Telger - East London.
Chairman Whitechapel
St George's East

Mr Ascroft. Harris Institute
Dr Dyer. Glasgow
Withdrawal City Guilds of
London

Bradford
Mr W Mather M.P
summarises the remarks
of the various speakers

HARRIS INSTITUTE,

PRESTON.

OFFICERS FOR THE YEAR 1882.

TRUSTEES:

Rev. C. H. Wood, M.A.
Mr. C. R. Jacson, J.P.
Mr. D. Irvin, J.P.
Mr. J. W. Eccles.
Mr. W. Ascroft, J.P.
Mr. G. B. Dalby.
Mr. J. S. Oliver.

PRESIDENT:
Mr. Wm. Ascroft, J.P.

VICE-PRESIDENT:
The Rev. Geo. Steele, M.A.

COUNCIL:

Mr. C. R. Jacson, J.P.	Mr. W. Ascroft, J.P.	Mr. A. M. Birchall.
Mr. D. Irvin, J.P.	Mr. W. Atherton.	Mr. Jas. Hibbert.
Rev. C. H. Wood, M.A.	Mr. T. R. Jolly.	Mr. M. S. Maynard.
Rev. Geo. Steele, M.A.	Mr. A. E. Ascroft.	Mr. R. C. Robinson.
Mr. G. B. Dalby.	Mr. Y. W. Booth.	Mr. J. S. Oliver.
Mr. Jno. Healey.	Mr. E. Dickson.	Mr. C. H. Sharples.
Dr. Hammond, J.P.	Mr. R. F. Easterby.	Mr. F. A. Moore.

HON. SECRETARY:
Mr. Thomas R. Jolly.

HON. TREASURER:
Mr. J. S. Oliver.

BANKERS:
Preston Banking Company.

HARRIS INSTITUTE.

—o—

SCHEME

For establishing and carrying on an Institute of Literature Art Science and Technical Instruction, to be called by the name of "The Harris Institute" settled and approved pursuant to the Order dated the 9th day of May 1881.

1. For the purpose of giving effect to the provisions in that behalf contained in the Will of the late Edmund Robert Harris (hereinafter referred to as " the testator ") with the view to establishing and endowing a Literary and Scientific Institution or other charitable institution or other institution of public utility which may contribute to perpetuate the remembrance of his father and his family in the town and neighbourhood of Preston, in the County of Lancaster, it has been resolved in pursuance of an Order made in this action on the 9th day of May, 1881, to reform or re-constitute the Preston Institution for the Diffusion of Knowledge, sometimes and more commonly called the Avenham

Mechanics Institution, (hereinafter referred to as "The Avenham Institution,") and to establish and carry on an institute of literature, art, science, and technical education. To give effect to the above resolution the Avenham Institution shall be dissolved under the provisions in that behalf contained in "The Literary and Scientific Institutions Act, 1854," its debts and liabilities (if any) shall be satisfied and its property made available for the purposes of the following Scheme, as hereinafter provided.

2. The Institution to be so established and carried on as aforesaid shall be called "The Harris Institute," so as to perpetuate the name of the testator, his father and family, as directed by his said Will, and shall be managed and governed in accordance with such trusts and rules as are respectively hereinafter contained.

3. For the purposes of the Scheme the land and buildings now the property of the Avenham Institution and comprised in an indenture dated the 2nd day of February, 1850, and made between Andrew Halliday of the first part, Robert Parker of the second part, the Worshipful James German, Mayor of the Borough of Preston, John Addison, William Ainsworth, Barton Fletcher Allen, Robert Ascroft, John Bairstow, Thomas Brewer, Lawrence Dobson,

John Goodair, Robert William Hopkins, Charles Roger Jacson, Robert Lawe, Thomas Miller, John James Myres, Richard Newsham, John Paley the elder, John Paley the younger, Robert Parker, John Stephenson, and William Taylor, of the third part, and Thomas Batty Addison of the fourth part, and which land and buildings are hereinafter referred to as "the site," and such of the furniture, books, effects, and other property of the Avenham Institution as may be required for the purposes of this Scheme, shall be vested in the seven trustees (hereinafter named and hereinafter referred to as "The Institute Trustees,") to be held for the purposes of this Scheme, and this Scheme has been approved and sanctioned subject to the condition that the present trustees of the Avenham Institution shall deduce and verify in the usual way and at the expense of their trust estate, a good title in fee simple, free from all incumbrances to the site, to the satisfaction of the Judge in Chambers. The above condition to be fulfilled before any payment or binding appropriation is made by the trustees of the said Will of the testator (hereinafter referred to as the "Harris Trustees") as hereinafter provided.

4. The Harris Trustees shall out of the testator's pure personal estate appropriate under

the direction of the Judge in Chambers a sum or sums of money not exceeding in the whole the sum of £40,000 (hereinafter referred to as "the endowment fund") when and as the same shall be required, and pay the same to the Institute Trustees to be by them held upon trust for the purposes of this Scheme. Notice of any application to the Judge under this clause shall be given to Her Majesty's Attorney General.

5. A trust deed or deeds shall be prepared by or on behalf of the Harris Trustees, and shall be executed by the Institute Trustees and all other necessary parties (if any) at the cost of the testator's estate for vesting the said site in the Institute Trustees, and for declaring the trusts of the site and of the endowment fund, such deed or deeds to be settled and approved by the Judge in Chambers. The principal trust deed shall contain clauses and provisions to the following effect, that is to say—

(*a*). That the Institute Trustees shall hold the site and the endowment fund upon trust for the purposes of the Harris Institute.

(*b*). That the Institute Trustees shall be empowered to invest the endowment fund at their discretion, and in the names or under the control of at least four of their number, in any of the public stocks or funds, or Government securities of the United

Kingdom or India, or in Stock of the Bank of England, or of the Metropolitan Board of Works, or in or upon freehold securities in England or Wales, (but not in Ireland,) or in or upon the mortgages, bonds, debentures, or debenture stocks of the Municipal Corporation or Corporations of any one or more of the following cities and towns, that is to say, London, Liverpool, Manchester, Birmingham, Bristol, Leeds and Preston, or upon mortgage of County or Police Rates in England or Wales, including Lancashire County Stock (but not in any other mode of investment), and so that no investment shall at any time be made in or upon any mortgages, bonds, debentures, or debenture stock of the Municipal Corporation of Preston, if and so long as a majority of the said trustees for the time being shall themselves be members or officers of the said Corporation, with power for the said trustees from time to time to vary or transpose any investments into or for others of any nature hereinbefore mentioned at their discretion, but subject to the restriction hereinbefore imposed.

(*c*). That the Institute Trustees for the time being shall pay the income of the endowment fund, and of the investments for the time being representing the same, to the Council for the time being hereinafter referred to, (the receipt of the President and Treasurer for the time being thereof being a sufficient discharge for the same).

(*d*). That once in every year the Institute Trustees for the time being shall render to the Council a full and particular account in writing of all sums received and expended by them, in the first

account from the commencement of the trust, and in each succeeding account for the period which shall have elapsed since the last preceding account, and shall also deliver to the Council a schedule of the property and moneys and investments for the time being vested in the Institute Trustees, and every such account and schedule shall be signed by four at least of the Institute Trustees for the time being. And if at any time there shall be less than five trustees, then by all the trustees for the time being.

(*e*). That the power of appointing a new trustee or new trustees in the place of any Institute Trustee or Trustees dying desiring to be discharged or refusing or becoming unfit or incapable to act shall be exercisable by the continuing trustees for the time being, or by the last retiring trustee or trustees, and that whenever the number of trustees shall be reduced below four, it shall be incumbent on the persons or person for the time being entitled to exercise the power of appointing new trustees to fill up all the vacancies, and make up the full number of trustees with as little delay as possible. Provided always that in case the number of persons making any such appointment shall be less than four, the appointment shall not be valid until the same shall be approved by the Charity Commissioners, and such approval be certified under their official seal.

(*f*). That upon every such appointment the property held by the Institute Trustees for the time being upon trust for the purposes of this Scheme, and the moneys and investments for the time being constituting the endowment fund shall be forthwith

vested in such new trustees alone or jointly with the continuing trustees or trustee as the case may be.

(*g*). That on the application of a majority of the Council, the Institute Trustees shall be at liberty from time to time to raise and expend any sum or sums of money out of the endowment fund (not exceeding in the whole the sum of £5,000) in the permanent improvement of buildings for the time being used for the purpose of this Scheme, or in the erection extension or adaptation of buildings on the site, or of buildings on any other site which may from time to time be vested in the Institute Trustees for the purposes of this Scheme, or in the purchase of books, plant, apparatus, or appliances to be used for the purposes of this Scheme.

(*h*). That the Institute Trustees shall be at liberty but shall not be under any obligation to accept donations, grants, or bequests for the purposes of this Scheme, and that such donations, grants, or bequests shall either be held separately upon such special trusts, and subject to such special conditions (if any) not being inconsistent with the provisions of this Scheme as may be attached thereto by the donors, grantors, or testators respectively, or subject to the provisions hereinafter contained, and in the absence of any such special conditions as aforesaid or other directions in relation thereto, shall if exceeding £5 be added to and form part of the endowment fund, and if not exceeding £5 the same shall be deemed to be and shall be applied by the Institute Trustees as income of the said endowment fund.

(*i*). That all expenses connected with the administration of the trust shall be defrayed out of the income only of the endowment fund, and no part of the capital of the endowment fund (except as aforesaid) shall on any pretext whatever be expended.

(*j*). That the Institute Trustees for the time being shall have and may exercise all powers given by law to trustees, including powers to give receipts and the ordinary right of reimbursement and indemnity, and that in addition to the ordinary indemnity the trustees shall be at liberty to lend money on any security with less than a marketable title, and shall not be answerable for any loss occasioned thereby.

The said deed shall also contain all such other clauses, powers and provisions as the said Judge shall approve or direct.

6. The first Institute Trustees shall be The Reverend Charles Harrison Wood, of Preston, in the County of Lancaster, Clerk in Holy Orders, Charles Roger Jacson, of Barton Hall, in the said County of Lancaster, Esquire, David Irvin, of Preston aforesaid, Esquire, John William Eccles, of The Inner Temple, in the City of London, Barrister-at-Law, William Ascroft, of Preston aforesaid, Esquire, George Bewlay Dalby, of Preston aforesaid, Esquire, and John Stephen Oliver, of Preston aforesaid, Esquire.

7. The Harris Institute shall be governed by a Council consisting of 15 co-optative members,

and such number of representative members as is hereinafter provided.

8. Of the first members of the Council who shall be deemed and called co-optative, seven shall be nominated by the Harris Trustees, and eight shall be nominated by the Council of the Avenham Institution prior to the dissolution thereof, such nomination to be signified by the declaration in writing of the president of the said institution for the time being.

Their appointment shall be subject to the approval of the Court, and shall be recorded in the principal trust deed as provided by Article 5, and shall take effect from the date thereof.

The future co-optative members of the Council shall be appointed in every case by the Council, at a meeting of which notice specifying the business to be transacted shall be given in manner hereinafter provided. The said first and all future co-optative members of the Council shall (except as next hereinafter provided) be appointed to office for the term of three years. Of the first co-optative members one-third shall go out of office on the 31st day of December 1882 and one-third on each 31st day of December following. The order in which the first co-optative members shall go out of office shall be regulated by the Council.

The Council shall at some meeting to be held in December in each year appoint members to fill up the vacancies in the number of co-optative members caused by effluxion of time. The members so appointed shall come into office on the 1st day of January next after their appointment.

9. Three representative members of the Council, shall be appointed by the Corporation of Preston out of members of their own body, each to remain in office except as next hereinafter provided, for three years, from the 1st day of January next following the date of his appointment, the first of such appointments (which will include three representative members) to be made at some meeting of the Corporation to be held within three months after the date of the Order confirming this Scheme, and of the three members first appointed, one shall go out of office on the 31st day of December, 1882, another on the 31st day of December, 1883, and another on the 31st day of December, 1884, the order in which the first representative members elected by the Corporation shall go out of office being regulated by the Corporation at the time of their election, or in default thereof by the Council. Every subsequent appointment of a representative member to be elected by the Corporation

to be made at some meeting of the Corporation within the month of December, in which the outgoing representative member retires from office, and in case of every or any casual vacancy at some such meeting within three months after such vacancy occurs. Any representative member appointed by the Corporation of Preston shall vacate his office on his ceasing to be a member of the Corporation.

10. Three representative members of the Council, shall be elected by the donors of not less than £25, and subscribers of the annual sum of not less than £1 1s. 0d., and of not less than one year's standing.

The representative members of this class shall also remain in office (except as hereinafter provided) for three years from the 1st day of January next following the date of their respective appointments. The first of such appointments (which will include three representative members) to be made at a meeting of those entitled to vote as hereinafter mentioned, to be held within three months after the date of the order confirming this Scheme, and to be convened by the President for the time being, or the last President of the Avenham Institution, or failing him by the Secretary for the time being, or the last Secretary thereof, by

three clear days' notice in some newspaper published and circulated in Preston, and of the three members so appointed one shall go out of office on the 31st day of December, 1882, another on the 31st day of December, 1883, and another on the 31st day of December, 1884, and the order in which the first representative members of this class shall go out of office shall be regulated by the electors present at such meeting as aforesaid, or in default thereof by the Council. Every subsequent appointment of a representative member of this class shall be made at the annual meeting to be held as hereinafter provided in the month of December, in which the outgoing member retires from office. At the two first elections of such representative members as last aforesaid, those, who on the 31st day of December, 1881, were members of and entitled to vote at the general or other meetings of the Avenham Institution shall be entitled to vote, and shall be admissible to the meeting for that purpose. At the first election of such representative members the President for the time being, or the last President of the Avenham Institution, shall take the chair, or, failing him, some member to be chosen by those present and entitled to vote, and the chairman shall have a second or casting vote. No person shall be eligible for election at such first election who has not been

nominated by a person entitled to vote at such election, and his name placed in a list to be provided by the person convening the meeting, and posted in some convenient place in the Avenham Institution for 14 days before such meeting. The voting at such meeting shall be taken in such manner as the chairman thereof shall prescribe, and the result shall be signified by his declaration in writing, which shall be conclusive.

11. Every member of the Council, whether co-optative or representative, shall be eligible for re-election.

12. If during his term of office any member of the Council shall become bankrupt or incapacitated to act, or express to the Council in writing his wish to retire, or omit for the space of six months to attend any meeting, the Council shall cause a record of the fact to be entered in their books, and upon such record being entered the member to whom it applies shall forthwith cease to be a member of the Council. Any member who shall cease to be a member of the Council by reason of his absence from its meetings shall be eligible for re-election.

13. Each vacancy in the Council shall be filled up as soon as can conveniently be

managed by the appointment of a new member by the body entitled on such vacancy to elect or appoint a new member as the case may be, but the Council shall itself appoint where the vacancy occurs in the number of representative members appointed otherwise than by the Corporation of Preston. In case of neglect or default after two months' notice of such body to fill up such vacancy the Council shall have power to do so. Any member appointed to fill up a vacancy shall hold office only for the remainder of the term vacated by his predecessor.

14. Every member of the Council shall at or before the first meeting which he attends sign in the Minute Book a memorandum declaring his acceptance of the office and his willingness to act and do his duty as such. And until he has signed such a declaration he shall not be entitled to discharge the functions of a member of the Council, and if he shall refuse or omit to sign such memorandum within three calendar months from the date of his appointment the office shall be again vacated.

15. The Council shall hold meetings in some convenient place in Preston as often as may be found necessary for the management of the Institute and at least one ordinary meeting in each month, on some convenient days to be

appointed by itself at such time or times and after such notice as it shall think fit to prescribe.

16. The Council shall, in addition to the ordinary meetings, hold an annual meeting in the month of December in every year, at which all donors of not less than £25 and all annual subscribers of not less than £1 1s. 0d. and of not less than one year's standing shall be entitled to be present, such meeting to be called by advertisement in some one or more local newspapers. At such annual meeting the said donors and subscribers then present shall elect one or more members of the Council as hereinbefore provided. In case the number of such donors and subscribers as aforesaid shall be less than 10 on the 1st day of November 1884, or on the 1st day of November in any subsequent year, the Council may at some meeting in the December following nominate one member of the Council in respect of any vacancy of representative members of this class, and every or any member so nominated shall remain in office for three years from the 1st day of January following.

17. The election of representative members of the Council by donors and subscribers shall be conducted as follows, that is to say: On the

1st of November before each annual meeting a list shall be open at a place to be from time to time prescribed by the Council for the nomination by such donors and subscribers as aforesaid of one person to be elected member of the Council at the annual meeting in respect of every vacancy, such lists to be closed on the 30th of the same month of November, and no person shall be eligible for election as such representative member whose name shall not have been entered on such lists respectively. Every such donor and subscriber as aforesaid shall have the right of nominating one person for election on the Council in respect of every or any vacancy. In case any vacancy be not filled up at the annual meeting the same shall be filled up by the Council at their next following meeting. At the first annual meeting the members of the Avenham Institution entitled to vote as aforesaid shall have the same rights of nominating candidates for election as are hereby provided for such donors and subscribers to the Harris Institute as aforesaid.

18. At all meetings all questions on which donors and subscribers have the right to vote shall be determined by the majority of the donors and subscribers present and voting at such meeting, such voting to be taken in such manner as the Council may from time to time

prescribe, or, in default, as may be determined by the chairman of the meeting, and the chairman shall have a second or casting vote at all such meetings, each donor shall have one vote in respect of every £25 of his donation, and each subscriber one vote in respect of each £1 1s. 0d. of his subscription, but no donor or subscriber shall have more than ten votes in the whole, and no subscriber shall be entitled to vote whose subscription for the current year shall not have been previously paid. In the case of a firm making a donation or being a subscriber they shall be at liberty to signify in writing to the Secretary which one of their members shall have the right of nominating and voting in respect thereof.

19. The Council shall at their first meeting and subsequently at their first meeting after each annual meeting elect out of its number a president and a vice-president.

20. All meetings of the Council shall be presided over by the president, vice-president, or one of the Council.

21. A quorum shall be constituted whenever five members of the Council are present at a meeting duly convened and held.

22. The Council may at any time appoint a committee of not less than three of its members

to transact any business with such powers as the Council thinks necessary, but the acts of every such committee shall be reported to the Council and be subject to its approval.

23. A special meeting of the Council may be held at any time on the written requisition of the president or of any three members of the Council addressed to the secretary of the Council.

24. All special meetings of the Council shall be convened by two clear days' notice in writing to the members, specifying the object of the meeting, and it shall be the duty of the secretary to give such notice.

25. All matters and questions shall be determined by the majority of the Council at any meeting, and in case of equality of votes the chairman shall have a second or casting vote.

26. If at any meeting of the Council there is not a sufficient number of members present to form a quorum, or if the business at any meeting is not fully completed, those present may adjourn the meeting to a subsequent day of which notice shall be given to all the members.

27. A minute book and proper books of account shall be provided by the Council and

kept in some convenient and secure place of deposit to be provided or appointed by them for that purpose, and minutes of the entry into office of every new member and of all proceedings of the Council shall be entered in such minute book and signed by the chairman of the meeting at which the proceedings shall have taken place at the conclusion of the meeting, or at the next following meeting at which the minutes shall be confirmed by the chairman thereof.

28. Full accounts shall be kept of the receipts and expenditure of the Council, and such accounts shall be stated for each financial year, and shall embody and include the accounts to be rendered by the Institute Trustees as hereinbefore provided. The accounts shall be audited annually by a public accountant, who may be paid by the Council. The accounts when audited shall be signed by the president, or in case of his absence or illness by the vice-president.

29. The Council shall cause sufficient abstracts of the accounts when audited to be published annually, and copies thereof sent to each donor and subscriber. Such abstracts shall be in a form to be from time to time prescribed by the Council.

30. The Council and Institute Trustees shall respectively cause sufficient accounts of the endowments, receipts and expenditure to be forwarded to the Charity Commissioners in accordance with the provisions of the Charitable Trusts Acts.

31. The Council and the Institute Trustees respectively shall make such arrangements as they may think most fitting for the custody of all muniments, title deeds, and other documents belonging to the trust, for the deposit of money for drawing cheques, for the appointment of officers, and for the conduct of its business. No officer who is a member of the Council shall be paid any salary or remuneration.

32. The following subjects shall be taught in the Institute, viz., mathematics, pure and applied mechanics, machine and building construction, chemistry, physics, freehand, model, perspective and landscape drawing, modelling, painting, mechanical drawing, and its application to machine and building construction, cotton spinning and weaving, pattern designing and its practical application to textile and other trades, and such other subjects in art, science, literature, and technical and industrial education as the Council may from time to time think necessary. The Council shall provide for the

regular and systematic examination of the results of the teaching.

33. Such moderate entrance and other fees may be charged as the Council shall from time to time prescribe, but the benefits of the Institute shall be open to all persons resident within the Town of Preston or the neighbourhood, subject only to such reasonable restrictions as the Council may from time to time impose for the better regulation and government thereof.

34. The Council shall have the power to require any student before entering upon the work of any study or group of studies, to pass such a satisfactory examination or to produce evidence of having passed such an examination as shall show that such student has acquired the knowledge necessary for the proper and intelligent study of the art science or subject which such student proposes to commence.

35. The Council may from time to time exercise all or any of the powers conferred by the Literary and Scientific Institutions Act, 1854, on the governing body therein referred to, and may from time to time make such regulations as they may think fit with reference to the discipline to be maintained, the general subjects of instruction, the relative prominence and value to be assigned to each group of subjects,

the period of study and vacation, the payments by students, the certificates and rewards to be granted to students, and generally for the purposes of carrying out the objects of this Scheme. The Council shall from time to time determine what number of masters, teachers or lecturers shall be employed, shall appoint and dismiss them, and shall fix and pay their salaries or other remuneration. The Council shall also provide such books, plant, apparatus, and appliances, and library for circulation or for reference, as they may think necessary for carrying out the general objects of the Institute. The Council may provide for the maintenance and repair of buildings used in connection with this Scheme, and may hire buildings for the purposes of this Scheme.

36. By way of exhibitions tenable at the institution itself, the Council may grant exemptions from the payment of tuition fees or make pecuniary grants for such periods and on such conditions as they may think fit, and shall each year throw open to competition by boys or girls under the age of 18 years, attending Elementary Schools or Evening Schools in connection therewith, within seven miles of the Preston Town Hall, at least 25 of such exhibitions, such exhibitions to be competed for and held under such conditions and for such

period as the Council may from time to time determine.

37. The Council shall forthwith establish two scholarships, to be called the Harris Scholarships of the annual value of not less than £45 each, to be awarded on competitive examination under such regulations and subject to such conditions as the Council shall from time to time by resolution determine, open to all pupils who have been in the Institute for not less than two years immediately preceding the examination, and tenable at any college or place of higher education.

38. The Council shall have the control and disposition of the funds of the Institute other than the capital of the endowment fund for the time being, and may apply the same for the purposes of the Institute as they shall resolve and determine, subject nevertheless to the following provisoes: (A) Not less than three equal eighth parts of the income of the said endowment fund shall be applied to the payment of salaries and remuneration of professors and teachers. (B) Not less than one equal eighth part of the same income shall be applied to the payment of such exhibitions and scholarships as are hereinbefore mentioned.

39. The Council may receive donations,

bequests, endowments or subscriptions for the general purposes of this Scheme.

40. The Council shall have the power to affiliate or to procure the affiliation of the Harris Institute or otherwise to enter into official relations with any university or any public body having similar objects, or conducting examinations, or providing teaching in subjects similar to those contemplated in this Scheme. Provided always that this clause shall not be deemed in any way to empower the Council to alter or modify this Scheme.

41. Copies of this Scheme shall be sold to the persons requiring the same at such price, not exceeding Ninepence each, as shall be fixed by the Council.

42. This Scheme shall come into operation at the expiration of one calendar month after an Order shall have been made directing the appropriation and payment by the Harris Trustees of such sum or sums of money as mentioned in clause 4 hereof.

Year	Reg.	av att	Indiv
1882-3	873	691	520
1883-4	1974	1247	1478
1884-5	2026	1342	
1885-6			
1886-7			
1887-8			
1888-9			
1889-90			
1890-91			

HARRIS INSTITUTE,

PRESTON.

Report

AND

Statement of Accounts

FOR THE YEAR
ENDING SEPTEMBER 30th, 1883.

THE HERALD PRINTING WORKS, PRESTON.
1884.

OFFICERS FOR THE YEAR 1884.

Trustees :

Rev. C. H. Wood, M.A.
Mr. C. R. Jacson, J.P.
Mr. D. Irvin, J.P.
Mr. J. W Eccles.
Mr. W. Ascroft, J.P.
Mr. G. B. Dalby.
Mr. J. S. Oliver.

President :

Mr. Wm. Ascroft, J.P.

Vice-President :

The Rev. Geo. Steele, M.A.

Council :

Mr. C. R. Jacson, J.P.	Mr. W. Ascroft, J.P.	Mr. A. M. Birchall.
Mr. D. Irvin, J.P.	Mr. W. Atherton.	Mr. Jas. Hibbert.
Rev. C. H. Wood, M.A.	Mr. S. A. Hermon.	Mr. M. S. Maynard, J.P.
Rev. Geo. Steele, M.A.	Mr. A. E. Ascroft.	Mr. R. C. Robinson.
Mr. R. Benson, J.P.	Mr. Y. W. Booth.	Mr. J. S. Oliver.
Mr. Jno. Healey.	Mr. E. Dickson.	Mr. C. H. Sharples.
Dr. Hammond, J.P.	Mr. R. F. Easterby	Mr. F. A. Moore.

Hon. Treasurer :

Mr. J. S. Oliver.

Secretary :

Mr. Thomas R. Jolly.

Bankers :

Preston Banking Company.

FIRST ANNUAL REPORT

OF THE

HARRIS INSTITUTE, PRESTON.

In presenting their first annual Report, the Council of the Harris Institute are able to refer with great satisfaction to the progress which has already been made.

The Council was fully constituted prior to September in last year, when the Scheme came into operation.

The Council at once applied themselves to consider the best mode of carrying out the Scheme. They found that the Classes in connection with the Avenham Institution were well conducted, and considered that for the first year it would be wise to continue them on much the same footing. The usual time for the commencement of Class work was in September, and the Council had therefore little time at their disposal. They obtained the services of an efficient Art Master, and made arrangements for conducting Classes in Art and several subjects of Science.

In addition, the Council arranged for a Course of Lectures in connection with the Cambridge University Extension Scheme, on the "Growth of English Literature since 1770," which was conducted by Mr. R. Hodgson, B.A.

The great bulk of the persons attending the different Classes consisted of young artisans, who sought the instruction afforded as a means of self-improvement in their several occupations. The Teachers discharged their duties very satisfactorily, and the average attendance of the Pupils was well maintained. The Classes were prepared for the Examinations of the Science and Art Department and the City and Guilds of London Institute, the Society of Arts, and the Union of Lancashire and Cheshire Institutes. The Examinations were held in May last, and the Pupils attained a very considerable amount of success. There is appended to the Report a list of the Classes, the numbers attending them, and the results of the different Examinations.

The Prizes gained were distributed to the successful Students in the Public Hall on the 15th November last by the Right Hon. Sir Richard Assheton Cross, M.P., G.C.B.,

to whom the Council desire to express their warm acknowledgments for the interest shown by him in the work of the Institute, and for the very valuable and eloquent address which he then delivered. A Report of the proceedings at the distribution is appended. (See page 11).

The building of the Institute was in a somewhat dilapidated condition when your Council obtained possession of it. The Lecture Theatre was but ill adapted for the purpose of the Science Classes, and the general means of warming, lighting, and ventilating the building were very defective. A considerable outlay has been necessary to remedy these defects. The Classes have been so successful, and the work of the Institute has been so well appreciated in the town, that it has become necessary to extend the accommodation. A house in Regent Street, adjoining the property of the Institute, has been purchased with outside means, and on the site of this and the property already belonging to the Institute it has been arranged to erect and fit up a building to contain two or more large rooms for Class purposes and a Chemical Laboratory for advanced Students. The want of this is greatly felt, and in its absence it is impossible properly to teach certain subjects, especially Chemistry, which has become one of great practical importance. Moreover, most of the Classes were in need of Scientific Appliances for the purpose of illustration. The supply of these requisites will nearly, if not entirely, exhaust the £5,000 authorised to be spent on Capital Account.

The Classes of the Avenham Institution in their last year were attended by 318 persons. Those of the Harris Institute in their first year were attended by 520 persons. The Classes during the current Session are attended by much larger numbers than before, and the means of the Institute to carry on even the present kind of instruction are strained to the utmost.

To the Report is appended a statement of the income and expenditure for the year ending 30th September, 1883, which has been audited by Mr. W. F. Moore, Chartered Accountant.

The Council venture to think that if larger funds were placed at their disposal, they would be enabled greatly to increase the usefulness of the Institute, and place within the reach of the inhabitants of Preston and the neighbourhood a kind of instruction, both elementary and advanced, which is now admitted to be necessary, to enable this country to maintain its commercial position in competition with other countries in which such means of instruction are now afforded.

The Council have made an application to the Harris Trustees for a further grant to enable them to expand the objects of the Institute. This application is under the consideration of the Trustees, and the Council venture to hope for a favourable result. The Trustees, to whom the town is so much indebted for their wise administration of their trust, view, it is believed, with satisfaction the use which the Council have been enabled to make of the powers with which they have been entrusted. Should the Trustees find themselves enabled to extend this confidence, the Council believe that the Harris Institute will become the means of conferring an increased benefit upon the district.

WILLIAM ASCROFT,
PRESIDENT.

November 30th, 1883.

HARRIS INSTITUTE.

PROCEEDINGS OF THE ANNUAL MEETING,

Held December 12th, 1883.

The annual meeting, at which donors and subscribers are entitled to be present in connection with this Institute, was held on Wednesday, Dec. 12, 1883. According to the Scheme for the Government of the Institute, the Council, in addition to its ordinary meetings, is required to hold an annual meeting in December, at which all donors of not less than £25, and all annual subscribers of not less than £1 1s., are entitled to be present. At this meeting the donors and subscribers are privileged to elect one or more members of the Council; but in case the number of subscribers is less than ten on the 1st of November, the Council may, at some meeting in the December following, nominate one member of the Council in respect of any vacancy of representative members of this class; and any member so nominated remains in office for three years from the 1st day of January following. The gentlemen present at this meeting were Mr. W. Ascroft, J.P. (President of the Council), in the chair; the Rev. Geo. Steele, Messrs. J. S. Oliver. R. F. Easterby, Y. W. Booth, W. Atherton, A. M. Birchall, and H. Oakey. The Secretary (Mr. T. R. Jolly) was unable to be present through illness.

The PRESIDENT, after explaining the purpose for which they had assembled, stated that only one gentleman had been nominated as a member of the Council—namely, Mr. C. H. Sharples—so that their duty was simply to elect him for three years, commencing on the 1st of January next.

On the motion, of Mr. EASTERBY, seconded by Mr. ATHERTON, it was resolved that Mr. Sharples be elected a representative on the Council.

The first annual report of the Harris Institute, which had been previously adopted by the Council, was read; the report will be found on page 5.

The PRESIDENT, alluding to this report of the Council, said it shortly detailed the work of the Institute during the last twelve months. It was unnecessary for him to refer to it further than to state that the work of the Institute had been very satisfactory, that the classes had all been very largely attended, and that the teachers had all conducted

their work in a most satisfactory manner. All the teachers were thoroughly efficient, and well versed in the subjects they had to teach, and they had been actuated by a strong determination to do their duty both to the Institute and the students under their charge. The lists showed that there was a very large average attendance, which proved that the students themselves had been actuated by a desire to profit to the fullest extent by the teaching placed within their reach. That co-operation on the part of the teachers and the students would, when the results came to be known in the examinations of May next, show that a very good work had been done in that Institute; the results, he had no doubt, would be creditable to the students, to the teachers of the Institute, and to the town at large. There was one subject that he wished to make a few observations about. It might be supposed that as they had a very large endowment it was unnecessary for them to appeal to the outside public. He might state that although their means were very considerable their students were large in number, and their expenses were also very considerable; and it would be of very great service to them if they were able to secure a considerable number of subscribers to add to the revenue of the Institution. They were also very much in want of donations towards the cost of the site for a new building they were about to erect for the purpose of additional class-rooms and a chemical laboratory. The law of mortmain prevented them from applying any portion of their endowment fund towards the purchase of a site. The only purpose connected with building that they could apply it to was for the erection of new buildings on a site which had to be provided from outside sources; therefore, for the purpose of erecting the additions which were absolutely required to enable them to carry on the work of the Institution, in the way of providing more class-room accommodation and a chemical laboratory, they had had to purchase a house in Regent-street, adjoining their own property, at a cost of £520, and that money would have to be raised by some means or other from sources outside their own fund. Towards that amount they had received the very handsome and generous contribution of £100 from Messrs. Horrockses, Miller, and Co., which had been promised them before and was sent the previous day. They now appealed to the inhabitants of Preston to assist them in obtaining the remainder of the money which was absolutely necessary to enable them fully to carry out the very useful purposes for which that Institution was intended. He had nothing further to add except that he hoped the inhabitants of Preston would assist them in carrying out the work they had begun.

The Rev. G. STEELE moved—"That it is desirable that efforts should be made to increase the number of subscribers and to obtain donations in aid of the Institution, especially having immediate reference to the money required for the purpose of the house in Regent-street which the Council have been compelled to purchase for the purposes of new class rooms and a Chemical Laboratory." He said it was very evident they did require the money for the purpose of paying that £520, and they felt exceedingly grateful, he was sure, to Mr. Hermon, as representing the firm of Messrs. Horrockses, Miller, and Co., for setting so excellent an example in that matter, as they had done in many others. He hoped other gentlemen in the same position in the town of Preston and neighbourhood would help them in the same way. It was to their interest to support that institute, because its object was to produce skilled artisans and to promote the general efficiency of workpeople, thereby doing good to themselves, the trade, and the whole neighbourhood. They hoped those who felt that would assist in clearing off that sum of £520, and also support the Institute, they trusted, in a general way afterwards by subscriptions, because, although as their president had said, their income seemed large, still there was a very large number of students being educated, so that their money was pretty well distributed and was bringing in a very good result.

Mr. W. ATHERTON seconded the motion, which was carried.

Mr. Y. W. BOOTH thought it ought to be stated that the members of the Council had individually promised subscriptions.—Mr. W. ATHERTON: I think we started the matter.

The PRESIDENT said that partly for the purpose of obtaining funds and partly for the purpose of enlisting the services of a large number of people in the management of the Institute, a clause was inserted in the scheme giving the donors and subscribers the power of electing three of the members of the Council. It was thought it would give them an active interest in the matter and bring the claims of the Institute home to a larger number of people than otherwise would be the case.

The meeting was then closed.

REPORT

OF

THE DISTRIBUTION OF PRIZES

To the successful Students attending the Institute, by

THE RIGHT HON. SIR RICHARD ASSHETON CROSS, M.P., G.C.B.

On Thursday, the 15th November 1883.

On Thursday evening, the 15th of November, a very large company, thoroughly representative of every class of residents in Preston and district, filled the Public Hall to witness the distribution of prizes and certificates to the successful students at the Harris Institute. The occasion excited more than ordinary interest, from the fact that it was the first of the kind in connection with the Harris Institute, and that the Right Hon. Sir R. Assheton Cross, M.P., G.C B., had undertaken to perform the principal ceremony, and the demand for tickets had exceeded the utmost anticipations of the Council. It was estimated that about six thousand persons were present when the proceedings commenced on Thursday evening, and it was gratifying to notice that the large company comprised a very considerable proportion of the working classes. At half-past seven Mr. Jas. Tomlinson, the borough organist, gave a recital on the Dewhurst organ, his programme comprising the following works: —1. Concerto in B flat (Handel). 2. Overture to "Zametta" (Auber). 3. Marche Cortege (Gounod). 4. Overture to Othello (Rossini). All the pieces were appreciated, the audience several times expressing their approval by applause. At eight o'clock precisely the President of the Institute, Mr. W. Ascroft, J.P., took the chair, and he was supported by the Right Hon. Sir R. A. Cross, M.P., G.C.B., Mr. W. Farrar Ecroyd, M.P., the Mayor of Preston (Alderman J. Forshaw), the Rev. G. Steele, M.A. (her Majesty's Inspector of Schools), vice-president; Mr. C. R. Jacson, J.P., D.L.; Mr. D. Irvin, J.P., Mr. J. Healey, Dr. Hammond, J.P., Councillor W. Atherton, Mr. A. E. Ascroft, Councillor Y. W. Booth, Mr. E. Dickson, Mr. R. F. Easterby, Mr. A. M. Birchall, Alderman Hibbert, Alderman Maynard, Councillor R. C. Robinson,

Mr. C. H. Sharples, Mr. F. A. Moore and Major Oliver (members of the Council of the Harris Institute), Mr. T. R. Jolly (secretary); Revs. J. Hamer Rawdon, M.A. (vicar of Preston), Geo. Alker, D. F. Chapman, C. K. Troughton-Dean, W. E. Hey, G. Rubie, W. H. Ramsbottom, E. Over, W. R. H. Pugh, W. H. Harris, S. R. Antliff, N. C. Papall, S.J., V. Bond, S.J., and Perry, S.J.; Captain Dove, R.E., Alderman Birley, J.P., Colonel Wilson, Mr. R. J. Flowerdew, J.P., Mr. Lawrence Rawstorne, J.P., Mr. W. W. Taylor, J.P., Mr. W. Calvert, J.P., Mr. F. Thorpe, J.P., Mr. A. Simpson, J.P., Aldermen W. Gilbertson, R. Benson, J.P., J. Satterthwaite, J.P., E. Garlick, J.P.; Councillors J. Toulmin, J.P., W. Hayes, J.P., G. Galloway, J.P., J. Jenson, J. Turner, J. Harding, J. Walmsley, J. Clegg, N. Miller, W. Bibby, J.P., W. B. Roper, J.P., H. Davies, J. J. Myres, R. Bee, J. Brown, J. Foster; Drs. Hall, Moore, Dixon, Allen, Pilkington, and Walmsley; Major Little (chief constable); Messrs. H. Hamer (Town Clerk), J. Carter (borough treasurer), T. Dodd, C. T. Taylor, J. B. Dickson, W. F. Moore, W. Banks, Geo. Brierley, J. Allsup, D. W. Allsup, H. Dodd, C. W. Hawkins, John Dewhurst, E. H. Booth, R. H. Wilding, T. Dodd, jun., J. R. Bradshaw, John Shaw, George Dewhurst, J. J. Greaves, G. Penny, J. C. Hamilton, E. Myres, M. Quaile, W. W. Newsholme, J. Booth, R. H. Thompson, George H. Dickson, James Gregson, T. D. Sellers, R. P. Threlfall, W. Sudell, W. Wilkinson, J. Sharpe, H. Oakey, S. Kent, H. W. Johnston, James Tullis, George Curwin, Thomas Hopkins, T. Mason, M. Graham, W. S. Bramwell, F. Penrice, E. Greenwood, W. Ashworth, J. Cumming, F. W. Catterall, W. R. C. Sedgwick, H. Pritt, J. S. Anderson, J. Pilkington, J. Gregson, J. Ormrod, R. Park, J. Starkie, H. Curwen, T. Coulthard, J. B. Norwood, J. Starkie, E. Wade, T. Dryden, C. Yates, W. Walker, F. J. Pye, J. B. Price, F. B. Osborne, John Gardner, R. Pendlebury, T. H. Greenall, G. Rogerson, B.A., A. F. Atkinson, W. B. Barton, G. Sutcliffe, W. H. Cowell, W. M. Maddox, M.A., H. Y. Cartmell, E. Withnell, Browne, J. J. Smith, S. Lee, S. Worthington, T. Gornall, J. Woods, W. Poole, S. Illingworth, L. Galli, H. Ormandy, T. Bradshaw, R. Parkinson, C. Greenall, S. D. M. Sykes, G. Howarth, E. Greenwood, R. Fazackerley, B. Fisher, E. Clarke, D. Bostock, G. Toulmin, jun., R. Arnett. H. Cartmel, E. D. Hindle, and many other influential residents in the town and district.

The CHAIRMAN, in opening the proceedings, stated that they had received the following letter from Mr. Addison, Q.C., the Recorder of the borough:—"Liverpool Assizes. Dear Sir,—I had fully intended doing myself the pleasure of

attending the meeting to-morrow night, but I have just received a letter which compels me to go to London to-morrow, for a case on Friday, and so, very much to my regret, I am unable to attend." It became his (the chairman's) duty to open the proceedings that night, and as they were likely to be of a lengthy nature—the prizes were very numerous, and their distribution would occupy considerable time—and as that vast assembly was anxious to hear Sir Richard Cross, he proposed to make his observations very brief. As that, however, was the first occasion on which, as the Council of the Harris Institute, they had had to make a public appearance, he thought it would be befitting on his part to say a few words to shew what the Harris Institute was, and what was the work which as yet it had been able to perform. As they knew, the Harris Institute had grown out of the old Mechanics' Institution, which was founded in 1828, for the purpose of diffusing useful knowledge amongst the working and other classes of Preston, and he thought that very great credit was due to those who from time to time have had the management of the Mechanics' Institution for the very excellent work which they were able to do under very considerable difficulties. That Institution, many years ago, founded a School of Art, and a few years later a School of Science, in which classes were conducted on various subjects; it had accumulated a library of about 11,000 volumes, and on the whole was doing a remarkably successful work. But those classes were not self-supporting, and in addition to the funds derived from time to time from occasional exhibitions and bazaars, the Institution was mainly supported by the payments of those members who subscribed for the purpose of obtaining the use of the circulating library; and when the Preston Corporation did a very spirited act in establishing the Free Library a few years ago, although it was an exceedingly beneficial thing for the town, its effects were very disastrous to the Mechanics' Institution, for the subscribers, finding that they could be equally well served at the Free Library for nothing, naturally deserted the library of the Mechanics' Institution, where they had to pay for what they got. The Harris Trustees—(applause),—those gentlemen who were so very wisely administrating the important trust which had been placed in their hands, and to whom the town was very much indebted for the time and anxious consideration which they had given to the discharge of their duties—(hear, hear),—those gentlemen determined to devote a large portion of the funds at their disposal towards building and endowing the new Free Library, which would be a noble establishment, but which would further impair the fortunes of the Mechanics' Institution, and render

it impossible for its supporters to continue that part of their work which related to the educational functions of their classes. At that time one of the Harris Trustees, Mr. C. R. Jacson—(applause),—to whom more than to anyone else was due the credit of the formation of the Harris Institute, suggested to the council of that Institution that they should consider whether or not they could bring their educational purposes within the scope of Mr. Harris's will. That suggestion was taken up by the council of the Mechanics' Institution, and the result was they made application to the trustees. He confessed that that application was couched in very modest terms, and did not fully realise the full extent and importance of the subject, but in the interviews that took place between the representatives of the Mechanics' Institution and the Harris Trustees, the subject was very fully talked out, and mainly on the suggestion of the Trustees themselves, the scope of the application was very considerably enlarged and its importance very much increased, and in the end an arrangement was come to by which the very convenient building and other property of the Mechanics' Institution were vested in the trustees of the new scheme; an endowment fund of £40,000 was provided by the Harris Trustees, and a scheme was framed in the Court of Chancery for the establishment of what had now become the Harris Institute. The governing body was placed on a very wide basis. It consisted as to part of co-optative members, selected as to a portion by the Harris Trustees, and as to a portion by the representatives of the old Institution, as to another part of members elected by donors and subscribers—who in time, he hoped, would become a very large constituency—and as to another part of members elected by the Corporation of Preston. This council took office in September of last year, and on a review of their position and powers they came to the conclusion that it was unnecessary to continue the circulating library, as the Free Public Library answered all the purposes of such a library, and they thought they would best serve the town and carry out the trusts which were committed to their charge by making of their Institute a college or school for the purpose of imparting instruction mainly having a bearing on the work and pursuits of the district. As he had stated, the council took office in September last year, and at the risk of being a little tedious, he would shortly explain to the meeting the work which as yet they had been able to perform. As the sessional classes commenced in September, they had very little time to make arrangements for the first session, but they were fortunate in securing the services of a number of able gentlemen, and they arranged for the continuance of the Schools of Art and

Science and of classes in other subjects, and they prepared their pupils for examination under the Science and Art Department of South Kensington, the City and Guilds of London Institute, and other examining bodies. The examinations were held in May last, and their pupils were successful—very much more so than the average of pupils—and the prizes gained in that examination were those which were to be distributed that evening. With regard to some of their pupils, he would wish to call their especial attention to a young man of the name of David Wilkinson, who had obtained prizes in six subjects of science; another young man, Thomas Shaw, had done the same; John Aspden, a student in the cotton classes, had obtained the second prize in the kingdom in the ordinary grade, for which he received a medal and a prize of £3; out of 27 students who went into the examination in cotton, 25 passed—(applause); then there was a young man of the name of Robert Anstin, who had obtained a medal in printing; and Burdett Sellers, who had been some time a student at the Institute, had gained the second prize in the kingdom in milling—a medal and £5. Reginald H. Crooke, an art student, had obtained prizes for landscape painting, both in oil and water colour—(applause), More especially did he wish to mention Henry Gibson, who for some years had been a student at their school, and who was the principal designer at the well known printworks at Bannister Hall, near Preston, and who had gained a free studentship at South Kensington, which entitled him to free admission to the training school there, and a payment of at least £1 per week for two years—(applause). That distinction was a very considerable one, and he (the Chairman) was sure they would join with him in congratulating the winner upon it, and in wishing that his career, so well begun, might fulfil the promises it now bore—(applause). During the vacation, the council took advantage of the time at their disposal for remodelling the building. They had almost reconstructed it internally, and had made it thoroughly well fitted for its purposes. It was now as convenient as it well could be; their Lecture room was an exceedingly handsome one, and all its arrangements and acoustic properties reflected great credit upon Mr. Hibbert, the architect. Their School of Art had been enlarged and made more convenient, and was certainly not inferior to any of the very many he had seen. They were about to erect a new building to contain several class rooms; they would have a chemical laboratory, fitted up with all proper and complete appliances, and in the arrangement of which they had had the benefit of the assistance of Dr. Roscoe, who at Manchester was at the head of what he (the Chairman) believed to be the best chemical

school in the kindom—(hear, hear). When those were completed they would have an institution as perfect as one could well imagine. There was only one danger, and that was of the building becoming too small for their requirements; but they lived in hopes that means might be found to remedy this defect, and also to provide them with a larger building in which, with proper appliances, the principles at least of the cotton and the mechanical trades could be more thoroughly taught. They had also classes in sound, light, and heat, physiography, magnetism and electricity, taught by Mr. Gardner; of inorganic chemistry, theoretical and practical, taught by Mr. A. F. Atkinson; and botany taught by Mr. T. H. Greenall and others. He would there wish to acknowledge the gratuitous services of the Rev. J. Shortt, M.A., and Mr. E. Dickson, both of whom were well-known gentlemen of scientific accomplishments, and who were conducting very interesting classes in geology —(applause). They had classes in machine and building construction, taught by Mr. Price and Mr. Pye, both practical men, and also men of scientific attainments; they had Latin and French and mathematics, taught by Mr. W. M. Maddox, M.A., Mr. G. Rogerson, B.A., and Mr. F. B. Osborne. Their art school, under Mr. W. Bright Barton and his assistants, was being conducted in a most thorough and efficient manner, and was attended by large classes of students, some of whom attended to acquire an elegant accomplishment, and others to improve themselves in their occupations. The technical classes in cotton spinning, weaving, printing, tools, and applied mechanics were taught by Mr. Sutcliffe, Mr, Sykes, Mr. Pendlebury, and other practical men. Mr. R. Parkinson, who taught printing, was a young townsman who last year took the first prize in all England in printing, and he, as well as teaching classes at the Harris Institute, was teaching similar classes at the Technical School in Manchester—(applause). They had very excellent classes in harmony and the principles of music, taught by Mr. Tomlinson, the Corporation organist—(applause). There were very large classes in English and shorthand—very important subjects—which were taught by Mr. H. Cartmell, a very competent teacher—(applause)—and last, but not the least, they had a class for tonic sol-fa singing, attended by more than 200 students, taught by an enthusiastic teacher, Mr. Cowell—(applause). Those classes would do a great deal to bring out the musical talents and tastes which he was quite sure existed amongst us. He would there wish to refer to the example set them by Mr. W. Atherton, a well-known machinist of Preston, and who he hoped would be followed by other employers of labour in

the town. Mr. Atherton had very large works in Preston, and he sent a great number of his apprentices to be taught at those classes at the Harris Institute which were most suited for their requirements, and he provided them with drawing materials and other things necessary for them in the pursuit of their studies. He would commend his example to other large employers of labour in the town. It was a generous action on the part of Mr. Atherton; but he would derive benefit from it by finding himself surrounded by a more intelligent class of workers, and at the same time he would have the satisfaction of feeling that he had done something to contribute to the welfare of the people under his charge—(applause). They were also keeping up their connection with the Cambridge Extension movement, and after Christmas they would have a series of lectures on the subject of Shakspere, conducted by Mr. R. G. Moulton, M.A., one of the best of the Cambridge lecturers. He asked them to remember that their classes were attended by more than 1,000 individual students—(applause). He was sure that all who attended those classes must be the better for the instruction which they received. He was sure that the effect produced in this and other towns throughout the kingdom by that and similar institutions, teaching all classes a knowledge of the principles that underlay their daily work, educating their hands and eyes as they could only be educated by a training in drawing, and elevating them in matters of taste, must be one that would conduce to the commercial supremacy of England, which, after all, depended on the character and brains of its people, What we were doing enables us to meet on their own grounds the efforts which other nations were making to shake our supremacy by the devotion with which they are applying themselves to the education of their people and so to the development of those trades in which they sought to rival us, and we were also putting ourselves in a better position to compete with them in the more artistic and scientific branches of industry, in which at present we were supposed to fall behind them. He thought that the number of pupils attending the classes at the Harris Institute showed that a great want in Preston was now being supplied. It also showed that the young people, when they had the opportunity, were not slow to avail themselves of good instruction when it was placed within their reach; and when it was remembered of what that instruction consisted, that in part it consisted in the conveying of information on scientific matters—the knowledge of the principles which underlay their daily work, the teaching of those things on which the prosperity of this district depended; that in part it was of a more literary character, and that in part it conveyed

the refining influences of music and art, everyone would agree that the work of that Institute was fraught with good in respect of the social and material well-being of Preston—(applause). It now became his duty to ask Sir Richard Cross to be good enough to distribute the prizes. They were very much indebted to him for accepting their invitation to be present. The name of Sir Richard Cross was a household word in Preston—(applause). His high character, his great abilities, and the lofty position which he had won for himself in the State increased the obligation which he had placed them under. To them all it was a matter of great gratification to see him there. To the students it would be a matter of great pride to receive the rewards of their industry at the hands of so distinguished a native of our town—(cheers).

Sir Richard then proceeded to distribute the prizes and certificates, a detailed list of which appears on page 31 of this report.

The pupils then stepped up to the platform, as their names were called out by the Rev. G. Steele, M.A. There was an extraordinary large number of recipients, who were very well marshalled by Mr. Johnson, the custodian. By the successful working of an admirable system, suggested and mainly carried out, we believe, by the energetic secretary, Mr. T. R. Jolly, the distribution was effected with expedition, and without the slightest hitch in the arrangements. Councillor W. Atherton and Mr. Frank Moore undertook the task of marshalling the students below, and Councillors Y. W. Booth and R. C. Robinson, and Messrs. J. Healey, and R. F. Easterby assisted in the general arrangements. Programmes had been printed, giving the names of the pupils, and the numbers of the seats they occupied in the hall. As their names were called out, they filed up the steps on to the dais, and, receiving their prizes, returned to their seats. By the methodical working of this arrangement, a great deal of time was saved. Sir Richard Cross accompanied each presentation with a shake of the hand and some kindly encouragement, and occasionally made some comment when a special feature of the distribution came under his notice. He regarded the local scholarships as one of the best phrases of the working of the Institute, and a great encouragement and spur to study. In presenting Thomas Shaw's prizes, he said it was due to him, considering the way that he had come out of those examinations, that he should be thanked publicly for what he had done. He hoped he would continue his labours, and always remain a high honour to the borough. He also addressed a few kindly words to David Wilkinson and Reginald Crooke, who, he

hoped, would long continue in their career. Sir Richard, in awarding prizes to Henry Gibson, and in speaking of the advantages of the Institute, stated that if a student there exhibited special talent which was quite sufficient to take him elsewhere, he could get a scholarship and provision made by which he could carry on those studies which they had succeeded so well in while at the Institute, and with so much honour to the town. He had peculiar pleasure in presenting Gibson's prizes, because that was just one of those cases which showed that anybody belonging to that Institute could go on and prosper elsewhere, and rise, as he hoped Mr. Gibson would do in future years, to some of the highest ranks in those paths of life in which at the present moment he was seeking to walk.

Sir R. Cross, responding to a call from the chair, after the distribution, was most cordially received. After the applause which greeted his rising had subsided, he said that the Institute whose meeting they were there to commemorate for this year was one that bore the name of a very old and very venerable friend of his own. He meant the late Mr. Harris, who for so long was at St. George's in Preston, and who was so honoured and so loved by all who knew him—(applause). He thought they owed a great debt of gratitude as townspeople to his son for the noble gift which he had presented to the town. It was with peculiar pleasure that he was there that night, and he had accepted with thankfulness the invitation which was given to him by their president and their chairman, because he felt it was a great compliment to an old fellow-townsman to come there on such an occasion. They knew that he was born in their neighbourhood, and that Preston was his native town—(applause)—and that it was owing to them that he made his first appearance—long ago, he was sorry to say—in public life—(applause). However, they were not there to discuss questions of a political kind that night; they were there with one common object, namely, if they could, to stir up emulation among the youth of Preston, in order that they might take possession of the advantages which were offered to them, and that they might in their turn, when they grew to be men and women, become, if possible, better citizens than they had been. He was very glad to see from the printed papers which had been published in the town with regard to the Harris Institute that those members who had anything to do with the matter had laid down the one golden rule of providing, so far as they had any power over it, everything of the very best and highest description—(applause). That seemed to him a rule which everyone in his own sphere of life ought always to lay before him. It was not the

slightest use putting up any institution of any kind or description to teach the youth of this intelligent country unless they could command their attention by the excellence of that which they had for them, for the people were far too shrewd not to find out an inferior article directly. The trustees had taken the only course which as honest Englishmen they could take, and stood up and said, "We will give you nothing but that which is the very best and highest we can possibly afford, and, thanks to the munificence of the bequest which was placed in our hands, we think we can afford you advantages just as good for this town of Preston as you could get in any other city or borough in the world." Yes, they must afford the best—the best accommodation, the best teaching, the highest classes, and do everything they could to get the best appliances; and they must minister also—and take care they did so—to the health and comfort of their students. They had reaped their reward at all events in this, that whereas he was told the old Mechanics' Institute—which, by the bye, did very good work in in its day and with the means at its command, and which though dead, they must not forget to praise for the work it did when alive—which had handed itself over now that it found the work could be done in other means, had in the last year of its existence, notwithstanding the flourishing science and art school which was then connected with it, only about 318 students attending. The existing Institution in its first year had 520 students, and at the present moment there were 1,600 people attending those classes, though of these several attended more classes than one, which would reduce the amount, but still over 1,000 of the inhabitants attending that Institute was very large indeed—(applause). And if that was so, then he thought that was a great work that the trustees of that Institution had done in so short a time. He thought more than that—that it was an encouragement to them to go on as they had done and provide their best—(hear, hear). Because it showed the people of that town appreciated what they had done, and that they had only to sow the seed and they would find plenty of people here willing to reap the fruit and restore it a hundred-fold from whence it came—(applause). He had to say to them that night that there was in this ancient and loyal borough of Preston no excuse for anybody in the future being ignorant unless they choose—(hear, hear). Happily by the law of the land every child could receive elementary education—(hear, hear). By elementary education he did not mean that they were very far advanced in education, but what he meant was that at all events they were to receive those elements which would enable them to very much forward education them-

selves. He was not a great advocate of forcing upon everyone a great education, but he was the strongest advocate of education to a certain extent for all. And when that was done it was not the simple rudiments, reading, writing, and arithmetic, that they had got. They had got a good deal more than that. They had gone through the discipline of the school, learnt habits of self-control, self-reliance, and, what was more valuable, how to teach themselves—(hear, hear). It was just at this point that an institution of that kind stepped in. They had the raw material properly combed out and ready for use, and in a much better state for use than before elementary education became general. Those who had passed through it also were much more ready to advance themselves and take advantage of their opportunities than they would have been had not this elementary education been compulsory. Now they had had the material prepared it was for them to see what manufactures they could work out of them. Those people who had leanred to read and write, and those habits of self-reliance and self-control, and also learned to respect themselves, which before, probably, they did not, were ready to advance their own interests and take advantage of the good things they found to their hands—(hear, hear). That Institution, in that respect, stepped in just at the right time. While talking about education, he must say that it was not everybody that would succeed—we did not know what would come to the world if that were the case—but it enabled those who had the power and the genius—and there was no doubt that there were people in the lowest classes with that—to rise to the highest position in the State. They had seen the number of people who had just received their prizes. These were people who had come from the elementary schools, and they had received a great impetus that night with their prizes to go on. A great deal more than that, the prizes they had won would have a great influence with their fellow students, and cause them to go and do likewise—(hear, hear). That Institute did a great deal more still, because if these people who came from the elementary schools went back again to their classes and remained there during the next two years, there were a certain number of scholarships which they could get in order to pursue their studies elsewhere for two years. He thought that some of them could get as much as £1 per week, and something more, in order to improve themselves in the practical lines of study which they themselves were desirous of following out. Every one who could rise could come there, attend these classes, get their prizes, and if they found they had still more genius, still more wish to rise, which every one might have, then they could get put into

these scholarships. He called that a noble Institution, and did not think that anything could be better than the proof that it showed to every one that they could rise above the situation in which they were born if they chose to do so—(applause). There was another thing which that Institution did, and that was that it gave no one in that town an excuse to be idle. They had seen in the prizes offered the immense variety of subjects upon which lectures were given in that Institution. They could hardly imagine a subject on which lectures were not given, whether mathematics, pure or applied mechanics, or astronomy, botany, chemistry applied to agriculture or arts, or technical education applied to the manufacture which was the staple industry of this town. Every one could get what he wanted, and no one could say, "I will be idle because there is not the particular subject taught which I want to learn"—(hear, hear). He hoped the people of this town would take advantage of the opportunities offered. He must congratulate the students upon the prizes received there, and the trustees again on the number of students attending, and the whole town on the noble bequest which had been put to such a noble and magnificent use. There was one danger against which he should like to warn some people, and on which a warning would not be out of place that night. That was that they must not go from one lecture to another and get a smattering of one thing and then of another. If they wished to learn anything they must go to the trouble of learning it right through. If they did not do that they would get no advantage. He urged the young people of that town, and those who were older too, to stick to one subject, and not go about like the bee from flower to flower to learn, but learn the one thing thoroughly. He thought that this remark about the bee was not an apt simile, for if they went to a flower after a bee had left it they would find very little honey left, and that was why she roamed from flower to flower; and if they were the same as the bee in that respect, then that was just what he wanted—(hear, hear, and applause). Get all they wanted out of one particular subject, and then let them go on to another. As he had said the trustees had given their best and the students must do the same. Let their motto be "thorough;" if it was not that it was not worth having. He saw from the papers that the trustees intended to have further extension of technical education. That was a subject which he had been alive to for some time in London and in the City of London Guilds. He looked upon that as one of the most interesting subjects which could come before them. He knew that there was a great deal of misapprehension about that matter. Many people laughed at it, and said, "You

cannot teach a man the trade of a carpenter, or founder, or cotton manufacturer, by books and lectures." That was true, but then that was what the institutions in London had never held out. They all knew that everyone who wanted to learn his trade, so as to have it thoroughly at his finger ends, must learn in the workshop and not at a class—(applause). That was the cardinal point of the whole story, and people were apt to forget that, and think that when they were talking about technical education they were teaching people to do with their heads what they ought to do with their hands. That could not be done, but what they could do was this. They could teach a working man how he was intelligently to know the use of his tools, and if he had to move weights, what was the relation between the power which had to move them and the weights that were to be moved, and if he was a carpenter, what was the strength of materials and what weight could be put upon them. He was quite clear that the man who had been taught the principles that had to be applied by his hands was worth three men who had to work it out themselves by practice. But when he was learning the principles with his head he must not forget to practice his hands at the same time, and that was only to be done in the workshop or factory itself. If we were to hold our heads above other nations we must take advantage of the science, knowledge, and learning which people had scraped together by years of study. They might depend upon it that in the long run the workman who knew most would do the best and the most work in a day, and the one who had received the most instruction would have a great pull in the great race of life—(applause). He would say to them in conclusion, for he did not wish to detain them long, that there was a higher and nobler office for that Institute even than teaching them how to use their tools and how to use their brains and how to rise in life to that high position which their own talent and genius entitled them to. He would undertake to say that there was not a man or a woman who went to the classes of that Institute who did not return home a better man or a better woman for the work that was done there—(applause). He would also undertake to say that any man, woman, boy, or girl who, having learnt something in that Institute at those lectures, or working in the Art Schools, or, it might be, in the other schools, he did not care which, who did not feel that he or she was a better man or woman when he or she got home at the end of the term than at the commencement—(applause). More than that, it showed him what human nature was capable of. It showed him that his pleasure ought not to be in the sensual pleasures of his body and appetites, but in the higher pleasures of the intellect and the

mind. To those persons who, in the earlier days of Mechanics' Institutions, thought that they were a dangerous thing, and likely to do harm, he answered that the result had proved the absolute contrary, and he believed the more men and women were taught to think for themselves, and look into matters for themselves, the higher would be their feeling, and all their lower passions and feelings would gradually disappear, and they would be led to higher matters, and to that mansion for which eventually they were destined—(applause). No man, however religious he might be, need ever fear the investigation of truth, for religion was truth, and it must be truth. He did not mean to say that for the time being people might not go astray, and think they had got hold of something contrary to religion and stick to it for a time, but he held the belief as firmly as anyone that religion had nothing to fear from the investigation of truth—(applause). The more people would search for this truth, and if they were high-minded in the first instance and searched quietly and patiently, it was quite certain that the end would be that truth would necessarily prevail, because truth and religion were one—(applause). The right hon. gentleman then said he had said more than he intended, knowing there were other gentlemen who had to speak, and he would only repeat the great pleasure with which he had been there, and he had to thank them very much for the way in which they had received the few remarks which he thought it his duty to make, and at any time, or at all times, it would always give him the highest pleasure to be of the slightest use to any of his fellow-townsmen—(continued applause).

Mr. C. R. Jacson, in moving a vote of thanks to Sir Richard Cross, said he was well aware that he had been selected as the representative of the Harris Trustees, and he had very great pleasure in availing himself of this opportunity to express the entire satisfaction which the Harris Trustees felt at the wise use that had been made of the sum of money that they were enabled by the scheme to place at the disposal of the representatives of the old Mechanics' Institute, for they had found their confidence thoroughly well placed. Under the direction of the remarkably clever president, Mr. Ascroft—(applause)—assisted by the sagacious vice-president, the Rev. Geo. Steele—(hear, hear)—the council had done work of an excellence and a quality that had far surpassed any expectation that the Trustees had ever formed of it—(hear, hear). They congratulated the council heartily on having been able to prevail upon Sir Richard Cross to pay a visit to Preston, to afford the value of his great personal influence in aid of that Institution—(applause). Sir Richard, they knew, was a thorough personification of all

those high qualities that he had been recommending so earnestly to the students—(hear, hear). A stronger proof of the estimation in which their honoured friend was held could not have been given than that which had been afforded within the last fortnight. During his progress in Scotland Sir Richard, while not going there as a politician, but still as a well-recognised statesman, had been received at Aberdeen and at Paisley, two places where, it was well known, they did not hold the same political views that he did, with marks of signal honour—(applause). The freedom of the city had been bestowed upon him, compliments had been paid to him not less deserved than they were warm, and he had received the very highest encomiums that could be bestowed upon any stranger who visited those places—(applause). But, passing from Scotland, Sir Richard had returned home, and now came the proof whether a prophet had honour in his native country—(applause). Well, their cheers sufficiently answered that. The knew Sir Richard's past conduct ; they knew that his career as a statesman was looked upon with the greatest and, he might say, with affectionate interest by all dwellers in this part of the country—(hear, hear). No matter what their political opinions might be, they all reciprocated that wish which their friend had expressed towards the students, that he might go on and prosper—(applause). He was not going to pay compliments to Sir Richard Cross, but he would exhort them all to study the character of the statesman who had done them the great honour to address them that evening. They would then discover those characteristics which had been the real secret of his success, his sincerity, his integrity, his resolution, the indomitable perseverance of the man in whatever capacity he had been placed, as student, collegian, barrister, statesman, or man of business, and, above all, the warm sympathy that he had manifested all through life for the great masses of his fellow countrymen—(hear, hear). Sir Richard knew, and none knew it better, that the home of the working man was every bit as much to him as the mansion of the great man—(applause). Sir Richard Cross had done more perhaps than any other statesman in this country to improve the condition of the dwellings of the labouring man, who naturally had to depend so much upon others for the quality of the house he inhabited—(hear, hear). This was the explanation of Sir Richard's wonderful reception in Aberdeen, and it also secured for him that very cordial greeting at Paisley, towns the inhabitants of which did not agree with him politically. They could not, however, but recognise the motives that had actuated him, and the admirable and powerful manner in which he had carried out those great measures to which reference had been made—(hear, hear).

He had much pleasure in moving that the best thanks of the meeting should be given to the Right Hon. Sir Richard Cross for his kindness in coming among them on that occasion, and the admirable manner in which he had discharged the duties that he had taken upon himself—(loud applause).

Mr. Alderman BIRLEY, in seconding the vote of thanks to Sir Richard Cross, said that Mr. Jacson had apologised for speaking to them, but he did not think they required an apology from Mr. Jacson, inasmuch as he was a principal member of the trustees under Mr. Harris's will. He (Mr. Birley) did think they required some apology on his part, because he was not directly connected with the Harris Institute which had just been established, or by being a member of that council, or in any way connected with the Harris Trustees; but possibly he might have been selected to appear before them that night because there were responsibilities attaching to himself within the borough which were not directly attached to others that had spoken to them previously that evening. But the responsibilities which attached to him in conneetion with the borough of Preston were grave and heavy ones, as being the employer of some hundreds of people in the town—(hear, hear, and applause),—therefore he thought that he ought to feel an interest in the advancement of the Harris Institute. He felt that times were not such as they were 30 or 40 years ago in the time of his predecessors in trade, when the people of this country were the producers, to a great measure, for the whole world; but now we had entered into a competitive race in which other nations competed with us, which aforetime we were not in a position to do, and therefore it required all the talent, all the ingenuity, and all the industry of both master and man, not only to enter upon, but to succeed in the competitive race—(hear, hear, and applause). He felt that during the last seven or eight years, on account of the languishing trade in this country, and the unsatisfactory state thereof, inventive genius had been sorely taxed, and it would still continue to be so. It therefore behoved them all, whether employers or employed, to put their shoulders to the wheel to tax their wits to the utmost, and for the growing population to take advantage of all such institutions as that which had been recently established in Preston, in order that they might be taught not only to work with their hands, but to have a full knowledge of why they worked with their hands at the trade in which they were engaged. He had listened with great interest to the able address of their president, Mr. Ascroft—(hear, hear, and applause). He had communicated much to them of great interest. He (Mr. Birley) had also listened to the most practical, able, and excellent remarks of Sir

Richard Cross—(applause),—and he was sure they would, in whatever position they were placed in the social scale, and in whatever business they were engaged, whether in a profession or business or trade, all go away from that room wiser men and women than they went into it, and it would be their own fault if they did not profit by it. He had read with great interest a copy of a paper which was read by Mr. Slagg, a member for Manchester, who had been on what he should call a roving commission to the Continent, to see what advances in technical education and science and art had taken place in those countries. He told them that there was a great care taken by the authoritics in advancing the growing population in science and technical knowledge. Everyone seemed to be interested in the subject. He told them also, if he had read his paper rightly, that this country had advanced considerably, although possibly not as much as other nations. He told them that in 1852 the number of people, both instructors and instructed, that were taking an interest in technical education was under 7,000, but in the year 1882 they had advanced to the number of above 90,000—(applause). Now, in Preston they were ahead of many towns, for they were able to conduct their elementary schools without taxing the rates of the people—(applause). Well, Mr. Slagg said that from the interest he had taken in his tour and from the knowledge he had gained that no institution would succeed except by subscriptions or by the aid ot rates or, lastly, by endowments. Well, now Preston, fortunately, had got a munificent endowment from Mr Harris—(applause)—and, therefore, nothing was wanting in the town except the young people taking advantage of it, as they were doing at the present time, and let it not be for this week or next week but from year to year, and Preston would bid fair to emulate not only every town in the United Kingdom of Great Britain, but also those countries abroad—(applause). He had rather wandered from the subject for which he was specially called, which was to second a vote of thanks to Sir R. A. Cross—(applause.) He (Mr. Birley) had known him for a great many years. He knew him when he first came forward as a candidate for the suffrages of the electors ot Preston—(hear, hear). He had known Sir Richard ever since, and had seen much in him to admire. His works were before them, and, as Mr. Jacson justly said, as a minister he did his work and did it rightly. No one during the time he was Home Secretary could possibly have done more for the artisan than Sir Richard Cross had done. His business as a member of Parliament had been brought to a profitable result, and that was far before all the theory in the world. With those few observations he asked

to be allowed to second a most cordial vote of thanks to Sir Richard Cross for coming there that night, and to say that they admired him not only as a member of Parliament, but as a good Englishman and as intimately connected by birth with the town—(applause.)

Mr. Ecroyd, M.P., rising, to support the resolution, had a most flattering reception. The applause having subsided, the hon. member said he came there that evening in the very happy person of a spectator of the most interesting proceedings which they had witnessed, and he had no intention at all to occupy their time in making a speech. It was certainly very delightful to come together upon those occasions to witness the combined result of the generous action of respected citizens of such towns as Preston, of the abilities of those who had known how to make the best use of such a bequest, and of the readiness with which the younger inhabitants of their borough had availed themselves of the great privileges that had been placed before them, and he thought as he saw the gainers of the prizes distributed pass one by one in front of the platform that it was indeed a fitting circumstance that they should receive their prizes and certificates at the hands of one who had proved in his own person what was open to a native of the ancient borough of Preston if he would only avail himself of his opportunities. He could not but believe—he spoke in the presence of Sir Richard Cross, and therefore he should avoid anything that might savour of flattery—that those who had received those prizes at his hand had received also something much more valuable—a certain sense of inspiration from the career of the man who handed them to them—(hear, hear). They had heard a great deal of late about the question of technical education, and there was no doubt that they would need all the resources of education and all the enterprise in every form to run the race of competion that was set before them. He believed, however, that it was quite possible for them to discourage themselves too much by overrating the advance that had been made in other countries beyond that which we ourselves had made. They must always take off a certain discount by remembering that it was the proud characteristic of this country that its inhabitants are more taught to depend upon themselves and less upon the constituted authorities. He had no doubt that though we could not show so great an amount of public organisation for the purpose of extending technical education in this country as could be shown in some of the neighbouring countries on the continent, still we could show that what was perhaps better, a large population who not only in the present generation, but happily for us in the generation which had gone before, had known how to teach themselves, which

was after all the best kind of teaching, while the advantages which were existing for this generation were such as would enable us to benefit very largely by them as compared with anything those had who had gone before. But it would be by those habits of self-denial which our forefathers had shown forth in far less favourable circumstances. He hoped that the benefits which the town of Preston enjoyed in that Institution might excite the young men in the town to show what noble use might be made of these privileges. He hoped that they would see some efforts made by these in the extension of the enterprise and scope of the manufactories in the town, and that none of them need to fear that so far as skill in manufacture, knowledge of the process of the manufacture, and industry in the carrying out of these processes, would cause them to lose any of the advantages by which we had passed far ahead of any of the other nations of the world. He had said already that he came there in the first place as a spectator only. He had been very glad to have been there, not only because of the very encouraging sight they had there, but also to testify his appreciation of the gentleman who had distributed the prizes. He knew that Preston had occasion to be proud of many of her citizens in these times, but he was quite sure that Sir Richard Cross had added to her name a new lustre, for it was not only as a statesman connected with one political party that Sir Richard Cross was honoured. He was a man esteemed by all parties, and sincerely, for his efforts for the common good. He had very great pleasure in supporting the motion that a vote of thanks be passed to Sir Richard Cross—(applause).

The CHAIRMAN put the motion, which was carried by acclamation.

Sir R. CROSS, in acknowledging the compliment, said he was not going to detain them a moment, but he would only say that he thanked them from his heart for the kindness with which they had received him—(applause).

The MAYOR (Alderman Forshaw), who was cordially greeted, said there was one other duty which he thought they ought to perform before leaving, and that was to propose a vote of thanks to the worthy president of the Institution, who had been their chairman that evening—(applause). They had all heard the admirable address which he made at the beginning of the proceedings that evening, and they must have seen from it the very great amount of labour which some one had performed in order to make the Institution the success it appeared to be. A large portion of that labour had been performed by Mr. Ascroft, the president of the Institute, and he was sure it was as little as they could do to accord to him a most hearty vote of thanks for occupy-

ing the chair at what might be called the inauguration of the noble Institution—(applause).

The VICAR (the Rev. J. H. Rawdon) said he felt it to be a very great honour as well as a very great pleasure to take even a small part in the proceedings that evening, but if he had been called upon to select a duty at the conclusion of the proceedings, there was none which he would have more gladly chosen than the one which had been committed to him, namely, to second the motion which had been proposed, that a vote of thanks be passed to their worthy president. He had from time to time heard Mr. Ascroft speak with the greatest interest and pleasure in the development of that most useful Institution, and he was quite sure that Mr. Ascroft had brought to bear upon it the same discretion, energy, and public spirit, of which he (the vicar) had always thought him distinguished in every other matter in which he had been connected with him. They had heard that night a great deal about the direct and immediate benefits of that new Institution, but what struck him as almost as important were the indirect benefits which it would confer upon the community. He meant the moral benefits of those advantages by giving to their young men and women the opportunities of spending their evenings profitably, and thereby withdrawing them from employments which would be much less profiable than those to which they were attracted. He would not detain them further, but simply desired to second the vote of thanks to their worthy president—(applause).

The motion was put by the Mayor, and carried enthusiastically.

Mr. ASCROFT briefly replied, and thanked those present for according to him so heartily their vote of thanks. He could only say that the work of the Institution could only have been carried out by an earnest and united council and an earnest and indefatigable secretary—(applause).

The proceedings then terminated, Mr. Tomlinson playing the National Anthem on the organ as the assembly left the hall.

LIST OF PRIZES AND CERTIFICATES AWARDED TO STUDENTS ATTENDING THE CLASSES AT THE HARRIS INSTITUTE DURING THE SESSION, 1882-83.

* These Students have obtained Local Scholarships.

SCIENCE.

Name	Subject	Queen's Prize	Local Prize
Atherton, Henry ...	Machine Construction, E II		
Atherton, John ...	Machine Construction, E II		Cyclopædic Sc'nce
Ainsworth Wm. ...	Applied Mechanics, E II ...	Marine Engineer	
,, ...	Magn'sm & Electricity, E II	Mechanics for	Material
,, ...	Steam, E I ...	Beginners	
Ainsworth Francis...	Sound, Light & Heat, E II		
,, ...	Magn'sm & Electricity, E II		
,, ...	Inorganic Chemistry, A II..		
Anderson, Thomas...	Magn'sm & Electricity, E II		
,, ...	Steam, E II ...		
,, ...	Geology, E II ...		
Ayres John Thos. ...	Magn'sm & Electricity, E II		
*Baines, Pius ...	Building Construction, A I	Twiss on Handrail-	Dry Rot in Timber
,, ...	do 2nd grade	ing. Masonry. Foundations. Mathematical instruments.	
Baldwin, J. S. L. ...	Building Construction, A II		
,, ...	Magn'sm & Electricity, E II		
Bleasdale, William...	Mathematics, stage 2, II ...		
,, ...	Physiography, A II ...		
Brocklehurst, J. W.	Mathematics, stage 2, II ...		
Baverstock, T. J. ...	Machine Construction, A II		
*Bradshaw, Herbert	Mathematics, stage 1, II ...		Treatise on the Power Loom
,, ...	Applied Mechanics, E II ...		
,, ...	Sound, Light, & Heat, E II		Astronomy, by Lockyer
,, ...	Magn'sm & Electricity, E II		
Buckley, John T. ...	Magn'sm & Electricity, E II		
Bannister, John W.	Applied Mechanics, E II ...		
,, ...	Sound, Light, & Heat, E II		
,, ...	Magn'sm & Electricity, E II		
*Bannister Lewis ...	Sound, Light, & Heat, A II		Elementary Lessons in Physics
,, ...	Magn'sm & Electricity, E II		
Bamber, Roger ...	Applied Mechanics, E II ...		
,, ...	Sound, Light, & Heat, A II		
,, ...	Magn'sm & Electricity E II		
,, ...	Steam, E II ...		

Name	Subject	Queen's Prize	Local Prize
Bull, John ...	Building Construction, E II		
Beardwood, J. ...	Magn'sm & Electricity, E II		
Birch, William, H ...	Magn'sm & Electricity, E II	Wanderings in S. America.	Homer's Iliad.
*Bottrill, Samuel J.	Inorganic Chemistry, E II...		Men who have made themselves
,, ...	Physiography, E I ...		
*Coulthard, Thomas	Machine Contruction, E II		Wor'sworth's Poem
Coulthurst Edward .	Building Construction, E II		
Cotton, Samuel ...	Mathematics, stage 2, II ...		
,, ...	Inorganic Chemistry, A II...		
,, ...	Practical Chemistry, E II...		
*Clarke, Frederick...	Mathematics, stage 1, II ...		On various forces
,, ...	Sound, Light, & Heat, E II		of Nature.
Clarkson, J. T. ...	Agriculture, E II ...		
Corless, George ...	Mathematics, stage 1, II ...		
*Carter, Charles ...	Magn'sm & Electricity, E I	Mechanics for Beginners. Wanderings in S. America	Forest, Jungle and Prairie. Land Battles
,, ...	Physiography, E I ...		
Coupe, Edward J.	Magn'sm & Electricity, E II		Conservation of Energy
Clarke, Lawrence H	Magn'sm & Electricity, E II		
Cockshott, Samuel...	Steam, E II ...		
Crombleholme, R. ...	Agriculture, E I ...	Familiar Science Studies	
Dewhurst, Edward...	Magn'sm & Electricity, A II		
Dallas, James ...	Steam, E II ...		
Dewhurst, John ...	Steam, A II ...		
Dover, John ...	Magn'sm & Electricity, E II		
Edmondson, John E.	Steam, E II ...		
Fare, Jane ...	Magn'sm & Electricity, E II		
Greenwood, John S.	Sound, Light, & Heat, E II		
,, ...	Magn'sm & Electricity, E II		
Green, Herbert J. ...	Building Contruction, E II		
*Gardner, Henry ...	Mathematics, stage 2, II ...	Elements of Mechanism	Juke's Manual of Geology. Bonny's Primer of Geology. Geike's Primer of Geology.
,, ...	Sound, Light, & Heat, A II		
,, ...	Physiography, E I ...	Notes on Electricity	
,, ...	Magn'sm & Electricity, A II		
Gardner, John L. ...	Sound, Light, & Heat, E II		
,, ...	Magn'sm & Electricity, E II		
Gleave, William ...	Magn'sm & Electricity, E II		
*Henry, Edward ...	Mathematics, stage 1, II ...		
,, ...	Physiography. E I ...	Familiar Science Studies	Smith's Key to Elem'tary Algebra
,, ...	Agriculture, A II ...		
Howarth, George ...	Magn'sm & Electricity, E II		
,, ...	Geology, E II ...		
Heaps, Thomas ...	Magn'sm & Electricity, E II		
,, ...	Physiography, E II ...		
,, ...	Agriculture, E II ...		
Hartley, Charles L.	Agriculture, E II ...		
Harrison, John ...	Physiography, E I ...		
Helme, Thomas ...	Physiography, E II ...		
Hunter, Robert G. ...	Applied Mechanics, A II ...	Marine Engineer	
,, ...	Steam, E I ...	Steam Engine Manual	

Name	Subject	Queen's Prize	Local Prize
Hargreaves, R. H....	Steam, E II ...		
Johnson, Edward ...	Building Construction, E II		Introduction to Sanitary Science
Johnson, James, B.	Building Construction, E II		
Jackson, John E. ...	Mathematics, stage 1, II ...		
,, ...	Magn'sm & Electricity E II	Natural History of Animals	Book on Insects
,, ...	Agriculture, E I ...		
Jolly, James P. ...	Sound, Light, & Heat, E II		
,, ...	Magn'sm & Electricity, E II		
Kirkham, John ...	Building Construction, E II		
*Kelly, Edward ...	Mathematics, stage 1, II ...		The Human Race
,, ...	Physiography, E II ...		Tennyson's Poems
,, ...	Agriculture, A II ...		
*Livesey, Charles ...	Machine Construction, A I	Puckett's Project'n of Shadows	Wheels and Teeth of Wheels
Longstone, Joseph ...	Magn'sm & Electricity, E II		
*Mallott, Francis ...	Building Construction, E II		Book on Arc'ture
*Moulton, Arthur J.	Prac., Plane,& Sld. G'y, E II	Descriptive Geom.	
,, ...	Inorganic Chemistry, E I ...		
,, ...	Machine Construction, A II	Elements of Machine Design	Thorpe's Inorganic Chemistry
,, ...	Steam, A I ...		
,, ...	Applied Mechanics, A I ...		
,, ...	Sound, Light, & Heat, A I	Applied M'chanics	Bloxam's Metals
,, ...	Magn'sm & Electricity, A II	Spherical Geom.	
,, ...	Theoretical Chemistry, A II		
McCarter, Wm. H....	Building Construction, A I		
,, ...	Mathematics, stage 2, II ...	Box of Water Colours	Fletcher on Quantities
,, ...	Sound, Light, & Heat, E II		Collins Logarithms
,, ...	Magn'sm & Electricity, E II		Dr'wngs for Marine Engineers.
McCarter, Albert ...	Mathematics, stage 2, II ...		
Martin, Thomas ...	Applied Mechanics, E II ...		
,, ...	Steam, E II ...		
Metcalf, John ...	Building Construction, E II		Ruling Pen
*Murphy, T. C. ...	Mathematics, stage 2, I ...	PrincipalsofPol'tc'l Economy. Qualitive Analysis. Spencer on Education.	Thorpe's Inorganic Chemistry. Adams English Language
,, ...	Sound, Light & Heat, A I		
,, ...	Magn'sm & Electricity, E II		
Miller, Christopher	Magn'sm & Electricity, E II		
Newsham, Ralph H.	Machine Construction, E II		
,, ...	Steam, E II ...		
*Pilkington, Thomas	Machine Construction, A I...	Marine Engineer	
,, ...	Magn'sm & Electricity E II	Engineers & Millwrights Assist'nt	Steam Engine
,, ...	Steam, A II ...	Engineer's Guide to the Navy	Principles of Mechanics
*Pott, George ...	Machine Construction, A II		Forms of Ships and Boats. Pocket Book for Civil Engineers. Series of Logarithms
,, ...	Applied Mechanics, A II ...		
,, ...	Steam, A I ...		
Pedder, J. G. ...	Magn'sm & Electricity, E II		
Plumb, Robert ...	Geology, E II ...	Geology	Geological Stories
,, ...	Agriculture, E I ...		

Name	Subject	Queen's Prize	Local Prize
Penny, Margaret C.	Physiography, E II ...		
*Redmond, Albert...	Building Construction, E I	30 Drawings on B'ding Construct'n	Scott Burns B'ding Construct'n
Riches, Henry W.	Mathematics, stage 2, II ...		Logarithms Trigonometrical Tables
,, ...	Sound, Light, & Heat, A II		Lessons on Physiology. Astronomy
,, ...	Magn'sm & Electricity, A II		
*Ryan, Patrick ...	Mathematics, stage 1, II ...		Mensuration for Beginners.
,, ...	Physiography, E II ...		
,, ...	Agriculture, A II ..		El'mt's of Magnetism & Electricity
Robinson, Robert ...	Machine Cons'ction, 2nd grade	Puckett's Project'n of Shadows	
Renwick, James ...	Sound, Light, & Heat, E II		Thompson's Electricity
,, ...	Magn'sm & Electricity, E II		
Rigby, George R. ...	Geology E II ...		
Rawcliffe, Mary R.	Physiography, E II ...		
Spencer, Arthur ...	Building Construction, A II		Practical Geometry Plane and Solid
Sanderson, John ...	Building Construction, E II		
Shaw, John ...	Mathematics, stage 1, II ...		
,, ...	Sound, Light, & Heat, E II		
,, ...	Magn'sm & Electricity, E II		
*Shaw, Peter ...	Mathematics, stage 1, II ...		
,, ...	Sound, Light, & Heat, E II	Physiography ...	Iron & Metal Trds. Companion
,, ...	Magn'sm & Electricity, E I	Notes on Elect'ity	
,, ...	Steam, A II ...		
*Shaw, George ...	Applied Mechanics, A II ...	...	
,, ...	Inorganic Chemistry, E II...		Fossils and Petrification
,, ...	Geology, E II ...		
*Shaw, Thomas ...	Sound, Light, & Heat, A II		Tyndall on Light
,, ...	Physiography, E I ...		
,, ...	Magn'sm & Electricity, A II	An'mal Chemistry	Box of Colours
,, ...	Inorganic Chemistry, E II	...	L'sons in Astr'my
,, ...	Geology, E II ...		
,, ...	Steam, A II ...		
Singleton, R. ...	Physiography, E II ...		
Snowden, Arthur H.	Magn'sm & Electricity, E II		
Standing, Charles .	Magn'sm & Electricity, E II		
,, ...	Agriculture, E II ...		
Sumner, William ...	Magn'sm & Electricity, E II		
Shepherd, Charles C.	Machine Construction, E II		
*Seed, William H....	Mathematics, stage 1, I ...	Every Man his own Mechanic	Treasury of Biography
Toulmin, J. H. ...	Machine Construction, A II		
*Tattersall, H. J. ...	Machine Construction, E I		Microscope
,, ...	Mathematics, stage 1, II ...	Book of Scales ...	Common objects of the Microscope
,, ...	Applied Mechanics, A II ...		
,, ...	Steam, A II ...		Spectroscope and its work
Threlfall, J. ...	Mathematics, stage I, II ...		
*Tomlinson, Wm. ...	Mathematics, stage 2, II ...		Elem'ts of Cmsty I

Name.	Subject.	Queen's Prize.	Local Prize.
*Tomlinson, Wm. ...	Sound, Light, & Heat, E II		Elem'ts of Cmsty II
			Short Logarithms
Town, Joe ...	Sound, Light, & Heat, E II		
,, ...	Magn'sm & Electricity, E II		
,, ...	Inorganic Chemistry, E II...		
,, ...	Geology, E II ...		
Thwaites, Wm. H.	Building Con'tion, 2nd grade	Pencil Outlines ...	
*Taylor, Elizabeth...	Magn'sm & Electricity, E I	British Birds ...	British Ferns
*Towill, E. J. ...	Inorganic Chemistry, E II...		Treasury of
			English Literature
,, ...	Practical Chemistry, E II...		
*Whittle, James ...	Practical Plane Geom., A II		Civil S'vice Geog'y
,, ...	Mathematics, stage 2, II ...		
,, ...	Agriculture, A II ...	Ganots Physics ...	
,, ...	Applied Mechanics, A II ...		Mensuration for
,, ...	Sound, Light & Heat, A II		Beginners
,, ...	Inorganic Chemistry, A II		
,, ...	Geology, A II ...		
,, ...	Metallurgy, A II ...		
,, ...	Steam, A I ...		
,, ...	Physiography, A II ...		
Wade, John R. ...	Machine Construction, A I	Cotman's Pencil Outlines ...	Engineer's Manual
,, ...	Machine Construction, 2 gde	Marine Engineer	
		Engineers Ass'tant	
		Engineer's Guide to the Navy	
		Puckett's Proj'ct'n of Shadows	
Whitehead, Wm. A.	Machine construction, E II		The Angler N't'rl st
*Wilkinson, David	Mathematics, stage 2, I ..	Geometrical Conic	
,, ...	Inorganic Chemistry, A I...	Sections	
,, ...	Practical Chemistry, E I ...	Text Book of	Text Book on the
,, ...	Geology, E II ...	Science	Steam Engine
,, ...	Physiography, E I ...	Theory of Heat ...	Theoretical Mchcs
,, ...	Agriculture, E I ...	Bloxam on Metals	
Wilkinson, Charles	Sound, Light, & Heat, E II	Principals of	
,, ...	Magn'sm & Electricity, E II	Mechanics	
,, ...	Inorganic Chemistry, E II...		
,, . .	Agriculture, E II ...		Element'ry Lessons
			in Physics
*Wilson, Lewis ...	Mathematics, stage 2, II ...		Conic Sections
Wilby, Walter ...	Mathematics, stage 1, II ...		
Winterbottom, T.H.	Mathematics, stage 1, II ...		
,, ...	Magn'sm & Electricity. E II		
*Wilson, Fred. J. O.	Applied Mechanics. A II ...		Marine Engineer
,, ...	Steam. A II ...		
Wiggans, Agnes A.	Magn'sm & Electricity, E II		
Wilson, Willam A.	Inorganic Chemistry, E II		
,, ...	Practical Chemistry, E II...		
Worden, Edward ...	Magn'sm & Electricity, E II		
Whiteside, J. ..	Mathematics, stage 1, II ...		Conservation of
,, ...	Sound, Light, & Heat, E II		Energy
,, ...	Magn'sm & Electricity, E II		

SCHOOL OF ART.

SECOND GRADE EXAMINATION IN DRAWING.

P Signifies Pass, and E Excellent.
* Scholarships awarded for the ensuing year.

Name.	Free-hand.	Geo-metry.	Pers-pective	Model.	Prize.
*Ackeroyd, Walter ...	P	...	...	...	
*Barlow, D. W. ...	...	...	...	P	
Baverstock, Wm. ...	...	...	...	E	Cotman's Pencil Outlines
Bennett, Harrison O. ...	...	...	P	...	
*Berry, Ada ...	P	...	...	...	
*Cardwell, E. A. ...	P	...	...	...	
Crook, Edith ...	...	...	E	...	Dennis, 3rd grade Perspective
*De Rome, Thomas ...	...	...	...	P	
Fairclcough, Robert ...	P	...	...	P	
Goodwyn, Frederick ...	...	...	...	E	Mathematical Instruments
Greenwood, Alf. H. ...	P	...	...	...	
*Hargreaves, Jane ...	P	P	P	P	
*Hindle, Caroline ...	...	P	...	...	
*Holmes, Arthur B. ...	E	...	...	...	Cotman's Pencil Outlines
*Howarth, James L. ...	P	...	...	...	
*Jackson, John E. ...	...	...	...	E	Box of Water Colours
*Jump, Thos. B. ...	P	...	...	...	
Jury, Elizabeth A. ...	...	...	...	P	
Lawrence, W. E. ...	P	...	P	...	
*Nelson, James ...	...	...	E	...	Box of Water Colours
Parker, James N. ...	...	P	...	...	
*Parkinson, James N. ...	...	P	...	P	Box of Water Colours
Parkinson, Richard ...	...	P	...	...	
*Redmond, Albert ...	P	...	...	P	
*Waterhouse, S. S. ...	P	...	...	E	Box of Mathematical Instrum'ts
Woods, Margaret J. ...	P	...	...	...	
*Wooley, Herbert J. ...	P	...	...	...	
Wilding, Thomas ...	...	...	...	P	

ART STUDENTS' CERTIFICATE.

For having passed a satisfactory examination in Freehand, Geometry, Perspective, and Model Drawing of the Second Grade.

Bennett, Harrison O. | Hargreaves, Jane
Crook, Regd. H.

STUDENTS TO WHOM THIRD GRADE PRIZES HAVE BEEN AWARDED.

Name.	Stage.	Prize.
Bell, Rhoda C. ...	15a	Photographs of Holbinn's Heads
Crook, Regd. H. ...	3b	Dictionary of English Artists
„ „ ...	5b	Bell on Expression
Gibson, Henry ...	23c	Photographs of Liber Studiorium
Poole, Florence ...	3b	Flaxman's Anatomy.

THE NATIONAL SCHOLARSHIP.

Entitling the holder to Free Tuition at the Art Training School, South Kensington, for two years, and an allowance of £52 per annum.—Gibson, Henry.

SPECIAL ART PRIZES.

Name.	Prize.	Donor.
Backhouse, S. ...	Writing Desk ...	Harris Institute
Baverstock, William	Box of Drawing Materials ...	do do
Bell, Rhoda C. ...	Dante's Poems ...	Wm. Ascroft, Esq., J.P.
„ ...	Stones of Venice ...	John Healey, Esq.
„ ...	Val D' Arno ...	A. E. Ascroft, Esq.
„ ...	Flowers of the Field ...	A. M. Birchall, Esq.
Catterall, Mrs. F. C.	Lectures and Lessons on Art ...	Harris Institute
Crook, Edith ...	Oil Paints ...	Harris Institute
Crooke, Regd. H. ...	Pictures by Landseer ...	John Healey, Esq.
„ ...	English Scenery ...	S. A. Hermon, Esq.
„ ...	Works by J. M. W. Turner ...	William Atherton, Esq.
„ ...	Marshall's Anatomy ...	The Rev. George Steele, M.A.
„ ...	2 Large Canvasses, etc. ...	F. A. Moore, Esq.
Fairclough R. ...	Trees, and How to Paint Them...	Harris Institute
Graham, Agnes ...	Views of Italy ...	The Head Art Master
Hargreaves, Jane ...	Byroms Poems ...	Harris Institute
Heaton, John ...	China Painting ...	do do
Holmes, A. B. ...	Box of Water Colours ...	S. A. Hermon Esq.
Howarth, James L.	Box of Compases ...	Harris Institute
Jackson, Edith ...	Burns's Poems ...	do do
Longmaid, L. ...	Ruskin's Seven Lamp Arch'ture	James Hibbert, Esq.
Lawrence, Wm. E....	Towers and Spires ...	Harris Institute
Livesey, Alice ...	Oil Paints, etc. ...	do do
Nelson, James ...	Castle's Sports and Pastimes ...	do do
Morris, Mary L. ...	Companion Box ...	do do
Oliver, Edith D. ...	Gray's Elegy ...	do do
Parkinson, J. N. ...	Academy Notes ...	do do
Parkinson, Richard...	Electrotyping, etc. ...	do do
Poole, Lizzie ...	Pictures by Landseer ...	Y. W. Booth, Esq.
Poole, Clara ...	Milton's Poems ...	Harris Institute
Poole, Florence ...	Noble Thoughts ...	do do
Smith, B. H. ...	Marshall's Anatomy ...	Wm. Atherton, Esq.
Waterhouse, Samuel	Box of Colours ...	Harris Institute
Wade, William W....	Box of Compasses ...	do do
Gibson, Henry ...	Marshall's Anatomy ...	Dr. Hammond, J.P.

STUDENTS ATTENDING DAY SCHOOLS WHO HAVE BEEN AWARDED INSTITUTE SCHOLARSHIPS.

SCIENCE.

Cookson, Annie
Gardner, John L.
Gornall, Mary
Hartley, John
Hoyle, Thomas
Livesey, Henry
Lamb, F.
Lucas, Annie
Mallott, Lilly
Penny, John
Purvis, John
Renwick, Thomas
Robinson, James
Robinson, W. H.
Toulmin, W.

ART.

Adamson, John T.
Coward, J. H.
Croasdale, Annie
Eccles, Catherine M.
Greenall, G. B.
Holliday, Albt. V.
Jump, Sidney B.
Lucas, Annie
Robinson, John H.
Worden, Amy

TECHNICAL.

Name.	Subject.	Grade.	Prize.	Local Prize.
*Aspden, John	Cotton Spinning	Ordinary 1st	2nd, Microscope & Bronze Medal	Russia
Atherton, W. H.	Mech. Engineering	do. 1st		The Highways of Literature
Austin, Robert ...	Printing ...	do 1st	3rd, £2 and Bronze Medal	Workshop Receipt
Bamber, Roger ...	Cotton Spinning...	do. 1st		
Barrow, Joseph ...	do. ...	do. 2nd		
Birkenhead, T. ...	do. ...	do. 2nd		
Blogg, Stephen ...	Tools ...	do. 2nd		
Clarke, L. H. ...	Cotton Spinning...	do. 2nd		
Coates, William ...	do. ...	do. 2nd		
Dawson, Wm. A...	do. ...	do. 1st		
Gardner, John H.	Printing ...	do. 2nd		
Gee, William H....	do. ...	do. 2nd		
Greenall, Wm. J.	Cotton Spinning...	do. 2nd		
Hargreaves, W. H.	do ...	do. 1st		Handbook of Machinery
Hartley, James ...	do. ...	do. 1st		
Howarth, M. ...	do. ...	do. 2nd		
*Hodgkinson, T...	do. ...	Honours 1st		British Ferns, Treatise on Power Loom. Technical Arithmetic
Hough, George ...	do. ...	Ordinary 2nd		
Houghton, Robert	do. ...	do. 2nd		
Hunter, Robert G.	Mech. Engineering	do. 2nd		
Hunter, W. F. ...	Cotton Spinning ...	do. 2nd		
*Jolly, Thomas ...	do. ...	Honours 2nd		Dreamthorpe. The Construction of the Power Loom

TECHNICAL.

Name	Subject	Grade	Prize	Local Prize
Latus, Robert ...	Tools ...	Ordinary 2nd		
Leeming, Thos. ...	do. ...	do. 2nd		Practical Mechanics Principals of Machinery
Lobbin William ...	Cotton Spinning...	do. 2nd		
Mallott, Henry ...	do. ...	do. 2nd		
Masheter, Joseph	do. ...	do. 1st		
Miles, William ...	do. ...	do. 2nd		
*Moulton, A. J. ...	Mech Engineering	do. 1st		
*Parish, Thomas...	do. ...	Honours 2nd		Pocket Book for Engineers
Park, Thomas ...	Tools ...	Ordinary 2nd		
Parkinson, Joseph	Cotton Spinning...	do. 1st		
*Parkinson, Jas. N.	Printing ...	Honours 1st		Reporters' Companion, Artistic Anatomy, Lectures on Drawing, &c.
Pearson, M. J. ...	Mech. Engineering	Ordinary 2nd		
Pilkington, Thos...	do. ...	do. 2nd		
Porter, Enoch ...	Cotton Spinning ...	do. 2nd		
Pott, George ...	Mech. Engineering	do. 1st		
Sellers, Burdett ...	Milling (flour mfr.)	Honours 1st	2nd, £5 Bronze Medal	
Sumner, Wm. ...	Cotton Spinning ...	Ordinary 2nd		
Sykes, John S. ...	Tools ...	do. 2nd		
*Thexton, Joseph	do. ...	Honours 1st		Strength of Mat'r'ls Indust'l Statistics. Lessons in Appd. Mechanics.
Turner, Josiah ...	Cotton Spinning...	Ordinary 1st		Steam Engine
Wilkinson, N. E...	do. ...	do. 1st		

MISCELLANEOUS.

Catterall, Emma ...	English Literature ...	Certificate awarded in connection with Cambridge Extension Scheme
Evans, Caroline ...	do. ...	do.
Grime, Annie J. ...	do. ...	do.
Goodwyn, Mary L. ...	do. ...	do.
Leech, Isabella ...	do. ...	do.
Lancaster, Margaret ...	do. ...	do.
Sefton, Maud A. ...	do. ...	do.
White, Alice C. ...	do, ...	do
Williamson, Wm. B. ...	do. ...	do.
Williamson, F. A ...	do. ...	do.

MISCELLANEOUS.

Name.	Subject.	Local Prize.	Society Awarding Certificate.
Bleasdale, Wm. ...	English, 2nd class	...	Lancashire and Cheshire Institutes
	do 3rd	...	Society of Arts.
Baron, Thomas ...	do 2nd	Hist'ry of Music for Stds	Society of Arts
,,		Organ Primer	
Bramwell, Wm. ...	do 2nd	Astronomy without	Society of Arts
	do 2nd	Mathematics	Lancashire and Cheshire Institutes
Cotton, Samuel ...	do 3rd	...	Society of Arts
Edwards, A. H. ...	do 3rd	...	do do
Etherington W. C.	do 3rd	...	do do
Gardner, John H.	do 3rd	...	do do
Jenson, James ...	do 3rd	...	do do
Kershaw, Wm. ...	do 2nd	Agriculture, Astronomy	Lancashire and Cheshire
	do do	Photography	Institutes and Society of Arts
Murphy, T. C. ...	do 2nd	...	Lancashire and Cheshire Institutes
	do do	...	Society of Arts
McDonald, John	do 3rd	...	Society of Arts
Penny, Margt. C.	do 2nd	Reliable Atlas	Lancashire and Cheshire
	do do		Institutes and Society of Arts
Penny, Isabella ...	do 3rd	...	Society of Arts
Pinder, John ...	do 2nd	...	Society of Arts
	do 3rd	...	Lancashire and Cheshire Institutes
Plumb, Frances ..	do 3rd		Society of Arts.
Preston, William	do 2nd	The Witty and Humor. ous side of the English Poets	Society of Arts
*Tattersall, H	do 2nd	Repr'ntative Government	Society of Arts
	do do	Inorganic C'mstry	Lancashire and Cheshire
,,		Tyndal on Light	Institutes
Wareing, Mary E.	do 3rd	...	Society of Arts
Whiteside, Agnes	do 2nd	...	Society of Arts
	do 3rd	...	Lancashire and Cheshire Institutes
Woods, Margaret	do 2nd	...	Society of Arts
	do do	...	Lancashire and Cheshire Institutes
Williamson, May	do 3rd	...	Society of Arts
Woods, Richard ...	do 3rd	...	do do
Burrow, Henry ...	Shorthand 2nd	Everett's Phonography	
Dodson, E. H. ...	do. 2nd	Heman's Poetical Works	
Fletcher, John J...	do. 1st & 3rd		Lancashire and Cheshire Institutes and Society of Arts
Gregson, Thomas	do. 1st	Treasury of Eloquents	do. do.
Hayes, Wm. H ...	do. 2nd & 3rd	Percy's Reliques	do. do.

MISCELLANEOUS.

Name	Subject		Local Prize	Society Awarding Certificate	
Harrison, Henry	Shorthand	2nd		Lancashire and Cheshire Institutes	
Newbound, Edwin	do.	2nd		do.	do.
Pinder, John ...	do.	1st	Loder's Violin School	do.	do.
Pomfret, E.	do.	1st	French Dictionary	Lancashire and Cheshire Institutes and Society of Arts	
	do.	3rd		do.	do.
*Pownall, Alf J ...	do.	1st	Contauseau's Dictionary		
*Tattersall, Hedley	do.	2nd	Doctor Morrel's English Spencer on Education	do.	do.
	do.	3rd	Qualitive Analysis		
Wade, John ...	do.	1st	Music and Harmony	Lancashire and Cheshire Institutes and Society of Arts	
Wigley, Martin J	do.	1st & 3rd	Chamber's Dictionary	do.	do.
Whiteside, Henry	do.	1st & 3rd	Life of G. Washington	do.	do.
*Wilkinson, R J...	do.	3rd	Practical Cabinet Maker	do.	do.

Table shewing the Number of Students who Sat for Examination at the Harris Institute in May and June, 1883.

SUBJECT.	Harris Institute.	St. Paul's School.	Farrington School.	Pharmaceutical Society.	Sculptors' Studio.	Professor Hope's Class.	Externals.	Total.
Model Drawing	32	4	2	...	15	...	5	58
Freehand do	45	11	...	...	19	...	13	88
Anatomy	2	...	...	...	...	...	...	2
Art Class Teacher's Certificate—Examination, Shading from Models (stage 5a)	3	...	...	...	...	...	...	3
Practical Geometry	24	12	...	...	3	...	1	40
Art Perspective	16	6	...	...	...	...	3	25
Art Class Teacher's Certificate—Examination, Outline Drawing from the Cast (stage 3b)	4	...	...	...	...	...	...	4
Art Class Teacher's Certificate—Examination Shading from the Cast (stage 5b)	3	...	...	...	...	...	...	3
Machine Construction	24	25	...	...	...	...	1	50
Building Construction	19	13	...	...	...	...	3	35
Mathematics, stages 1, 2, 3.	51	20	12	...	...	...	5	88
Sound, Light, and Heat	44	14	...	...	...	...	2	60
Magnetism and Electricity	64	30	...	...	...	...	7	101
Animal Physiology	...	...	...	...	...	...	4	4
Principles of Agriculture	13	7	14	...	...	3	6	43
Practical, Plane, and Solid Geometry	...	33	...	...	...	...	4	37
Geology	15	5	...	...	...	...	1	21
Physiography	20	23	...	...	...	...	9	52
Theoretical Mechanics	...	...	...	...	...	...	4	4
Applied Mechanics	24	24	...	..	...	...	5	53
Inorganic Chemistry	16	19	...	8	...	...	1	44
Mathematics, stages 4 & 5.	...	...	...	...	...	...	1	1
Metallurgy	...	...	...	...	...	...	1	1
Elementary Botany	...	...	...	8	...	...	2	10
Steam	21	19	...	...	...	...	2	42
Inorganic Chemistry, practical	8	...	...	...	...	...	...	8
Total	448	265	28	16	37	3	80	877

In addition to the above, the following shows the number of Students of the Harris Institute, examined at the Institute in connection with other classes:—

City and Guilds of London Institute, viz.:		
Cotton	27	
Tools	12	
Mechanical Engineering	18	
Printing	8	65
Cambridge Extension Lectures:		
Literature		10
Society of Arts:		
Shorthand	20	
English	29	49
Lancashire and Cheshire Union of Institutes:		
Shorthand	24	
English	32	56
		180
Students Sitting for Science and Art as above		877
Total		1057

T. R. JOLLY, Secretary

HAR

AB

NAME OF CLASS.	TEACHER.	OCTOBER, 1882.	
		No. on Register.	Average Attendanc
School of Art.			
Day Class	Mr. Barton.	33	26
Evening Class	Do.	73	49
School of Science.			
Sound, Light, and Heat (Elementary)	Mr. Gardner.	44	35.2
Do. (Advanced)	Do.	9	7.6
Magnetism and Electricity (Elementary)	Do.	60	49.4
Do (Advanced)	Do.	14	9.8
Chemistry (Elementary)	Mr. Sowerbutts.	17	14.25
Do. (Advanced)	Do.	4	4.
Do. (Practical)	Do.	...	2.
Mechanics (Applied)	Do.	27	21.4
Steam and Steam Engine	Do.	23	17.2
Geology	Do.	20	16.25
Physiography	Mr. Southworth.	25	18.6
Agriculture	Do.	16	14.4
Methematics, Stage 1	Mr. Howarth	51	41.7
Do. Stages 2, 3, and 4	Do.	25	19.2
Machine Construction	Mr. Price.	24	17.5
Building Construction	Mr. Pye.	22	17.4
School of Technology.			
Cotton	Mr. Sutcliffe.	25	23
Tools	Do.	13	13
Mechanical Engineering	Mr. Pendlebury.	20	18
Printing	Mr. Parkinson.	8	7.6
Miscellaneous.			
Shorthand (Elementary)	Mr. Cartmel.	63	54
Do. (Advanced)	Do.	23	20
English Grammar and Composition	Do.	84	74
*Cambridge Lectures	Mr. Hodgson.	75	70
	Total	798	658.5

RRIS INSTITUTE, PRESTON.

STRACT OF CLASS REGISTERS, 1882-3.

	NOVEMBER, 1882.		DECEMBER, 1882.		JANUARY, 1883.		FEBRUARY, 1883.		MARCH, 1883.		APRIL, 1883.		MAY, 1883.	
e.	No. on Register.	Average Attendance.	No. on Register.	Average Attendance.	No. on Register	Average Attendance.	No. on Register.	Average Attendance.	No. on Register.	Average Attendance.	No. on Register.	Average Attendance.	No. on Register.	Average Attendan
	34	28.5	35	29	41	22.5	42	28.5	48	28.125	44	27	45	26
	81	49.5	85	51.5	90	48	94	50	96	44.5	100	49	101	35
	46	37	47	37	47	36.3	46	38	46	39	46	40.5	46	41
	9	8	9	8.5	9	8.5	9	8 7	9	7	9	8	9	9
	65	54	66	56	64	50.7	64	51.7	64	49	64	50	64	51
	14	11	14	11	14	11	14	10.5	14	11.2	14	11	14	11
	17	13	17	13.75	14	12	14	10.7	14	9.6	14	10	14	10.5
	6	4.5	6	5	6	4	6	5.2	6	4.5	6	5	6	5.5
	7	6.25	7	6	7	5.75	7	6.2	7	6.4	7	7	7	7
	28	21.75	28	23	26	20 25	26	20	26	18.5	26	18	26	18
	23	16.25	23	17.5	22	17.5	22	15.6	22	15.75	22	16.5	22	17
	21	16	22	17	18	16	17	15	17	13.5	17	14	17	15
	26	22	26	23	26	19.5	24	20	24	18	24	18	24	17.5
	19	12.5	19	14	19	12	16	13.6	16	12.5	16	12	16	13
	54	40.7	56	43.5	41	33.2	40	34.5	40	32	40	33	40	34
	25	18.8	25	19	19	14.5	17	13.7	17	13	17	14	17	15
	25	17.8	25	18	25	18.6	31	19.5	31	20	31	20	31	21
	24	18.5	25	20	25	20	25	19 5	25	20	25	20.5	25	21
	36	34	36	34	35	29	35	27	35	28	35	30	35	31
	16	15	16	14.75	16	13	16	13	16	13.5	16	14	16	14
	21	13.8	21	14	22	17	22	18	22	17	22	18	22	19
	10	5	10	7	10	9	10	9.5	10	8	10	8	10	9
	67	48	67	59	61	52	61	49	61	53	61	50	61	49
	24	17	26	19	24	21.25	24	21	24	20	24	18	24	19
	87	69.75	87	71	82	60	82	65	82	60	82	56	82	53
	75	65	75	70	...	...	...							
	860	663.5	873	691.5	763	571.55	764	583.4	769	562.75	772	567.5	774	561.5

* The Cambridge Lectures ceased in December, 1882.

T. R.

HARRIS INSTITUTE, PRESTON.

Receipts and Expenditure, Year ending September 30th, 1883.

RECEIPTS.

	£ s. d.	£ s. d.
To interest from invested capital ...	1,037 19 9	
Deduct one-eighth to be set aside for Scholarship (see scheme, clause 38B)	129 15 0	908 4 9
Fees, viz.: Science	66 19 6	
,, Art.....	129 13 0	
,, Technical	6 0 0	
,, Miscellaneous	36 17 0	
,, Cambridge Lectures.....	21 17 6	261 7 0
Subscriptions		21 0 0
Balance overdrawn		257 18 0
		£1,448 10 0

EXPENDITURE.

	£ s. d.	£ s. d.
By Salaries of Teachers, viz.:		
Science	95 2 6	
Art.....	275 0 0	
Technical	54 16 3	
Miscellaneous	45 5 0	470 3 9
,, Secretary and Custodian		134 0 0
,, Cambridge Lectures		49 5 0
,, Additions and Alterations		174 8 9
,, Apparatus and Books.....		220 18 6
,, Printing and Stationery		93 5 10
,, Advertising.....		72 3 6
,, Lighting and Firing		48 9 11
,, Washing and Cleaning		40 17 5
,, Rates, Taxes, and Insurance		40 16 5
,, Expenses, examination, including fees to Society of Arts, &c.		28 7 1
,, Bank Commission		9 12 6
,, Miscellaneous expenses.....		66 1 4
		£1,448 10 0

Examined and found correct,
W. F. MOORE, Chartered Accountant, Preston.

WILLIAM ASCROFT,
President.

9, Chapel Street, Preston, 8th December, 1883.

To the President and Council of the Harris Institute.

Gentlemen,—I have examined the accounts of the Institute for the past year, and have pleasure in certifying as well to their correctness as to their clearness. I have seen vouchers for all the payments, and have inspected the deeds and securities for the capital in vestments, and find all in order.—Yours truly,

W. F. MOORE,

HARRIS INSTITUTE, PRESTON.

Trustees' Acccunt, Year ending September 30th, 1883.

		£ s. d.	£ s. d.
1882.	To Capital		40,000 0 0
Nov. 1	To Interest from Corporation	72 12 4	
„ 27	„ do Savings Bank ...	17 2 4	
1883.			
Jan. 1	„ do County of Lancaster	170 14 7	
Mar. 1	„ do Corporation	83 15 7	
May 2	„ do do	273 0 11	
June 30	„ do County of Lancaster	256 3 8	
July 31	„ do Consols	72 14 5	
Sept. 1	„ do Corporation	91 15 11	
			1,037 19 9
			£41,037 19 9
	To Balance brought down ...		39,201 10 0
			£39,201 10 0

	£ s. d.	£ s. d.
By Amount transferred to Institute Account, being Interest from Capital sum of £40,000		1,037 19 9
Paid J. Walmsley, on account contract	600 0 0	
„ Y. W. Booth	198 10 0	798 10 0
Balance		39,201 10 0
		£41,037 19 9
By amount invested with Corporation at 3¾ per cent. ...20,000	0 0	
„ do C'nty of Lancater at 3½ pr ct.15,000	0 0	
„ do Consols at 3 per cent 2,500	0 0	
„ do Savings Bank at 3 per cent. 1,701 10	0	39,201 10 0
		£39,201 10 0

October 26, 1883. Submitted to a meeting of Trustees and adopted.

C. R. JACSON,
DAVID IRVIN,
JOHN WILLIAM ECCLES,
WILLIAM ASCROFT.

WILLIAM ASCROFT, President.

Examined and found correct,
W. F. MOORE, Chartered Accountant, Preston.

LIST OF SUBSCRIPTIONS RECEIVED DURING YEAR ENDED SEPT. 30, 1883.

	£	s.	d.
Ascroft, Mr. A. E.	1	1	0
Ascroft, Mr. W.	1	1	0
Atherton, Mr. John	1	1	0
Atherton, Mr. W.	1	1	0
Birchall, Mr. A. M.	1	1	0
Booth, Mr. Y. W.	1	1	0
Dalby, Mr. G. B.	1	1	0
Dickson, Mr. E.	1	1	0
Easterby, Mr. R. F.	1	1	0
Hammond, Mr. J. H.	1	1	0
Healey, Mr. J.	1	1	0
Hermon, Mr. S. A.	1	1	0
Hibbert, Mr. Jas.	1	1	0
Jacson, Mr. C. R.	1	1	0
Moore, Mr. F. A.	1	1	0
Oakey, Mr. H.	1	1	0
Oliver, Mr. J. S.	1	1	0
Robinson, Mr. R. C.	1	1	0
Steele, Rev. Geo.	1	1	0
Wilson, Mr. T.	1	1	0
	£21	0	0

Harris Institute,

PRESTON

SECOND

ANNUAL REPORT

AND

STATEMENT OF ACCOUNTS

FOR THE YEAR 1884,

AND

ADDRESS

GIVEN BY

PROF. JOHN TYNDALL,

LL.D., F.R.S., D.C.L., F.G.S.,

AT THE

DISTRIBUTION OF PRIZES,

ON

DECEMBER 4TH, 1884.

PRESTON:
PRINTED BY T. SNAPE & CO., 141, CHURCH STREET.
1885.

OFFICERS FOR THE YEAR 1885.

Trustees:

Rev. C. H. Wood, M.A.
Mr. C. R. Jacson, J.P., D.L.
Mr. D. Irvin, J.P.
Mr. J. W. Eccles.
Mr. W. Ascroft, J.P.
Mr. G. B. Dalby.
Mr. J. S. Oliver.

President:

Mr. Wm. Ascroft, J.P

Vice-President:

The Rev. Geo. Steele, M.A.

Council:

Mr. C. R. Jacson, J.P., D.L.
Mr. D. Irvin, J.P.
Rev. C. H. Wood, M.A.
Rev. Geo. Steele, M.A.
Mr. R. Benson, J.P.
Mr. Jno. Healey.
Dr. Hammond, J.P.
Mr. W. Ascroft, J.P.
Mr. W. Atherton.
Mr. S. A. Hermon.
Mr. A. E. Ascroft.
Mr. Y. W. Booth.
Mr. E. Dickson.
Mr. R. F. Easterby.
Mr. A. M. Birchall.
Mr. Jas. Hibbert.
Mr. M. S. Maynard, J.P.
Mr. R. C. Robinson.
Mr. J. S. Oliver.
Mr. C. H. Sharples.
Mr. F. A. Moore.

Hon. Treasurer:

J. S. Oliver.

Secretary:

Mr. Thomas R. Jolly.

Auditor:

Mr. W. F. Moore.

Bankers:

Preston Banking Company, Limited.

SECOND ANNUAL REPORT

OF THE

HARRIS INSTITUTE, PRESTON.

THE Council of the Harris Institute have the satisfaction of reporting at the end of the second year of the Institute continued progress.

The Classes are now attended by 1,478 individuals, a considerable increase in the numbers of the previous year.

The Students, as before, have been examined by the Science and Art Department, South Kensington, the City and Guilds of London Institute, the Society of Arts, and the Lancashire and Cheshire Union of Institutes. The results are satisfactory, and speak well for the efforts of the Teachers and the application of the Students.

In addition to the Classes previously formed and hitherto maintained, instruction is now given in the following subjects, viz.:—Navigation, under Mr. George Lynch; Hygiene and Physiology, under Dr. H. O. Pilkington, the Medical Officer of Health; and Arithmetic, under Mr. F. B. Osborne. A Class in Modelling, under Mr. R. Rhodes, has been added to the Art School. The numbers attending the Classes, the average attendance in each, and the results of the examinations are set out in the Schedules subjoined to the Report. The Laboratory and new Class Rooms have been completed and are in use.

The Council have to acknowledge with thanks the following donations towards the cost of the site of the new Laboratory and Class Rooms:—Messrs. Horrockses, Miller, and Co., £100; the President, £25; Councillor W. Atherton, £25; Mr. John Healey, £20; Councillor Y. W. Booth, £10; Alderman Benson, £10. £392 15s. 4d. is still required to discharge the remainder of the liability This sum cannot legally be paid out of the funds of the Institute, but must be raised by a voluntary outside effort.

The Council desire to acknowledge with thanks the following gifts towards the objects of the Institute:—Desks and appliances for the different Class Rooms, and a model of force pump in sections, valves, &c., by Mr. Councillor William Atherton; models of marine engines, by Edward Rodgett, Esq., J.P.; a model of a loom, by J. R. Spencer, Esq.; A Treatise on the Structure of Cotton Fibre, by J. R. Bowman, Esq., D.S., P.R.S.A.S.; Buckler's Manufacturers' Compendium, Scott's Spinners' and Manufacturers' Compendium, History of Cotton Manufacture, Ure's Cotton Manufacturers' and Textile Calculations, and The Structure of Fabrics, by John Healey, Esq.; and Hulme's Suggestions on Floral Design, by the President.

The Accounts for the year, ending 30th September last, have been audited by W. F. Moore, the Auditor of the Institute.

The Prizes and first-class Certificates gained by the Students at the Examinations held in May were distributed in the Public Hall, on the 4th December, by Professor John Tyndall, F.R.S., LL.D., D.C.L., F.G.S., to whom the Council express their heartiest thanks for his very valuable and interesting address, for the encouragement given by his presence to the Lecturers and Students, and for the expression of his approval of the work in which the Council are engaged.

WILLIAM ASCROFT,

PRESIDENT.

December 10th, 1884.

HARRIS INSTITUTE.

Proceedings of the Annual Meeting,

HELD DECEMBER 18th, 1884.

The annual meeting, at which donors and subscribers are entitled to be present in connection with this Institute, was held on Wednesday, December 18, 1884. Mr. W. Ascroft, J.P., President, occupied the chair, and there were present the Revs. Geo. Steele, M.A., H.M.I.S., and C. H. Wood, M.A., B.C.L., Dr. Hammond, J.P., Alderman Benson, J.P., Alderman Maynard, J.P., Councillor Y. W. Booth, Messrs. E. Dickson, R. F. Easterby, A. M. Birchall, and T. R. Jolly, secretary.

The CHAIRMAN said the meeting was purely a formal one, called in pursuance of Clause 16 of the scheme under which the Institute was governed, the principal business being to receive the report and statement of accounts, and to elect a gentleman to serve on the Council as representing the donors and subscribers. Only one gentleman had been nominated for that position, the retiring representative, Mr. J. S. Oliver, and therefore it would be their duty to re-elect him.

On the motion of Alderman BENSON, seconded by Councillor Y. W. BOOTH, Mr. J. S. Oliver was re-elected to serve on the Council of the Institute as representing the donors and subscribers.

The report of the Council, together with a statement of accounts, was submitted by Mr. JOLLY, the secretary. The report, which was adopted, will be found on page 5.

The PRESIDENT said there was one paragraph in the report to which he desired to draw special attention. They would see that there was a sum of £392 15s. still owing to discharge the remainder of the liability in respect of the purchase of the site of the new laboratory and class-rooms. The matter had been referred to at the previous annual meeting, when it was arranged that an effort should be made during the year to clear off this liability. For

certain reasons, this had not been accomplished during the past twelve months. It was to be hoped, however, that their efforts in connection with the Institute would not be encumbered much longer by a debt of this description. They felt justified in appealing to the public for aid in this matter. The liability was one that could not be met out of the general funds of the Institute; it must be raised by a voluntary outside effort. He felt sure that, under these circumstances, the people of Preston, knowing the great advantages of the Institute, its benefit to the town, and the advantageous effect that it must have on the trade of the locality, would readily help them to discharge this debt. They therefore appealed to the public in this matter with considerable confidence.

In answer to Dr. Hammond, the CHAIRMAN said the debt was originally £542 8s., and there had since been some accumulations and interest and some subscriptions towards it. He felt sure that if a well-organised canvass were made, they would not be very long in clearing off this liability.

The Rev. GEO. STEELE said it must be clearly understood that this was only for the purchase of the site of the new building, which site they had no power to pay for out of their ordinary funds.

In reply to other observations, the CHAIRMAN said they had completed the new building, and the requisite fittings had been got in. All the accounts had been paid, and he was glad to say the amount of cost was within the original estimate.

The SECRETARY announced that he had just received £10 from Mr. Y. W. Booth in reduction of the liability on account of the site.

The CHAIRMAN said it had been thought that it would be a very desirable thing if they could increase the constituency of subscribers and donors to the Institute. The latter had a share in the management, and they were represented on the Council.

Dr. HAMMOND suggested that something might be procured from those who were obtaining the advantages of the Institute; he meant the students. Amongst the latter there were some in very good positions, and as they had these advantages at a comparatively small cost, he thought they might fairly be asked to contribute or to assist in obtaining donations towards meeting this liability.

The Rev. GEO. STEELE quite approved of the suggestion. He thought it would be a very desirable thing to give the students an opportunity of doing something to evince their appreciation of the advantages which they obtained through the Institute. There seemed to be a mistaken impression abroad that they were so rich that they had no need of assistance.

Ultimately Dr. HAMMOND moved—"That an effort be made during next year to obtain donations towards paying off the remainder of the debt in respect of the cost of the site of the new class-rooms and chemical laboratory, and to add to the list of subscribers, and that the students at the Institute be invited to assist in this effort."

Alderman BENSON seconded the motion, and it was unanimously passed.

At the conclusion of the formal business, Dr. HAMMOND proposed and Councillor Y. W. BOOTH seconded a vote of thanks to the Chairman, which was passed and duly acknowledged.

Distribution of Prizes to the Students

ADDRESS BY AND PRESENTATION TO

PROFESSOR J. TYNDALL.

Unquestionally, the grandest public demonstration in respect to the educational progress of the town of Preston took place on Thursday, the 4th December, 1884, when several thousands of the community assembled in the Public Hall to listen to a learned address from Professor John Tyndall, and witness the distribution of prizes and certificates to the successful students attending the various classes in connection with the Harris Institute. This duty had originally been undertaken by Earl Lathom, and arrangements were made for a meeting to be held a few weeks ago. Owing, however, to the demands made upon his lordship by his Parliamentary office, he was compelled to ask the Council of the Institute to relieve him from the duty. Therefore the happy idea was broached of inviting Professor Tyndall, and Mr. Ascroft, J.P., the president, and Mr. T. R. Jolly, the secretary, proceeded to the Surrey home of the distinguished scientist. There they made known their mission, and ultimately received a promise from him that he would visit Preston, with which he had been early associated. When it became known that Professor Tyndall was coming to this town there was a great demand for tickets for the meeting from all parts of the county, and the result was a gathering which crowded the Public Hall almost to its utmost capacity. Dr. Tyndall arrived in Preston along with his wife on the Thursday afternoon, and was the guest of Mr. W. Ascroft.

The Professor met with a most hearty welcome on his appearance on the platform, and his address was listened to throughout with marked attention. The spacious hall was literally packed with ladies and gentlemen, seats in the front portion of the hall being reserved for the students. It is only due to Mr. T. R. Jolly to state that under his energetic supervision everything was carried out in a most gratifying manner. Prior to the general proceedings a recital on the grand Dewhurst organ was given by Mr. James Tomlinson, Corporation organist, the following

being the selections, which he played in his usual masterly style :— Overture to "Martha" (Flotow); Gavotte (Lee),; Overture to "Othello" (Rossini); Air with variation (Rode); March from Tannhauser (Wagner).

The students were marshalled by Messrs. W. Atherton and F. A. Moore, assisted by Mr. Johnson, the custodian of the Institute; and Messrs. Jno. Healey, Y. W. Booth, R. F. Easterby, A. M. Birchall, and R. C. Robinson efficiently discharged the duties of general marshals.

W. Ascroft, Esq., J.P., President of the Institute, presided; and amongst those supporting him, in addition to Professor Tyndall, were the Mayor of Preston (Alderman Forshaw), W. E. M. Tomlinson, Esq., M.P.; C. R. Jacson, Esq., J.P., D.L.; E. Birley, Esq., J.P.; R. J. Flowerdew, Esq., J.P.; D. Irvin, Esq., J.P.; W. H. Bowdler, Esq., J.P.

The Rev. Geo. Steele, M.A., H.M.I.S., vice president; Alderman Benson, J.P.; Alderman Maynard, J.P.; Dr. Hammond, J.P.; Councillors W. Atherton, R. C. Robinson, and Y. W. Booth; Messrs. J. Healey, F. A. Moore, R. F. Easterby, A. M. Birchall, Edmund Dickson, S. A. Hermon, A. E. Ascroft, J. S. Oliver, C. H. Sharples, and T. R. Jolly, secretary, representing the Council of the Institute; Messrs. W. B. Barton, J. Gardner, S. D. M. Sykes, G. Rogerson, B.A., J. B. Osborne, Geo. Sutcliffe, Geo. Lynch, J. B. Price, H. Cartmell, W. M. Maddox, M.A., F. J. Pye, A. F. Atkinson, H. Ormandy, jun., H. O. Pilkington, Jas. Tomlinson, T. H. Greenall, R. Rhodes, W. H. Cowell, R. Pendlebury, and R. Parkinson, teachers and lecturers at the Institute; Revs. Canon Rawstorne, M.A., Canon Armstrong, M.A., J. H. Rawdon, M.A., Vicar of Preston; Geo. Alker, M.A., R. Firth, M.A., W. D. Thompson, N. C. Papall, S. Mill, C. K. Troughton-Dean, M.A., J. T. Frost, W. Edmondson, G. Blaydon, I. L. Thomas, B. C. Huntly, M.A., R. V. Barker, M.A.; Aldermen Edelston, Satterthwaite, J.P., Gilbertson; Councillors Turner, Roper, J.P., Geo. Toulmin, J.P., Jos. Harding, H. Davies, Jos. Toulmin, J.P., J. Walmsley, N. Miller, D. Miller, J. Rawcliffe, J. Brown, J. J. Myres, Clegg, Pearson; Drs. Gilbertson, J.P., Arminson, Hall, Trimble, Mc.Nab, J.P., Noble, Lightbourn, Rhodes, Marshall, Dixon, Holden, and Walmsley; Messrs. W. W. Taylor, J.P., F. Thorp, J.P., J. Allsup, W. Calvert, B.A., J. Hull, W. Alston, J. W. Drennan, T. Walmsley, H. Cartmell, W. Wilkinson, J. Kennerley, R. W. Ascroft, B.A., F. W. Ponting, James Brown, M. B. Copland, W. J. Dickson, J. J. Smith, George Brierley, H. C. Walton, T. Jump, D. Bell, E. Barber, William Banks, T. Thorp, A. King, C. W. Hawkins, John Toulmin, T. Mason, W. Thompson, T. Nevett, James Gregson, J. Turner, E. Greenwood, Geo. Dewhurst, Robert Park, W. Livesey, R. Heathcote, S. Illingworth, H. Dodd,

C. Fryer, I. Bradshaw, A. Beattie, W. Brown, R. Veevers, F. Cotman, E. Dean, C. T. Taylor, J. W. Cooke-Taylor, W. F. Moore, Bourne, E. Nye, J. W. Elliott (Bury), James Tullis (Longridge), J. F. Cookson, M. Willan, J. Leigh, J. Fletcher, T. Crabtree, H. Dewhurst (Walton), W. Walker (Higher Walton), Jos. Parkinson, A. Barlow, J. Willacy (Penwortham), F. Woods, J. Shaw, Ed. Hall, J. Gardner, H. G. Bell, J. Cumming, A. Tullis, D. W. Allsup, J. Toulmin, G. Toulmin, jun., J. Cooksey, R. Fazackerley, J. Whiteside, P. H. Edelston, W. Edelston, J. Farnworth, J. Sumner, W. France, W. Tattersall (Lytham), G. T. Ducker, W. E. Withnell, L. Stockdale, Jas. Jackson, H. Cooke, C. Greenall, R. Pateson, J. Foster, J. Norwood, jun., J. Dewhurst, E. R. Lightwood (Lytham), A. Hewitson, J. Mc.Kay, R. Hothersall, R. Poole, Thomas Read, R. Mashall, Wm. Cross (Lytham), John Mellor (Lytham), T. Nevett, D. Bostock, J. Bilsbrough, W. Westhead, J. Todd, junr., G. Williamson, E. D. Hindle, J. Mason, J. Furness, J. Higson, H. Calvert, B.A., W. H. Linell, J. Jackson, J. Bramwell, and many other gentry and tradesmen of the town and district.

The following letter of apology for absence was received from the Rev. Father Perry, S.J., F.R.A.S., &c.:—

Stonyhurst College, Blackburn, Nov. 27, 1884.

Dear Sir,

I am very sorry that you have chosen a Thursday for your distribution day, as I am obliged to be at Liverpoool on all Thursdays before Christmas, to lecture for the Corporation at the Rotunda Hall.

Yours truly,

S. J. PERRY.

Wm. Ascroft, Esq., J.P.

And the following from Mr. W. F. Ecroyd, M.P.:—

Carlton Club, Pall Mall, S.W.,
2nd Dec., 1884.

Dear Mr. Ascroft,

I have your note of yesterday. I have been waiting to see the course of business in Parliament before writing to you again. Now, Thursday is definitely fixed for the second reading of the Redistribution Bill, and though I am much disappointed both in regard to taking part in the annual meeting of your noble institution and the pleasure of meeting Professor Tyndall—yet I do not see how I can with propriety be absent from the House of Commons on this very important occasion. It is not that any division is probable; but I am, along with many of my political friends, watching this question very closely—and I must follow the debates with attention, especially such speeches as may be expected on the day when the second reading is taken. I hope my colleague, Mr. Tomlinson, will find it possible to be with you. I had some conversation with him on the subject last evening.

Assuring you of my very sincere regret,
I am, dear Mr. Ascroft,
Yours faithfully,
W. FARRER ECROYD.

The CHAIRMAN then rose and said: I will shortly refer to the progress of the Institute since the last occasion on which we met for the same purpose as now, namely, to distribute the prizes to the succesful students at our examinations, and this progress will, I think, be shown when I refer to the examinations and their results. I would here express, on the part of the Council, our sense of obligation to Professor Tyndall for accepting our invitation to be present. (Applause.) Professor Tyndall's career and reputation, known as they are to all the world, are nowhere better known or more highly appreciated than in Preston—(applause)—and it is a matter of great pride to us that he should lately have so gracefully acknowledged a connection which once existed between him and our old Mechanics' Institution. (Applause.) It is a most generous act on his part that in the height of his fame, and amidst the pressing calls upon his time and thought, he should, at great inconvenience, have come down to Preston, where he himself was once a patient student, to lend the weight of his genius and example to the encouragement of a large number of young persons, who, in a manner so praiseworthy, and with so much self-denial, are seeking to improve their minds and prospects by what is really a laborious course of studies. (Hear, hear.) The examinations to which I just now referred have, as before, been conducted by the Science and Art Department at South Kensington, the City and Guilds of London Institute, and the Society of Arts. Their object is not solely to discover the few students who have done the best, but rewards are given to all who attain a certain standard of excellence. No temptations are held out to the teachers to devote themselves to a few students likely to give exceptional reputation to their teaching. The teachers have equal inducements held out to them to bring on the whole bulk of their pupils, and the individual students are encouraged to put forth their best efforts by additional rewards being offered to those who reach a higher standard of excellence. (Hear, hear.) In this respect, therefore, the examinations very fairly test the average work of the classes. With reference to the standard of excellence required, it is by no means the same thing to go in for examination and to obtain a certificate. The standard is somewhat exacting, especially in technical subjects. To succeed a very considerable amount of proficiency must be shown, and the possession of a certificate proves that the student has been well taught, that he has applied himself to his studies with care and diligence, and that he has acquired a fair knowledge of the principles of the subject in which he has been examined. An employer may safely assume that he has become a better and more efficient servant for the knowledge which he has gained. The results of the last examination are very satisfactory, and contrast favourably with similar results in other places, and with our own in previous years. (Hear, hear.) Last year the number of

certificates gained in the previous examination was 349, this year the number of certificates is 546;—(applause)—in each year there has been a corresponding number of prizes. It would obviously be impracticable to go through the ceremony of distributing so many prizes and certificates this evening. We decided, therefore, though with much regret, that the prizes and first-class certificates only should be distributed to-night. The other certificates will be handed to those who have gained them on some other occasion. During the session ending in May last the classes were attended by numbers representing an entry on the register of 1,974, but as some students took up more than one subject this represents a total of individual students of 1,340. Great as this number is, I am sure that you will be pleased to know that the numbers attending the classes during the present session is still greater. In addition to the classes which were conducted during the previous year, and which I described on the last occasion, we have formed a few others, the principal of which are a class, under Mr. Lynch, in navigation, in prophetic anticipation of the success of our future port;—(laughter and applause)—classes in hygiene and physiology, taught by Mr. Pilkington, the medical officer of health; and one in arithmetic, taught by Mr. Osborne, which has become so large that it has been found necessary that it should meet in two sections, which are attended by 116 students. These are in addition to classes in the higher branches of mathematics attended by a large number of students. Most of our classes show an increased number of students, and this is especially the case with regard to those subjects which have a direct bearing on their daily work. For example, the shorthand classes are now attended by 153 students. I should like to impress upon all young men who are or intend to become clerks the necessity of acquiring this art. In almost all offices and counting-houses it is becoming the practice of employers to dictate their correspondence to a shorthand clerk, who writes it out more leisurely for the signature of his employer, to whom this course saves an immense amount of time, and in these days of speed and pressure it is becoming a practical necessity. If a young man can write shorthand well he is more valuable as a clerk, and commands better wages than if he can not, and, indeed, without a knowledge of this art it will soon become difficult for a clerk to obtain employment. The other classes having a bearing on work are attended as follow:—Machine construction, 90; building construction, 70; geometry, 92; carpentry and joinery, 19; steam and mechanics, 86; spinning and weaving, 109. These classes, indeed most if not all our classes, have a direct influence on the capacity of the students in those occupations on which they depend for their well-doing. The results of our examinations show that the teaching is good and thorough, and as an especial proof of this, I may state that in our

technical subjects we have passed, in the honour grade, a larger proportion of our students than London, Birmingham, Edinburgh, Glasgow, or any place in Lancashire or Yorkshire, with the exception of the Yorkshire College at Leeds. (Applause.) The following instances of success deserve especial mention. Miss Rhoda Bell has obtained the art teacher's certificate, and Miss Florence Poole has obtained a certificate enabling her to teach in any art class. In the theory of music, Mr. Tomlinson has passed 36 out of 37 pupils—an extraordinarily large proportion. (Applause.) Mr. Hedley Tattersall passed first in English, and obtained the first prize offered by the Lancashire and Cheshire Union of Institutes, open to the competition of students of both counties, and has obtained a special prize given by Messrs. Cassels and Company, London—(applause)—and Mr. David Wilkinson has obtained certificates in no less than eleven subjects of science, of which six are in the first class. (Applause.) Since our last meeting we have had the advantage of reading the report of the Royal Commission on technical instruction. This report gives a most interesting and detailed account of the progress of education, and especially of technical education abroad, and of the effect which this education is producing on the condition of continental trades. The work of the world is done by the artisan, and in order that it may be efficiently done it is necessary that he should be well trained and well directed. Schools for the instruction of masters and men are spread over the continent as thickly as they can be, and everywhere large industries are springing up, controlled by clever and enterprising men. The commissioners report that the masters and managers of industrial establishments abroad impressed them much by their technical knowledge and general intelligence, their acquaintance with the sciences allied to their occupations, and with the new scientific discoveries at home and abroad, and their desire to make use of them if of advantage to do so. They report that the workpeople for the most part are steady and industrious, and striving by education to improve their capacities and mend their condition in life. The sums of money spent on schools abroad are such as in this country we have no conception of. As one instance alone, I will quote the town of Chemnitz in Saxony, a town which, from a population of 54,000 in 1864, has grown to 89,000 in 1879. No less than £240,000 has been spent on its schools, of which £95,000 has been contributed to its higher schools by the State. The zeal of its inhabitants for technical education may be seen when it is known that the technical schools of the town have cost £88,000. The result is that the trade of the town and district has greatly increased. In the hosiery trade it has proved a successful competitor with Nottingham, not only in the United States and other export markets, but in England itself. It was alleged in Chemnitz that one reason why

their goods were sold so extensively in England was that similar goods were not made there. Their manufacture requires superior skill in designing and weaving, and a varied and technical knowledge in dyeing. These requirements, through the influence of technical schools, have been carefully attended to and mastered in Chemnitz, but have not as yet received the same attention in competing towns in England. Similar progress is reported in the case of other industries. Still the report would appear to show conclusively that the great bugbear of continental traders is English competition, and, notwithstanding the lack of education, English labour, in point of endurance, mechanical genius, and practical power, is still the best, and, taking the arts of construction and manufacture as a whole, England is still at the head of the commerce of the world. The progress of foreign nations in matters of trade is, however, very great, and their rivalry with us is very keen and dangerous. These considerations prove that in forming such institutes as this we are not a moment too soon. It is satisfactory to think that, thanks to the stimulus afforded by South Kensington and the London Institute, a conviction of their necessity is rapidly spreading, and that soon each large town in the kingdom will be in possession of an institute like our own, and that by their means a taste for art and a knowledge of the principles of science will be spread broadcast amongst our people. (Applause.) With reference to our own town, it is most gratifying to find that the attempt to spread this taste and knowledge has been so deeply appreciated. Our classes this year are attended by 1,478 individuals ;—(applause)—we are, in fact, crowded out. In the case of vigorous communities one natural remedy for over-population is to colonise. So with us, to meet the wants of our growing classes, and to accommodate the increasing numbers who flock to them, it has been suggested that we should, in different parts of the town, establish branches in which can meet the more elementary classes in art and science, which would act as feeders to our central institute, where the more advanced pupils would be taught. (Applause.) A comprehensive institute would thus be formed, which, instead of 1,500 students, might bring possibly more than twice that number within its influence. (Applause.) I do not know that it would be well to aim at teaching too much. I don't suppose it is possible in schools to teach the practical part of trade. What we now aim at is to give to our pupils a taste for art, a familiarity with the use of the pencil, some skill in execution, and a general knowledge of the principles of science which they can apply to their work, and which will enable them to understand the reasons for what they have to do. They must learn their trades in their workshops, but this can be better done if they go there with informed minds and quickened thoughts. The great strength of the English workman is his ready skill and practical power, and so far as our teaching

can stimulate this and direct it into skilful channels it will be a success. To expand our institution in the direction at which I have pointed would require much greater means than we at present possess. The buildings ought to be good and suitable, conveniently placed, and made attractive by being made comfortable, and being fitted with proper appliances. The cost would be very considerable, but the resulting benefit would be very great. It would weave an appreciation of art and science into the texture of our people, giving them an impatience of anything except good art and good work. This benefit would to them be twofold. It would, on the one hand, increase their skill and technical knowledge, enabling them to produce better and more valuable work. It would, on the other hand, add to their general information, fill their minds with new ideas and fresh thoughts, enlarge their sympathies and means of usefulness, give them, indeed, a new sense, and add a source of brightness and happiness to their daily lives. (Loud applause.) I will now call upon Professor Tyndall to distribute the prizes. (Renewed applause.)

Professor TYNDALL then presented the prizes gained by the students, addressing a word or two of encouragement to each.

The CHAIRMAN afterwards called upon Mr. C. R. Jacson to present an address of welcome to Professor Tyndall.

Mr. C. R. JACSON accordingly rose and said: You have imposed upon me the double task (and a very honourable one I feel it to be) of moving that a vote of thanks be given to the distinguished Professor who has honoured the Institute with his presence this evening, and of presenting to him the address of welcome which has been prepared on behalf of the lecturers and the students. For the honour done to the Institute and the town the thanks of this large assembly will be given, as they ought to be, with a degree of warmth which will leave no doubt on the mind of the Professor as to the appreciation in which his distinguished career, connected as it is in a degree—slight, it is true—with this town, is held amongst us. (Applause.) We shall all be sensible that at this inclement season of the year to leave a distant home to perform an act of courtesy and bestow encouragement on a provincial Institute, entitles those who make the sacrifice to the best thanks of all who are able to participate in the intellectual treat thus brought within their reach. (Applause.) The vote which I shall shortly propose will, I doubt not, be received with the utmost enthusiam. (Applause.) I propose to defer the formal vote until a later part of the proceedings. Professor Tyndall, the remaining part of my honourable task consists in presenting to you an address from the lecturers and students of the institute which you this evening honour with your presence and assistance, 32 lecturers and more than 1,000 students—being more than two-thirds

of the whole—having signed this address. The students are not limited to one alone of the sexes. The names of a full proportion of the feminine element will be found among the signatures. On their behalf, I beg leave to offer to you, sir, and through you to Mrs. Tyndall, their best and most respectful acknowledgments of her kindness, in addition to your own, for the manifestation of interest in their pursuits which this joint visit affords. (Applause.) Your scientific career has been very fairly made known to us by your published works and the remarkably interesting sketch with which the Birkbeck Institute was recently favoured. We revert to the days of your elementary instruction, and early manhood, wherein may be recognised solidity and strength of character, the instincts of self-improvement, resolute self-denlal, appreciation of the means of self-advancement, no mean portion of which was afforded by the Mechanics' Institution of this town and by the voluntary lecturers, whose names still live in your memory as having afforded you instruction and influenced you in after life. (Applause.) Sir, you have spoken of the contentment you enjoyed and of the happiness you derived from your devotion to the acquisition of useful knowledge. You have told us how you resisted the temptation of railway gambling, when the glittering prize was within your reach. All must honour you for this, and for the wisdom with which, still in early manhood, at Queenswood, you grasped the secret of a teacher's success—the compound quality of knowledge to be master of his work, of power to impart knowledge, and of ability to stimulate acquisition by exercise and to strengthen the growing minds committed to his care. Sir, we follow you to the University of Marburg, the pine woods of which wherein you pondered problems of science and composed dissertations must ever live in the remembrance of those who read your interesting personal sketch. We perceive how receptive your mind was of Bunsen's mastery over the language of experiment; how, in the spirit of self-reliance, you overcame all difficulties, and how, after much self-questioning, you entered on the sphere of experimental physical science, which you subsequently prosecuted at Berlin, in the laboratory of Professor Magnus, and in conjunction with some of the greatest scientists of the age. Sir, we track you along the path of Davy, Dalton, Faraday,—(hear, hear)—through the mysteries of chemical analysis and experimental physics, investigating the nature of water, light, heat, sound, electricity, and exploring the depths of natural philosophy. From the glacier of the Alps to the floating matter in the air, nothing appears to have been too great to defy your grasp or too minute to elude the fineness of your touch. (Applause.) What is the secret of this power? Sir, your autobiographical lecture supplies the answer. The principle of growth in life has been your aim and object. You, like Professor Magnus, have sought to confer completeness on everything you have touched.

This, too, is the secret of the pre-eminent success you have attained as an experimental lecturer. But there is another and a more important secret still. The principle of duty which you have described as your "motive force," the principle which attracted you in Carlyle, the same which actuated the philosophers of Germany, who, you say, were men of the loftiest moral tone, who were, in fact, preachers of religion as much as expounders of philosophy. "Not glory, but duty," you say, was their motto; not glory, but duty, has been yours. (Applause.) Sir, in this indication of the chief points of interest in your career I should fall short if I failed to allude to the sympathy manifested by you towards those who are struggling along the same road which in your earlier years you painfully trod. On your return from America in 1872, you afforded a strong proof of this sympathy when you funded the profits of that scientific tour, and directed that the interest should be expended in aid of students of science who devote themselves to original research. (Applause.) As one of the Harris trustees, to whom the motives of the testator, as expressed in his will, must be ever an object of jealous regard, I have derived peculiar pleasure from the charming descriptions of natural scenery, and the reverential spirit with which your works abound. I see no reason to fear that the claims of science, as expounded by you, and of religion can so conflict as that the faith of the student of science shall be shaken. Sir, the narrative of your explorations around your Alpine home has afforded to thousands unbounded interest and delight. (Applause.) We hear that you are now pitching your tent on the high and wild moorlands that are still found in Surrey, but whether as a step towards the enjoyment of well-earned leisure and repose, or with a view to future increased power and usefulness, we know not. Whatever the object, I take it on myself to express on behalf of the lecturers and students of the Harris Institute their best wishes for your happiness and that of Mrs. Tyndall, and that you may be long spared to give the world the continued benefit of your mature skill and profound knowledge in extracting and explaining the secrets of the wonders of creation. (Prolonged applause.) Mr. Jacson then handed the address to Professor Tyndall, after which he moved a hearty vote of thanks to him, for having kindly accepted their invitation to distribute the prizes that evening.

The Rev. Father N. Papall, S.J., seconded the vote, and said they had amongst them a man eminent not only in heart, but also in intellectual power. That was a very extraordinary occasion, and they were not only to thank a man who had put himself to great inconvenience of coming all that distance in order to attend that meeting; but a man like Professor Tyndall, who, at the young age of 27 years, was teaching youth in the college of Queenwood, in Hampshire. A man, who, whilst still young, had conferred

upon him the degree of Doctor of Laws by the famous University of Cambridge as well as by the famous University of Oxford, and also Edinburgh; and a man whose works on light, and heat, and sound, would be a pattern and guide in science. (Applause.) He was a man whom Prestonians would all be delighted and proud to honour. He had heard of visitors to "Proud Preston" commenting on the appellation "proud," and wondering what Prestonians were proud of. If anybody were to come to Preston and he wished to see what they were proud of, he would not show them the streets or the Covered Market, nor would he mention the Ribble scheme, but he would take them to the factories, and there they would see Preston. Then he would take them to the Harris Institute, where there were thousands of young people endeavouring, he would not say to emulate the professor, because it was given to very few men to attain such a position, but endeavouring, to the best of their ability, to follow in his footsteps. He would then take them to this hall, and show them the thousands of attentive listeners gathered together, and demonstrating the interest they took in the institution for the promotion of science and art. That was where they would see the intellect of Preston, of which they might justly feel proud. (Applause).

The CHAIRMAN then put the motion, which was carried with universal acclamation.

Professor TYNDALL (who was again and again loudly applauded) rose to respond. He said: Mr. Jacson, I must cordially thank you for the manner in which you have presented this gift to me, and I thank you also in the name of Mrs. Tyndall, whose sympathy with the efforts which are here exerted is not less than mine. (Applause.) I thank Father Papall for the warm words with which you have spoken. As Father Papall spoke those words he impressed me as being what I should call a spherical man, a man all round, a man not only of intellect but of heart, and that is the complete man, the man who mingles honourable and high emotions with the operations of his brain. (Applause.) There are, ladies and gentlemen, in this world various forms of honour that men rank high; there are decorations of various kinds, stars and garters and other things of that fashion, but I say with perfect truth that no honour of the kind could appeal to my heart, or could be more prized by me, than the gift that you have presented to me. (Loud applause.) The American Emerson has said that the real romance lies in the details of daily life, and this element of romance has not been wanting in mine; for I little thought when 40, and more than 40 years ago, I walked along the green banks of the Ribble and heard the mellow sound of the Penwortham bells, I say I little thought of the welcome that has met me here this day. (Applause, again and again renewed.) Last Saturday

week, on returning from an afternoon walk, I found in a hut that I have erected on the Surrey moors two gentlemen. They were waiting for me there, and they informed me that they had come all the way from Preston to London, and that not finding me in London they had gone still further and come down to Haslemere and ascended to the moorland of Hindhead. They said that Lord Lathom had failed them and they wanted me to distribute the prizes in his place. Well, the impediments before me were so great that though strongly wishing to comply with their desires I felt myself utterly unable to do so. I am not sure that you know how excellent a president you possess in Mr. Ascroft. He drove me and pushed me and brought all manner of reasons to bear upon me, but the difficulties in front of me were so great that I could not yield. He went away, I hope in good humour with me, though obviously disappointed, and when I thought of the trouble that he and Mr. Jolly had taken in coming to me to that wild moorland, the thought of allowing them to go away disappointed became a source of misery to me. I relented. But the terror of meeting an audience—I did not expect to meet such an audience as I see here—but to meet a numerous Preston audience, to borrow a line from Hamlet,

> Unhousled, unprepared, unanel'd,
> With all my imperfections on my head,

was very terrible to me. But then came the reflection, they only want me to stop a gap. I will go down and stop it, and if the work be not done rightly and effectually my Preston friends will forgive me. (Applause.) The history of science, since the time of Bacon and Descartes, has been an astonishing one. Abandoning the vain speculations of the ancients, the scientific mind began nearly three centuries ago to seek its knowledge of nature by the sure method of observation and experiment. Not that the ways of the ancients were entirely vain, for scientific knowledge cometh not wholly by observation. There is something in the human mind in its higher manifestations which desires and seeks the light of principles to irradiate facts, and reveal their substratum. You know that Newton was preceded by Kepler, who, hunting with extraordinary industry among the observations of Tycho Brahé, extracted from these observations the facts of planetary motion, known as the laws of Kepler. They are what we name in science empirical laws—that is to say, laws derived from observation and not deduced from an underlying principle. These laws came into the hands of Newton, who, unsatisfied with the mere facts of observation, asked why these laws should be laws of nature. Pondering the phenomena,—"intending his mind," as he himself expressed it, upon the facts, he placed at the root of Kepler's laws the principle of gravitation, or of universal attraction, from which they all necessarily flow.

But here a difficulty presented itself to Newton which he never solved, and which remains a difficulty to many philosophic minds to the present hour—the difficulty of imagining a body to act where it is not, or across empty space. He asked himself whether nothing existed between the earth and the sun which enabled them to hold together—nothing, for example, resembling the traces between a pair of horses and a carriage. In fact, Newton was not disposed to accept the idea of what is called action at a distance; and though he was too cautious to commit himself to an expressed opinion about the matter, there is little doubt that he supposed some medium to exist around and between the sun and planets which enables them to exert the pull of gravitation upon each other. We have here a characteristic feature of the scientific mind. In the long run it is driven beyond the boundaries of sensible phenomena, and compelled to found its conceptions on an ultra-sensible world out of which these phenomena spring. This was more fully illustrated by his treatment of light. Newton asked himself, "What is light?" His senses were here of no direct use to him. He was compelled to fall back upon the scientific use of the imagination. He supposed light to be due to flying particles of ultra-sensible magnitude—which were darted out with inconceivable velocity by luminous bodies. One consequence of this "Corpuscular theory" was that light moves more rapidly through transparent terrestrial substances, than through stellar space. Thus if you suppose a beam of light passing earthward from the sun, on entering the earth's atmosphere its velocity, according to Newton, would be augmented; and, supposing the same beam to impinge upon the waters of the ocean, its velocity, in passing through the water, would be still further augmented. Here, however, he met an opponent in his own day—the illustrious Huyghens—who said to him, "No, light is not due to the flight of corpuscles, nor is its velocity in water or air so great as in stellar space. It is due to the motion of waves, not to the motion of particles." All space is filled with an elastic ether, which transmits through the universe the pulsations of light. It is these pulsations that awaken light in the eye, as the pulsations of air awaken sound in the ear. We have here another illustration of where the scientific mind habitually dwells. It dwells in a region altogether beyond the range of the senses; and the man who lacks the power and penetration to break into this region can hardly be described as a truly scientific man. There are in science certain little numbers, to the accurate determination of which all the skill, penetration, and veraciousness of scientific men have been devoted. One of these magic numbers was discovered by the great Galileo when he went to the top of the leaning tower of Pisa and determined the time required by a body to fall to the bottom. By these experiments of Galileo the laws of falling bodies were for ever determined,

and the magic number which he discovered was 32. This number marks what is called the acceleration of gravity—it is the measure of gravitating force. The meaning of this is that if a body be taken to a certain height above the earth's surface, and let it loose, the pull of gravity exerted on it for one second of time will impart to the body a velocity of 32 feet a second. Is not this a small key with which to unlock the treasure-house of the planetary system. With this little number to rely upon, Newton was able to weigh the moon, and after it the sun and the planets, and to determine the law according to which the force of gravity diminished with the distance. There are other small numbers and formulæ which, with adamantine firmness, bear the weight of the edifice of science in their respective domains. There is, for example, the law of reflection, discovered by the ancients, and the law of refraction, discovered by Willebrod Snell. According to Snell's law, the sine of the angle of incidence, divided by the sine of the angle of refraction, gives an invariable quotient called the "index of refraction," however the angles themselves may vary in magnitude. It was reserved for a later day to understand the full significance of Snell's discovery. We now know that the two sines referred to simply express the velocities of light in the two media. Then there is another small number, expressing the ratio of the specific heat of air at constant volume to its specific heat under constant pressure, from which the most momentous consequences can be deduced. The co-efficient of expansion of air is also a physical constant of the very greatest importance. Among other things, it enables us to assign the temperature at which temperature would cease—that is to say, the the absolute zero of temperature. And now to come nearer to our own time, and to this locality. We have the number 772, or 1,390, according as we use the degrees of Fahrenheit or Centigrade, expressing the mechanical value of heat. If you heat one pound of water one degree Fahrenheit, the amount of heat employed would, if mechanically applied, lift 772lbs. a foot high. Or if instead of the degrees of Fahrenheit we use centigrade degrees, the amount of heat required to raise a pound of water one degree in temperature would, if mechanically applied, raise 1,390 lbs. one foot high. In the one case 772 foot pounds, as they are called, and in the other 1,390 foot pounds is "the mechanical equivalent of heat." In the whole range of science there is not a more important number than this one; and it is a number indissolubly associated with the honoured name of James Prescott Joule, of Manchester. An unalterable relation being thus established between heat and ordinary mechanical work, it was soon seen that the principle of equivalence ruled the relationship of the other agents of nature. Expanding our minds so as to take in the whole of the powers of the material universe, we pass from the mechanical theory of heat

to the wider principle of the "conservation of energy," a principle which affirms the agencies of nature to be indestructible while they are mutually convertible. There is no such thing as the creation of energy in the material-universe; and if a new form of energy should appear, the principle of conservation affirms that some other form of energy must have disappeared to produce it. Take the case of a cannon ball in a gun. Fire the charge, and send the projectile flying through the air. The projectile's flight is paid for by the heat of the gunpowder, a portion of which has failed to make its appearance as heat, being converted into the motion of the ball. When the ball strikes the target, and has its motion stopped, the precise amount of heat lacking in the burning gunpower is restored. With Joule's equivalent in our hands, we may go into the universe, and calculate, as Mayer and Thompson have done, how suns may be generated by the collision of planetary masses. With the principle of conservation to guide us we can resort to our forests and our coal fields, and asking ourselves whence came the immense stores of heat potential in the wood and coal, we are able to reply that it comes from the sun. It is the wave motion of solar light that decomposes the carbonic acid and the aqueous vapour of the air, and stores up the carbon and the hydrogen in the body of the tree. We may pass from the vegetable to the animal world, and learn that all its energies are entirely derived from the sun. I cannot lift my arm without bringing into play this law of conservation. The words that I now speak impinge against your ears and rustle against the walls of this house, producing by their action a certain amount of heat. This is the exact equivalent of that portion of the motion of the vocal chords which is expended in producing the sonorous vibrations. I have said that these vibrations are converted into heat, and this is the tendency of all other forms of energy. Every electric current has its equivalent in the heat it produces. In fact all energies tend to take the form of heat, and heat is eternally radiating. Through this agent, as Thompson has pointed out, there is a never-ceasing tendency to bring all parts of the universe to the same temperature. Now, it is a principle of thermo-dynamics that work can only be done by heat during its passage from a hot body to a cold one. Hence, when all things are brought to the same temperature—a time immeasurably distant, but still approaching—all work must cease, and death must set in. We thus pass through the forces and phenomena of inorganic nature. We pass thence into the vegetable world, and from the vegetable world into the animal, finding everywhere the law of equivalence asserted. Dare we take a step further, and inquire whether equivalence reigns between the processes of thought and the molecular motions of the brain? Are we as rigidly bound in the domain of human consciousness as in the physical world? In his

"Universal Prayer" the poet Pope addresses the "Father of all" as fixing nature fast in fate, but leaving free the human will. Is this so? I can only say that if the human mind should ever prove capable of crossing the bourne which separates physics from thought, it must be by an intellectual act qualitatively different from the mind's action in dealing with the physical world. We are here suddenly pulled up in our deductions through the absolute scientific incongruity existing between thought, and even sensation, and molecular motion. When the idea of coming to Preston first appeared to me as a possibility, both my wife and I thought that if I took three great principles which in after time will be regarded as the glory of the present age, and spoke to you in a familiar way about them, I might possibly fill the twenty minutes which Mr. Ascroft assured me was all I need inflict upon your patience. I have just dealt with one of these principles—the conservation of energy. Two others remain; and if I should exceed the twenty minutes granted me by Mr. Ascroft, I hope you will forgive me. The two others are the theory of evolution, on which it will not be necessary to say more than a few words, and the germ theory of epidemic disease. With regard to the theory of evolution, I cannot help noting the wide toleration which has been infused into the public mind since the appearance of Mr. Darwin's "Origin of Species" in 1858. Well do I remember the cry of anguish and detestation with which the views of Mr. Darwin were assailed when they were first enunciated. To one example of this I will here refer. There was a meeting of the British Association at Oxford in 1860, when the subject of the origin of species was discussed by the late Bishop Wilberforce. I was at a distance from the platform, my neighbours being, for the most part, clergymen. The vehemence with which the Bishop's powerful sarcasm was cheered was extraordinary. And knowing full well that he would be effectually answered by a friend of mine, I was not able to forecast the consequences. But whatever these might be, I was determined to share them. So I gradually edged my way through the crowd, overturning in my passage a seat on which many people were standing, till I got close to my friend, who, I feared, incurred some risk of a physical mauling. But the discussion passed away without violence, and in virtue of that plasticity with which the human mind, in the long run, takes the stamp of truth, those who were then so perturbed in spirit are now ready to admit, not only that the origin of species did them no particular harm, but that they are quite prepared to accept its doctrine. And what is this doctrine but the realisation, in a wider sense than the poet dreamt, of the poet's faith that "through the ages one increasing purpose runs"? That, beginning with the lowest forms of life, we find them nursed through innumerable generations until we reach the being who stands foremost in the files of time—the man of

to-day? And here again, who will answer the problems that present themselves to the thoughtful mind? Consider your own bodies and the processes that go on within them. What have you had to do with them? Look to the mechanism of the human frame. Look to the structure of the ear, with its drum head, and its hammer, and its anvil, and its stirrup bone, planted against the "windows" at the other side. Go forward towards the brain, and find there Corti's organ, with its five thousand strings, expressly constructed to take up sonorous vibrations and convey them to the brain. Neither you nor I had part or lot in the production of these wonders, and still there they are. As Wolsey advised Cromwell, "Let us hold fast by our integrity;" let us meet the truth loyally and courageously whenever it is presented to us. But, coming face to face with the inscrutable mysteries by which we are surrounded, let each of us echo the words of Byron as applied to Socrates—

> Well did'st thou speak, Athena's wisest son!
> All that we know is, nothing can be known.

No great scientific discovery springs isolated from the mind. The individual takes in the knowledge of his time, ponders it, sees new meanings in it, and, equipped with the requisite originality and power, shoots ahead of his contemporaries. But his achievements have their roots in antecedent labours. The system of Copernicus simmered in the mind of Pythagoras; the principle of gravitation and the law of inverse squares were surmised before the time of Newton. The mechanical theory of heat was more than surmised by Boyle and Hooke and Rumford, the doctrines of Darwin were foreshadowed by his own grandfather, and enunciated in broad outline by Demaillet and Lamarck. Thus also the "germ theory" of disease in its earliest glimmerings appeared centuries ago; but in this our day it has undergone astonishing development. We are no longer dependent even on the far-reaching penetration of men of genius like William Budd, who, during his lifetime, saw more clearly than any other man in England the advent of this great generalisation. In our day the theory has been removed from the sphere of mere observation and analogical reasoning, and founded on the irrefragable basis of experiment. Excellent work has been done in England in relation to this subject, and the promise of still more excellent was fair a few years ago. But the English investigator has been handicapped in this great race, and must necessarily fall behind. Great work has been done, and is still being done, in Germany. Take a sample. In the year 1876 a paper was put into my hands by Professor Cohn, of Breslau, in which the contagium of splenic fever was investigated. This is the terrible wool-sorters' disease, so well known in districts where that calling is pursued. The paper had been drawn up from his own experiments and observations by a perfectly unknown young

physician, who then held a small appointment in the neighbourhood of Breslau. The investigation impressed me as masterly in execution and as pregnant in results. The writer followed, with the most unwearing patience and the most consummate skill, the life-history of *Bacillus Anthracis*, which is the contagium of splenic fever. I said at the time that the author of this investigation was destined to rise higher. That young man was Dr. Koch, of whom you have heard so much of late. The next time I heard of him he was head of the Imperial Sanitary Institute of Berlin. There he has been the author of labours of the very highest importance, among which the discovery of the organism which produces the withering malady, known among us as consumption, takes the highest place. He has transferred the tubercle bacillus from the diseased lung to a medium where it could increase and multiply. With a speck of that new crop he has infected fresh pure substance, and in this way has cultivated the organism through many generations. With the bacillus, thus cleansed from its first impurities, he has inoculated various animals susceptible of tuberculosis, and the disease has been infallibly reproduced. Others had proved the disease communicable, but Koch's merit consists in detecting the peccant organism, and in proving it beyond all doubt, to be the veritable cause of the disease. With the lair of the enemy revealed we may hope to dislodge him by and by. Germany, at the present moment, is peopled by able investigators, who have thrown themselves with one accord upon this important line of enquiry. The great achievements of Pasteur in France have come to all our ears; and surely they are calculated to fill our minds with hope and wonder. It is most interesting to follow the line of thought and experiment which led Pasteur to his results. He began with a physico-chemical investigation on the rotation of the plane of polarisation by certain tartrates which turned the plane of polarisation to the right. Pasteur discovered a tartrate which turned it to the left. The substances were alike in chemical composition, but their molecules were put together in different ways. Pasteur noticed the singular fact that one of his tartrates was capable of furnishing nutrition to a minute microscopic fungus, while the other was not. Extending his observations, he found that the growth of this little fungus was accompanied by all the marks and tokens of fermentation. He knew that the ferment of beer had been proved by Cagniard-Latour and Schwann to be caused by the growth of a microscopic plant, and with the keen penetration which characterises him, he closed with the idea that all ferments are living things and that the albuminoid substances which were generally supposed to be ferments, were in reality, the food of the ferments. Pasteur directed his attention not only to the pure fermentation of beer and wine, but to the disorders which so frequently spoilt these liquids, rendering them acid, or putrid, or "ropy." The acidity

of wine he traced to the action of a small organism called *mycoderma aceti*. It is this organism which converts wine into vinegar, and on its operations the vast industry of vinegar manufacture is based. Placing pure yeast under his microscope he saw there the specific plant which constitutes the alcoholic ferment, and no other. Placing sour or putrid yeast under his microscope, he saw, mixed with his torula, or beer ferment, numerous other organisms, which he aptly named "ferments of disease." Disastrous losses have often been incurred by brewers through the use of yeast which five minutes' intelligent inspection by the microscope would have caused them to cast away. Pasteur has succeeded in producing beer which will keep for any length of time, while in the case of wine he showed that by simply heating the liquid to a temperature of 50 degrees centigrade the organisms by which it was so frequently rendered unfit for use are all destroyed. One of Pasteur's great investigations had reference to the silk husbandry of France. Utter ruin had fallen upon this husbandry through the spread of an epidemic among silk worms. To obtain healthy eggs various European countries had been laid under contribution, and these failing in their turn, eggs were obtained from Japan. After flourishing for a time, the crops derived from these eggs also failed; and the outlook became utterly hopeless. The weight of the cocoons produced in 1853 was twenty-six million kilogrammes or between fifty and sixty million pounds. In 1865 the weight of the produce had fallen to four million kilogrammes, thus entailing in a single year, a loss of a hundred million francs. This inquiry did not quite deflect Pasteur from his former pursuits. It had been discovered that the infected worms were invaded by small corpuscles, which spread from the intestinal canal through the body of the worm, often filling the silk bag, producing there the pressure of the true vicious fluid, and causing the insect to go mechanically through the process of spinning its cocoon. Bringing his previous discipline with the microscope to bear upon the question, Pasteur found that the eggs might seem free and still be smitten; that the worms might seem free and still be charged with the invisible germs of the malady. But he found that in *the moth* the contagium, if it existed at all, was infallibly detected. First upon a small scale, and afterwards upon the larger scale of a great national industry, Pasteur succeeded in separating the healthy from the unhealthy moths, in abolishing the latter, and in restoring to his country its silk culture. A mind like his would not ponder the phenomena thus brought under his eyes without surmising far-reaching developments. He infected his worms in all the usual ways by which infection is spread. He infected them by smearing corpusculous matter over the mulberry leaves on which they fed. He infected them by inoculation, and he caused them to infect each other by the wounds of their own claws. Finally, he showed that corpusculous dust

wafted through the air sufficed to spread the epidemic. Place a fresh mutton chop upon a plate and expose it to the air; if the air is humid, all the better. After a few days, the odour of the chop becomes offensive. Place a minute drop of the blood or juice of the chop under a microscope; it will be found swarming with minute motile organisms, rushing with extreme rapidity hither and thither, across the field of the microscope. These are the agents of putrefaction. The decompositions accompanying their growth produce all the evil smells, and if they could be kept away from the chop, putrefaction would never set in. The same is true of all putrescible substances. Take pure mutton broth, limpid beef tea, or an infusion of fish, fowl, or vegetable. Clear and sweet at first, they all become turbid and bad smelling in the end, and, when examined, invariably show these swarming organisms. Milk owes its sourness and putridity to a similar cause. The freezing temperature paralyses, though it does not kill, these bacteria; and the possibility of transporting frozen meat from a distance is due to the torpor produced by the cold. I had a frozen salmon sent to me some time ago from Canada, which, when thawed, was perfectly sweet and good. It would have remained a century good if it could have been kept frozen. You all know the story of the Siberian elephant, which, after having been entombed for unknown ages in ice, was found perfectly fresh when its body was revealed. You may also remember the history of the Chamounix guides who, in 1820, while leading Dr. Hamel up Mont Blanc, were swept by an avalanche into a crevasse upon the Grand Plateau. More than 40 years afterwards their remains were found, unputrefied, at the end of the Glacier des Bossons. Schwann was the first to show that putrefaction was the work of living organisms, and that it might be effectually avoided by preventing either these organisms or their germs from entering the putrescible substance. Schwann made his experiments in 1837, and they were followed, in 1863, by the far more elaborate researches of Pasteur. But now we take a new departure. The influence of these bacteria upon dead matter had been placed beyond a doubt when, by a happy inspiration, Lister extended the generalisation to living matter. Simple fractures, where the skin is not broken—that is where the wound does not come in contact with the air—give the surgeon no trouble; but compound fractures, where the wound extends to the surface, were frequently followed by putrefaction and death, however skilful the operator who treated them might be. Floating in the air, and mixed with the dust of our floors, walls, and furniture, we have multitudes of the germs and organisms of putrefaction, and Lister's idea was, that by destroying these germs, he would infallibly save his patients. In the face of very strenuous opposition he has triumphantly proved his case, and placed on an irrefragable basis the antiseptic system of surgery. He dresses his

patient's wounds under a fine rain of carbolic acid, or of some other liquid competent to destroy the germs. No more beneficient step was ever taken in surgical art than this one. It is not, however, to the surgeon only that these organisms are of interest. Their action extends over a vastly wider field. Penetrative minds saw, long ago, the analogy between the phenomena of communicable diseases and those of propagation by germs. Infectious diseases "breed true." Smallpox begets smallpox, scarlet fever begets scarlet fever, typhoid begets typhoid, with as much regularity and certainty as a thistle seed begets a thistle or an acorn an oak. But we have passed the bounds of analogy, and are now able to lay our finger on the organisms which produce various infective diseases. Koch's investigation of splenic fever, and its deadly cause, the *Bacillus anthracis*, formed a noble contribution to the germ theory of disease. Pasteur afterwards completely verified Koch's results as to the parasitic origin of splenic fever. One incident may be mentioned, as profoundly interesting in itself, and as affording an illustration of Pasteur's penetrative sagacity. Koch had found that while the virus of splenic fever was deadly to mice, guinea pigs, and many of the larger animals, birds were able to defy it. By means of infusions Pasteur determined the temperature at which the organism ceased to propagate itself, and he found it to be close to the temperature of the blood of birds. In the infusions, however, the point of suspended vitality was from two to three degrees higher than the blood temperature. Hence, if the living blood were like the infusions, the bacillus ought still to thrive in it. But, said Pasteur, the living blood is not like an infusion. The blood corpuscles offer resistance to any attempt to deprive them of their oxygen, and this resistance may be equivalent to a difference of two or three degrees of temperature. He chilled his fowls, inoculated them with the splenic fever virus, and thus killed them. Others he inoculated, while chilled, and when the fever was at its height he warmed them till their blood resumed its normal temperature. The bacillus was killed and the fowls were saved. When I first read the account of this experiment I deemed it one of singular beauty and importance. The next step taken by Pasteur is certainly one of the greatest ever taken in preventive medicine. He has succeeded in widening indefinitely Jenner's discovery of vaccination. You know that vaccine lymph came originally from the horse and cow, and that when it is perfectly pure, and used with proper precautions, by imparting the disease in a mild form, it secures, for a considerable time, immunity from further attack, The vaccine virus is, probably, a mild form of the more virulent smallpox virus. Pasteur would call it an "attenuated virus." Now he has succeeded in this process of attenuation so far as to do for other diseases what Jenner enabled us to do for smallpox.

The agent by which the attenuation is effected Pasteur considers to be the oxygen of the air. Take, for example, the deadly bacterium from a fowl suffering from chicken cholera, and cultivate it through 15 or 16 successive crops. If the cultivations follow each other rapidly, if only a short time is allowed to elapse between one culture and the next following one, then, at the end of twenty, or even of fifty cultivations, the contagium appears to be as virulent as at first. But if several days, or weeks, be allowed to elapse, between each culture and the next following one, the infective organism becomes enfeebled, and after a time, when used for inoculation, though the organism may produce the disease, it does not produce it in a fatal form. The fowl is rapidly restored to health, and if it be then inoculated with the organism in its most virulent form, the contagium proves powerless. How is this immunity, which is one of the most extraordinary facts in the etiology of disease, to be accounted for? I would here venture to give you the views which I have long entertained upon this subject. When a tree, or a bundle of wheat or barley straw is burnt, an amount of mineral matter remains in the ashes, which, though small, was absolutely essential to the growth of the vegetable. In a soil lacking the necessary mineral constituents the tree cannot live, the crop cannot grow. Now contagia are living things which demand certain elements of life just as inexorably as trees, or wheat, or barley; and it is not difficult to see that a crop of a given parasite may so far use up a constituent, existing in small quantity in the body, but essential to the growth of the parasite, as to render the body unfit for the production of a second crop. The soil is exhausted, and until the lost constituent is restored the body is protected from any further attack of the same disorder. Such is one explanation of non-recurrent diseases which naturally presents itself to a thorough believer in the germ theory. To exhaust a soil, however, a parasite less vigorous and destructive than the really virulent one may suffice; and if, after having by means of a feebler organism, exhausted the soil, without fatal result, the most highly virulent parasite be introduced into the system, it will prove powerless. This, in the language of the germ theory, I hold to be the secret of the immunity which attends vaccination. Some distinguished investigators, I ought to say, hold a somewhat different view. Pasteur has had the hardihood to attack the deadly malady of splenic fever, and to seek to reduce the power of a virus which, under ordinary circumstances, is terribly fatal. He triumphed. And here an anecdote may be recited which will be for ever memorable in the history of medicine. When it was publicly known that Pasteur had succeeded in attenuating this virus, he was invited by the President of the Society of Agriculture in Melun to make an experiment on an agricultural scale. Sixty sheep and ten cows were placed at his

disposal. Twenty-five sheep and four cows were left unvaccinated, while a similar number of each group were inoculated with an attenuated virus. Fourteen days afterwards the vaccinated and unvaccinated cows and sheep were all inoculated with a very virulent virus. Three days after this last inoculation two hundred people assembled to witness the result. Of the twenty-five unvaccinated sheep twenty-one were already dead, and the remaining four were dying. The unvaccinated cows were alive, but tumours had been formed at the points of inoculation, and the animals were so prostrated by intense fever that they were unable to eat. Meanwhile, the sheep and cows which had been protected by the attenuated virus remained perfectly healthy and "gay," not even showing a rise of temperature. At the end of 1881 nearly 34,000 animals had been vaccinated in France with the attenuated virus of splenic fever. At the end of 1883 the number had risen to nearly 500,000. One final word regarding the investigation on which Pasteur is now engaged. He has attacked with success the mysterious and terrible disease, of hydrophobia. The first report of a commission appointed by the French Minister of Public Instruction, which reached me in Switzerland last summer, contains a summary of the experiments made under the direction of the commission. Here is the summary. Of six dogs unprotected by vaccination, three succumbed to the bites of a dog in a state of furious madness. Of eight unvaccinated dogs, six succumbed to the intravenous inoculation of rabic matter. Of five unvaccinated dogs, all succumbed to inoculation by trepanning of the brain. Finally, of three-and-twenty vaccinated dogs, not one was attacked with the disease, though they had been inoculated with the most potent virus. Madness in human beings is always referred to the brain, but in rabies the saliva was considered to be contagious matter. Pasteur has proved this to be a complete delusion. The saliva is no doubt infectious, but its contagium is derived from the brain and nervous system, and is communicated to the saliva. Well, I think in the presence of facts of this kind we are entitled not only to wonder, bnt to hope, that by and by we shall so far master those diseases which have for countless ages mastered us as to be able to trample them from the face of the earth. (Applause.) I have no peroration to offer; I have had to prepare this address with extreme rapidity, and I have only to thank you for the great attention you have given me. (Loud applause.)

The learned Professor was several times during its delivery interrupted with hearty applause.

Mr. W. E. M. Tomlinson, M.P., said that before they parted he had to ask them to perform one other duty, and he was sure it was one which they would so cordially and readily agree

with that it would really need no words in support of it. He should, however, be failing in his duty if he did not express the thanks which that meeting desired to tender to Mr. Ascroft for his occupation of the chair. (Applause.) In speaking of his occupation of the chair he did not mean merely the physical effort of sitting in the chair. They knew how much this highly valuable institution—the value of which they become more and more sensible every day—owed to the committee of management, and he thought they would all agree with him in saying that if it had not been for their having at their head one who had so cordially the interests of this institution at heart, they would hardly have attained the same measure of success that they had now attained. (Applause.) He thought on this special occasion they ought not to forget what they owed to Mr. Ascroft for bringing Professor Tyndall amongst them. (Hear, hear.) They were aware that the first name which presented itself to their committee to distribute the prizes was a nobleman to whom they owed very much, because he was always ready to come amongst them and help them whenever he could. (Hear, hear.) But he thought that if he had been in Mr. Ascroft's place, on his failure to acquire the services of the Earl of Lathom, he would hardly have been bold enough to go, as he did, to one of the foremost men of science to come here—and they might flatter themselves that to some extent the eminent position which he had attained was due to the contact which he had in early life with the robust institutions of this part of England. (Applause.) His hesitation in going to Mr. Tyndall might have been because, living in London as he did, he knew something of the immense calls there were on his time. It had been his privilege to take for many years an interest in that great institution in London with which Tyndall was connected, and his earliest introduction to scientific studies was made under Dr. Tyndall's great master—Professor Farraday. (Applause.) It was when Farraday was removed from the scientific world, or at least when he was obliged to give up his scientific pursuits, that his mantle fell upon Dr. Tyndall, and he thought they would all agree with him that he had worthily and ably occupied that difficult position. (Applause.) That evening he had occupied a great part of his speech with a very interesting discourse upon the subject of germs, and it was only right that they should acknowledge that Dr. Tyndall himself was one of the foremost men of to-day on that particular subject. (Applause.) To his mind, in all the great branches of science to which Dr. Tyndall had devoted himself, there was nothing more perfect, nothing more beautiful than the demonstrations by which he established, and established beyond all controversy, that these germs were not self-produced, but had their origin only in the existence of the life which propagated them. (Applause.) This was a matter which they in Preston might very well pay some

attention to. The sanitary condition of our town was not what they could regard as satisfactory, and it was now tolerably well-established that to some extent the mortality amongst young children was due to the fact that the food provided for them was not wholesome or healthy when it was issued to their organisations. Science had now put them in possession of the reasons and causes which made food wholesome sometimes and unwholesome at others, and the duty was incumbent upon them to instruct those who had not the same advantages as themselves upon the absolute necessity for the health and life of the younger portion of our population of securing the wholesome condition of the food which was put before them. (Applause.) He was sure they all appreciated the services of Mr. Ascroft, and he had great pleasure in proposing a cordial vote of thanks to the president of the Harris Institute. (Applause.)

Mr. JOHN HEALEY seconded the motion, which was carried by acclamation.

The CHAIRMAN, in returning thanks, said Mr. Tomlinson had alluded to the fortunate circumstance of their having had Professor Tyndall to distribute the prizes and deliver an address to them. They had a charming visit to the moorlands of Surrey, of which they would ever retain a most pleasant recollection. They were only sorry that when they left Professor Tyndall felt himself unable to accept their invitation. They were received by Mr. and Mrs. Tyndall in the most pleasing and hospitable manner, and Mr. Jolly and himself would ever remember that interesting visit. He ventured to think that they would consider it not one of the least of the claims to the vote of thanks that Mr. Jolly and himself had been partly instrumental in inducing Professor Tyndall to come to them that night and favour them with that most interesting and able address to which they had had the pleasure of listening, and they were also under a great obligation to Mrs. Tyndall for gracing the meeting with her presence. (Applause.) He begged to thank them for the vote accorded to himself.

The National Anthem was played on the organ, and the proceedings terminated.

LIST OF PRIZES AND CERTIFICATES AWARDED TO STUDENTS ATTENDING THE CLASSES AT THE HARRIS INSTITUTE, SESSION 1883-4.

SCIENCE.

† These Students have obtained Queen's Prizes.

* These Students have obtained Local Prizes.

A signifiies Advanced. **E** Elementary. **I** First Class. **II** Second Class.

Name.	Subject.	Name.	Subject.
Abbott, Robert.....	Botany, E II	Carter, George.....	Botany, E II
Ainsworth, Edmund..	Applied Mechanics, E II	*Caunce, Harriett E.	Mag. & Electricity, E I
Albinson, John E. ..	Machine Construction, E II	,, ..	Physiography, E II
Attwater, George....	Mag. & Electricity, E II	*Caunce, Lydia	Mag. & Electricity, E II
,, ...	Inorganic Chemistry, E II	,, ...	Physiography, E I
,, ...	Geology, E II	Clarke, Lawrence N..	Steam, E II
Baldock, Edward T..	Mathematics, stage 1, II	Cockshott, Samuel ..	Machine Construction, E II
Baldwin, James S. ..	Building Construction, A II	,, ..	Applied Mechanics, A II
,, ..	Physiography, E II	,, ..	Steam, A II
Ballantyne, James ..	Botany, A II	Corless, George	Mag. & Electricity, E II
*Bamford, Edith E..	Sound, Light, & Heat, E II	Cottam, Henry.....	Mathematics, stage 1, II
,, ..	Mag. & Electricity, E I	Coulthard, Thomas..	Mag. & Electricity, E II
,, ..	Physiography, E I	Coulthurst, Edward..	Building Construction, A II
*Bamford, Sarah E..	Sound, Light, & Heat, E II	Croft, James.....	Building Construction, E II
,, ..	Mag. & Electricity, E I	Crombleholme, Robt.	Agriculture, A II
,, ..	Physiography, E II	Crook, Dora.....	Mag. & Electricity, E II
Bannister, Lewis....	Mag. & Electricity, E II	*Cunliffe, Thomas ..	Botany, E I
,, ...	Physiography, E II	Dallas, Ellen	Botany, E II
Bannister, Robert C..	Geology, E II	Davies, Samuel	Mag. & Electricity, E II
Barber, Edward H...	Inorganic Chemistry, E II	,, ...	Geology, E II
Barnes, John	Machine Construction, A II	*Dempsey, William..	Physiography, A II
,, ...	Applied Mechanics, A II	,, ..	Agriculture, A I
*Bonny, James	Mathematics, stage 1, I	Denby, John	Mag. & Electricity, E II
,, ...	Sound, Light, & Heat, A II	†*Dewhurst, Edward.	Sound, Light & Heat, A I
Bottrill, Sam. J.	Mag. & Electricity, A II	,, ...	Mag. & Electricity, A I
,, ...	Physiography, A II	Dewhurst, Henry ..	Mathematics, stage 1, II
*Bradshaw, Herbert..	Mathematics, stage 1, II	,, ..	Mag. & Electricity, E II
,, ..	Inorganic Chemistry, E I	,, ..	Inorganic Chemistry, E II
Bradshaw, Thomas ..	Machine Construction, E II	Dewhurst, John	Machine Construction, A II
Bramwell, James....	Geology, E II	Dixon, Francis E ..	Building Construction, E II
*Brewer, Fred. W. ..	Sound, Light, & Heat, E I	,, ..	Geology, E II
,, ..	Mag. & Electricity, E I	,, ..	Physiograpy, E II
Brewer, John C.	Mag. & Electricity, E II	*Dixon, Edith M....	Mag. & Electricity, E II
*Briggs, William F..	Applied Mechanics, A I	,, ...	Botany, E I
Bull, John	Building Construction, A II	*Dover, John	Physiography, E I
Carter, Charles.....	Mathematics, stage 1, II	,, ...	Agriculture, A II
,, ...	Mag. & Electricity, A II	*Durham, Richard...	Sound, Light & Heat, E II
,, ...	Physiography, A II	,, ...	Mag. & Electricity, E I

Name.	Subject.	Name.	Subject.
Edgar, Eleanor	Mag. & Electricity, E II	Helme, Thomas	Physiography, A II
Fare, Jane	Physiography, E II	Heron, Caroline C...	Sound, Light & Heat, E II
*Fawcett, Richard ..	Mag. & Electricity, E I	,, ..	Mag. & Electricity, E II
Ferguson, Richard ..	Sound, Light & Heat, E II	Hodson, George ...	Building Construction, E II
,, ..	Mag. & Electricity, E I	Hodson, John T....	Mag. & Electricity, E II
Ferguson, May.....	Mag. & Electricity, E II	Holliday, William ..	Steam, A II
,, ...	Physiography, E II	Holmes, Martha	Mag. & Electricity, E II
Fildes, Henry, sen...	Sound, Light & Heat, E II	,, ...	Physiography, E II
,, ..	Mag. & Electricity, E I	Howarth, Edward G.	Mathematics, stage 1, II
,, ..	Physiography, E II	*Hubberstey, James	Mag. & Electricity, E I
*Fildes, Henry, jun..	Mag. & Electricity, E II	,,	Physiography, E II
,, ..	Inorganic Chemistry, E II	Hubberstey, Robert..	Mathematics, stage 1, II
,, ..	Physiography, E II	,, ..	Physiography, E II
*Fletcher, Barten ..	Mag. & Electricity, E I	,, ..	Agriculture, E II
,, ..	Botany, E I	Iddon, Richard	Mathematics, stage 1, II
Foster, Robert G. O..	Applied Mechanics, E II	Iddon, Thomas	Machine Construction, E II
Gardner, Anthony ..	Sound, Light & Heat, E II	,, ...	Mag. & Electricity, E II
*Gardner, Edward ..	Mag. & Electricity, E I	Ireland, Joseph	Mathematics, stage 1, II
,, ..	Physiography, E II	,, ...	Physiography, E II
Gardner, Henry	Geology, A II	Irvin, Joseph	Mathematics, stage 1, II
Gardner, Thomas ..	Mag. & Electricity, A II	,, ...	Mag. & Electricity, E II
Gardner, John L....	Mathematics, stage 1, II	,, ...	Physiography, E II
,, ...	Sound, Light & Heat, E II	Jenson, James.....	Mathematics, stage 1, II
,, ...	Mag. & Electricity, E II	Johnson, James B...	Building Construction, A II
,, ...	Physiography, E II	Johnston, Walter H..	Geology, A II
Goggs, Matthew	Mathematics, stage 1, II	Johnstone, Wm. A...	Physiography, E II
Gornall, Enoch	Steam, A II	*Jones, John	Prac. Inorg. Chemistry, E I
Gray, Charles E.....	Mathematics, stage 1, II	,, ...	Botany, E I
Green, Herbert B. ..	Inorganic Chemistry, E II	,, ...	Organic Chemistry, E I
*Greenwood, John S.	Sound, Light & Heat, E II	Kelley, Edward	Mathematics, stage 1, II
,,	Mag. & Electricity, E I	Kent, James G.	Geology, E II
Gregson, George E...	Agriculture, A II	Kilroe, Pat	Botany, E II
Gregson, Richard ..	Building Construction, E II	King, Fred. C.....	Geology, A II
Halewood, Alfred....	Physiography, E II	,, ...	Botany, A II
Hall, James B.	Machine Construction, E II	,, ...	Physiography, A I
*Hall, John	Inorganic Chemistry, E I	Kirkham, Thomas ..	Machine Construction, E II
*Hargreaves, Rd. N..	Mathematics, stage 1, II	Ladyman, Arthur W.	Mathematics, stage 1, II
,, ..	Applied Mechanics, E I	Ladyman, Thomas B.	Mathematics, stage 1, II
,, ..	Steam, A II	Lambert, Samuel ..	Mag. & Electricity, E II
Harrison, John	Building Construction, E I	Lawrence, William E.	Mathematics, stage 1, II
*Harrison, Richard..	Magnetism & Electricity, E I	,, ..	Inorganic Chemistry, E II
,, ..	Inorganic Chemistry, E I	Lillie, Mary	Botany, E II
*Harrison, Rd. R. H.	Applied Mechanics, E II	,, ...	Physiography, E II
Hartley, Charles H.	Mag. & Electricity, E II	Livesey, Henry	Mag. & Electricity, E II
,, ..	Botany, E II	Lynch, George	Physiography, A II
Hartley, John	Mathematics, stage 1, II	Lynex, Mary	Botany, E I
,, ...	Mag. & Electricity, E II	†Mallott, Frederick..	Building Construction, A II
,, ...	Inorganic Chemistry, E II	,, ..	Building Con., 2nd gde. pze.
Hayhurst, James....	Machine Construction, A II	†Mallott, Henry	Machine Construction, E II
Heathcote, Herbert C.	Building Construction, E II	,, ...	Mach. Con., 2nd grade prize
*Heathcote, Wm. Hy.	Building Construction, E I	Mansley, Robert	Botany, E II
Helme, Thomas	Mag. & Electricity, A II	,, ...	Agriculture, E II

Name.	Subject.
*Marsden, Chas. H..	Mathematics, stage 1, II
*Marsden. James ..	Geology, E I
,, ..	Agriculture, E II
Martland, James	Mathematics, stage 1, II
*May, Henrietta	Mag. & Electricity, E I
,, ...	Inorganic Chemistry, A I
Mayor, John James..	Prac. Plane & Sld. G'y, E II
Mayor, Richard	Prac. Plane & Sld. G'y, E II
,, ...	Building Construction, E II
McCarter, Albert G...	Machine Construction, E II
,, ..	Mathematics, stage 2, II
,, ..	Applied Mechanics, E II
,, ..	Steam, E II
†*McDonald, Alex...	Prac. Plane, & Sld. G'y, E I
,, ..	Machine Construction, A I
,, ..	Mathematics, stage 1, 1
,, ..	Applied Mechanics, A I
Mc.Manus, Edward ..	Physiography, A II
,, ..	Agriculture, A II
,, ..	Hygiene, A II
Metcalf, John	Building Construction, A II
†Morley, William ..	Building Construction, A II
,, ..	Building Con., 2nd gde. pze.
†*Moulton, Arthur J.	Prac. Plane & Sld. G'y., E I
,, ..	Mathematics, stage 4, II
,, ..	Theoretical Mechanics, A I
,, ..	Metallurgy, E I
,, ..	Machine Construction, A I
,, ..	Inorganic Chemistry, A I
,, ..	Prac. Inor. Chemistry, E I
†*Murphy, Timothy C.	Inorganic Chemistry, A I
,,	Prac. Inorg. Chemistry, E I
Newsham, Ralph H. R.	Steam, A II
Openshaw, John Wm.	Sound, Light, & Heat, E II
,,	Inorganic Chemistry, E II
,,	Prac. Inorg. Chemistry, E II
*Ormerod, Thomas ..	Mathematics, stage 1, II
*Orrell, Fred. J. O. ..	Mathematics, stage 1, II
,, ..	Mag. & Electricity, E I
Parish, Thomas	Sound, Light, & Heat, A II
,, ...	Mag. & Electricity, A II
*Parkinson, Richard..	Inorganic Chemistry, A II
,, ..	Prac. Inorg. Chemistry, A II
,, ..	Agriculture, E I
*Pateson, Dora E. ..	Botany, E I
*Pateson, Herbert W.	Sound, Light, & Heat, E II
,,	Mag. & Electricity, E I
,,	Physiography, E II
*Pateson, Joseph W.	Applied Mechanics, A I
*Peet, Henry	Sound, Light, & Heat, E II
,, ...	Mag. & Electricity, E I
,, ...	Geology, E II

Name.	Subject.
Penny, George D. ..	Mathematics, stage 1, II
Penny, Isabella	Mag. & Electricity, E II
*Penny, John	Mag. & Electricity, E I
,, ...	Agriculture, E II
Pilkington, James H.	Applied Mechanics, A II
,,	Steam, A II
Pilkington, Thos. ...	Applied Mechanics, E II
,, ..	Steam, A II
Plant, Henry A.	Inorganic Chemistry, E. II
Plumb, Robert.....	Geology, A II
Pritt, Thomas	Mathematics, stage 1, II
Purves, John	Mathematics, stage 1, II
,, ...	Inorganic Chemistry, E II
†Ranson, Richard ..	Building Construction, A II
†*Redmond, Albert..	Building Construction, A I
,, ..	Building Con., 3rd gde. prize
*Ribchester, Edward.	Mag. & Electricity, E I
,, ..	Physiography, E II
Richardson, James ..	Machine Construction, A II
*Riches, Henry W...	Mathematics, stage 1, II
,, ..	Inorganic Chemistry, E I
†*Rigby, James	Prac. Plane & Sld. G'y., E I
,, ...	Machine Construction, A I
,, ...	Applied Mechanics, E II
,, ...	Steam, E II
Robinson, James ..	Mathematics, stage 1, II
†Robinson, Robert ..	Machine Construction, A II
,, ..	Mach. Con., 3rd grade prize
Sanderson, John	Prac. Plane & Sld. G'y, E II
,, ...	Building Construction, A II
Seed, Richard	Mathematics, stage 1, II
Seed, William Hartley	Inorganic Chemistry, E II
*Shaw, Emily	Sound, Light & Heat, E II
,, ...	Mag. & Electricity, E I
,, ...	Physiography, E I
*Shaw, George	Mathematics, stage 1, II
,, ...	Sound, Light & Heat, A II
,, ...	Mag. & Electricity, A II
,, ...	Physiography, E I
Shaw, Mary.....	Mag. & Electricity, E II
†*Shaw, Peter.....	Applied Mechanics, E I
,, ...	Mag. & Electricity, A I
,, ...	Steam, E II
,, ...	Physiography, E II
Shaw, Richard Thos.	Machine Construction, A II
,, ..	Applied Mechanics, A II
Shaw, Thomas	Sound, Light & Heat, A II
,, ...	Steam, A II
Shepperd, Chas. C...	Machine Construction, A II
Sidebotham, W. H...	Mathematics, stage 1, II
,, ..	Mag. & Electricity, E II
Slater, Charles B. ..	Mag. & Electricity, E II

Name.	Subject.
Southworth, John E.	Sound, Light & Heat, A II
,, ..	Geology, A II
,, ..	Hygiene, A II
Spencer, Arthur	Building Construction, A II
†*Stacey, Chas. E. ..	Mathematics, stage 2, II
Standing, Charles ..	Geology, E II
Stuart, William	Mag. & Electricity, E II
,, ...	Botany, E II
*Sumner, Charles J..	Mathematics, stage 1, I
,, ..	Sound, Light & Heat, E I
,, ..	Physiography, E II
,, ..	Agriculture, E II
Sykes, Robert	Inorganic Chemistry, E II
Tattersall, Herbert ..	Sound, Light & Heat, A II
,, ..	Mag. & Electricity, A II
Taylor, Alfred	Mathematics, stage 1, II
Taylor, Charles	Mathematics, stage 1, II
Taylor, Fred	Mathematics, stage I, II
Taylor Elizabeth....	Physiography, E II
Taylor, John T.	Applied Mechanics, A II
Thexton, Joseph	Agriculture, A II
*Thornton, Joseph ..	Mag. & Electricity, E II
,, ..	Physiography, E I
†Thwaites, Wm. Hy.	Building Con., 3rd gde. prize
Toulmin, John Hy...	Machine Construction, A II
Tullis, James	Building Construction, E II
*Turner, Francis....	Mag. & Electricity, E II
,, ...	Physiography, E I
†Wade, John R.	Machine Construction, A I
,, ...	Machine Con., 3rd gde. prize
Walker, Roger	Building Construction, E II
White, George.....	Mathematics, stage 2 II
Whitehead, Wm .A...	Machine Construction, E II
Whiteside, Agnes ..	Sound, Light & Heat, E II
,, ..	Physiography, E II
Whiteside, James ..	Mathematics, stage 1, II
,, ..	Agriculture, E II
*Whittle, Arthur....	Mathematics, stage 1, I
*Wilcockson, Edward ,,	Prac. Plane & Sld. G'y, E II Building Construction, E I
Wilkinson, Charles ..	Prac. Plane & Sld. G'y, E II
,, ..	Physiography, E II
,, ..	Prac. Plane & Sld. G'y, E I
†*Wilkinson, David..	Mathematics, stage 2, II
,, ..	Mathematics, stage 4, II
,, ..	Theoretical Mechanics, A II
,, ..	Applied Mechanics, A II
,, ..	Sound, Light & Heat, A I
,, ..	Mag. & Electricity, A II
,, ..	Inorganic Chemistry, A I
,, ..	Geology, E I
,, ..	Physiography, A II
*Williamson, Fred A.	Mathematics, stage 1, II
,, ..	Inorganic Chemistry, E I
,, ..	Geology, E II
,, ..	Physiography, E I
Williamson, Wm. B.	Mathematics, stage 1, II
,, ..	Geology, A II
,, ..	Botany, E II
,, ..	Physiography, A II
*Wilson, Lewis	Mathematics, stage 2, II
Woodhouse, Frank ..	Machine Construction, E II
Worden, Richard M.	Agriculture, E II
Yates, James	Mag. & Electricity, E II

SCHOOL OF ART.

GOVERNMENT SECOND GRADE EXAMINATIONS.

P Signifies Pass, and E Excellent.
† Government Prize awarded. * Scholarship and Local Prize awarded.

Names.	Free-hand.	Geo-metry.	Pers-pective.	Model.
†*Ainley, George	..	..	..	E
*Ayres, John T.	P	..	E	P
*Barlow, Sarah	..	P	..	P
†*Baxendale, John Robert	..	..	..	E
*Bradshaw, William A.	P	..	..	P
Brewster, Sophia	..	P	E	..
Cardwell, Elizabeth A.	..	P	..	..
†Dallas, Ellen	..	P	E	..
*Dewhurst, William E.	P	..	..	..
†*Fairclough, Robert	..	E	E	..
†*Ferguson, Jessie	..	E	E	..
*Goodier, Hubert	..	P	..	P
Greenwood, Alfred H.	..	..	..	P
*Heathcote, Herbert C.	..	..	..	P
†*Hindle, Caroline	..	..	E	P
†*Holmes, Arthur B.	..	P	E	..
Howorth, James L.	..	..	..	P
Jump, Thomas B.	..	..	..	P
*Kirkham, William	P	..	..	..
Livesey, Ellen J.	..	..	..	P
*Lucas, Annie	P	..	..	..
†*Lynex, Mary	..	E	..	..
*McGuire, John	..	P	..	..
*Mayor, Isabella	P	P	P	..
*Mayor, John James	..	P	..	..
†*Morgan, Charles	..	E	..	..
†*Morris, Mary Louisa	..	..	E	..
†*Nelson, James	..	E	..	..
†*Paine, Algernon O.	..	..	..	E
†Parker, James N.	..	..	E	..
Parkinson, James N.	..	..	P	..
†Poole, Lizzie	..	..	E	..
Rigby, Thomas	P	..	..	..
Robinson, Robert	..	..	..	P
Rowbotham, Felicia	..	..	..	P
*Shaw, John	..	..	P	P
*Sidebotham, William Henry	P	..	..	P
†*Smith, Rose Ann	P	E	E	P
†Thornley, John William	..	P	..	E
Thorp, Theresa H.	P	..	..	..
Wade, Emily	..	..	..	P
†*Waterhouse, Samuel S.	..	P	E	..
†Wilding, Thomas	..	..	E	..
†*Woods, Albert	E	..	..	..
Woods, Margaret	..	P	..	..
*Woolley, Herbert Joseph	..	P	..	P

ART MASTERS AND ART TEACHER'S CERTIFICATE.

Rhoda C. Bell obtained the Art Class Teacher's Certificate, and also the Higher Certificate of the 1st Groupe, 3rd Grade (Art Masters), entitling her to a Free Studentship at the Central Art School, South Kensington. Florence Poole also obtained the Art Class Teacher's Certificate, passing in all three subjects at the last Examination. Sophia Backhouse passed in Stages 5a and 5b, and Reginald H. Crooke in 5a in the Art Class Teacher's Examination.

Rose Ann Smith obtained the complete 2nd Grade Certificate, comprising the four subjects of Freehand, Model, Geometry, and Perspective, passing in the whole at the late May Examination, and in the two latter obtaining the award "Excellent."

Students who have completed their 2nd Grade Certificate during the past year:—Sophia Brewster, Robert Fairclough, Arthur B. Holmes, James L. Haworth, Ellen Livesey, James N. Parker, James N. Parkinson, and Samuel S. Waterhouse.

SPECIAL ART PRIZES (Local).

Names.	Class of Work.	Names.	Class of Work.
Ainley, George.....	Set of freehand from flat	Holmes, Arthur B...	Study of landsce. foreground
,, ...	Set of model drawings	Howorth, James L...	Set of model drawings
Almond, Annie	Drawings in Sepia	Livesey, Alice	Study of a single tree
Backhouse, Sophia ..	Study of flowers, fruit, &c.	Lynex, Mary	Geometrical problems
,, ..	,, wild flowers	Nelson, James.....	Surface design
,, ..	Outline of plant from nature	,, ...	Study of a single tree
Barlow, Sarah	Set of geometrical problems	Oliver Edith D.	Shaded drawing from the cast
Bell, Rhoda C.....	Shaded drawing from the cast	Paine, Algernon O...	Set of outlines from cast
Brewster, Sophia ..	Set of perspective diagrams	Parker, James N. ..	Landscape in oil
Cardwell, Elizh. Ann.	Shaded drawing from the cast	Parkinson, Ada F. ..	Study of flowers, fruit, &c.
Crooke, Reginald H..	Study from life	Parkinson, James N.	Perspective diagrams
,, ..	Study of still life group	Poole, Florence	Study of still life group
,, ..	,, landscape in oil	,, ...	,, outlines of plant from nature
,, ..	,, drapery on model		
,, ..	,, a single tree	Poole, Clara.....	,, ,,
Fairclough, Robert ..	,, lands. in watr. colr.	Poole, Lizzie	,, ,,
,, ..	,, landsce. foreground	Salthouse, Samuel ..	Set of freehand from flat
Fairley, John	Set of freehand from flat	Smith, Barbara H. ..	Study from life
Goodier, Hubert	Set of model drawings	,, ..	Study of drapery on model
Greenwood, Arthur H.	Shading from the cast	Smith, Rose Ann ..	Set of freehand from flat
,,	Set of outlines, hands & feet	,, ..	,, model drawings
,,	Set of freehand from flat	Swarbrick, George ..	Shading from cast
,,	Set of model drawings	Thorp, Theresa H. ..	Study of landsce. in wat. col.
Holmes, Arthur B. ..	Drawing in Sepia	Willacy, Louisa	Shaded drawing from cast

TECHNICAL.

CITY AND GUILDS OF LONDON INSTITUTE EXAMINATION.

* These Students received Local Prizes.

Name.	Subject.	Grade and Class.
Ainsworth, James Henry ..	Weaving and Designing ..	Ordinary 2nd
*Arnett, Robert	Cotton Spinning	Honours 2nd
*Aspden, John.....	do.	Honours 1st
Ball, John	Weaving and Designing	Ordinary 2nd
Bannister, Lewis.....	do.	do. 2nd
Bannister, John William ..	do.	do. 2nd
*Barrow, Joseph	Cotton Spinning	Honours 2nd
*Birkenhead, Thomas.....	do.	do. 2nd
Blackburn, George	do.	Ordinary 2nd
*Blackhurst, David.....	Weaving and Designing	do. 1st
Blackhurst, John.....	do.	do. 2nd
Blackhurst, Thomas	do.	do. 2nd
Bleasdale, William	do.	do. 2nd
Blinkhorn, Edward	do.	do. 2nd
*Blogg, Stephen	Tools	Honours 2nd
Bradshaw, Herbert	Weaving and Designing	Ordinary 2nd
Brown, Walter	Cotton Spinning	do. 2nd
*Clarke, Lawrence H.....	do.	Honours 2nd
Dewhurst, John Robert	Printing	Ordinary 2nd
Dickson, Joseph W.	do.	do. 2nd
Fox, William Thomas.....	Weaving and Designing	do. 2nd
Green, George.....	Cotton Spinning	do. 2nd
Grime, Robert.....	do.	do. 2nd
*Hargreaves, William Henry	do.	Honours 2nd
Heskin, Thurston	do.	Ordinary 2nd
*Hinshlewood, Clyde	do.	Honours 2nd
*Houghton, Robert.....	do.	Ordinary 1st
*Hunter, William F.	do.	Honours 2nd
*Jolly, Thomas	do.	do. 1st
*Lobbin, William	do.	do. 2nd
*Lomax, James W.....	Weaving and Designing	Ordinary 1st
*Mallott, Henry	Cotton Spinning	Honours 2nd
*Masheter, Joseph	do.	do. 1st
Milner, William	Tools.....	Ordinary 2nd
Ormerod, John A.	Weaving and Designing	do. 2nd
Parkinson, Richard	Oils, Colours, etc.	Honours 1st
*Pateson, Joseph W.	Cotton Spinning	do. 1st
Pilkington, James H.	Mechanical Engineering....	Ordinary 2nd
*Rigby, James.....	do.	do. 1st
Rogerson, John	Cotton Spinning	do. 2nd
Seed, Henry.....	Mechanical Engineering....	do. 2nd
Shaw, Peter.....	Tools.....	do. 2nd
Smith, Arthur	Cotton Spinning	Honours 1st
Taylor, John T.	Weaving and Designing	do. 1st

Name.	Subject.	Grade and Class.
Thexton, Joseph	Carpentry and Joinery	Ordinary 2nd
Thompson, James	Cotton Spinning	do. 2nd
Threlfall, James	do.	do. 2nd
Toulmin, John H.	do.	do. 2nd
Tullis, James	Tools	do. 2nd
Turner, Alfred H.	Weaving and Designing	do. 2nd
*Turner, Josiah	Cotton Spinning	Honours 2nd
Ward, Joseph	do.	Ordinary 2nd
Wigley, John M.	Printing	do. 2nd
Wilkinson, Robert J.	Tools	do. 2nd
Woodhouse, Charles H.	Weaving and Designing	do. 2nd
Woods, Thomas	do.	do. 2nd
Yates, Joseph	do.	do. 2nd

MISCELLANEOUS.

* Scholarships and Local Prizes awarded.

‡Signifies "Honours."

Names.	Subject.		Names.	Subject.	
	Cambridge Lectures Exam.			Society of Arts Examination.	
Bottrill, Samuel J.	Shakespeare's Dramatic Art		*Crane, Sarah	Theory of Music, 2nd Class	
Brown, Walter	do.		*Fenton, Thos. Hy.	do.	2nd
Cooper, Charles	do.		*Fletcher, Barten	do.	2nd
*‡Foster, Sarah A.	do.		Gardener, Robert	do.	3rd
Graham, Agnes	do.		*Goodwyn, Mary L.	do.	2nd
*‡Grime, Annie J.	do.		Grime, Annie	do.	3rd
Marshall, Elizabeth	do.		*Harrison, Sarah E.	do.	2nd
Parr, H. Emily	do.		Matthews, John H. S.	do.	3rd
*‡Pearson, Edmd. T.	do.		*Moore, Mary Wilson	do.	2nd
Turner, Mary A. B.	do.		Parker, Alice	do.	3rd
Williamson, Jane	do.		Robinson, John	do.	3rd
	Society of Arts Examination.		*Robinson, Richard.	do.	2nd
Akeroyd, Emily	Theory of Music, 3rd Class		*Seed, Mary F. L.	do.	2nd
*Allison, Annie	do.	2nd	Shepperd, Esther A.	do.	3rd
Ambler, Fannie	do.	3rd	Shuttleworth, Fred. G	do.	3rd
Appleby, Wm. Dixon	do.	3rd	*Smith, Martha	do.	2nd
*Ascroft, Emily Isab.	do.	2nd	*Stevenson, Emily	do.	2nd
*Ascroft, Gertrude Grace	do.	2nd	*Stevenson, Fanny	do.	2nd
Atherton, Joseph	do.	3rd	Stevenson, Lucy	do.	2nd
*Baverstock, Thos. J.	do.	2nd	*Taylor, Bertha	do.	2nd
*Bell, Mary Jessie	do.	2nd	*Tullis, William	do.	2nd
Berry, Ada	do.	3rd	Turner, Mary A. B.	do.	3rd
*Billington, Eliza	do.	3rd	Fletcher, Barten	Shorthand,	3rd
Briggs, James	do.	2nd	Fletcher, John James	do.	3rd
Cartwright, Eliz. A.	do.	3rd	Smalley, Robert Ed.	do.	3rd
Cornall, Thomas	do.	3rd	*Ward, George Wm.	do.	2nd
			Wigley, John Martin	do.	3rd

Names.	Subject.
*Yates, Fred. S.	Shorthand, 2nd
	Society of Arts Examination.
Birchall, Alice.....	English 3rd
Bleasdale, William ..	do. 3rd
*Cottam, Samuel ..	do. 2nd
*Dean, S. J.....	do. 2nd
Edwards, Arthur H..	do. 3rd
France, James.....	do. 3rd
France, John	do. 3rd
Harrison, John	do. 3rd
*Kershaw, William ..	do. 2nd
*Kitchen, Margaret..	do. 2nd
*Lewty, Richard	do. 2nd
Livesey. Richard Hy.	do. 3rd
*Rawkins, William S.	do. 2nd
Rimmer, Margt. H..	do. 2nd
*Robinson, Ellen C..	do. 2nd
*Seed, William H. ..	do. 2nd
*Shaw, Robert.....	do. 2nd
Simpson, John	do. 3rd
Smith, John James..	do. 3rd
*Tattersall, Hedley..	do. 2nd
Toulmin, William ..	do. 3rd
Walmsley, George ..	do. 3rd
Wilkinson, Robert J.	do. 3rd
Williamson, Wm. B.	do. 3rd
Yates, Fred. S.....	do. 3rd
	Lancashire and Cheshire
	Union of Institutes Exam.
*Dean, S. J.....	Phonography, 1st class
*Hayes, William H..	do. 1st
*Kelshaw, John T. ..	do. 1st
*Tattersall, Hedley..	do. 1st
Bramwell, John J. ..	do. 2nd
Fletcher, Barten	do. 2nd
Harrison, John	do. 2nd
Oddie, Thomas	do. 2nd
Smalley, Robert E...	do. 2nd
Watson, William H.	do. 2nd
Wilkinson, Robert J.	do. 2nd
Ward, Thomas	do. 2nd
Ward, George Wm...	do. 2nd
Whiteside, Edward..	do. 2nd
Yates, Fred. S.	do. 2nd
Bancroft, Thomas ..	do. Passed
Dodson, Edward	do. do.
Mayor, George.....	do. do.
Merigold, F. W.....	do. do.
Peet, Henry.....	do. do.
Rawkins, William S.	do. do.
Sanderson, D.	do. do.
Turner, Robert	do. do.
Tattersall, Hedley ..	English, 1st class
Kershaw, William ..	do. 1st

Names.	Subject.
	Lancashire and Cheshire
	Union of Institutes Exam.
Birchall, Alice	English, 1st
Kitchen, Margaret ..	do. 2nd
Dean, S. J.	do. 2nd
Yates, Fred. S.	do. 2nd
Bleasdale, William ..	do. 2nd
Williamson, Wm. B.	do. 2nd
Rawkins, William S.	do. 2nd
Cottam, Samuel	do. 2nd
Robinson, Ellen C. ..	do. 2nd
France, John	do. Passed
Mayor, George.....	do. do.
Crook, George	do. do.
Lewty, Richard	do. do.
Harrison, John	do. do.
Seed, William H. ..	do. do.
France, John	do. do.
Simpson, John.....	do. do.
Denny, Robert.....	do. do.
Robinson, Emily....	do. do.
Whittle, Joshua	do. do.
Smith, William H. ..	do. do.
Thompson, James ..	do. do.
Jump, Jane H.....	do. do.
	Harris Institute Exam.
*Walsh, Alfred.....	Shorthand, 1st
*Durham, William R.	do. 1st
*Town, Joe	do. 1st
*Gornall, William Hy.	do. 1st
Geary, Charles G. ..	do. 1st
Price, L. G. S.....	do. 1st
Bailey, William	do. 1st
Greenwood, R. B. ..	do. 1st
Ainsworth, R. C.....	do. 1st
Smith, William Hy...	do. 2nd
Crozier, Richard	do. 2nd
Crerar, James	do. 2nd
Clarkson, Richard ..	do. 2nd
Newbound, H. C. ..	do. 2nd
Whiteside, Thomas..	do. 2nd
Long, George	do. 2nd
Jones, John F.....	do. 3rd
Nutter, Joseph P. ..	do. 3rd
Pye, Richard C.	do. 3rd
Walker, Wilfred	do. 3rd
Mansley, James L...	do. 3rd
Ward, J. H.....	do. 3rd
Clitheroe, John	do. 3rd
	Lancashire and Cheshire
	Union of Institutes Exam.
Poole, Florence	French 1st
Parr, Emily H.	do. 2nd
Eatough, Robert	do. 2nd

Name.	Subject.	Name.	Subject.
	Lancashise and Cheshire Union of Institutes Exam.		Harris Institute Exam.
Poole, Clara.....	French, 2nd class	Openshaw, J. W. W.	Latin, 3rd class
Poole, Lizzie	do. Passed	Bennett, William P.	do. 3rd
Smith, Rose Ann....	do. do.	Abbott, Robert.....	do. 3rd
Barlow, Sarah.....	do. do.	Leaver, Henry L. ..	do. 3rd
Dewhurst, John	do. do.	Preston, William....	do. 3rd
Marshall, Elizabeth..	do. do.	Bownass, Juliet I. ..	Tonic Sol-fa, Elementary
	Harris Institute Exam.	Birchall, Alice	do. do.
*Poole, Florence	Latin, 1st class	Coward, Isabel.....	do. do.
*Whiteside, Henry ..	do. 1st	Cowherd, Thomas ..	do. do.
*Stuart, William	do. 1st	Coulthurst, Rebecca..	do. do.
*Brocklehurst, J. W.	do. 2nd	Dodson, Edith.....	do. do.
*Robinson, Ellen C.	do. 2nd	Riley, Helen	do. do.
*Southworth, John E.	do. 2nd	Robinson, Tirzah ..	do. do.
*Atherton, Thomas D.	do. 2nd	Stephens, Elizabeth...	do. do.
		Winder, Alice	do. do.

INSTITUTE SCHOLARSHIPS AWARDED TO DAY SCHOLARS AT ELEMENTARY SCHOOLS.

SCIENCE.		ART.	
Simmons, Thomas	Atherton, Arthur	Jump, Sidney Borland	Buck, Isabella
Sykes, Albert	Hugh, Caroline	Bailey, John	Robinson, William
Irvin, George	Toulmin, William	Atherton, Arthur	Ley, Ernest
Bailey, John	Vogwill, George	Harrison, Fred.	Irvin, George
Jolly, Rebecca Jane	Mercer, Charles	Howarth, Edward	Coupe, James J.
Buck, Isabella	Harrison, Fred.	Toulmin, William	Canavan, Patrick
Hopkins, James Henry	Ley, Ernest		

HARRIS INSTITUTE, PRESTON.

ABSTRACT OF CLASS REGISTERS, 1883-4.

NAME OF CLASS.	TEACHER.	OCTOBER.		NOVEMBER.		DECEMBER.		JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		No. of Students who sat at Examinations	No. of Students who obtained Certificates
		No. on Register	Average Attendance	No. on Register	Average Attendance	No. on Register	Average Attendance	No. on Register	Average Attendance	No. on Register	Average Attendance	No. on Register	Average Attendance	No. on Register	Average Attendance	No. on Register	Average Attendance		
SCIENCE.																			
Practical Plane and Solid Geometry	Mr. F. J. Pye.	36	30·75	36	27·2	36	28·1	38	25·1	38	28·2	38	24·1	38	25	38	25·5	23	9
Building Construction	Do.	39	30·2	39	31·3	40	31	43	27·2	43	30·2	43	29	43	29·5	43	29	27	22
Machine Construction	Mr. J. B. Price.	71	42·7	73	43 6	73	40·8	73	38·3	73	30·7	73	36·7	73	37	73	36·5	45	22
Mathematics, Stage 1 (Elementary)	Mr. F. B. Osborne (Grammar School).	89	73	92	71	93	65·3	93	59·5	93	65	93	53·5	93	57	93	56	64	46
Do. do. (Advanced)	Do.	29	24	30	23	29	18·3	30	15·7	30	18·3	31	17·2	31	18	31	19		
Do. Stage 2	Mr. G. Rogerson, B.A. (Grammar School).	27	20·5	27	20	27	14	27	13	27	12·5	27	10·5	27	11	27	11		
Applied Mechanics	Mr. R. Pendlebury.	34	24·6	35	26	34	22	34	22·5	34	18·5	35	17	35	18	35	17·9	21	16
Sound, Light and Heat (Elementary)	Mr. J. Gardner.	27	23	28	24·2	28	24·2	28	23·7	28	24	28	23·2	28	25	28	25	31	23
Do. (Advanced)	Do.	14	11	13	10·1	14	10 3	14	9	14	10	14	9	14	9	14	9		
Magnetism and Electricity (Elementary)	Do.	74	60	76	61·2	76	60·2	76	59	76	55·7	76	56	76	57·5	76	57	66	60
Do. (Advanced)	Do.	17	15·5	17	14	17	14·3	17	13	17	13·6	17	11·8	17	12	17	12		
Inorganic Chemistry (Elementary)	Mr. A. F. Atkinson (Grammar School).	32	22·8	33	21·5	33	20	33	19·7	34	23·2	34	21·4	34	22	34	22	26	23
Do. (Advanced)	Do.	9	6·2	9	6	9	5	9	3·5	11	3·1	11	2	11	2	11	2		
Do. (Practical)	Do.	7	6	7	6·5	8	4·6	8	3·5	8	3·5	8	2·5	8	2·5	8	2	4	4
Geology	Rev. J. Shortt, M.A., and Mr. Ed. Dickson	41	32·4	43	30	43	26·1	43	27	43	24·3	43	23·2	43	24	43	25	19	17
Botany (Elementary)	Mr. T. H. Greenall, A.P.S	27	22	25	21·25	25	19	25	18·2	25	17	25	16	25	17	25	17·2	18	17
Do. (Advanced)	Do.	4	3·5	4	3·25	4	2·3	4	3	4	3·2	4	3	4	4	4	4		
Steam and Steam Engine	Mr. R. Pendlebury.	43	34·4	42	30	42	27·5	42	28	42	25	46	24·5	46	25·5	46	25	23	12
Physiography (Elementary)	Mr. J. Gardner.	57	47·5	56	50·7	56	45	56	45·7	56	44·2	56	45·3	56	46	56	47	55	44
Do. (Advanced)	Do.	14	10·5	14	12·2	14	11	14	11·6	14	10·5	14	11	14	11	14	11		
Agriculture	Mr. G. Sutcliffe, F.C.S.	17	14·2	19	17	19	15·2	19	14·5	19	16	19	15	19	16	19	16	17	14
ART.																			
Day Class	Mr. W. B. Barton.	29	23	31	24·4	33	23·5	36	24·3	*100	78·2	101	76	101	77·2	103	79	178	72
Evening Class	Do.	159	81·5	168	71·9	182	62·8	186	70·6	188	72	194	66·8	194	67	197	73		
TECHNICAL.																			
Cotton Spinning	Mr. G. Sutcliffe, F.C.S.	70	60·3	69	65	69	50	69	53·5	69	48	69	44·5	69	46	69	47	39	25
Cotton Weaving	Do.	85	71·25	87	70	87	60·1	87	63·3	87	60	87	50·1	87	51·5	87	50·2	40	18
Mechanical Engineering	Mr. R. Pendlebury.	12	8·25	15	9·5	16	8·5	16	10	16	6·7	16	8·5	16	9	16	9	10	3
Tools	Mr. G. Sutcliffe, F.C.S.	21	17	19	15	19	12	19	14·2	19	11	20	14·6	20	15	20	16	13	5
Printing	Mr. R. Parkinson.	20	16·15	21	17·5	21	11	21	15	21	14	21	13·5	21	14	21	14	11	3
MISCELLANEOUS.																			
Music (Class Singing and Harmony)	Mr. J. Tomlinson (Corporation Organist),	63	56·4	67	50·6	67	40·7	67	40·3	67	43·3	67	42·2	67	43	67	44	37	36
Singing (Tonic Sol-fa)	Mr. W. H. Cowell (Sec. Choral Society).	215	176	218	179	218	160	219	187	219	158	219	157	219	158·5	219	157	16	10
Latin	Mr. W. M. Maddox, M.A. (Grammar School).	39	30·18	41	28·7	41	27·7	41	20·7	41	22·5	41	24·4	41	25	41	24	14	12
French (Elementary)	Do.	52	40·5	53	37·5	53	38·5	53	26·2	55	28·7	55	30·6	55	31·6	55	30	26	9
Do. (Advanced)	Do.	24	13	25	16·5	25	15·5	26	15	26	10	26	13·2	26	14	26	14		
Cambridge Lectures (Shakespere)	Mr. R. G. Moulton, M.A. (Chr. Col., Cantab).	..	..	..	..	..	..	47	45	89	84	89	82	89	83	89	80	12	11
Shorthand (Elementary)	Mr. H. Cartmell.	83	69·4	84	62·5	84	59·6	86	57·5	87	52·2	87	53	87	54	87	52	26	25
Do. (Intermediate and Advanced)	Do.	38	33	38	31·0	40	31	41	30·2	42	29	42	31·3	42	31	42	30		
English (Elementary)	Do.	81	67	81	67·5	83	61	84	56	84	46	84	48	84	50	84	48	31	25
Do. (Advanced)	Do.	12	10	12	9 6	12	8	12	7·2	12	8·2	12	8·2	12	9	12	8		
German		..	..	..	..	..	..	..	..	4	3·2	4	3	4	..	4	3	..	..
		1711	1317·237	1747	1296	1770	1164	1837	1206	1956	1251	1969	1289	1969	1247	1974	1247	892	583

*High School commenced.

T. R. JOLLY, Secretary.

Table shewing the number of Students who sat for Examination at the Harris Institute, in May, 1884.

SUBJECT.	Harris Institute.	St. Paul's School.	Sculptor's Studio.	Farrington School.	Cross Street School.	Ragged School.	Externals.	Total.
Freehand Drawing	73	10	16	..	7	..	27	133
Model do.	44	..	16	..	1	..	10	71
Perspective	23	1	3	..	1	..	2	30
do. advanced	..	..	..	..	1	..	..	1
Practical Geometry.....	28	8	6	..	3	..	9	54
Art Class Teachers' Certificate—Examination, Shading from Models (stage 5a)	3	..	..	..	..	..	..	3
Outline Drawing from Cast (stage 3b).....	4	..	..	..	..	..	..	4
Shading from Cast (stage 5b)	3	..	..	..	1	..	..	4
Animal Physiology.....	..	..	..	..	..	..	2	2
Machine Construction.....	45	26	..	..	..	..	3	74
Building Construction.....	27	7	..	..	..	..	2	36
Mathematics, stages 1, 2, 3.	64	10	..	..	..	..	4	78
Sound, Light, and Heat....	31	..	..	..	..	5	1	37
Magnetism and Electricity..	66	41	..	..	..	5	7	119
Physiography.....	55	9	..	..	..	..	8	72
Principles of Agriculture....	17	..	..	13	..	..	5	35
Practical, Plane, and Solid Geometry	23	21	..	..	..	..	3	47
Geology.....	19	..	..	..	..	..	1	20
Mathematics, stages 4 and 5	..	..	..	..	..	..	2	2
Hygiene	..	..	..	..	..	..	5	5
Theoretical Mechanics	..	..	..	..	..	..	3	3
Applied Mechanics.....	21	13	..	..	..	..	2	36
Inorganic Chemistry.....	26	15	..	..	..	4	1	46
Practical Inorganic Chemistry (E. stage).....	4	..	..	..	..	..	..	4
Elementary Botany.....	18	..	..	..	..	..	1	19
Metallurgy	..	..	..	..	..	..	1	1
Organic Chemistry.....	..	..	..	..	..	..	1	1
Steam	23	10	..	..	..	..	2	35
Practical Inorganic Chemistry (advanced stage) ..	..	..	..	..	..	..	1	1
Total.....	617	171	41	13	14	14	103	973

In addition to the above, the following shows the number of Students of the Harris Institute, examined at the Institute, in connection with other classes:—

City and Guilds of London Institute, viz.—
- Cotton Spinning 39
- Weaving and Designing 40
- Tools 13
- Mechanical Engineering 10
- Printing 11

113

Cambridge Extension Lectures—
- Literature 12

Society of Arts—
- Shorthand 26
- English 38
- Music 37

101

Lancashire and Cheshire Union of Institutes—
- Shorthand 26
- English 31
- French 26

83

Examined Locally—
- Latin 14
- Tonic Sol Fa 16

30

339

Students sitting for Science and Art as above... 617

Total of Harris Institute Students Examined.. 956

T. R. JOLLY, Secretary.

HARRIS INSTITUTE, PRESTON.

Trustees' Account, Year ending September 30th, 1884.

RECEIPTS.

				£	s.	d.	£	s.	d.
1883.		To Balance in hand Sept. 30th, 1883					39201	10	0
Nov.	2	,,	Interest from Corporation	275	8	2			
Dec.	7	,,	do. Savings Bank ..	83	11	3			
1884.									
Jan.	1	,,	do. County	257	0	8			
,,	8	,,	do. Consols.....	36	14	5			
Mar.	1	,,	do. Corporation	91	15	11			
May	3	,,	do. do.	275	8	2			
July	1	,,	do. County	257	0	8			
,,	8	,,	do. Consols	36	14	5			
Sept.	1	,,	do. Corporation	91	15	11			
							1405	9	7
,,	12	,,	Sale of Consols by Preston Banking Co.....				27	11	0
							£40634	10	7
			To Balance brought down				37332	4	3
							£37332	4	3

EXPENDITURE.

				£	s.	d.	£	s.	d.
			By Amount transferred to Institute Account, being Interest from Capital				1405	9	7
1883.									
Nov.	2	By Paid	John Walmsley	400	0	0			
Dec.	1	,, ,,	Y. W. Booth	26	6	6			
,,	28	,, ,,	Metcalf & Dilworth..	44	17	11			
,,	28	,, ,,	Jas. Hibbert	35	12	4			
1884.									
April	9	,, ,,	W. Hothersall.....	450	0	0			
May	29	,, ,,	do.	450	0	0			
July	22	,, ,,	do.	250	0	0			
Sept.	15	,, ,,	do.	240	0	0			
							1896	16	9
			By Balance carried down....				37332	4	3
							£40634	10	7
			By Invested with Corporation.....	20000	0	0			
		,, ,,	County.....	15000	0	0			
		,, ,,	Savings Bank	2332	4	3			
							37332	4	3
							£37332	4	3

Examined found correct,
W. F. MOORE,
Chartered Accountant, Preston.

Exhibited Jan. 7th, 1885,
C. R. JACSON, D. IRVIN,
C. H. WOOD, W. ASCROFT,

THOMAS R. JOLLY,
Secretary.

HARRIS INSTITUTE.

Scholarship and Prize Fund Account, September 30th, 1884.

RECEIPTS.	£	s.	d.
To Amount transferred from General Account, as per Balance Sheet for year ending 30th September, 1883	129	15	0
,, Bank Interest	1	0	6
	£130	15	6

EXPENDITURE.	£	s.	d.
By Amount paid for Free Scholarships	27	6	0
,, Paid for Prizes awarded to Students	34	16	2
,, Bank Commission	0	1	9
	62	3	11
,, Balance in hand	68	11	7
	£130	15	6

To Balance brought down .. £68 11s. 7d.

Examined and found correct,
W. F. MOORE, Chartered Accountant, Preston.

WM. ASCROFT,
President.

THOS. R. JOLLY,
Secretary.

Harris Institute, Preston.—Cash Statement, year ending 30th September, 1884.

RECEIPTS.	£ s. d.	£ s. d.
To Interest received from capital.....	1405 9 7	
Less :—Transferred to Scholarship Fund	175 13 9	
		1229 15 10
FEES AND GRANTS, VIZ. :—	£ s. d.	
Science Fees.....	92 17 6	
,, Grants, 1882-83..	185 12 0	
	278 9 6	
Art Fees.....	114 8 0	
,, Grants, 1882-83.....	67 9 0	
	181 17 0	
Technical Fees.....	29 1 0	
,, Grants, 1882-83	51 0 0	
	80 1 0	
Miscellaneous Fees	138 13 6	
		679 1 0
Subscriptions		22 1 0
Balance carried down.....		589 16 3
		£2520 14 1
To amount overdrawn with the Preston Banking Company	593 3 3	
Less :—In the hands of the Secretary	3 7 0	
	£589 16 3	

EXPENDITURE.	£ s. d.	£ s. d.
By balance overdrawn, Sep. 30th, 1883.		257 18 3
SALARIES, VIZ. :—	£ s. d.	
Science.....	398 2 0	
Art	337 0 0	
Technical	118 5 0	
Miscellaneous.....	140 10 0	
	993 17 0	
,, Secretary and Custodian	119 5 0	
,, Painting and Repair of Building, Alterations and Improvements ..	556 4 3	
,, Apparatus, Appliances and Books ..	83 14 10	
,, Expenses Cambridge Lectures	52 5 6	
,, Printing and Stationery	117 12 2	
,, Advertising	25 18 0	
,, Lighting and Firing	91 7 1	
,, Washing and Cleaning	41 17 10	
,, Rates, Taxes, and Insurance	29 6 3	
,, Expenses *re* Distribution of Prizes..	56 1 3	
,, Expenses of Examinations and Entrance Fees for Students	42 7 1	
,, Miscellaneous Expenses	40 3 2	
,, Bank Interest and Commission	12 16 5	
		2262 15 10
		£2520 14 1
By Balance brought down.....	589 16 3	
	£589 16 3	

Examined and found correct,
W. F. MOORE, Chartered Accountant, Preston.

WM. ASCROFT, President.
THOS. R. JOLLY, Secretary.

To the President and Council of the Harris Institute.

9, Chapel Street, Preston, 9th December, 1884.

GENTLEMEN,—I have examined the accounts of the Institute for the year ending 30th September, 1884, and have pleasure in certifying to their correctness. I have seen vouchers for all the payments, and have inspected the deeds and securities for the capital investments, and find all in order.

Yours truly, W. F. MOORE, Chartered Accountant.

LIST OF SUBSCRIPTIONS RECEIVED DURING YEAR ENDED SEPT. 30, 1884.

	£	s.	d.
Ascroft, Mr. A. E.	1	1	0
Ascroft, Mr. W.	1	1	0
Atherton, Mr. John	1	1	0
Atherton, Mr. W.	1	1	0
Benson, Mr. R.	1	1	0
Birchall, Mr. A. M.	1	1	0
Booth, Mr. Y. W.	1	1	0
Dickson, Mr. E.	1	1	0
Easterby, Mr. R. F.	1	1	0
Hammond, Dr.	1	1	0
Healey, Mr. J.	1	1	0
Hermon, Mr. S. A.	1	1	0
Hibbert, Mr. Jas.	1	1	0
Jacson, Mr. C. R.	1	1	0
Moore, Mr. F. A.	1	1	0
Oliver, Mr. J. S.	1	1	0
Robinson, Mr. R. C.	1	1	0
Sharples, Mr. C. H.	1	1	0
Steele, Rev. Geo.	1	1	0
Willan, Mr. W.	1	1	0
Wilson, Mr. T.	1	1	0
	£22	1	0

HARRIS INSTITUTE,

PRESTON.

THIRD

ANNUAL REPORT

AND

STATEMENT OF ACCOUNTS

FOR THE YEAR 1885,

AND

ADDRESS

GIVEN BY

THE RIGHT HONOURABLE

THE EARL OF LATHOM

AT THE

DISTRIBUTION OF PRIZES,

ON

DECEMBER 22ND, 1885.

PRESTON:
PRINTED BY R. PARKINSON AND CO., BRIDGE STREET WORKS.
1886.

OFFICERS FOR THE YEAR 1886.

Trustees:

REV. C. H. WOOD, B.C.L.
MR. C. R. JACSON, J.P., D.L.
MR. D. IRVIN, J.P.
MR. J. W. ECCLES.
MR. W. ASCROFT, J.P.
MR. G. B. DALBY.
MR. J. S. OLIVER.

President:

MR. WM. ASCROFT, J.P.

Vice-President:

THE REV. GEO. STEELE, M.A.

Council;

MR. C. R. JACSON, J.P., D.L.
MR. D. IRVIN, J.P.
REV. C. H. WOOD, B.C.L
REV. GEO. STEELE, M.A.
MR. R. BENSON, J.P.
MR. JNO. HEALEY.
DR. HAMMOND, J.P.
MR. W. ASCROFT, J.P
MR. W. ATHERTON.
MR. S. A. HERMON, J.P.
MR. A. E ASCROFT.
MR. Y. W. BOOTH.
MR. E. DICKSON.
MR. R. F. EASTERBY.
MR. A. M. BIRCHALL.
MR. JAS. HIBBERT.
MR. M. S. MAYNARD, J.P.
MR. JAS. BROWN, J.P.
MR. J. S. OLIVER.
MR. C. H. SHARPLES.
MR. F. A. MOORE.

Hon. Treasurer:

MR. J. S. OLIVER.

Secretary:

MR. THOMAS R. JOLLY.

Auditor:

MR. W. F. MOORE.

Bankers:

PRESTON BANKING COMPANY, LIMITED.

Third Annual Report

OF THE

HARRIS INSTITUTE,

PRESTON.

THE Council of the Harris Institute are enabled, at the end of the third year of the Institute, to report a continued state of satisfactory progress. Some changes have been made in the teaching staff, and a class has been formed in Plumbing in connection with the City and Guilds of London Institutes. The Cotton Spinning Class is now taught by Mr. W. I. Hannen, and that in Weaving and Designing by Mr. W. Taylor. The class in Plumbing is taught by Mr. F. Jolly. These gentlemen are practically engaged in the trades which they teach. Mr. Stacey, of Farington, now teaches the class in Agriculture. The Rev. W. S. Matthews, M.A., head master of the Kirkham Grammar School, has undertaken the classes in French and Latin. All the classes are working very satisfactorily, and the Council feel themselves enabled to say that the teaching in all the departments is good and thorough.

The Council acknowledge with thanks the following donations towards the cost of the site of the new laboratory and class rooms :—Mr. G. Buckstone-Brown, £20 ; the Rev. J. Shortt, M.A., and Mr. E. Dickson, £15 ; the Rev. G. Steele, M.A., £10 ; Messrs. Brown and Deighton, £5 ; Mr. R. F. Easterby, £3 3s.; Mr. F. Thorp, J.P., £2 ; Mr. Jas. Tyson, 10s. 6d.

The Council also acknowledge with thanks the following gifts towards the objects of the Institute :—Mr. Atherton, appliances for Art and Machine Construction classes ; Mr. R. H. A. Willis, £5 5s. for Art Prizes ; the Rev C. H. Wood, B.C.L., Mr. J. Healey, and Mr. W. F. Moore, for Special Prizes ; the Misses ffarington, Set of Geometrical Instruments.

During the past year the following useful additions have been provided : —A screen in the Art School, in which has also been

opened a new north light and conservatory ; and hose piping and fire appliances have been provided throughout the building.

The Schools have been inspected on behalf of the Departments by both Science and Art Inspectors, from whom very satisfactory reports of the Institute have been received.

At the opening of the classes in September last, a very interesting exhibition of students' works and scientific apparatus was held in the Institute, and was attended by a large number of persons, on which occasion a very excellent concert was given by several accomplished amateurs, to whom the Council are much indebted for their assistance. The Council desire also to express their thanks to the gentlemen who supplied and took charge of the microscopes on this occasion.

The Council have this year been enabled, for the first time, to award three Scholarships of £45 a year each—one to Mr. A. J. Moulton, one to Mr. D. Wilkinson, and one to Miss B. H. Smith. Mr. Moulton has, in addition, gained a Whitworth Scholarship of £150, and a Royal Exhibition entitling him to free teaching at the Science Schools at South Kensington, and £50 a year for three years ; and Mr. Wilkinson has obtained a Royal Studentship, entitling him to the same teaching for three years. These are very conspicuous examples of the advantages placed by the Institute within the reach of the young people of Preston and the neighbourhood. The Department have for three years given gratuitously the benefit of the Science and Art Training Schools, South Kensington, to our Scholars.

The students have done well at the yearly examinations, which were conducted as usual, and the prizes then gained were, on Tuesday, the 22nd December, distributed in the Public Hall by the Countess of Lathom, who was accompanied by the Right Hon. the Earl of Lathom, who delivered a very interesting and able address.

The Council desire to express their great acknowledgment to the Earl and Countess of Lathom for the very gracious courtesy with which they accepted the invitation of the Council, and took part in the Prize Distribution.

W. ASCROFT,

PRESIDENT.

Dec. 29th, 1885.

HARRIS INSTITUTE.

Proceedings of the Annual Meeting.

HELD DECEMBER 30th, 1885.

THE Annual Meeting of subscribers to this valuable Institution was held on Wednesday evening, the 30th December, 1885, at the Institute, the business being of a purely formal character. Mr. W. Ascroft, J.P., President of the Institute, occupied the chair, and there were present the Revs. Geo. Steele and C. H. Wood, Alderman Benson, J.P., Mr. A. M. Birchall, and Mr. T. R. Jolly, secretary.

The CHAIRMAN said their subscribers at present only numbered twenty-three or four. They would be glad to see this number considerably increased, and it was felt that the employers of labour in the town might help them in this way. The subscribers, he might point out, had a share in the management of the Institute. One object of the meeting was to elect a member of the Council. Only Mr. F. A. Moore had been nominated, and hence it would be their duty to elect that gentleman.

On the motion of Mr. Alderman BENSON, seconded by the Rev. GEO. STEELE, Mr. F. A. Moore was accordingly re-elected a member of the Council.

The Report of the Council, together with a Statement of Accounts, was submitted by Mr. T. R. JOLLY, the Secretary. The Report, which was adopted, will be found on page 5.

From the Statement of Accounts appended, it appeared that the balance at the beginning of the year was £37,332 4s. 3d. During the twelve months there had been received as interest on capital, £1,271 2s. 3d. and a grant of £192 from the Science and Art Department, South Kensington, towards the new laboratory. Of the total, £1,271 2s. 3d. had been transferred to General and Scholarship Accounts, and £1,184 16s. paid to the contractor as a final instalment for the new laboratory and classrooms. The balance now to the credit of the trustees is £36,339 8s. 3d. From the General Account it appeared that the balance

overdrawn at the beginning of the year was £589 16s. 3d. There had been drawn from Capital Account £1,122 4s. 6d., from fees and grants, £916 15s. 0d., rent, £10, subscriptions, £22 1s. The total payments had been £2,164 14s. 5d , leaving the overdrawn balance £693 10s. 2d. A large sum had been paid during the year for alterations, improvements, and apparatus, and these items were not expected to appear in future balance sheets. A certificate appended showed that the accounts had been audited and found correct by Mr. W. F. Moore, chartered accountant.

Mr. Alderman BENSON remarked that the Report was a very interesting one and showed the Institute to be in a satisfactory condition.

The CHAIRMAN intimated that it was the intention of the Council to approach the railway companies with a view of inducing them, if possible, to grant their pupils coming from a distance the privilege of travelling to and from the classes at reduced fares.

They had at present a number of pupils attending from Leyland, Chorley, Kirkham, Blackburn, and other surrounding towns. It was their desire to see the numbers of these outside students increased, and to make the Institute a valuable educational centre for the whole district. Some facilities in the direction indicated were already granted by the railway companies to pupils under 16, and their desire was that the privilege might be extended to elder students. By this means it was believed that the number of students from the district—one of whom he might say had obtained a valuable scholarship—would be largely increased. This proposal of the Council was heartily approved.

A vote of thanks to the chair being given, the meeting afterwards terminated.

Distribution of Prizes to the Students

BY THE COUNTESS OF LATHOM,

DECEMBER 22nd, 1885.

THE Annual Distribution of Prizes to the successful students at the Harris Institute took place on the 22nd Decr., 1885, in the Public Hall. The Countess of Lathom, who had gracefully consented to distribute the prizes, was accompanied by the Right Hon. the Earl of Lathom, and they, with the Harris Trustees and others, were the guests of W. Ascroft, Esq., J.P., the President of the Institute. The Hall, as on the last occasion, when Prof. Tyndall addressed the audience, was crowded, every seat being occupied nearly half an hour before the proceedings commenced. The arrangements for the accommodation of the audience were, as before, of an admirable character, and reflected credit on Mr. W. Atherton, Mr. R. F. Easterby, and Mr. F. A. Moore. Mr. Councillor Y. W. Booth marshalled the guests on the platform, and Mr. T. R. Jolly (the Secretary) organized and had charge of the general arrangements.

At a quarter-past seven, Mr. J. Tomlinson, the Corporation organist, commenced a recital on the Dewhurst Organ, and continued playing till the arrival on the platform of the President of the Institute and his party, who were received with cheers. The Countess of Lathom was handed to a seat at the right of the President, and the Earl of Lathom and Mrs. Ascroft sat on the left.

The rest of the occupants of the platform were :—His Worship the Mayor (Ald. Walmsley), D. Irvin, Esq., J.P., and the Rev. C. H. Wood (representing the Harris Trustees) ; W. E. M. Tomlinson, Esq., M.P.; Alderman Forshaw, Col. Wilson, E. Birley, Esq., J.P.; the Revs. S. J. Perry, S.J., J. H. Rawdon, N. C. Papall, W. H. Harris, Moulton, and Firth ; the Rev. G. Steele (vice-president of the Institute) ; Mr. R. F. Easterby, Mr. E. Dickson, Mr. W. F. Moore (Institute auditor), Mr. C. H. Sharples, Mr. A. M. Birchall, Ald. Maynard, Mr. J. S. Oliver, Ald. Benson, Mr. A. E. Ascroft, Councillor Y. W. Booth, Mr. F. A. Moore, Mr. W. Atherton, and Mr. T. R. Jolly, secretary (Council of the Harris

Institute) ; Messrs. W. B. Barton (art), S. J. Elliott, Pendlebury, Pye, Cartmell, J. Hannen, J. W. Elliott, F. J. Osborne, F. C. King, Dr. Pilkington, Messrs. F. Jolly, and W. Taylor (representing the teaching staff) ; Councillors Davies, Strickland, W. Miller, Myres, G. Toulmin, J.P., R. Bee ; W. P. Park, J.P., C. T. Taylor, E. Dean, J. Brown, J.P., T. Fletcher, J. Whiteside, S. Lee, W. B. Roper, J.P., F. Thorp, J.P., T. Nevett, J. Harrison, Jos. Foster, W. Willan, R. France, R. Pateson, Major Whitehead, E. Greenwood, W. Hothersall, G. H. Dickson, R. Park, W. Alston, J. S. Garner, &c.

The PRESIDENT, before delivering his opening address, stated that letters of apology for inability to attend had been received from Mr. Hanbury, M.P., and Mr. C. R. Jacson, J.P., D.L. The junior member for Preston stated that he had been unwell, and his doctor had advised rest. Mr. Jacson was sorry that prior engagements prevented his attendance. He took a great interest in the Institute, and regretted that he could not be present.

The PRESIDENT, who was loudly applauded, then said : Since the last distribution of prizes the progress of the Institute has been most satisfactory. The work has been steady and progressive, and the number of prizes to be distributed this year is somewhat in excess of last. The numbers on the last occasion were :— Examined, 892 ; certificates, 546 ; prizes, 153. This year the numbers are :—Examined, 1,073 ; certificates, 662 ; prizes, 176.

The work of the Institute is now so well known that it is not necessary for me to refer to it in any detail. I may say, generally, that all the classes which were in operation last year are continued, and that in addition, we have formed one in plumbing. No branch of work is more important than this—dealing as it does with the arrangements of our houses and sanitary work in general —and in no branch of practical work is it more important that those engaged in it should have a theoretical as well as practical acquaintance with its details. Good or bad work in this department has a material effect on the health and even the death rate of our people. The class which we have established is well attended by men for whose especial benefit it was formed, and is conducted by a well qualified teacher, practically engaged in the trade, the principles of which he teaches. I would commend this class to the attention of the master plumbers of Preston. I am certain that they will better gain the confidence of their employers when it is known that the men in their service are well-skilled, and it is felt that reliance may be placed on the excellence of the work which they undertake to do.

Our science classes, indeed all our classes in the main, are in a very flourishing condition ; but some of our classses are not so

well attended as I think they deserve to be, and in this category I would name especially that in Practical Chemistry and that in Modelling. The Chemistry classes—theoretical and practical—are taught by Mr. Atkinson, a most competent teacher, and the results of the examination have been highly satisfactory, reflecting credit both on teacher and on taught. The theoretical classes have been well attended, but the class in practical chemistry has never been well attended. The numbers in this class have been as follows :— 1883, 8 ; 1884, 17 ; 1885, 19, of whom nine attend an advanced class. This shows some improvement, but the numbers ought to be much greater. We have gone to very considerable expense in erecting a laboratory, which, in the completion of its arrangements and the attention paid to the comfort of the students, is, I am certain, unsurpassed. To say nothing of those who might be expected to take up the study of practical chemistry as an interesting study, or as a means of acquiring information useful as bearing upon other studies, or as having some indirect relation to their work—there must in Preston be large numbers of young men engaged in chemists' shops preparing themselves to take up that business. In all such occupations the necessity for a thorough scientific training in their work is yearly becoming greater, and I would appeal to them and to their employers whether or not it would be a benefit to them to use, at least for one or two evenings or afternoons in the week, the very complete advantages which we can place within their reach.

The modelling class is taught by Mr. Rhodes, a gentleman engaged in the sculptor's work of the new Free Library. This I look upon as one of the most interesting classes which we have, but it is very thinly attended. Those who do attend it are, however, really industrious and clever students, and produce some most excellent work. Miss Marie Poole has obtained a National Prize for an original model of a vase, executed in clay, and which is a work of very considerable beauty. Plasterers and those who work in wood, iron, or stone are losing a great opportunity of acquiring instruction which would qualify them to produce original designs, and to reproduce their own or other designs in patterns or other work, or to carve them in wood or stone. In the ironworks, stoneyards, and plasterers', cabinetmakers', and joiners' establishments there must be a many young men whose taste and skill would be much increased by a course of instruction in this class, and it should be borne in mind that no class of labour is now better paid than that which can bring to bear on work something of the taste and skill of the artist.

The other art classes generally are doing well, both as to numbers and results, and some work has been produced in them

exhibiting a very considerable amount of skill. These classes are deserving of the greatest attention. They are arranged to meet the requirements of pupils of all ranks. They tend to create in all who attend them, from the highest to the lowest, an appreciation of form and colour—qualities which lead to good taste in the public who buy, and perfection in design and finish, and accuracy in execution on the part of those who produce.

With reference to the bearing of the art classes on the trades of the town, it is not a matter of mere sentiment, but of considerable practical importance. Our weaving trade is becoming more of what is known as the fancy trade, depending for its success in great measure on the excellence of its designs. In many towns firms provide for the attendance of their apprentices at the evening art classes. In Nottingham, the seat of the lace trade, this is largely done, and as one illustration of the consequence of this, one manufacturer there who ten years ago paid £1,000 or £1,200 a year for French designs, and to French designers, now spends in that direction not more than £50 a year. (Applause.) Probably 1,500 young men are now engaged in that town as designers and draughtsmen. But few employers in Preston send their apprentices to us. I am sure that they would find their account in it if they did. They would benefit themselves, their apprentices, and their town.

Of the excellence of our musical classes I need say nothing, they will shortly speak for themselves. Before I leave the subject of the classes, I would refer to the technical classes, which are in full operation under teachers having a practical knowledge of, and actually engaged in, the trades which they teach. They embrace now the cotton, engineering, and building trades in most of their branches, and place within the reach of the workers of Preston the opportunity of improving themselves in their knowledge of the work on which their welfare depends. One class, a most important one, on steam and the steam engine, is attended by a largely increased number. You may depend upon it that soon no one will be allowed to take charge of an engine or boiler who has not a certified knowledge of this science, and properly so too, for the lives even of their fellow workpeople, not to speak of the property of their employers, depend on the skill and watchfulness of the men in charge. I see that the subject has been mooted in the Trades Unions, and probably some stringent rule will be made by masters and workmen alike.

In addition to the ordinary certificates and prizes, we are this year in a position, for the first time, to award the scholarships of £45 a year each. Under our scheme, it is our duty to award each year at least two scholarships of £45 a year each, tenable at

some place of higher instruction, to be competed for by students who have attended the Institute for at least two years, and under conditions to be prescribed by the Council. We decided to award one to the science and one to the art department. For the science scholarship we had 14 competitors. Mr. Richard Threlfall, a young neighbour, and a very clever member of Cambridge University, at the request of the Council, undertook the examination. In the result, the Council awarded two science scholarships, one to Mr. Moulton and one to Mr. Wilkinson, about both of whom I shall desire to say a little more presently. For the art scholarship there were five competitors. Mr. Willis, head master of the Manchester School of Art, undertook to conduct this examination. He reported that the competition was a very close and creditable one, and that the students had done excellent work of a high character. The scholarship was awarded to Miss Smith, a student who for some years has come almost daily from Chorley to attend the classes, and who is at present in receipt of it, and in addition, is reaping the benefit of a year's free teaching at the Art Training School at South Kensington, the advantages of which most excellent teaching the Department have given gratuitously to our scholars.

I ought to call attention to the following students who have distinguished themselves at the last examination :—Miss Sophia Backhouse and Mr. Reginald H. Crook have obtained the art teacher's certificates. James Henry Binfield has obtained the following passes in science : two first class advanced and one first class elementary ; Alfred Halewood (aged only 14 years), two first class elementary and one second class ; Caroline Hindle, two first class elementary ; James Martland, two first class elementary and one second ; William Henry Pimblett the same ; and Frederick Threlfall, two first class elementary. In the technical subject of tools, Stephen Blogg has obtained a first class in honours, receiving a medal and £5 in money—passing in this subject the second in the kingdom. In addition to our scholarships, Moulton and Wilkinson have gained the following distinctions :—Moulton has obtained a Whitworth Scholarship of the value of £150, and a Royal Exhibition, which entitles him to £50 a year for three years, and free teaching at the Royal School of Mines or the Science Schools at South Kensington. (Applause.) Wilkinson has obtained a Royal Studentship which entitles him to free teaching also for three years at the same schools, than which, I daresay there are no better science schools in the world. (Applause.) Of these Royal Exhibitions and Studentships there have this year been awarded only 25, and when it is remembered that these are open to the competition of all British subjects, it is felt to be a

matter of proud congratulation to our Institute and to Preston that two of the number, or eight per cent. of the whole, should have been gained by our students. Of the Whitworth Scholarships only 25 are awarded, varying in amounts from £200 to £100. They, like the Royal Exhibitions and Studentships, are awarded on the results of the yearly May examination of the Science and Art Department, but, unlike the latter, are confined to students actually at work in the engineering trade in Great Britain or India or the Colonies. Moulton's success has therefore been very remarkable. He has, by his brains and industry, gained free teaching of the highest kind for three years and money awards amounting to £115 a year for the same period. Wilkinson is this year, for family reasons most creditable to himself, unable to make use of the scholarship and studentship which he has won, but they have been held over in the hope that he may be able to do so next year. These two young men, as well as Miss Smith, deserve a vast amount of credit. They have been very close and regular students in our classes, and are conspicuous examples of the advantages placed within the reach of all who have ability, industry, and good conduct. (Applause.) We congratulate them heartily upon their success, and express an earnest wish for their future prosperity, of which they have laid so good a foundation. (Hear, hear.)

In conclusion, I would renew my appeal to employers of labour, especially those into whose work enters any element of art or science,—and there are indeed few occupations into which these conditions do not enter more or less—to support the Harris Institute more largely than, with some few exceptions, they do at present, at least by sending to our classes the young people in their service. To do this would be a matter of very small cost and trouble to themselves. But, to judge from the results of similar action in other places, it would tend greatly to raise the average of skill and intelligence of their workpeople, to further their own interests, and in time greatly to enlarge the commercial importance of Preston. (Cheers.)

The Countess of LATHOM then distributed the prizes, and addressed a few words of encouragement to the successful students. To Alfred Halewood she said his success must be a source of great pride to him and to those who had an interest in him, and she was sure they must be many. The Misses Poole she warmly congratulated. She hoped their studies might still be rewarded with success, and she hoped that they would keep up the family repute. She also had a word of graceful compliment to Miss T. Thorpe. The three students specially mentioned by the Chairman presented themselves the last. To Miss Smith Lady Lathom said she hoped her success in the past would encourage her in the future, and that

she would not only do honour to herself and her family, but to womankind in general. (Applause.) To Mr. David Wilkinson, she observed his success was a sufficient story of his perseverance and ability. She hoped his example would be a great encouragement to all others to work as he had done, and therefore to gain the esteem of all. To Mr. A. J. Moulton, who presented himself amid a round of applause, she said his talents had been fitly acknowledged by the rewards he had received, and she was sure he would not forget this occasion. (Loud applause.)

The Right Hon. the Earl of LATHOM, who was received with cheers, said: When your chairman invited me to come and present these prizes last year, I felt great diffidence in following in the footsteps of Sir Richard Cross, who, I saw, gave you a most excellent address on education. Unfortunately I was unable to fulfil my engagement owing to parliamentary duties, and I am happy to think that my place was so ably filled by Professor Tyndall; only my natural feelings of diffidence last year can but be twofold this year in having been preceded by so great a man.

I am no authority on education, and I am not, unhappily for myself, scientific, so I cast about for a subject on which I could speak to you without wearying you, and it has been very difficult to find one. However, in the course of my life I have travelled to a certain extent, and it occurred to me that I might be able to give you some experiences that would perhaps be useful, if not entertaining.

Now, in the first place, it is impossible for any man of observation to travel without improving himself—(hear, hear). Only to do so fully it is absolutely necessary that he should be educated to a certain point. Of course, there are many varieties of travellers—those who travel for pleasure or for profit, those in search of particular objects, scientific, political, artistic, or simply bookmaking—others who travel to settle, others in search of health. In every one of these cases knowledge is great power. Take the man of pleasure—he passes over the ocean, to some, unfortunately, a time of woe, but to the healthy man one from which he derives a constant pleasure and interest. I will not dilate upon the wonders of the deep, for you will probably have read about them as much as I can tell you, but it is careful study and research on that subject which alone enables a man to appreciate them. He passes through cities and towns stored with the accumulations of years, in the shape of buildings, pictures, ancient monuments, &c.; and without knowledge what would be the value of them to him beyond the gratification of the moment? Take the traveller in search of profit. It may be mercantile, or engineering, or otherwise. It is not necessary to point out how knowledge and cultivated intelligence come in here.

Then take the seeker of precious metals or stones—every rock, every water-course has its history for him ; the science of geology, perhaps studied with difficulty and trouble at home, now comes into play, and the man properly rejoices in his knowledge. Take botany ; a man learns from books the experience of others, but what joy for him to be able to see and judge for himself, to penetrate into remote places and discover new plants, and new beauties of nature, of which he has only dreamt before, and in which he now revels with delight and reverence. Take the settler ; he may be only a simple farmer, but if he has read and studied, how much more likely he is to succeed than the poor fellow who goes by rule of thumb, and because at home he did such and such a thing in a certain way thinks that the same system must suit all countries and every variety of soil and climate. Again, the settler, if educated, has enormous advantages if, when cut off, as he very likely may be, from all society and from all intercourse with intelligent men of his own class for months in the winter, he can occupy his leisure hours with reading, music, and perhaps scientific studies, such as botany, geology, and zoology. But whether a man travels for pleasure or profit, or for any other reason, it is almost impossible for him to return home without having gained a great deal by his journey, always supposing that his mind has been enlarged by habits of study and intelligent observation and application.

My latest travels have been across the Atlantic to the country known as the Dominion of Canada, where I have an interest in a cattle ranche. Our ranche is situated in the Far West, at the foot of the Rocky Mountains, so that to reach it I had to cross the Continent. This may not convey much to some here, but when I tell you that Canada from east to west, that is from Belle Isle to Vancouver, measures about 3,400 miles, and from north to south, that is from the Arctic Ocean to the United States frontier, about 2,000 miles, it will give you some idea of the vastness of the country. The superficial area of Canada is about 3½ million square miles, and it is therefore of larger extent than the whole of Europe.

I am not going to inflict upon you a long account of my own travels, but will give you a few experiences that I think might be of general interest. The first town of the Far West that I saw was Winnipeg—one of the mushroom towns that have sprung up in the last few years along the line of the Canadian Pacific Railway —a true type of the new town of the West, long, wide, rambling streets, side walks of wood, the roads a sea of mud, houses of every description, from the modest log hut and plankhouse to the new pretentious brick and stone stores. Where, about six years ago, a solitary fort stood, visited by occasional hunters and Indians, there is now a thriving town of many thousand inhabitants. All owing

to what? To the vast opening out of the corn lands of Manitoba—perhaps the most magnificent wheat-growing country in the world—I travelled through it, and saw myself what crops can be grown, but let it be well understood that any man going out there must know how to use his hands and wits, and must not expect the crops to grow without labour; also that nearly all the labour of the year is compressed into six months, the other six being dead winter—intense cold, but dry, so that it does not hurt. From Winnipeg to Calgary, 840 miles, with very few exceptions, the whole country is fitted for agriculture, and is being rapidly settled up, farms in the neighbourhood of such towns as Brandon, Regina, Quapelle, Medicine Hat, &c., being in great request. Calgary, when I arrived there in 1883, boasted a fort and about three plank houses; now it has about 8000 inhabitants. A most delightful site for a town, just at the foot of the Rockies. There I had the pleasure of meeting an old Roman Catholic priest, by name Father Le Coome, who had lived for 35 years among the Indians; he is known and respected throughout the whole continent. I asked him, "Father Le Coome, you have lived among the Indians many years—have you done any good?" The old man said, "Oh, that is a hard question, but I will answer it," and his face lighted up—"Yes," he said, "I have saved many lives." We all admired the old man for his candour in not attempting to say he had converted the Indians, but simply telling the truth that by the influence he had over them he had been able to prevent them practising cruelty upon any unfortunate hunters that fell into their hands.

I may mention in passing that I had the pleasure of sending the first telegram from Calgary to England, and receiving an answer within twelve hours.

From Calgary I struck south to my ranche in Alberta County, and for several weeks lived in the company of cowboys. Now, the cowboy of the Far West is a most curious specimen of mankind; amongst their ranks you find all sorts of men, from negroes up to men who have been educated at the Universities. Their life is hard and rough, but most exciting. Riding half-broken animals, they carry with them all their belongings, which generally consists of the following:—A wide-brimmed sombrero or wide-awake, with coloured bands round it and floating tassels; on his body a hunting shirt of dressed buck-skin, with fringes down the arms; on his legs leggings over trousers called shaps, made of thick cow-hide; on his feet moccasins, to which huge spurs, with rowels an inch and a half in diameter are attached, and jingling brass chains hanging loose under the foot; a heavy deep-seated Mexican saddle, with high cantel behind and a pommel rising into a crutch, on which is hung the lasso or lariat; under the saddle the rider's blanket, a revolver at

his waist, a bag of flour, a little tea and tobacco and bacon, and he is ready to go anywhere. His duties are to keep touch of the herd of cattle under his care, often necessitating his lying out for days together in all weathers. As a rule, they are great gamblers, but you continually find among them cultivated men ready to point out to you any botanical curiosity, or call your attention to any fine scenery of which they are well worthy. I remember to my cost having lent one of my boys a Shakspere one day, when I went out to hunt; and coming back very hungry late in the evening and finding him lying on his back kicking his heels with delight over the "Comedy of Errors"; no dinner for me that night.

In the course of my wanderings I came across many Indians, and was able to see a great deal of their manners of living. I ought to explain to you that the system the Canadian Government have instituted is to give every tribe of Indians a tract of country entirely for their own use, on which no white is allowed to settle, shoot, hunt, or fish. As long as the Indians of each reserve remain within its boundaries they are provided by Government with blankets, agricultural implements, seeds, and 4½lb of meat per week for every person. The reserves vary in size; one that I saw most of, called the reserve of the Blood Indians, is about the size of Yorkshire; on it there were between 1,500 to 2,000 Indians.

The Bloods are a portion of the old Cree tribe of which you may have read in Cooper's novels. Some of their habits are most peculiar; they bury, if you can use the word, their dead in the branches of the trees on rude platforms—the dead Indian is wrapped in his blankets and skins, and around him are placed or hung all his household possessions, a most curious collection they are, of every imaginable sort of rubbish, glass bottles, tin canisters; in one instance I saw a child buried in a box bearing the name of Huntley and Palmer. These burials refer only to the males or bucks; the women or squaws when they die are simply thrown out of the camp to be devoured by the cayotes, wolves, or dogs. One camp I saw consisted of about 300 tepees or lodges; the tepee is simply a frame-work of poles covered with skins; there were swarms of naked children, the bucks stalking about wrapped in their red blankets, or else gambling; they are great gamblers, but have only two games that I could make out: one played with a little wheel bound round with cloth—it has four spokes made of beads, and one of the spokes has on it a large blue bead. The game is as follows: Two Indians, each with an arrow, start side by side, one trundles the wheel against a log; at the moment it falls they dart their arrows, and the one whose arrow point fall nearest the blue bead wins. Their quickness of eye is wonderful. The other game is this: They form sides, ten or twelve sitting opposite each

other, one man takes two little bits of wood, one black and the other white, in either hand, he holds them behind his back for a second and then produces them ; the other side have to guess which hand the black piece is in. Meanwhile the friends of the man holding the pieces keep up a most infernal din, clapping their hands, yelling, and shrieking, to confuse the guesser, and so the game goes on ; they will play night and day at it, and often gamble away everything they possess. No buck is allowed to marry until he has proved himself a brave. In the old times a man did this by taking so many scalps. As they cannot do this now, those who aspire to the dignity have to undergo the following ordeal : Skewers of wood are run through the muscles of the chest, ropes are fastened to them, and the wretched aspirant is slung up to a bough of a tree, the squaws then swing him about and pull at his legs—he must not utter a sound, and must appear to enjoy the process ; the sooner the muscle breaks, the sooner the torture is over, and he is a brave. They are very proud of the scars that this operation leaves, but in these degenerate days I am told few of the young bucks care to undergo the ordeal. In most of the camps you find a missionary, and I had many interesting talks with them ; the account they give for the most part of the result of their work is disheartening. They say that the children are very sharp and learn quickly like parrots, but that they forget everything directly ; they are dreadful thieves, and most untrustworthy. They make but little progress in Christianizing the Indians ; a certain number have been baptized, but they cannot overcome their old superstitions. For instance, though some few will allow their dead to be buried underground, they insist upon a hole being left at the head, by which the spirit may pass in and out. It is almost impossible to make them till the ground, and if they do plant crops, it is almost certain that before they are ripe they will turn their horses in to eat and spoil everything.

I could go on for some time telling you stories of the Indians, the cowboys, the splendid scenery I saw, but I am afraid time will not allow of my ramblings in these far off regions any longer, and before I conclude I think it might interest you a little to hear something about the mines of Montana. Twenty-two years ago the country lying just to the east of the Rocky Mountains, and south of the boundary line between Canada and the United States was but little known ; it was inhabited by some extremely warlike Indians, and it was almost certain death for any white man to enter their territories. In 1863 the rumours of rich discoveries of gold and silver ore found its way to the Salt Lake City, Colorado, and other places to the south. A rush of adventurers made their way through many hardships and difficulties into the new country. The

first place they struck ore at was afterwards known as the Beaver-head diggings ; from this place started from time to time bands of emigrants and miners, who afterwards spread over all the rich gulches of the Montana territory. Desperate fights took place with the Indians, in which many lives were lost, and no doubt many of you have heard of the dreadful outrages, murders, and such-like that took place in the mining camps There was no authority, no law, and every man went about armed, as indeed they do now. At last things came to such a pass that the more respectable of the miners and storekeepers formed themselves into vigilance committees, and took the law into their own hands. I have a list of some thirty of the most desperate villains the earth ever beheld ; they were strung up by these vigilantes under lynch-law. By degrees things began to settle down, and now the towns are comparatively quiet, respectable places, though whenever there is a rush to any new diggings, and a new mining camp is formed, of course the same sort of things go on, though in a minor degree. The rush to the place now called Helena, happened between nine and ten years ago ; a band of prospectors—that is, miners looking for a likely place in which to find ore—started out from Omaha. I believe there were 15 of them, with the usual accompaniment of wagons and horses ; they crossed the prairie into the Montana territory, taking three weeks on their road ; they had bad luck, had tried many likely places without discovering any traces of gold ; they had come to the end of their provisions, and were giving the whole thing up in despair, being on the point of starvation. One evening they camped down on a gulch running down into the prairie between two hills—they had a council as to what they should do, and made up their minds to strike south to save their lives ; one of them said : "Well, now, that's settled—here goes for a last hope"—went down into the creek, and after digging to a slight depth panned out the stuff—I will explain this further on—at the bottom of his pan he found a rich deposit of gold dust. Within a month from that time there was a camp of some 4,000 miners, composed of representatives of all nations, on what is now the site of Helena. It was known by the name of Last Hope for a long time, one of the richest, most prosperous diggings, or rather, placer-washings, that had hitherto been found. Soon afterwards equally prolific washings, such as Silver City, Dragon Creek, and several others, were found in the immediate neighbourhood ; and Helena became the centre of one of the largest mining districts in the West. Helena at present is a city of about 14,000 inhabitants ; good hotels, fine stores, villas springing up rapidly, in fact, a most flourishing place ; and now that the Northern Pacific Rail-road runs past it, is likely to become a most important town.

Just below the town, I had an opportunity of seeing some placer-washing going on—the gravel bed of the gulch or stream is about six feet deep, down to the bed-rock. The mode of operation is as follows: a stream of water is brought down a cutting, narrowing by degrees till it comes to a wooden trough—this leads into a large flexible leather hose terminating in a brass nozzle; the miner holds this between his legs, and directs the force of the stream of water against the gravel-bed, sluicing it all away, till about two inches of stuff are left on the rock; Chinamen remove all the heavy stones; the deposit is then sluiced with water into a flume or trough, and washed down into what are called settling pits, of which there are generally six. The water carrying the dirt passes through these six pits. At certain times the water is turned off, and then the deposit is carefully poured out. The miner takes a tin dish, scoops up about two handfuls of the stuff, fills up with water and then gives the pan or dish a rotatory movement, keeping the muddy stuff in a state of agitation; every now and then he pours some away, and adds fresh water; as soon as he has washed all the dirt away, there is a small residue at the bottom of more or less gold dust according to the richness of the washing; this is poured out on a flannel and then placed in a leather bag. I ought to say that each miner on coming to a new washing, pitches on the most likely looking ground, and stakes out his claim, which varies in size at different places; in choosing the claims, the great object is to get as near the centre of the bed of the stream as possible, for naturally gold, being heavier than anything else, gravitates down to the lowest part; but the centre claims do not always turn out best, for all streams make bends or sudden turns, and occasionally an outside claim proves very valuable to the lucky miner, for he may have hit on one of these bends, and in it what is called a pocket has been formed. It is in these pockets that the largest nuggets are found. I have held in my hand a nugget of pure gold, shaped like the human ear, weighing 394 ounces, worth, say, from £600 to £700.

I may mention here that it is estimated that the total amount of gold taken out of the gulch on which Helena now stands fell very little short of the enormous sum of three millions sterling.

I asked an old miner many questions about mining and miners—what was the largest amount of gold ever taken out in a given time by any one man? He told me that three men in less than three months took out of the Dragon Washings three tons of gold. What has become of those men? Two have died by the roadside from drink, not having a farthing of their money left; the third, he believed, had managed to save a portion of his earnings, and was living somewhere in the Eastern States. He said that it was

a very rare thing for any miner to save—they spent their money as fast as they got it ; that the miner's life was a very hard one. having constantly to be in water and wet through, living on very bad food, and as a rule drinking heavily when he got the chance.

I went one day to the assay office. Formerly, the miners paid for their goods in gold dust, and a fine thing the storekeepers and other harpies made out of it. To give you an instance : it was a common trick to place rough flannel on the counters and rough mats on the ground near ; the miner, careless and half drunk, would often spill some of his gold dust into the flannels or into the rug ; the cunning store or bar-keepers all knew the value of their rugs and flannels ; and often at the end of the week would be able to burn these things, melting out of them £20 or £30 worth of gold. To save the wretched miner, the Government established these assay offices, and now, a miner having found a certain amount of gold, takes it to the assay office ; it is weighed and numbered, a ticket is given to the miner, and he is told to come back in 24 hours. The gold, whatever may be the quantity, is taken into a smelting room, placed in a crucible, and melted down, then poured into a mould forming an ingot. Of course, these vary in size according to the quantity—from one a few ounces in weight to one about the size of two bricks, and that is as much as two men can conveniently carry. As soon as the ingot has cooled two corners are cut off and handed to two experts, who proceed to test them in different ways to find out the quality and value of the gold, which varies considerably, as much as 8s. an ounce ; the value of the ingot and the weight are then stamped upon it, and the miner, on calling and producing his ticket, receives the value in money at once. In the same manner all other kinds of ore are tested and assayed. I was shown the whole of the operations, and it was most interesting to see the care with which they were conducted. So careful are the operators that the sweepings of the office are only valued at £50 per annum. One would think that experts continually working at this sort of thing would be able to judge at a glance what was the value of any ore submitted to them, but such is not the case. One of the gentlemen told me that he had a good lesson a short time before. A miner brought him a piece of ore to be assayed. Looking at it, my friend said, "Why, it is not worth the trouble, there is nothing in it." The miner insisted, and the result of the assay was that it turned out one of the richest specimens they had ever had—80 per cent. of silver, 6 of gold, and the rest nearly all pure copper. They showed me in a strong room ingots of gold of various sizes piled up, the accumulation of about three months—valued at nearly £100,000 sterling. They clear it out about four times a year, and

send it under charge of special bullion agents to New York. All the men in the office are armed, but do not seem to fear being robbed.

And now I feel the time has come when my wanderings must cease, and when I must apologise to my kind and patient hearers, not only for wearying them, but for having, perhaps, strayed somewhat far from the original subject in point, *i.e.*, education. My only excuse is that I have wished to prove to those here, and they may be many in these days of constant locomotion, who have to wander from the land of their birth, what enormous advantages they will possess in their travels if their minds are well stored with knowledge, if they have acquired the power of intelligent observation and apt application ; if, in short, they have known how to turn to the best possible use the excellent education they have received at the Harris Institute.—(Prolonged Cheers.)

The Rev. Fr. PERRY, F.R.S., who was received with applause said: It is with very great pleasure that I rise to move a vote of thanks to her ladyship, the Countess of Lathom, for the honour she has conferred upon us this evening in presiding at the distribution of prizes and certificates, that have just been awarded to the successful candidates of the Harris Institute, and also to his lordship, the Right Hon. the Earl of Lathom, for the interesting and valuable lecture he has given us.

I am sure that it is no little incentive to labour strenuously for the victor's crown, when the reward has to be bestowed by the gentle hand of one whom we ourselves esteem, and who in conjunction with her noble husband, has gained, by so many acts of kindness and self-sacrifice, the esteem and affection of our fellow-townsmen.

It is certainly one of the greatest pleasures of life to feel that by our presence we can increase the joy of those who have well deserved by their labours the reward they receive, and therefore I cannot doubt but that the hours spent amongst you this evening will long continue to be most pleasantly remembered. Yet when there are many calls of a like nature on one's time, the self-sacrifice required to meet them is by no means small ; you will, therefore, I am sure, all agree with me in saying that we feel most grateful for the presence of the Earl and Countess this evening, both on account of the inconvenience it has caused them, and still more for the gracious manner in which their favour has been bestowed. (Applause.)

And now before resuming my seat, I would beg to be allowed to offer my hearty congratulations, not only to those who have been successful competitors in this year's race, but to those also who have honestly striven for a prize. The object of our studies is not to enable

us to pass successful examinations, for examinations are only appointed to stimulate us so to train our minds as to be able to use them to the best advantage in the struggle of life. The student who honestly does his duty during the hours he can devote to study, although the results may not perhaps at first appear brilliant, will, if he thoroughly masters the great principles that lie at the foundation of each branch of science, be training his mind more effectively than his more brilliant, but less solid, companion. (Applause). Unfortunately it not unfrequently happens that we hurry on in our studies without devoting sufficient time to the clear understanding of what are the chief principles or facts on which science rests, and whence it mainly derives its strength. I will illustrate my meaning by an example. Take the great law of gravitation, which enters so largely into the most weighty questions of rational mechanics. We first learn the statement of the law, that every particle of ponderable matter in the universe attracts every other particle by a force that varies in the inverse ratio of the square of the distance separating the particles; and then perhaps we are reminded that this law was suggested to Newton by the accidental fall of an apple, and confirmed by its application to the moon, and later on proved experimentally by the attraction exerted on two freely suspended balls by two larger ones, in the Cavenish experiment. We then accept the law, and it takes a certain hold of our minds. But now let us recall the history of the first re-appearance of Halley's comet in 1759 ; how its probable return had been predicted by this great English astronomer many years before it happened; how the law of gravitation showed the French mathematicians Clairaut and Lalande, that, as the comet had to pass near the massive planets, Jupiter and Saturn, it would be disturbed in its path ; and how, assisted by a lady-computer, Hortense Lepante, they calculated these disturbances, and thus found the position of a body that had been invisible for more than seventy years, and in the meantime had travelled to a distance from the earth of more than 3,000,000,000 of miles. Or, again, let us listen to the recital of the marvellous triumph of Adams and Le Verrier, who, in the retirement of their closet, confident in the truth of the great law of Newton, could sit down and calculate the exact position in the heavens of a previously unknown body, which they found must exist, in order that the apparent disturbances of the planet Uranus might be accounted for. Or, again, let us dwell for a moment on a proof of the universality of the law of gravitation, more remarkable, if possible, than that to which I have just drawn your attention. The mighty star Sirius, fifty times as brilliant, and five hundred thousand times as distant from us as our far-off sun, and rushing through space at the enormous speed

of almost a million and a half miles a day, is found to move unequally. It must then be disturbed by some neighbouring body, if the law of gravitation is truly universal. The German astronomers, Bessel and Peters and Auwers, calculate the path of the disturbing body, and find that its mass must be seven times that of our sun. Its position can thus be indicated for any epoch, and the honour of completing the discovery of this companion to Sirius by telescopic observation was reserved for the son of the well-known American optician, Alvan Clark, who, now past his eightieth year, recounted to me last year with lawful pride his son's share in this wondrous confirmation of the law of universal gravitation. Verifications such as these give a deeper insight into the true nature of the fundamental principle than any direct demonstration. The power of prediction, verified by the event, gives a firmness of conviction and a reality of grasp to be acquired by no other means ; and when, after this, we are told that the law of gravitation is only probable, we know well what to answer. Time can never be lost in thus making sure of our first principles, and then we can confidently build thereon a solid superstructure.

But let not the student of science imagine that by mastering the principles of his own and of kindred sciences he has done all that is necessary to train his mind, so as to ensure success in after life. His powers of observation and of reasoning are, it is true, well cultivated by the natural sciences and by mathematics, but for complete mental training he must also acquire facility in expressing his thoughts in speech and writing, and that is best done by a diligent study of literature. Translation and re-translation are the most effective means for attaining precision and elegance of style ; and this change of study will be found at the same time to be the surest way of freshening the mind for a renewed attack upon the principles and applications of science. But not only will a course of literature, pursued side by side with that of science, impart new vigour to the mind, it will also bring the heart and soul into contact with all that is highest and noblest in thought and in example, thus perfecting our own nature by the contact. And if the study of the thoughts of great minds, if contact with the lives of the noblest of our race, give such cultivation to our mind and heart, how necessary must be the union of the soul with its Creator by the practices of religion, in order that what is highest within us may have its full development. (Applause.) In conclusion I beg to move " That the best thanks of this meeting be accorded to her ladyship the Countess of Lathom for her kindness in attending to distribute the prizes, and to the Rt. Hon. the Earl of Lathom for his excellent address delivered this evening." (Applause.)

Mr. W. E. M. Tomlinson, in seconding the vote of thanks, said they were accustomed at gatherings in Preston to the presence of both Lord and Lady Lathom, and were always glad to see them. They were always ready to help them in matters which were of interest and concern to Prestonians, and he felt sure that their presence there that night was a recognition of the great importance of that institution at the present day. It was hardly going too far to say that circumstanced as they were, an institution of that kind was an absolute necessity, if Preston as part of Lancashire, and Lancashire as part of England, was to keep its place in the world at the head of manufacturing industries. They were accustomed, justly, to look upon the age in which they lived as an epoch in which science was supreme. There was no doubt that the cultivation of science had passed into a condition which would not have been dreamt of in preceding ages or generations ; sciences which some of them could remember in a comparatively rudimentary stage, had passed almost into the condition of the science of which Father Perry was the especial master, which used to be known as the exact science, and those sciences had been adapted to the requirements of those manufactures which were pursued in places such as Preston, but unless art was cultivated along with science, he thought it must be admitted that they would fail to keep pace with the rest of the world. If they wanted to have that fully demonstrated they had only to look at the records of that very valuable commission which went over Europe to study the condition of technical science and technical education in other parts of the world. He believed that the conclusion at which they must arrive was that although we might be in this country on an equality with other nations with respect to the cultivation of science, we had hardly kept pace with them in the study of art. Art must be the handmaid of science, and unless we carried forward the education of our people in art as well as science it would be impossible for us to keep our place in manufacturing industries with the rest of the world. The chairman, in his opening address, made some very valuable observations on the results of the pursuit of technical education in another town, he thought it was Nottingham, and he stated that instead of manufacturers paying, as they formerly did, £1000 a year in order to buy knowledge derived from foreigners, they were now enabled to supply that technical knowledge from their own resources. Now that technical knowledge, which was necessary in the arts and sciences, was not only the abstract knowledge of science which enabled them to produce with machine-like regularity, the same article over and over again ; they must also bring out in the objects which they produced the impress of individual skill and

taste. He said that in science, this age was supreme, but it could hardly be said to be equally supreme in art. If they wanted to look at objects which stood highest as a matter of artistic merit, they generally had to go back at least two or perhaps more centuries, and if they asked those who understood the method by which those objects were produced, they would say that at all events it was very difficult to find amongst modern artisans skill adequate to produce similar objects. He happened the other day to go through Hampton Court Palace, and he saw some iron gates there (very likely many of them had admired them as he did). They were about 200 years old, or rather more, and he was told that not only would it be difficult now to find that peculiar description of iron which had been worked into so beautiful an object, but that it would be almost impossible to find amongst our artisans men of sufficient skill to produce a similar work of art. Two or three days ago he had had a still more ancient object in his hands, it was a very ancient tile ; it came from Damascus, and he had no hesitation in saying that at the present day, even Minton, or any of our great manufacturers, could not produce a tile like that. In conclusion, he would only say that his object in making those few remarks was that it led up to observations which Lord Lathom made in the early part of his address, namely, that one result of travelling abroad was to see the importance of the knowledge and study of art and science. He thought the presence of Lord and Lady Lathom was a testimony to the interest they took in that institution, and he thought the object of that institution was that they might be able to bring their mental faculties to bear to produce objects which would not only be worthy of the scientific age in which we live, but to enable them to raise the standard of art as well as science in this country. (Applause.)

The resolution was then put to the meeting and carried with enthusiasm.

The Earl of LATHOM, in the name of the Countess and himself, thanked the audience for the hearty reception which they had given to the resolution. He had already told them with what diffidence he undertook to come there on that occasion, and he might have added that his hesitation was increased by the fact that he had previously known comparatively little about the Harris Institute. But he had had the advantage that afternoon of going over the Institute and seeing the admirable arrangements that were there made for the convenience of the students in the prosecution of their work. After having seen this, all he could say was "Happy would be every town in England if they possessed such an Institute." (Applause.) They in Preston were happy, and they showed that they appreciated their happiness by taking

advantage of the Harris Institute, and they demonstrated that they did this effectually by the very creditable list of prize-winners which had been presented that evening, (Applause.) Most heartily he congratulated the students, and he wished them more success in the future, and he congratulated the people of Preston on having such an educational establishment as the Harris Institute in their midst. (Applause.) So far as the Countess and himself were concerned their visits to Preston had been comparatively rare, but whenever they had come a most hearty and cheering welcome had been accorded them. (Applause.)

Mr. D. IRVIN, in moving a vote of thanks to the Chairman, said they had great cause for thankfulness that they had such a President, when they saw the results of the teaching at the Harris Institute, and remembered that Mr. Ascroft was the principal cause of bringing out that establishment as the successor of the old Mechanics' Institute. (Hear, hear.) He (Mr. Irvin) maintained that such was the fact, and that but for Mr. Ascroft's perseverance, which was continued for a length of time, the students would not have been in the proud position which they had occupied that evening of coming there to receive prizes, some to the value of over £200. (Hear, hear.) He must remind them, however, that the Harris Institute was not yet finished. Their President had put before them the desirability of having a building of some considerable size provided with such appliances as would enable the technical instruction they at present received at the Institute to be carried to greater perfection, in such a manner as would rebound to the credit of those who did the work, and benefit, as he hoped, not only Preston and Lancashire, but the whole country. (Hear, hear.) He hoped that Mr. Ascroft would not rest satisfied till this idea had been carried into effect, thus giving those who had gained mechanical knowledge at the Harris Institute the fullest opportunity for developing successful mechanical work. (Applause.)

Dr. HAMMOND, who seconded the proposition, remarked that the conspicuous success which had hitherto attended the Harris Institute was due in no small measure to the unwearied exertions of their President. (Hear, hear.) When Mr. Ascroft first undertook the presidency of the old Avenham Institution the latter was in a state of decadence. Thanks, however, to the valuable aid which they had received from the Harris Trustees, and efforts of their President and others, that valuable and successful Harris Institute had risen Phœnix-like from its ashes. (Hear, hear.) He was glad to hear what had been said as to the desirability of providing an adjunct to the Institute to meet the requirements of developed technical instruction, and he trusted that the scheme would be successfully carried out. (Applause.)

The motion was adopted with acclamation, and the PRESIDENT, in a brief response, said that the origin of the Harris Institute was much more owing to the Harris Trustees themselves than to any efforts of his. He hoped that they would continue their progress, and that their utmost expectations which had been pictured in the brilliant prospect which had been set out before them would be realised. (Applause.)

At intervals during the evening some interesting selections were rendered by the advanced Tonic Sol-fa Class in connection with the Institution, aided by picked voices from the different choirs in the town, Mr. W. H. Cowell skilfully conducting. The programme included Mendelssohn's "Farewell to the Forest" and "The woods," Smart's "Pale Autumn flowers" and "When Spring comes round," "In this Hour of Softened Splendour" (Pinsuti), and Leslie's arrangement of "God Save the Queen."

LIST OF PRIZES AND CERTIFICATES AWARDED TO STUDENTS ATTENDING THE CLASSES AT THE HARRIS INSTITUTE, SESSION 1884-5.

SCIENCE.

† These Students have obtained Queen's Prizes.

* These Students have obtained Local Prizes.

A signifies Advanced. **E** Elementary. **I** First Class **II** Second Class.

Name.	Subject.	Name.	Subject.
Abbott, Robert	Mag. & Electricity, E II	Burrows, Jos. T....	Theo. In. Chemistry, E II
Attwater, George ..	Geology E II	*Bradley, Oswald J.	Prac. In. Chemistry, E I
Bilsborough, Eliz. ..	Botany, E II	*Boddy, Hubert....	Geology, E I
Bolton, Edith C. ..	Physiography, E II	,,	Physiography, E I
Bryce, Thomas	Botany, E II	,,	Agriculture, E II
*Briggs, Wm. F. ..	Steam, A I	*Charlton, James S.	P. P. & S. Geometry, E I
†*Binfield, Jas. Hy	P. P. & S. Geometry, A I	,,	Building Construction, E II
,, ..	Applied Mechanics, A I	Coulthurst, Edwd ..	P. P. & S. Geometry, E II
,, .	Steam, E I	,, ..	Building Construction, A II
Barnes, John	Machine Construction, A II	*Cookson, John W.	P. P. & S. Geometry, E II
,, ..	Applied Mechanics, A II	,, ..	Building Construction, E I
,, ..	Steam, A II	*Cuerden, Joseph ..	Machine Construction, E I
Bennett, Thomas L.	Machine Construction, E II	Corner, Alexander..	Machine Construction, E II
Baker, Elizabeth ..	Physiography, E II	*Corner, William H.	Machine Construction, E I
Bashall, Henry	Building Construction, E II	Calvert, John W. ..	Machine Construction, E II
Bamford, Sarah E..	Physiography, A II	Coulthard. Thos. ..	Machine Construction, A II
*Bradshaw, Thomas	Building Construction, E I	Capstick, John	Machine Construction, E II
Bamber, Richard ..	Agriculture, E II	*Croft, James.....	Building Construction, E I
Bradshaw, Joseph	Building Construction, E II	*Cunliffe, A. B.....	Building Construction, E I
*Buckley, Albert S.	Building Construction, E I	*Clarke, Frederick..	Mathematics, Stage 1, I
Brewer, John C. ..	Mathematics, stage 1, II	,, ..	Sound, Light, & Heat, E I
,, ..	Sound, Light, & Heat, E II	Coates, John	Applied Mechanics E II
,, ..	Mag. & Electricity, E II	†*Cockshott,Saml...	Applied Mechanics, E I
Bennison, Benjn. ..	Mathematics stage 1, II	,, ..	Steam, A I
,, ..	Mag. & Electricity. E II	*Cunliffe Thomas ..	Sound, Light, & Heat, E I
*Bradshaw, Herbert	Mathematics, stage 2, II	*Clitheroe, John...	Mag. & Electricity, E I
Birkenhead, Thos...	Applied Mechanics, E II	,, ..	Botany, E II
*Bailey, John.....	Sound, Light, & Heat, E I	*Crozier, William..	Mag. & Electricity, E I
,,	Mag. & Electricity, E I	,, .	Physiography, E II
Buck, Isabella.....	Sound, Light, & Heat, E II	*Cornall, Samuel ..	Physiography, E I
,,	Mag. & Electricity, E II	Carter, Roger.. ...	Agriculture, E II
,,	Physiography, E II	Dewhurst, Edwd. ..	Machine Construction, E II
*Ball, John Hy.....	Mag. & Electricity E I	*Dunn, Henry	Building Construction, E I
,,	Geology, E I	,, .	P. P. & S. Geometry, E II
*Bolton, Thos. B. ..	Mag. & Electricity, E II	Durham, Richard ..	Mathematics, stage 1, II
,,	Theo. In. Chemistry, E I	*Davies, Walter...	Mathematics, stage 2, I
Beesley, George	Mag & Electricity, E II	*Dewhurst, Henry..	Mathematics, stage 1, II
*Blewitt, Kate ...	Theo. In. Chemistry, E II	,, ..	Mag. & Electricity, E I
,,	Prac. In. Chemistry, E I	Dewhurst, J. H. ..	Applied Mechanics, E II
Bostock, Lillian	Physiography, E II	Dewhurst, John....	Agriculture, E II

Name.	Subject.
Dewhurst John R...	Mag. & Electricity, E II
Denby, John	Mag. & Electricity, E II
Davidson, Joshua ..	Theo. In. Chemistry, E II
,, ..	Prac. In. Chemistry, E II
Dallas, Ellen	Botany, A II
Dixon, Edith M....	Botany, A II
Dixon, Francis E. ..	Agriculture, E II
Dobson, John.....	Physiography, E II
Etherington, Joseph	Sound, Light, & Heat, E II
*Eaves, Henry	Theo. In. Chemistry, E I
Elliott, John	Navigation, E II
*Eddleston, Edward	Mag & Electricity, E I
,, ..	Physiography, E I
Edwards, Robert	Hygiene, E II
Foster, Charles T.	Machine Construction, E II
*Fawcett, Richard..	Sound, Light, & Heat, E I
,, ..	Mag & Electricity, A II
Fairnie, James S. ..	Mag. & Electricity, E II
,, ..	Botany, E II
*Freeman. Thos. J..	Theo. In. Chemistry. E I
Furness, Thomas E	Botany, E II
Ferguson, Charlotte	Hygiene, E II
*Gregson, Richard	P. P. & S. Geometry, E II
,, ..	Building Construction, E I
Grandison, Robt. J	Machine Construction, E II
Goodyear, Joseph ..	Machine Construction E II
Gaunt, George ...	Mathematics, stage 1, II
Grime, Robert ...	Mathematics, stage 1 II
Gray, Charles E .	Geology, E II
Greenwood, John S	Physiography, E II
*Harring, Joseph ..	P. P. & S. Geometry, E II
,, ..	Building Construction, E I
Hull, Richard	Building Construction, E II
Heathcote, Herbert C	Building Construction. E II
Hardman, John ...	Building Construction, E II
Hodson, George....	Building Construction, A II
Hartley, John.....	Mathematics, stage 1, II
,, ..	Mag. & Electricity. E II
,, ..	Physiography, E II
*Hargreaves, Rd...	Mathematics, stage 2, II
*Hindle, Caroline ..	Sound, Light, & Heat, E I
,, ..	Physiography, E I
*Halewood, Alf. ..	Sound, Light, & Heat, E II
,, ..	Mag. & Electricity, E I
,, ..	Physiography, E I
Holmes, Martha...	Mag. & Electricity, E II
Harrison, Fredk. ..	Mag. & Electricity, E II
,, ..	Physiography, E II
Hind, John R.	Mag. & Electricity, E II
Halliwell, Edward..	Animal Physiology, E II
Hartley, Chas. H. ..	Animal Physiology, E II
,, ..	Hygiene, E II
Hall, John	Steam, E II

Name.	Subject
Holt, Alexander....	Physiography, E II
*Iddon, Thomas....	Machine Construction, E I
Iddon, Robert.....	Mathematics. stage 1, II
,, ..	Agriculture, E II
Jones, Isaac	P. P. & S. Geometry, E II
,, ..	Machine Construction, E II
*Jump, Thomas B...	Machine Construction, E I
	Special Prize by the Rev. C. H. Wood, M.A.
,, ..	Mathematics, stage 1, II
*Jackson, John J. ..	Building Construction, E
Jackson, John	Mathematics, stage 1. II
,, ..	Mag. & Electricity, E II
,, ..	Physiography, E II
Jackson, William E.	Mag. & Electricity, E II
Jolly, Rebecca J. ..	Mag. & Electricity, E II
*Jenson, James	Theo. In. Chemistry, E I
,, ..	Prac. In. Chemistry, E I
Johnston, Walter H	Geology, A II
Kinloch, John	P. P. & S. Geometry, E II
,, ..	Machine Construction, A II
Kirkham, Thomas	Machine Construction, E II
*Kensington, F. J..	Building Construction, A II
,, ..	Sound, Light, & Heat. E I
,, ..	Theo. In. Chemistry, E II
Knagg, W. H.	Mathematics, stage 1, II
,. ..	Physiography, E II
Kilroe, Patrick . ..	Botany, E II
King, Agnes A. ...	Physiography, E II
King, Edith	Physiography, E II
Kellett, Robert	Agriculture, E II
Lamb, James	Machine Construction, E II
Lang, Richard	Machine Construction, E II
Leach, William ...	Building Construction, E II
†*Lobbin, William..	Mathematics, stage 1, II
,, ..	Applied Mechanics, A I
,, ..	Steam, A II
Lancaster, Hy. P. ..	Applied Mechanics, E II
,, ..	Steam, E II
Lambert, Samuel ..	Sound, Light, & Heat, E II
,, ..	Mag. & Electricity, E II
†*Lomax, Jos. T. ..	Sound, Light, & Heat, A I
,, ..	Mag. & Electricity, A II
,. ..	Physiography, A II
*Lynex, Edwin G ..	Mag. & Electricity, E I
Livesey, Henry	Mag. & Electricity, E II
,, ..	Physiography, E II
Lillie, Mary.....	Botany, E II
,. ..	Physiography, E II
Ley, Ernest.....	Physiography, E II
*MacDougal, Rd. ..	P. P & S. Geometry E. II
,, ..	Machine Construction, E I
,, ..	Steam, E II

Name.	Subject.
†*Mc. Carter, A. G.	Machine Construction, A II
,, ..	Applied Mechanics, E I
,, ..	Steam, A I
*Mayor, John James	P. P. & S. Geometry, E I
,,	Machine Construction, E II
Melling, Robert....	Building Construction, E II
Metcalf, John.....	Building Construction, A II
Mallott, Frederick..	Building Construction, A II
Mc Carter, Wm. H.	Building Construction, A II
*Morgan, Charles ..	Mathematics, stage 1, I
,, ..	Mag. & Electricity, E I
*Martland, James ..	Mathematics, stage 1. I
,, ..	Mag. & Electricity, E I
,, ..	Physiography, E II
Miller, George	Mathematics, stage 1, II
,, ..	Mag. & Electricity, E II
Moore, Thomas	Applied Mechanics, E II
,, ..	Steam, E II
Moore, William	Sound, Light, & Heat, E II
*Milner, Wm.....	Mag. & Electricity, E I
,, ..	Physiography, A II
*Mc Manus, Edwd..	Mag. & Electricity, E I
*May, Henrietta F..	Prac In Chemistry, E I
†*Moulton, Arthur J	Prac. In Chemistry, A II
,, ..	Animal Physiology, E I
Marsden, James....	Geology, A II
,, ..	Physiography, E II
Miller, Richard	Botany, E II
Mc. Kie, Mary Jane	Physiography, E II
*Marshall, Elizabeth	Physiography, E I
†*Newsham, R.H.R.	Applied Mechanics, E I
,, ..	Steam, A I
Openshaw, J. W. W.	Botany, A II
*Pilkington, Thos...	P. P. & S. Geometry, E I
,, ..	Mathematics, stage 1 II
,, ..	Steam, A II
Parkinson, Rd.	Machine Construction, E II
,, ..	Sound, Light, & Heat, A II
,, ..	Theo. In. Chemistry, A II
,, ..	Prac. In. Chemistry, A II
Parkinson, Thos. ..	Machine Construction, E II
Parkinson, Edmd. ..	Building Construction, E II
*Parkinson, Jas. N...	Mag. & Electricity, E I
,, ..	Theo. In. Chemistry, E II
Pyke, James	Building Construction, E II
Penny, Isabella	Physiography, E II
,, ..	Mag. & Electricity, E II
Penny, John	Mathematics, stage 1, II
,, ..	Mag. & Electricity, A II
,, .	Physiography, E II
Penny, John A.	Mag. & Electricity, A II
,, ..	Theo. In. Chemistry, A II

Name.	Subject
*Purves, John.....	Mathematics, stage 1, I
,, ..	Physiography, E II
Pritt, Thomas	Geology, E II
*Pimblett, Wm. H.	Animal Physiology, E II
,, ..	Botany, E I
,, ..	Hygiene, E I
*Plant, Henry A. ..	Animal Physiology, E II
,, ..	Hygiene, E I
Parker, Frederick W.	Steam, E II
*Pateson, Dora E...	Physiography, E I
†*Rigby, James....	P. P. & S. Geometry, A II
,, ..	Applied Mechanics, A I
,, ..	Steam, A I
Rigby, John R.	Physiography, E II
Roskell, John	P. P. & S. Geometry, E II
,, ..	Mag. & Electricity, E II
Ranson, Richard ..	P. P. & S. Geometry, E II
,, ..	Building Construction, 2nd Grade Prize
,, ..	Building Construction, A II
Rogerson, John	Applied Mechanics, E II
,, ..	Steam, E II
Rhodes, John C. .	Sound, Light, & Heat, E II
,, ..	Mag. & Electricity, E II
Renwick Thomas ..	Mag. & Electricity, E II
,, ..	Theo. In. Chemistry, E II
*Roberts, Wm. H...	Mag. & Electricity, E I
Redmond, Wm. D.	Mag. & Electricity, E II
Riches. Henry W...	Physiography, A II
Shaw, Emily	Physiography, A II
*Shaw, John	Machine Construction, E II
,, ..	Mathematics, stage 1, I
Shaw, George.....	Sound, Light, & Heat, A II
,, ..	Physiography, A II
Shaw. Peter.... .	Mathematics, stage 1, I
,, ..	Applied Mechanics, A II
,, ..	Sound, Light, & Heat, A II
,, .	Steam, A II
Scoble, Reginald ..	Machine Construction, E II
Sanderson, Daniel..	Mag. & Electricity, E II
Sanderson John....	Machine Construction, E II
Sanderson, John	Building Construction, A II
*†Spencer, Arthur..	Building Construction, A I *Special Prize by the Rev. C. H. Wood, M.A.*
Smith, Margaret A.	Sound, Light, & Heat, E II
,, ..	Mag. & Electricity, E II
,, ..	Physiography, E II
*Smith John	Building Construction, E I
Simpson, Thomas W.	Building Construction, E II
Slater, Chas B.	Mathematics, stage 1, II
,, .	Mag. & Electricity, E II

Name.	Subject.
*Sykes, Albert	Mathematics, stage 1, I
*Simmons, Thomas..	Sound, Light, & Heat, E I
,, ..	Mag. & Electricity, E I
Stuart, William	Sound, Light, & Heat E II
,, ..	Theo In. Chemistry. E II
Sedgwick. Chris....	Mag. & Electricity. E II
Sumner, Edward ..	Theo. In. Chemistry, E II
Sumner, Charles J..	Physiography A II
,, ..	Agriculture, E II
Sinclair, James	Physiography. E II
,, ..	Agriculture, E II
Toulmin, John H. ..	Machine Construction A II
,, ..	Mag. & Electricity, E II
Tullis, James	Building Construction. A II
Thornley, John W..	Mathematics stage 1, II
Thornber, Wm. H.	Mathematics, stage 1, II
*Threlfall, Fredk. H	Sound, Light, & Heat, E I
Vogwill, George H.	Mag. & Electricity, E II
Walker, Roger	P. P. & S. Geometry. E II
,, ..	Building Construction, A II
Whittle, Henry	Mathematics. stage 1, II
†*Wilkinson, David	P. P. & S. Geometry, A II
,, ..	Mathematics, stage 2, I
,, ..	Applied Mechanics A I
,, ..	Sound, Light, & Heat, A II
,, ..	Mag. & Electricity, A II
,, ..	Theo. In. Chemistry, A II
,, ..	Geology, A I
,, ..	Animal Physiology, E I
,, ..	Physiography, A II
,, ..	Agriculture, E I
,, ..	Hygiene, E I

Name.	Subject.
*Wilkinson, Robt. J.	Physiography, E I
Wilkie, James R. ..	Sound, Light. & Heat,'E II
,, ..	Physiography, E II
Wignall, John	Machine Construction. E II
*Woodhouse, Frank	Machine Construction, E I
,, ..	Steam, E II
*Whitehead Wm, A.	Machine Construction, E I
Whiteside, Edward	Building Construction, E II
*Whalley, John T.	Building Construction, E I
Williamson, Roger	Building Construction, E II
*Williamson, F. A.	Mag. & Electricity, E I
,, ..	Botany, E II
Williamson, Joshua	Building Construction, E II
*Williamson, W. B.	Animal Physiology, E II
,, ..	Botany, A II
,, ..	Hygiene, E I
*Woolley, Herbert J.	Mathematics, stage 2, II
,, ..	Sound, Light, & Heat E II
,, ..	Mag. & Electricity, E I
Worden, William ..	Applied Mechanics, E II
Whittingham, Jas ..	Mag. & Electricity, E II
*Woods, Robert...	Mag. & Electricity, E I
Worden, Rd. M. ..	Mag. & Electricity, E I
,, ..	Agriculture, E II
Weall, George A. ..	Theo. In. Chemistry, A II
,, ..	Prac. In. Chemistry, A II
Whiteside, Annie ..	Theor. In. Chemistry, E II
,, ..	Physiography, E II
Worthington, Bnj...	Steam, E II
Yates, James	Mathematics, stage 1 II
,, ..	Mag. & Electricity, E II

SCHOOL OF ART.

GOVERNMENT SECOND GRADE EXAMINATION.

P signifies Pass, and E Excellent.
† Government Prize awarded. * Scholarship and Local Prize awarded.

Names.	Free-hand.	Geo-metry.	Pers-pective.	Model.
*Anderson, Edwin P.	..	..	..	P
†*Bailey, John	E	..	..	E
*Barnes, Joseph Robert	P	..	..	P
Baverstock, William	..	..	P	..
†*Croasdale, William	E	..	..	P
Dewhurst, William E.	..	..	..	P
†*Dodgson, Walter J.	E	..	..	..
Edgar, Eleanor A.	P	.	..	..
*Fairley, John	P	..	..	P
†*Goodier, Hubert	E	..	..	..
†*Gray, Charles	P	E	..	..
Harrison, Frederick	P	..	..	..
*Horrocks, Mary A.	P	..	..	P
†*Jump, Sidney B.	P	..	..	E
Kay, Alfred	P	..	..	..
*Knagg, William H.	P	.	..	P
Knowles, Mary	..	P	..	..
Lancaster, Emily	P	...	..	..
†*Lynex, Edwin G.	..	E	..	P
†*Lynex, Mary	..	..	E	..
†*Macfarlane, Sidney	..	E	..	..
Mc.Guire, John	..	..	..	P
†*Milner, William	..	E	..	..
†*Morgan, Charles	..	..	E	..
Morris, Mary L.	..	P	..	..
Norcross, Edward	P	..	..	..
Nelson, James	P	..	..	P
†*Ogden, Hannah R.	..	E	E	E
Oliver, Edith D.	..	..	..	P
†*Paine, Algernon O.	..	E	P	..
†*Parker, Elizabeth A.	..	E	E	..
Poole, Clara	..	P	..	..
*Pritt, Thomas	P	..	..	P
Roberts, William H.	..	..	..	P
*Rowbotham, George E.	P	..	..	..
Starkie, Walter	P	..	..	..
Taylor, Annie	P	.	..	..
†Wade, Emily	E	..	..	..
*Waumsley, Thomas H.	P	..	..	..
†*Whiteside, Agnes	..	P	E	P
Whiteside, William	P	..	..	..
Winder, Alice	..	P	..	..
Woods, Albert	..	..	..	P
†Woolley, Herbert J.	..	..	E	..

ART CLASS TEACHERS' CERTIFICATES.

Miss SOPHIA BACKHOUSE and Mr. REGINALD H. CROOKE have each obtained the Art Class Teacher's Certificate.

Miss BARBARA H. SMITH passed in Stage 3b, and Mr. JAMES N. PARKER passed in Stage 3b and 5a at the Art Class Teachers' Examination.

Students who have completed their 2nd Grade Certificate during the past year :—Mr. WM. BAVERSTOCK, Miss MARY KNOWLES, Miss MARY L. MORRIS, Mr. JAMES NELSON, and Miss LIZZIE POOLE.

NATIONAL AWARDS.

Miss MARIE POOLE obtained a Book Prize, in National Competition for a Flower Vase, modelled in Terra Cotta.

Mr. REGINALD H. CROOKE, 3rd Grade Prize for Anatomised Figuring.

SPECIAL ART PRIZES (LOCAL).

Name.	Order of Merit	Subject.
Ambler, Lilly	2nd	Shaded Drawing of a Head
Ayres, John T.	1st	Set of Geometrical Problems
Backhouse, Sophia	2nd	Shaded Drawing of Antique Figure
,,	2nd	,, Head
,,	4th	Design for Damask
Bennett, Harrison O.	1st	Modelled Design
Cotton, Charlotte G.	2nd	Study from Life, any medium
Crooke, Reginald H.	1st	Anatomised Figure
,,	2nd	Landscape Foreground
Firth, Louisa	1st	Shaded Drawing of a Head
Fairclough, Robert	2nd	Drawing in Sepia
Fairley, John	1st	Set of Model Drawings
,,	1st	Set of Freehand Drawings
Goodier, Hubert	2nd	Set of Perspective Diagrams
Holmes, Arthur B.	3rd	Drawing in Sepia
Jump, Sidney B.	2nd	Set of Freehand Drawings
Lynex, Mary	1st	Set of Perspective Diagrams
Macfarlane, Sidney	1st	Set of Geometrical Problems
Merigold, A. E.	2nd	Modelled Design
Morris, Mary L.	1st	Still Life Group
Ogden, Hannah R.	2nd	Set of Geometrical Problems
Poole, Clara	2nd	Design for Damask
,,	1st	Design for Flat Decoration
Poole, Lizzie	1st	Design for Damask (Mr. Healey's prize)

Name.	Order of Merit	Subject.
Poole, Lizzie	2nd	Flowers, Fruit, etc.
,, ...	1st	Shaded Drawing from the Cast
,, ...	2nd	Drawing in Sepia
,, ...	2nd	Set of Geometrical Problems
Poole, Florence	1st	Study from Life, any medium
,, ...	1st	Shaded Drawing—Antique Figure
,, ...	1st	Shaded Ornament from Cast
,, ...	1st	Outline from Cast
,, ...	1st	Architectural Details
Poole, Marie	2nd	Modelled Design
Raw, Miss	2nd	Modelled Design
Shaw, John	2nd	Set of Model Drawings
Smith, Barbara Hatton....	2nd	Outline from the Cast
,, ...	3rd	Design for Damask
Thorpe, Theresa H.	1st	Landscape in Water Colour (Mr. W. F. Moore's prize)
,, ...	1st	Flowers, Fruit, etc.
Waterhouse, Samuel S.....	2nd	Shading from the Cast
,, ...	1st	Drawing in Sepia

SKETCHING CLUB PRIZES.

Name.	Order of Merit	Subject.
Backhouse, Sophia.....	2nd	Outline of Plant
Crooke, Reginald H.....	1st	Head from Life
,, ...	2nd	Landscape in Water Colour
Fairclough, Robert	1st	,,
,, ...	1st	Foreground Study in Water Colour
Livesey, Alice.....	1st	Landscape in Oil
Poole, Clara	1st	Design for Damask
Poole, Lizzie	2nd	Study of Flowers in Water Colour
Smith, Rose Ann	1st	Landscape in Water Colour
,, ...	1st	Outline of Plant
Smith, Barbara H.....	1st	Head from Life
Thorpe, Theresa H.	1st	Outline from Plant
,, ...		Study of Flowers, etc.

TECHNICAL.

CITY AND GUILDS OF LONDON INSTITUTE

EXAMINATION.

* These Students received Local Prizes.

Name.	Subject.	Grade and Class,
*Ainsworth, James H.	Weaving and Designing ..	Ordinary 1st
Baldwin, James S.	Carpentry and Joinery	do. 2nd
Barnes, John	Mechanical Engineering ..	do. 2nd
Blacow, Albert	Printing	do. 2nd
*Blogg, Stephen	Tools (Wood-working), £5 and Bronze Medal, and 2nd in United Kingdom	Honours 1st
Bull, John	Carpentry and Joinery	Ordinary 2nd
Cartwright, Thomas E. ..	Printing	do. 2nd
Charnley, Thomas	Weaving and Designing ..	do. 2nd
Coulthurst, Edward	Carpentry and Joinery	do. 2nd
*Grierson, Maxwell	Cotton Manufacture	Honours 2nd
Heywood, William	Weaving and Designing .	Ordinary 2nd
Hodson, George.....	Carpentry and Joinery	do. 2nd
Metcalf, John.....	Carpentry and Joinery	do. 2nd
*Miles, William	Cotton Manufacture	Honours 2nd
Ogden, James	Cotton Manufacture	Ordinary 2nd
*Pilkington, Thomas.....	Mechanical Engineering ..	do. 1st
*Redmond, Albert	Carpentry and Joinery ...	do. 1st
Reynolds, William.....	Printing	do. 2nd
Riley, Charles	Tools (wood-working)	do 2nd
Shaw, George.....	Cotton Manufacture	do. 2nd
*Shaw, Peter	Cotton Manufacture	Honours 2nd
Thornber, John T.....	Weaving and Designing ..	Ordinary 2nd
Towler, Richard E.	Printing	do. 2nd
*Walker, Roger.....	Carpentry and Joinery....	do. 1st
Wallace, James	Cotton Manufacture	do. 2nd
*Waller, William H.....	Cotton Manufacture	Honours 2nd
Whittam, William.....	Cotton Manufacture	Ordinary 2nd
*Wilkinson, Robert J.	Tools (wood-working)	do. 1st
*Woods, Thomas	Weaving and Designing ..	do. 1st

MISCELLANEOUS.

* Scholarships and Local Prizes awarded.

‡ Signifies "Honours."

Name.	Subject.		Name.	Subject.	
	Cambridge Lectures			*Society of Arts.*	
*Ball, T. Stanley ..	Literary Masterpieces		Ashton, Margaret A	English	3rd Class
*Bell. James	do.	do.	Bannister, John	do.	...3rd ,,
**Catterall, Annie M	do.	do.	Bleasdale, William..	do.	..3rd ,,
*Dewhurst, Thos. ..	do	do.	Bownass. Raymond	do.	..3rd ,,
*Dixon, Edith M. ..	do.	do.	Coward, Elizabeth..	do.	..3rd ,,
**Foster, Sarah A...	do.	do.	*Dean, Samuel J. ..	do.	..2nd ,,
**Goodwyn, Mary L.	do.	do.	Denny, Robert	do.	..3rd ,,
*Graham. Agnes ..	do	do.	Hubberstey. Robert	do.	..3rd ,,
**Grime, Annie J...	do.	do.	*Kitchen, Margaret	do.	..2nd ,,
*Hargreaves, Esther	do.	do.	Knowles, Thomas H	do.	..3rd ,,
*Hargreaves, Jane..	do.	do.	Morgan, Peter . ..	do.	..3rd ,,
*Marshall, Elizabeth	do.	do.	*Owen, James G. ..	do.	..2nd ,,
Paley, Ada	do.	do.	Toulmin, Mary	do.	..3rd ,,
	Society of Arts.		Toulmin, William ..	do.	..3rd ,,
*Ainsworth, William	Theory of Music..	2nd Class		*Society of Arts.*	
*Akeroyd, Emily ..	do.	..2nd ,,	*Lomax, Joseph T.	French	..2nd ,,
*Ambler, Fannie .	do	. 2nd ,,	Lynex, Mary	do.	..3rd ,,
*Ascroft, Gertrude G.	do.	..2nd ,,	Poole, Clara	do.	..3rd ,,
*Banks, Edward C	do.	..2nd ,,	*Poole, Florence ...	do.	..1st ,,
Baverstock, Thos J	do.	..3rd ,,	*Poole, Lizzie.....	do	..2nd ,,
*Cornall, Thomas ..	do.	..2nd ,,		*Society of Arts.*	
Ditchfield, Eliz. E.	do.	..3rd ,,	Bamber, John.....	Arithmetic	..3rd ,,
Parker, Alice	do.	..3rd ,,	Bennison. Benjamin	do.	..3rd ,,
Riley, Jane E... ..	do.	..3rd ,,	Coward, Elizabeth.	do.	..3rd ,,
Rowe, Elizabeth....	do.	..3rd ,,	*Davies. Walter....	do.	..1st ,,
Seed. Mary F. L. ..	do.	..3rd ,,	Halliwell, Edward..	do.	..3rd ,,
Stothert, Richard ..	do.	..2nd ,,	Knowles. Thos. Hy	do.	..3rd ,,
Sumner, Edith M...	do.	..3rd ,,	Mayor, Isabella	do.	..2nd ,,
Sumner, Emily	do.	..3rd ,,	Owen. James G.....	do.	..3rd ,,
Swarbrick, John ..	do.	..3rd ,,	Pateson, Dora E. ..	do.	..3rd ,,
*Taylor, Bertha....	do.	..2nd ,,	*Seed, Frances	do.	..2nd ,,
*Tomlinson, Lucy E.	do.	..2nd ,,	*Sumner. Charles J	do.	..2nd ,,
*Yates, Fredk S. ..	do.	..2nd ,,	Turner, Kate L... ..	do	..3rd ,,
	Society of Arts.			*Union of Lancashire and Cheshire Institutes.*	
Bramwell, John Jas.	Shorthand	3rd ,,			
Burrow, Harry	do.	..3rd ,,	‡Bramwell, John J ..	Shorthand ..	Honours
Dean, Samuel J.....	do.	..3rd ,,	‡Hayes, William H	do. ..	Honours
Fletcher. John J. C	do.	..3rd ,,	‡Smalley, Robert E.	do. ..	Honours
Hayes. William H.	do.	. 3rd ,,	‡Yates, Fred S	do. ..	Honours
Rawkins. William S.	do.	..3rd ,,	Kendall, William T.	do. ..	1st Class
Sanderson, Daniel .	do.	..3rd ,,	White, George	do. ..	1st ,,
*Smalley, Robert E.	do.	..2nd ,,	Ainsworth Robt. C.	do. ..	2nd ,,
*White, George....	do.	..2nd ,,	Burrow, Harry	do ..	2nd ,,
*Yates, Fred S.	do.	..2nd ,,	Crerar, James	do. ..	2nd ,,

Name.	Subject.
	Union of Lancashire and Cheshire Institutes.
Dawson, David	do. .. 2nd Class
Forrest, John	do. .. 2nd ,,
Geary, Charles G. ..	do. .. 2nd ,,
Merigold, F. W....	do. .. 2nd ,,
Oddie, Thomas	do. ... 2nd ,,
Singleton John ...	do. ... 2nd ,,
Smith, Wm. H	do. ... 2nd ,,
Whiteside, Thos L	do. ... 2nd ,,
	Union of Lancashire and Cheshire Institutes.
Dean. Samuel J.....	English..... 1st ,,
Bleasdale, William..	do ..2nd ,,
Bownass, Raymond	do. ..2nd ,,
Bolton, Edith C.....	do ..2nd ,,
Bilsborough Eliz ..	do. ..2nd ,,
Owen, James G. ..	do. ..Passed
Coward, Elizabeth..	do. .. ,,
Banister, John	do. .. ,,

Name.	Subject.
	Union of Lancashire and Cheshire Institutes.
Toulmin, William	do. .. Class
Kitchen. Margaret..	do. .. ,,
Crerar, James.....	do. .. ,,
Parkinson, John T.	do. .. ,,
De Rome. William..	do. .. ,,
Lewty, Richard	do. .. ,,
Morgan, Peter	do. .. ,,
Blacklock, John R..	do. .. ,,
Toulmin, Mary ...	do. .. ,,
Carter, John J	do. .. ,,
Rawkins, William S	do. .. ,,
	Union of Lancashire and Cheshire Institutes.
Poole, Clara.....	Commercial French 1st ,,
Lomax, Joseph T. ..	do. do 1st ,,
Poole, Lizzie	do. do. 1st ,,
Lynex, Mary	do. do. 2nd ,,
Haslewood, Jas. R	do. do. 2nd ,,

The following Students have been awarded Special Prizes by the Union of Lancashire and Cheshire Institutes, and open to all Students in these counties.

Smalley, Robert E.. First Prize Phonography; Yates, Fredk. S., Second Prize, Phonography; Poole, Clara, First Prize, French; Poole, Lizzie, Second Prize, French; Dean, Saml. J., First Prize, English; Wilkinson, David, Second Prize, Stage II. Mathematics.

Name.	Subject.
	Harris Institute Local Examination.
*Poole, Florence ..	Latin..... 1st Class
*Riches, Henry W.	do. 1st ,,
Edwards, A. H	do. 2nd ,,
Townend, Annie ..	do. 2nd ,,
Burrows, Joseph T	do. 2nd ,,
Townend, Fredk. J	do. 2nd ,,
Brewer, John C....	do. 2nd ,,
Norris, John T. ...	do. 2nd ,,
Abbott. Robert ...	do. 2nd ,,
Good, Alfred	do. 2nd ,,
Toulmin George ..	do. 2nd ,,
Hopkins, J	do. 2nd ,,
	Harris Institute Local Examination.
*Poole, Clara	French, Advanced 1st ,,
*Smith, Rose Ann..	do. do. 1st ,,

Name.	Subject.
	Harris Institute Local Examination.
*Birchall, Alice	do. do. 1st Class
*Lynex, Mary	do. do. 1st ,,
*Bolton, Mary E. ..	do do. 1st ,,
Poole, Lizzie	do. do. 2nd ,,
Pomfret, Edwin ..	do. do. 2nd ,,
	Harris Institute Local Examination.
Hall, John	French, Elementary 1st ,,
*Fletcher, John J. C.	do. do. 1st ,,
*Robinson, Ellen C.	do. do. 1st ,,
*Weall, George A..	do. do. 1st ,,
*Hully, Fred	do. do. 1st ,,
*Cotman, W. R.....	do. do. 1st ,,
*Dewhurst, J. A. ..	do. do. 1st ,,
Crerar, James.....	do. do. 2nd ,,
Jump, John W.....	do. do. 2nd ,,

Name.	Subject.
	Harris Institute Local Examination.
Bell, Robert	do. do. 2nd Class
Clegg, Edith	do. do. 2nd ,,
Naphten, Mary C ..	do. do. 2nd ,,
Rhodes, John C.....	do. do. 2nd ,,
Murdoch, Lawr. S...	do. do. 2nd ,,
Parkinson, Hannah	do. do. 2nd ,,
Bridge, Margaret ..	do. do. 2nd ,,
	Harris Institute Local Examination.
	Shorthand, Elementary
*Black, John	do. 1st ,,
*Orrell, Fredk.	do. 1st ,,
*Parker, George....	do. 1st ,,
*Ladyman. A. W...	do. 1st ,,
*Price, L. C..	do. 1st ,,
Blackburn, J	do. 1st ,,
Whittaker, J. W. ..	do. 1st ,,
Jackson, Robert....	do. 1st ,,
Cartwright, Geo ..	do. 1st ,,
Bradshaw, W. A. ..	do. 1st ,,
Breakell, W.	do. 1st ,,
Gardner, John	do. 2nd ,,
Chantler, John ...	do. 2nd ,,
Simpson, James Hy.	do. 2nd ,,
Beckett, Thomas ..	do. 2nd ,,
Heald, James	do. 2nd ,,
Robinson, James ..	do. 2nd ,,
Hibbert, William A	do. 2nd ,,
Greenwood, Fred ..	do. 3rd ,,
Napthen, Samuel ..	do. 3rd ,,
Burton, Richard....	do. 3rd ,,
Pritt, Thomas.....	do. 3rd ,,
Penny, John	do. 3rd ,,
Southworth, Walter	do. 3rd ,,
Wood, Charles R. ..	do. 3rd ,,
Mansley, J. L	do. 3rd ,,
De Rome, Percy....	do. 3rd ,,

Name.	Subject.
	Harris Institute Local Examination.
*Davies, Walter....	Arithmetic .. ..1st Class
*Seed, Frances	do. ..1st ,,
*Owen, James G. .	do. ..1st ,,
*Mayor, Isabella ..	do. ..1st ,,
*Bennison, Benjamin	do. ..1st ,,
*Coates, John.	do. 1st ,,
Dodgson, Albert ..	do. ..2nd ,,
Coward, Elizabeth..	do. ..2nd ,,
Halliwell, Edward..	do. ..2nd ,,
Worthington. Wm...	do. ..3rd ,,
Pateson, Dora Ellen	do. ..3rd ,,
Beesley, John T. ..	do. ..3rd ,,
Ormrod, Elizabeth..	do. ..3rd ,,
Livesey, Rd. Henry	do. ..3rd ,,
Airey, Charles	do. ..3rd ,,
De Rome, William.	do. ..3rd ,,
Duxbury, James ...	do. ..3rd ,,
	Tonic Sol Fa Association Certificates.
*Dewhurst, John R.	Intermediate .. P
*Burgess, Margt. A	do. .. P
*Winder, Alice	do. .. P
*Dodgson, Edith ..	do. .. P
*Staines, Laura E...	do. .. P
*Birchall, Alice	do. .. P
*Bostock, Clara	do. .. P
*Bownass, Juliet I...	do. .. P
*Blezard, Eliz. A. ..	do. .. P
*Kirkham, Mary E.	Elementary .... P
*Burgess, Mary....	do. .. P
*Barnes, Agnes	do. .. P
*Purves, Eliz A. ..	do. .. P
*Bancroft, Thomas..	do. .. P
*Bailey, Sarah M...	do. .. P
*Brown, Mary E. ..	do. .. P

INSTITUTE SCHOLARSHIPS AWARDED TO DAY SCHOLARS AT ELEMENTARY SCHOOLS.

SCIENCE.

Winder, George
Walker, Wm H.
Dewhurst, Wm. E
Johnson, Fred
Horrocks, Chas. W.
Hartley, Elizabeth A.
Manley, David
Dewhurst, Emily J.
Woodhouse, Eliz. J.
Davies, Joseph
Barton, John
Sergeant, Margaret
Heaton John
Woods, Esther H.
Seed, Thomas
Fletcher, Rd Jas.
Kershaw, Charles
Hesketh, Annie
Standing, Margaret
Whitewell, John W.

ART.

Dunderdale, John
Horrocks, Chas. W.
Sellers, Harry
Ley. Percy
Mc.Gavin, Montgy.
Atkinson, Emily
Crozier, Janet
Mayor, Elizabeth
Walker, Wm. Hy.
Hodge, Edward
Little, Germain
Seed, Thomas
Fletcher, Rd Jas
Eaves, Jas. R.
Pye, William H.

HARRIS INSTITUTE.

£45 SCHOLARSHIPS.

SCIENCE.

A. J. Moulton
D. Wilkinson

ART.

Barbara H. Smith

Table showing the number of Students who sat for Examination at the Harris Institute, May, 1885.

SUBJECT.	Harris Institute.	Sculptors' Studio.	Cross Street.	St. Paul's	Moor Lane.	Externals.	Totals.
ART							
Model Drawing	38	2	4	5	..	10	59
Freehand do.	69	11	4	2	..	19	105
Perspective (Theory)	..	..	1	..	..	..	1
Geometry	23	7	4	1	..	4	39
Perspective	10	2	1	..	..	9	22
Perspective (Practice)	1	..	..	..	..	..	1
Drawing in Stage 5a	5	..	..	..	...	1	6
Do. do. 5b	5	..	..	..	..	1	6
Do. do. 3b	6	..	..	..	..	1	7
Elementary Architecture	..	..	1	..	..	..	1
Sciography	..	..	1	..	..	..	1
Elementary Principles of Ornament	..	..	1	.	..	..	1
Painting from Still Life	..	..	1	.	..	..	1
SCIENCE							
Animal Physiology	8	..	..	..	..	8	16
Machine Construction	55	..	..	20	..	2	77
Building Construction	40	..	..	4	..	1	45
Mathematics, stages 1, 2, 3.	49	..	..	12	..	9	70
Sound. Light, and Heat	36	..	..	2	..	8	46
Magnetism and Electricity	76	..	..	9	9	10	104
Physiography	65	..	..	..	6	11	82
Principles of Agriculture	15	..	..	..	..	13	28
Practical Plane and Solid Geometry	38	..	..	11	..	5	54
Navigation	5	..	..	..	..	1	6
Geology	9	..	..	..	4	3	16
Mathematics, stages 4, 5	..	..	..	..	..	1	1
Hygiene	8	..	..	..	..	6	14
Theoretical Mechanics	..	..	..	..	..	4	4
Applied Mechanics	24	..	..	6	..	3	33
Inorganic Chemistry	24	..	..	23	6	2	55
Practical Inorganic Chemistry (E. Stage)	5	..	..	..	..	2	7
Practical Organic Chemistry (E. Stage)	..	..	..	..	..	1	1
Metallurgy	..	..	..	..	..	4	4
Botany	15	..	..	2	..	8	25
Mineralogy	..	..	..	..	..	2	2
Nautical Astronomy	..	..	..	..	..	1	1
Organic Chemistry	..	..	..	.	..	3	3
Steam	27	..	..	4	..	2	33
Practical Inorganic Chemistry (advanced stage)	5	..	..	..	..	1	6
Totals	661	22	18	101	25	156	983

HARRIS INSTITUTE, PRESTON. ABSTRACT OF CLASS REGISTERS.

NAME OF CLASS.	TEACHER.	OCTOBER, 1884.		NOVEMBER, 1884.		DECEMBER, 1884.		JANUARY, 1885.		FEBRUARY, 1885.		MARCH, 1885.		APRIL, 1885.		MAY, 1885.		Number of Students who sat at Examination	Number of Students who obtained Certificates.
		No. on Register.	Average Attendance.	No. on Register.	Average Attendance.	No. on Register.	Average Attendance.	No. on Register.	Average Attendance.	No. on Register.	Average Attendance.	No. on Register.	Average Attendance.	No. on Register	Average Attendance.	No. on. Register.	Average Attendance.		
SCIENCE.																			
Practical Plane and Solid Geometry	Mr. F. J. Pye.....	92	63	93	74	92	60·2	92	56	92	59 5	92	60·3	92	62	92	59	38	17
Building Construction	Do.	70	56	71	50·7	72	46·2	73	46	73	49	73	47	73	46	73	48	40	38
Machine Construction	Mr. J. B. Price	90	5/2	92	47·6	92	45	92	39	92	39	92	34·1	92	34	92	35	55	31
Mathematics, Stage I (Elementary) ...	Mr. F. B. Osborne ..	80	60	84	58	84	57	84	45	84	49	84	47	84	48	84	47	49	33
Do. Do. (Advanced)	Mr. G. Rogerson, M.A.	22	18·5	22	14	22	12	22	13 3	22	13·3	22	10	22	10·3	22	10		
Do. Stage II.....																			
Applied Mechanics	Mr. R. Pendlebury ..	34	26·5	35	27	35	24·5	37	20 5	35	24	35	26·3	35	26·3	35	24	24	17
Sound, Light and Heat (Elementary)....	Mr. J. Gardner	36	30	36	29·5	34	21	34	24 5	34	26·5	34	27·5	34	26	34	25	36	24
Do. (Advanced) ...	Do.	19	14 5	19	14	17	13·3	17	12·6	17	14·7	17	14·3	17	15	17	15		
Magnetism and Electricity (Elementary)	Do.	78	62	78	63	77	60·6	77	60	77	63 3	77	61	77	60	77	61·3	76	56
Do. (Advanced)	Do.	26	23	26	20·7	26	21	26	19 4	26	19	26	19·5	26	20	26	19		
Inorganic Chemistry (Elementary).....	Mr. A.F. Atkinson....	43	37	43	22	43	21	44	18	44	19·7	44	20·3	44	21	44	20	24	18
,, (Advanced)	Do.	12	10 3	12	7	12	6	12	5	12	6	12	7	12	8	12	7·5		
, (Practical)	Do.	18	16	18	13·3	17	12	17	10	17	9	17	8 5	17	9	17	8·5	10	8
Geology	Mr. F. C. King	12	9	12	8·7	12	9	12	8	12	9·2	12	8 3	12	8	12	7	9	8
Botany (Elementary)	Mr. T. H. Greenall....	28	23	27	18·2	24	15·6	24	14	24	15·3	24	14	24	13	24	13 3	15	14
Do. (Advanced).....	Do.	9	7	8	6·5	8	6·3	9	5·8	9	6·5	9	5 5	9	5	9	5·2		
Steam and Steam Engine	Mr. R. Pendlebury....	40	32	43	34·7	45	31·5	48	25 5	48	29	48	32	48	32	48	32·3	27	17
Physiography (Elementary)	Mr. J. Gardner	52	43 5	52	41	58	48·3	61	53 3	61	56	61	54	61	55	61	54·5	65	44
Do. (Advanced).....	Do.	23	19	23	18	21	14	21	13	21	15	21	15·5	21	16	21	15		
Agriculture	Mr. G. Sutcliffe.....	27	23	26	19·5	26	17	26	18 3	26	19·2	26	19·3	26	19·3	26	19	15	11
Navigation	Mr. G. Lynch.....	10	7·3	10	6·3	10	5·5	10	5 5	10	6 2	10	6	10	6	10	5·5	5	1
Animal Physiology.....	Dr. H. O. Pilkington..	23	20	23	18	22	12	22	13	22	14	22	13	22	14	22	13·3	8	7
Hygiene	Do.	16	13	16	12	15	9	15	10	15	9·3	15	9	16	8	16	8·5	8	7
ART.																			
Day Class	Mr. W. B. Barton....	25	19	26	16·6	30	17·5	30	19·5	30	17·6	30	16	30	14	30	15		
Evening Class	Do.	182	91·8	187	86	202	80·5	202	75	204	73·6	204	78·6	204	72·5	204	74	157	74
High School.....	Do.	65	60	66	60	64	50·6	64	60	64	55	64	55	64	56	64	57		
TECHNICAL.																			
Cotton Spinning	Mr. G. Sutcliffe.....	53	40	53	40·1	53	39	53	40	53	41·6	53	42 5	53	41	53	42	35	9
Cotton Weaving	Do.	56	46	67	49·2	67	45·5	67	47	63	43	63	43·3	63	43·5	63	44	23	5
Mechanical Engineering	Mr. R. Pendlebury....	11	8·5	12	8.3	12	8·5	13	7·2	13	7 5	13	8	13	7·5	13	8	7	2
Tools	Mr. G. Sutcliffe	6	4	6	5	6	4	6	4·2	6	5·5	6	4·3	6	5	6	4·3	4	3
Printing	Mr. R. Parkinson	10	7·5	10	6·2	10	5·4	10	6	10	5 5	10	6·5	10	6	10	6·5	7	4
Carpentry and Joinery	Mr. F. J. Pye.....	19	15·3	19	13	19	12·5	19	13	19	14·5	19	13	19	14	19	13·3	11	7
MISCELLANEOUS.																			
Music (Class Singing and Harmony)	Mr. J. Tomlinson	26	19	28	21·3	29	20·3	29	19	29	19	29	21·3	..	..	..	..	†23	18
Singing (Tonic Sol-Fa)	Mr. W. H. Cowell	98	87	98	88·3	98	83·5	104	86	104	91·3	104	89	..	..	..	..	28	17
Latin	Mr. W. M. Maddox M.A.	33	23	33	20	34	23	34	25	35	25	35	24	..	..	..	..	§13	11
French (Elementary)	Do.	35	25	35	23	35	24	35	24 3	36	26·3	36	25	..	..	..	..	‡5	‡5
Do. (Advanced)	Do.	29	23	29	22	29	22	29	23	29	21	29	23	..	..	..	..	‡5	‡5
Cambridge Lectures (Shakespeare)	Mr. R. G. Moulton, M.A.	120	106	120	108	120	109	..	..	..	..	..	..	..	..	..	..	§26	23
Shorthand (Elementary).....	Mr. H. Cartmell.....	101	82	101	83·7	101	75·3	101	68	102	63·7	102	60·5	102	70	102	60	13	13
Do. (Intermediate)	Do.	52	46	52	35	52	37·5	53	35	54	35	54	36·3	..	..	..	..	§45	27
Do. (Advanced)	Do.																	‡39	17
English (Elementary).....	Do.	67	53 7	69	50	69	48·3	71	45	72	42	72	43·5	..	..	..	..	†17	10
Do. (Advanced)	Do.	17	15	17	14	17	14·3	17	12	17	12	17	13	..	..	..	..	‡36	19
																		†35	18
Arithmetic	Mr. F B. Osborne....	116	97	117	83	117	83	120	76	120	82	120	83	..	..	.	..	§32	17
																		†12	11
	Total....	1979	1529	2012	1542	2026	1342	1928	1194	1935	1214	1935	1228	1438	979	1438	952	1073	662

† Society of Arts. ‡ Lancashire and Cheshire. § Local.

THOS. R. JOLLY, SECRETARY.

In addition to the foregoing table, the following shows the number of Students of the Harris Institute, examined at the Institute in connection with other Classes :—

City & Guilds of London Institute, viz.—		
Cotton Spinning	35	
Weaving & Designing	23	
Tools	4	
Mechanical Engineering	7	
Printing	7	
Carpentry & Joinery	11	
		87
Cambridge Extension Lectures—		
Literary Masterpieces		13
Society of Arts—		
Shorthand	17	
English	35	
French	5	
Music	23	
Arithmetic	12	
		92
Lancashire & Cheshire Union of Institutes.		
Shorthand	39	
English	36	
French	5	
		80
Examined Locally—		
Arithmetic	32	
French	26	
Latin	13	
Tonic Sol Fa	28	
Shorthand	45	
		144
		412
Students sitting for Science and Art as above		661
Total of Harris Institute students Examined		1073

HARRIS INSTITUTE, PRESTON.

TRUSTEES' ACCOUNT, Year ending September 30th, 1885.

RECEIPTS.

	£	s.	d.	£	s.	d.
To Balance in hand, Sep. 30, 1884..				37332	4	3
,, Interest from Corporation.....	275	8	2			
,, ,, Savings Bank....	30	10	6			
,, ,, County.....	255	8	9			
,, ,, Corporation.....	91	3	6			
,, ,, ,, ...	273	0	11			
,, ,, County.....	254	18	0			
,, ,, Corporation.....	90	12	5			
				1271	2	3
,, Grant from Science and Art Department towards New Laboratory				192	0	0
				£38795	6	6
To Balance brought down	36339	8	3			
	£36339	8	3			

	£	s.	d.	£	s.	d.
By Amount transferred to Institute Account, being Interest from Capital				1271	2	3
1884						
Oct. 29 By paid W. Hothersall, Contract....	400	0	0			
Dec. 10 ,, J. Heywood. Fittings	432	6	7			
,, 24 ,, W. Hothersall, Balance cont	183	19	7			
1885						
Jan. 6 ,, J. Hibbert, Commission	148	9	10			
,, 13 ,, T. Cunningham, Services	20	0	0			
				1184	16	0
				2455	18	3
By Balance carried down				36339	8	3
				£38795	6	6
By Invested with Corporation....	20000	0	0			
,, County	15000	0	0			
,, Savings Bank..	1339	8	3			
				36339	8	3

Examined and found correct,
W. F. MOORE,
9th Decr., 1885. Chartered Accountant.

Jan. 4th, 1886, Exhibited and Approved,
C. R. JACSON, Chairman.
THOS. R. JOLLY, Secretary.

HARRIS INSTITUTE.

Scholarship and Prize Fund Account, Year ending September 30th, 1885.

RECEIPTS.	£	s.	d.
To Balance in hand September 30th, 1884	68	11	7
,, Amount transferred from General Account, as per Balance Sheet for year ending 30th September, 1884.....	175	13	9
,, Bank Interest	1	15	9
	£246	1	1

EXPENDITURE.	£	s.	d.
By Amount paid for Free Scholarships	53	0	0
,, Paid for Prizes awarded to Students	34	3	4
,, Bank Commission	0	1	0
	87	4	4
,, Balance in hand	158	16	9
	£246	1	1

To Balance brought down .. £158 16 9

By Balance in Preston Bank.....£158 16 9

Examined and found correct,
W. F. MOORE, Chartered Accountant.
9th December, 1885.

WM. ASCROFT,
President.

THOS. R. JOLLY,
Secretary.

Harris Institute, Preston.—Cash Statement, year ending 30th September, 1885.

RECEIPTS.	£	s.	d.	£	s.	d.
To Interest received from Capital	1271	2	3			
Less:—Transferred to Scholarship Fund	158	17	9			
				1112	4	6
FEES AND GRANTS FOR 1883-84, VIZ.—						
Science Fees	102	0	0			
,, Grants	368	2	0			
	470	2	0			
Art Fees	100	3	0			
,, Grants	134	6	0			
	234	9	0			
Technical Fees	20	3	0			
,, Grants	55	0	0			
	75	3	0			
				779	14	0
Miscellaneous Fees				137	1	0
Rent, High School				10	0	0
Subscriptions				22	1	0
Balance carried down				693	10	2
				£2754	10	8
To Amount due to Preston Banking Company	694	13	3			
Less:— in hands of Secretary	1	3	1			
	£693	10	2			

EXPENDITURE.	£	s	d.	£	s.	d.
By Balance overdrawn, Sep 30th, 1884.				589	16	3
SALARIES, VIZ :—	£	s.	d.			
Science	627	12	0			
Art	373	12	0			
Technical	140	0	0			
Miscellaneous	146	2	6			
	1287	6	6			
,, Secretary and Custodian	126	15	0			
,, Alterations and Improvements	175	4	8			
,, Apparatus, Appliances & Books	100	1	1			
,, Expenses Cambridge Lectures	48	18	0			
,, Printing and Stationery	89	11	9			
,, Advertising	19	0	7			
,, Lighting and Firing	119	18	6			
,, Washing and Cleaning	44	1	7			
,, Rates, Taxes and Insurance	27	15	6			
,, Expenses *re* Distribution of Prizes and Opening Ceremony	26	17	6			
,, Examinations & Entrance Fees for Students	41	3	10			
,, Miscellaneous Expenses	29	0	0			
,, Bank Interest and Commission	28	19	11			
				2164	14	5
				£2754	10	8
By Balance brought down	693	10	2			
	£693	10	2			

Examined and found correct,
W. F. MOORE, Chartered Accountant.
9th December, 1885.

WM. ASCROFT, President.
THOS. R. JOLLY, Secretary.

To the President and Council of the Harris Institute.

GENTLEMEN,—I have examined the Accounts of the Institute for the year ending 30th September, 1885, and have pleasure in certifying to their

LIST OF SUBSCRIBERS.

	£	s.	d.
Ascroft, Mr. W....	1	1	0
Ascroft, Mr. A. E.	1	1	0
Atherton, Mr. John...	1	1	0
Atherton, Mr. W.	1	1	0
Benson, Mr. R.	1	1	0
Birchall, Mr. A. M.	1	1	0
Booth, Mr. Y. W.	1	1	0
Brown & Deighton, Messrs.	1	1	0
Dickson, Mr. E.	1	1	0
Easterby, Mr. R. F....	1	1	0
Healey, Mr. J.	1	1	0
Hermon, Mr. S. A....	1	1	0
Hibbert, Mr. Jas.	1	1	0
Jacson, Mr. C. R.	1	1	0
Maynard, Mr. M. S.	1	1	0
Moore, Mr. F. A.	1	1	0
Oakey, Mr. H....	1	1	0
Oliver, Mr. J. S.	1	1	0
Robinson, Mr. R. C.	1	1	0
Sharples, Mr. C. H.	1	1	0
Steele, Rev. Geo.	1	1	0
Thorp, F.	1	1	0
Willan, Mr. W.	1	1	0
Wood, Rev. C. H.	1	1	0

HARRIS INSTITUTE

PRESTON.

FOURTH

ANNUAL REPORT

AND

STATEMENT OF ACCOUNTS

FOR THE YEAR 1886,

AND

ADDRESS

GIVEN BY

SIR JOHN LUBBOCK, Bart., M.P.,

F.R.S., D.C.L., LL.D., AT THE

DISTRIBUTION OF PRIZES

ON

17TH DECEMBER, 1886.

PRESTON:
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1887.

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Mr. J. S. Oliver.

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The Rev. Geo. Steele, M.A.

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Mr. J. S. Oliver.
Mr. F. A. Moore.
Mr. R. C. Robinson.

Hon. Treasurer:

Mr. J. S. Oliver.

Secretary:

Mr. Thomas R. Jolly.

Auditor:

Mr. W. F. Moore.

Bankers:

Preston Banking Company, Limited.

Fourth Annual Report

OF THE

HARRIS INSTITUTE,

PRESTON.

THE Council have again to report continued satisfactory progress in the working of the Institute. The number of entries on the class register, excluding the Cambridge Lectures, is this year 2,069. The number of individual students is 1,384. The examination of the students has again been conducted on lines similar to those of previous years, 700 certificates having been gained. A new class has been formed in brickwork and masonry, conducted by Mr. F. J. Pye, and advanced classes have been formed in harmony under Mr. Tomlinson, and in singing under Mr. Cowell. Classes have also been formed under the auspices of the St. John Ambulance Association, conducted by Dr. Pilkington. They have been well attended, especially by females. The Council have to tender their thanks to Mr. Anderton, of Grimshaw-street, and to Mr. M. S. Maynard, of Bold-street, for allowing students attending the Cotton Class to inspect their works; to Messrs. Toulmin and Sons, and the Roach Paper Mill Company, and Star Paper Mill Company, for allowing students who receive instruction in printing to inspect their machinery; to Messrs. R. Parkinson and Co., Friargate, for use of room for the examination in printing; and to Mr. R. Parkinson, jun., for a work on "Paper"; to the Society of Arts; and to Mr. W. F. Moore for books for Reference Library; and to Mr. R. H. A. Willis, Mr. W. F. Moore, Mr. J. Healey, and Mr. R. Strickland for art prizes. The Council also desire to express their thanks to the gentlemen who lent the works of art which were exhibited at the opening of the classes in September last, and to the gentlemen who on the same occasion contributed towards the success of the scientific exhibition; and to the ladies and gentlemen who kindly gave their services at the Concert. In accordance with a suggestion made at the last Annual Meeting, the railway com-

panies were communicated with, with a view of inducing them to allow all students attending the classes at the Harris Institute to travel at reduced fares, but after the question had been considered by the various companies it was decided that no further concession could be made. A catalogue has now been completed of the library, and the Council would express their obligations to the Rev. J. Shortt, M.A., who has rendered most valuable assistance in this work. To provide for the requirements arising from the increase in the number of classes and students, the Council have taken the old Conservative Club in Lancaster-road for a period of five years, and have arranged for several of the classes to meet there. The distribution of prizes to the successful students was made by Lady Lubbock, in the Public Hall, on Friday, the 17th December, on which occasion Sir John Lubbock, Bart., M.P., delivered a most valuable address. The Council desire to express their warmest thanks to Sir John and Lady Lubbock for their kind and gracious assistance in the work of the Institute.

W. ASCROFT,

PRESIDENT.

Dec. 29th, 1886.

HARRIS INSTITUTE.

Proceedings of the Annual Meeting

HELD 30TH DECEMBER, 1886.

THE Annual Meeting of the subscribers and donors to the Harris Institute was held on Thursday, the 30th December, 1886, in the Council Room of the Institute. The chair was occupied by Mr. W. Ascroft, J.P. (President). There were also present the Rev. G. Steele, M.A. (in the vice-chair), the Rev. C. H. Wood, B.C.L., Lieut.-Col. Oliver, Mr. Alderman Maynard, J.P., Mr. J. Brown, J.P., Councillors Atherton and Booth, and Mr. T. R. Jolly, Secretary.

The first business was the election of a member of the Council, in the place of Mr. Sharples, the retiring member. The only person nominated was Mr. R. C. Robinson, machinist, and he was accordingly elected, his period of office being three years.

The Report of the Council and Statement of Accounts for the year were submitted by Mr. T. R. Jolly, Secretary.

Several of the members expressed the opinion that the Report was a very satisfactory one.

Mr. W. ASCROFT (the President) said they were increasing their expenses by taking new premises in Lancaster-road, but they might possibly recover the ground by cutting down the expenses in other directions. It was absolutely necessary to take the Lancaster-road premises, because their classes at the Central Institution had increased so much that they really could not go on without additional accommodation elsewhere. The rooms they had taken appeared to be very convenient; the classes had been a success; and he thought the result had justified the trouble and expense they had gone to in engaging those rooms. The Harris Institute had had a very successful year, and the current year promised also to be successful. Everything appeared to be going on satisfactorily. He thought now that all the branches of the building trade were represented in their classes, or nearly so. With regard to their subscribers, he had to confess that they had not nearly so many as

they had fairly a right to expect from a town like Preston, and the Council would be exceedingly glad if more well-wishers of the Institution could see their way to becoming subscribers. Their thanks were due to those who had enabled the students to visit their works to witness various processes of manufacture. Besides the gentlemen named in the Report, they were much indebted to Mr. Atherton for allowing the students to go to his rooms for the purpose of studying weaving in a manner and under circumstances which must be of very great advantage to them in their technical training. He thought if the masters of public works would permit the students to visit their works occasionally, the Institution would be very much assisted. He was sorry the railway companies had not seen their way to allowing all the students—irrespective of age—to travel at reduced fares. At present all students under 16 years of age were allowed to travel at half-price, but the companies could not see their way to extending the privilege to adults. He hoped at some later time they might be able to do so. He thought they were under great obligations to the Rev. J. Shortt for the assistance he had given to the Institute from time to time. He had been the principal means of getting the catalogue of their library complete. Mr. Birchall had also assisted in the work, but certainly the great bulk of the labour had fallen upon Mr. Shortt, who had done the work in a very efficient manner. He thought it should be known to the students that the library could be made use of under certain conditions. Books were not allowed to be circulated, but might be seen in the building. The reading-room was a very pleasant and commodious room.

The Rev. G. Steele: I should like to say a word or two. I desire to say this—that I, as Inspector of the Schools in this district, feel under very great obligation to the Harris Institute for the work it is doing for pupil teachers. It has often been my lot to complain of the work of pupil teachers, and I do not say that everything is satisfactory yet. But I do say this—that the pupil teachers now under instruction at this Institute have a better opportunity of supplementing whatever deficiencies there may be in the instruction of their own schools than ever they had before. Mr. Ascroft mentioned on the evening of the distribution of prizes the successes gained by certain pupil teachers who had been students at the Harris Institute. I need not mention them again, but I am glad that there are a good many pupil teachers belonging to this town who are students, and I cannot help expressing the hope that after the holidays we shall see a good many more pupil teachers attending the classes, for there they have the means of obtaining instruction in whatever they may feel deficient. The pupil teachers form an important part of the

population of the town, because they will in the course of a few years be themselves the principal teachers and instructors of a large portion of our population. (Hear, hear.)

Councillor Y. W. BOOTH asked if the Victoria University (Owen's College) had been of advantage to their students? Had any been sent there?

The PRESIDENT stated that none had been sent yet, but the college might be of advantage to their students, because in connection with the Harris Institute there were two scholarships of £45 each, and they were tenable at places of higher education, within which description Owen's College came. They had always looked forward to the probability of some of their students going to Owen's College, because there they received, on a much more advanced scale, the instruction that was given at the Harris Institute.

Mr. JOLLY (the Secretary) explained that the fees at Owen's College were so high that it was almost impracticable for their students to go there.

Councillor BOOTH: Are they higher at London?

The SECRETARY: Those holding our Scholarships do not pay any fees at all there. A remission has been made.

The PRESIDENT said that still if the scholars preferred to go to Owen's College they would go with £45 more money, and it might be that if they could not afford to go without £45, they would be able to go with it. The teaching at Owen's College was as good as at any place in the world. It was a very valuable institution indeed.

In answer to Mr. Booth, the PRESIDENT explained that Owen's College was a branch of the University.

The Report having been adopted, the proceedings were brought to a close with a vote of thanks to the President, which was proposed by the Rev. C. H. WOOD.

Councillor ATHERTON seconded, and Councillor BROWN supported the motion, which was carried.

The CHAIRMAN, in responding, hoped that they would work as satisfactorily in the future as in the past.

DISTRIBUTION OF PRIZES TO THE STUDENTS

BY

LADY LUBBOCK,

17th DECEMBER, 1886.

THE prizes and certificates gained by students attending the various classes at the Harris Institute, Preston, were distributed in the Public Hall, by Lady Lubbock, in the presence of a very large and distinguished assemblage. Sir John and Lady Lubbock arrived in Preston on the morning of the distribution, and were received by Mr. W. Ascroft, J.P., President of the Harris Institute. Subsequently Sir John made an inspection of the Institute, accompanied by Mr. C. R. Jacson, Chairman of the Harris Trustees; the President; Vice-President, and Secretary, and expressed himself highly gratified with the admirable arrangements of the establishment. The Public Hall was filled some time before the hour appointed for the commencement of the proceedings. A considerable portion of the platform was occupied by the Harris Choir, comprising nearly 200 voices, which, under the direction of Mr. W. H. Cowell, gave a choice musical entertainment during the evening. Mr. W. Ascroft, J.P., presided, and he was supported by Sir John Lubbock, Bart., M.P., and Lady Lubbock, Mrs. Ascroft, Mr. W. E. M. Tomlinson, M.P.; the Mayor; Lieut. Sankey, R.E.; members of the Institute Council, including Mr. D. Irvin, J.P., Rev. C. H. Wood, B.C.L., Rev. George Steele, M.A., Alderman Benson, J.P., Dr. Hammond, J.P., Mr. W. Atherton, Mr. A. E. Ascroft, Councillor Y. W. Booth, Messrs. E. Dickson, R. F. Easterby, A. M. Birchall, Councillor Brown, J.P., Alderman Maynard, J.P., Messrs. R. C. Robinson, J. S. Oliver, C. H. Sharples, and F. A. Moore; Mr. T. R. Jolly (Secretary), and the Masters at the Institute. Amongst others present were the Revs. J. H. Rawdon (vicar of Preston), G. Alker, C. O. L. Riley, R. Firth, A. B. Beaven, T. R. Waltenberg, J. Pimblett, Very Rev. Dean Pyke, Rev. W. H. Harris, Colonel Cotton, Colonel Oliver, Major Little, Captains Walker, Calvert, and King; Aldermen Satterthwaite, J.P., and

Ambler; Messrs. J. J. Myres, R. J. Flowerdew, J.P., W. H. Bowdler, J.P., J. Stanning, J.P., S. Simpson, J.P., F. Cotman, J. Clarke, B. Sykes, J. Haverfield, J. Winder, A. Tullis, J. Dewhurst, J. Foster, W. T. Bourne, H. Hamer, W. F. Moore, W. K. L. Armytage, M. B. Copland, D. Bostock, J. H. Park, J. Harrison, J. Sumner, H. W. Johnston, R. Mc.Nab, H. Green, H. G. Bell, J. Greenhalgh, J. Higson, J. J. Smith, W. H. Smith; Drs. Wood, Trimble, Garner, Pilkington; and Hully, and many other of the leading residents in the town and neighbourhood.

Apologies for inability to attend were received from Mr. Hanbury, M.P., Mr. C. R. Jacson, J.P., D.L., Fr. Papall, and several others. Prior to the opening, Mr. J. Tomlinson, the Corporation Organist, played several choice pieces on the Dewhurst Organ, and the Harris Choir sang, "O great is the depth," from Mendelssohn's "St. Paul." After the principal visitors had taken their places, the President, on behalf of the Institute Botany Class, presented to Lady Lubbock a very choice bouquet.

The CHAIRMAN said: Ladies and Gentlemen,—On this the fourth yearly prize distribution we may congratulate ourselves on the continued progress of the Institute, and on the presence of Sir John and Lady Lubbock, to whom we are greatly indebted for their kindness in accepting our invitation. Sir John Lubbock has at all times shown the greatest interest in the cause of education, and it is a high compliment to us and to our students that a gentleman so distinguished in public life and in the walks of commerce, of science, and of literature, should, by taking part in our proceedings, show his approval of the work in which we are engaged, and his sense of its importance with regard to the lives and prospects of those who seek the instruction which our Institute affords. I have said that we are able to congratulate ourselves upon the continued progress of the Institute. To be able to say this in the middle of its fifth session is a conclusive proof that its importance is well recognised, and that it has firmly rooted itself as one of the permanent institutions of the town. Last year the number of certificates gained and prizes distributed was—certificates, 662; prizes, 176 individuals. This year the number is—certificates, 700; prizes, 187 individuals. This is in addition to the prizes gained by the members of the Art Sketching Club. The number of entries on the registers of our different classes was—last year 1,963, this year 2,069; in each case excluding the Cambridge lectures. This year we have 1,384 individual students, a number larger than at any time since the formation

of the Institute. To accommodate all our students we have been compelled to open additional class rooms in Lancaster-road. I am glad to observe a tendency on the part of the students to take up concurrently a fewer number of subjects. It is better to study one or two subjects at a time with thoroughness than to take up more subjects at once with a less satisfactory result. We have this year extended the advantages of the scholarships open to students of the elementary schools toa larger number than before, and have awarded 74 of such scholarships. These scholarships mean free tuition in our classes in art, science, and technology. It is gratifying to find that they are so freely competed for, and that so many of the young people leaving school and entering on the work of life seek to continue their education in a manner calculated to influence for good their progress in the particular callings which they are about to follow. Notwithstanding this increase of students just quitting the elementary schools, the average age of our students has somewhat increased. We have continued all our classes, which, as I have said, are attended by satisfactory numbers. In some cases there is a slight falling off. In many cases there has been a very considerable increase, and this has been especially the case in the class on cotton weaving and designing. This class is now taught by Mr. Taylor, a gentleman of very considerable abilities and practical experience, who has received a course of instruction at the very excellent technical school at Bradford, and has passed in the subject with high honours and distinction. With reference to this class, I have, as I had on a previous occasion, to acknowledge our obligations to Mr. Atherton, who, at his works, has afforded to the students an opportunity of studying the subject in a form more practical than without his aid they would as yet have been enabled to do. The class in weaving and designing is attended by 72 students. I have been much struck on visiting this class by the intelligence and earnestness of the pupils, speaking well for the attractive and valuable nature of the teaching, and promising well for the future of a most important branch of our local trades. I can speak in equal terms of our classes in cotton spinning, building, engineering, and our other classes in kindred subjects. In these classes great numbers of young people are being trained in a knowledge of the science on which their particular occupations depend, and in the details and technicalities, as well as the artistic taste, which are of essential importance in the various branches of design. We have this year formed classes for both sexes in connection with the St. John Ambulance Association. Classes in this subject for males only had met previously in the town, but it was pointed out to us by gentlemen of the medical profession, and others

whose judgment we much valued, that unless we took it up there was a danger of the matter falling through. It was also pointed out to us that in a district like ours, where there are so many mills, workshops, and other places in which accidents unfortunately frequently occur, it is of great importance that people, at all events those in authority, should have some knowledge of what to do in cases of emergency until surgical aid can be brought, and that such knowledge, if not relied upon too much, may in many cases afford material alleviation of suffering, and possibly lead even to the saving of life. We weighed these reasons, and after some little hesitation came to the conclusion that we should be acting within our province were we to take up the subject at least for a time. I am glad to say that our action has been well appreciated, and our classes, taught by Dr. Pilkington, the very efficient Medical Officer of Health, have been attended by 22 males and 96 females. It is satisfactory that so many females have enrolled themselves in these classes. It affords grounds for hope that it may lead to the establishment of classes in nursing, which usually form a sequel to the first-aid classes. This subject of nursing is a most important one in all families. Sickness comes to all at some time or other, and those who have experienced it know how much the sufferings of a sick bed are lessened when the kind offices needed by the invalid are rendered by hands skilful as well as gentle. With reference to the recent examinations, I have a pleasant duty in calling attention to the following especial successes:—Science:—David Wilkinson has this year availed himself of the Institute Scholarship of £45, and also for a second time obtained a National Free Studentship awarded by the Science and Art Department. Hubert Boddy has obtained first class certificates in mathematics, chemistry, geology, physiography, magnetism, and electricity, and has gained the Institute Scholarship of £45. W. H. Pimblett, Peter Shaw, Henry Dewhurst, Geo. Kennedy, Thomas Pilkington, and John Shaw, have obtained several first class certificates, the latter student being awarded the first prize for magnetism and electricity open to all students attending Institutes in Lancashire and Cheshire. Wm. Cross obtained honours in botany and first prize in connection with the Union of Lancashire and Cheshire Institutes. Art: Miss Edith J. Raw obtained a national bronze medal (Queen's prize for modelling in clay—study in drapery). Miss Florence Poole passed excellent in theory and practice third grade perspective, and obtained the Institute Scholarship of £45. She has now gone to the Training College at South Kensington, and within the last few days has gained there the first place in the test examination in Anatomy. The following obtained third grade prizes (Queen's): H. O. Bennett, W. Howden, Albert E.

Merigold, and Misses Lizzie and Marie Poole. The following deserve special mention for their second grade successes: S. A. Bamford, J. Busby, J. Haydock, C. W. Horrocks, and H. Royle. Technical: Mr. F. J. Pye, one of our most valued teachers, has obtained honours in brickwork and masonry, £5 and bronze medal, passing second in Great Britain, and has also obtained honours in plane and solid geometry. The following also obtained honours certificates:—Robt. Houghton, cotton spinning; James Ogden, cotton spinning; and Albert Redmond, carpentry and joinery. Miscellaneous: Miss S. A. Foster deserves special mention. She has now obtained five certificates from the Cambridge Syndicate, which entitles her to the Vice-Chancellor's certificate. F. S. Yates has gained first prize and W. H. Hayes second prize in shorthand, Lancashire and Cheshire Union of Institutes; John J. Bramwell and Robt. E. Smalley have passed with honours in shorthand, Lancashire and Cheshire Union of Institutes; Miss Lizzie Poole has gained first prize, open to females in Lancashire and Cheshire. Frances M. Bentham has passed first class in French, Society of Arts; and W. Bleasdale and Margaret H. Rimmer have passed first class in English, Society of Arts. Many of our classes are especially of advantage to pupil teachers, who, I am glad to say, attend them in large numbers. Mr. Steele informs me that at the recent examination of pupil teachers for admission into training colleges, at which 3,165 candidates were examined, Mary Lynex, of the Kirkham National Girls' School, passed sixth, and Caroline Hindle, of St. Peter's Girls' School, Preston, passed 30th in all England, and that the parents of each of these girls have written to him saying that, in a very great measure, their children's successes were to be attributed to the instruction which they have obtained at the Harris Institute. Last year I appealed to the employers of labour in the town to help us by sending to us those in their employment, on the ground that by so doing, they would not only help their assistants, but also help themselves. This appeal has, I am glad to say, been partially responded to, notably by Messrs. Coulthard and Toulmin, who have sent to us a large number of their apprentices. On this occasion I would, in addition to renewing this appeal to the employers, appeal to the workpeople themselves. As a matter of wages only, it is true that, as a rule, these depend on supply and demand. This, although true as a general proposition, is only half a truth when applied to particular cases. Young people, by improving their capabilities and acquirements, place themselves on a higher level, and enable themselves to compete for higher positions commanding higher remuneration. Many instances can be quoted where pupils of technical schools have directly, by means of the knowledge there

acquired, raised themselves to much higher positions in life. I hold letters from the secretaries of the schools at Manchester, Oldham, and Huddersfield, and from a well-known teacher at the Bolton school, giving the details of many such cases. It would occupy too much time to quote them, but they prove conclusively the truth of what I say, namely, that young people who apply themselves with diligence to improve their minds and acquirements by a careful course of study are certain to reap the benefit of it in the shape of better wages and more responsible and more lucrative employment. It is not, however, to the employed alone that this higher instruction is of advantage. Other nations now press upon us in a more active rivalry than ever before. In many cases their educational arrangements are equal to and in some cases superior to ours, especially in the instruction of all ranks engaged in manufactures or trade in matters bearing upon their occupations. To avoid the danger of falling back from our present position, it is necessary to raise the level of instruction and training of employers and workpeople alike in art and science as applied to trade, and in a thorough acquaintance with the requirements of those whom they would make their customers, and the efforts which other nations are making to supply them. These Institutes move in the direction of supplying this want, and we look with confidence for the active support of every one who is interested in the maintenance of our trades, and desires that our nation should in the future, as in the past, occupy the foremost place in the commerce of the world.

Subsequently Lady LUBBOCK handed the prizes and certificates to the successful students. The arrangements for the distribution were admirably carried out under the direction of the Mr. T. R. Jolly, Councillors Atherton and Y. W. Booth, Mr. F. A. Moore, and Mr. J. Johnson. Several of the prizetakers, notably the Misses Poole and Mr. H. W. Boddy, were very heartily cheered as they received their awards at the hands of her ladyship.

Sir JOHN LUBBOCK, who was warmly received, said: It is now my pleasant privilege, not only in my own name, but as I trust I may, in that of the meeting generally, to congratulate those who have carried off prizes, and to encourage those whose successes are yet to come, for, depend upon it, some in one way, some in another, all may succeed who deserve success. The prizes of life are very varied, and many a man not only leads a happy and useful life, but even attains to high eminence, who has never succeeded at school or college. Do not, however, let me be misunderstood. Those who might have gained a prize, and through their own fault have not done so, if any such are

here, though they need not be discouraged, must seriously consider the responsibility they incur, the opportunities they are wasting. Even, however, in tests by the most skilful and patient examiners there is a certain element of chance; a little over-anxiety, a slight indisposition, the nature of the questions, and many other considerations introduce an unavoidable element of uncertainty. Moreover, if you have done your best, that is the great thing, the knowledge you have stored up, the skill you have acquired, the habits of application you have strengthened, these are real prizes, of which books or certificates are but the outward and visible sign.

Turning now to those whom we have the pleasure of congratulating to-day, I must remind them that intellect, like property, has its duties as well as its rights. You have shown to-day that you have abilities above the average; these gifts are, so to say, charges entrusted to you, and impose on you serious responsibilities. In some cases it is probable that your parents have made considerable sacrifices in order to give you the best possible education, but whether this be so or not, you are bound so to live, so to cultivate your natural gifts, as to make the most, in no mean or vulgar sense, of the few years of your life, that you may be a support and credit to your family and country. You will, I hope, endeavour to increase and develop the talents entrusted to you, and not lazily hide them under a napkin, like the idle servant. Moreover, your studies, as Bacon said, should be neither "a couch on which to rest; nor as a cloister in which to promenade alone; nor as a tower from which to look down on others; nor as a fortress whence we may resist them; nor as a workshop for gain and merchandise; but as a rich armoury and treasury for the glory of the Creator and the ennoblement of life." But though it is true enough that life is no child's play, and though I earnestly press you never to waste a minute, do not, pray, suppose that I wish you to lead a life of drudgery. Far from it. Time spent in innocent and rational enjoyment, in social and family intercourse, in healthy games, is well and wisely spent. I remember once asking a young French friend, of perhaps 16, what games they played at his college. He looked at me with surprise, and said nothing. I repeated my question, and he answered almost angrily, "Games! Games are for children." Poor fellow, his must have been a dull life! Games not only keep the body in health, but give a command over the muscles and limbs which cannot be over-valued. Moreover, there are other temptations in youth, which strong exercise enables us the better to resist. Indeed, so far from wishing to put drudgery as the ideal of life, I would do the very reverse, and impress on you the duty of

happiness, as well as the happiness of duty. In our cheerfulness' says Pliny, consists the success of our studies—*studia hilaritate proveniunt*; and Theognis, in his ode on the marriage of Cadmus and Harmonia, makes the muses sing—

> What is good and fair,
> Shall ever be our care;
> Thus the burden of it rang.
> That shall never be our care,
> Which is neither good nor fair;
> Such were the words your lips immortal sang.

The difficulty, however, is not perhaps so much to procure the requisites of happiness, as to resist the assaults of care and sorrow. "The great man," said Emerson, "is he who in the midst of the crowd keeps with perfect sweetness the serenity of solitude." How many of the troubles of life are insignificant in themselves and easily avoidable? It is not so much, in most cases, great sorrows, disease, or death, but rather "the little daily dyings" which cloud over the sunshine of life. How many a day has been damped and darkened by a cold look or a harsh word? Many of you, I dare say, have suffered in this way; be careful, then, not to pain others. Mr. Rarey, the great horse tamer, tells us that he has known a harsh word to raise the pulse of a horse ten beats a minute; think, then, how it must affect a child. It is the custom, but I think it is a mistake, to talk of happy childhood. Children are acutely sensitive, and very often over anxious. Man ought to be man, and master of his fate; but children are at the mercy of those around them. As you grow up your lives will become more and more what yourselves make them. We are not only masters, but almost the creators of ourselves. It is small blame to the young if they are over anxious; but it is a danger to be striven against. "The terrors of the storm are chiefly felt in the parlour or the cabin." We most of us give ourselves an immense amount of useless trouble, encumber ourselves, as it were, on the journey of life with a dead weight of unnecessary baggage. In that most delightful fairy tale, "Alice behind the looking glass," the "White Knight" is described as having provided himself on starting for a journey with a variety of odds and ends, including a mousetrap, in case he was troubled by mice at night, and a beehive in case he came across a swarm of bees. To save ourselves from imaginary, or at any rate problematical, evils, we often incur real suffering. "The man," said Epicurus, "who is not content with little is content with nothing." I have often been amused by a passage in "Hearne's Journey to the Mouth of the Coppermine River." A few days after starting he met a party of Indians, who annexed a great deal of his property, and all Hearne says is "the weight of our baggage being so much lightened our next day's journey was

much pleasanter." I ought, however, to add that the Indians broke up the philosophical instruments, which, no doubt, were rather an encumbrance.

Do, then, your best, and await calmly the result. It is anxiety, not work, which kills; it is work, not anxiety, which commands success. There is a Hindoo saying that the fortune of a man who sits, sits also; it sleeps when he sleeps, moves when he moves, and rises when he rises. Anxiety, on the contrary, does more harm than good. Many seem to think that in these days of competition and stuggle for existence life is more difficult and anxious than it used to be. On the contrary, I believe there never was a time when modest merit and patient industry were more sure to merit reward. Do not, however, be in a hurry to succeed. The life of Sir Josiah Mason, who amassed a great fortune, and founded the Mason College at Birmingham, is a striking lesson of patience and perseverance. He worked hard and intelligently from a boy; he had no great reverses, and yet at the age of thirty he had but £20 in the world. Do not, then, be discouraged if success be slow in coming. Moreover, the amount of one's income matters little; the real question is how we spend it.

Nor would this be a suitable occasion to enlarge on economy or thrift, but it is impossible to omit them altogther in indicating, however briefly, the Scyllas and Charybdises between which we have to steer.

Take, again, the question of health. Everyone recognises how much our happiness depends on it. It has been considered by some as the greatest of our many great gifts. "Health," said Simonides, is best for mortal man; next, beauty; thirdly, well-gotten wealth; fourthly, the pleasures of youth among friends. Empedocles, we are told, was worshipped as a god by the people of Selinus for having delivered them from pestilence by draining a marsh; and a coin is said to have been struck in his honour, representing the philosopher in the act of staying the hand of Phœbus. Few, however, perhaps realise how much it is under our own control. We all know that we can make ourselves ill, and we can also do much to keep ourselves well. A very large percentage of our bodily suffering is self-inflicted. I am inclined to doubt whether the study of health is sufficiently impressed on the minds of those just entering life. Not that I would have you always pottering over minor ailments, reading books on illnesses, or taking medicine. Far from it. The less one fancies oneself ill, or bothers about little bodily discomforts, the better. It is, however, a very different matter to study the general conditions of health. A well-known proverb tells us that at forty every one is either a fool or a physician. Unfor-

tunately, however, many persons are invalids at forty, as well as physicians. Yet the requisites of health are plain enough; regular habits, daily exercise, personal cleanliness, simple diet, and moderation in eating, as well as in drinking, will keep most people well. Dyspepsia, for instance, from which so many suffer, is in nine cases out of ten a person's own fault; it is strong evidence of too little exercise and too much food. With most of us in the matter of food it matters comparatively little what we eat so long as we do not eat too much. Indeed, in matters of health generally our own instincts are excellent guides.

It is in fact, I cannot but think, a fault running all through our present educational system, that we do not sufficiently study the instincts of children. I do not propose now to refer to this, for I have often endeavoured to convince those who control our schools that it is essential to make education interesting. So far as you make children love their books you succeed. Nor will I enlarge on the boundless sources of enjoyment open to you in the power of reading. I have been subjected to some good-humoured criticism and ridicule because in an address, delivered last year at the London Working Men's College, I recommended for study the very best books, and I was told that working men could not appreciate Aristotle or Plato, Homer or Shakspere, Bacon or Darwin. I deny this. The theory of the London Working Men's College at any rate has always been to offer to working men the very best possible education. But I will not revert to this now, and I merely allude to it because I could not omit all reference to the pleasure of reading, which it would be indeed impossible to over estimate. Do not, however, suppose that I would reccommend only works on science or philosophy. Even in the matter of reading I by no means advise you to confine yourselves to stiff books. Good novels are also very instructive, and indeed there is much that can be learnt best from novels, and some things which can only be learnt from them.

Most of those who have written in praise of books have compared them very justly to friends, and much certainly of the happiness and purity of your lives will depend on your making a wise choice of your companions and friends. Many people seem to trust in this matter to the chapter of accident. It is well and right, indeed, to be courteous and considerate to everyone with whom one is thrown into contact, but to choose them as friends is another matter. Many people make a man a friend, or try to do so, because he lives near, because he is in the same business, travels on the same line of railway, or for some other trivial reason. There cannot be a greater

mistake. If your friends are badly chosen they will inevitably drag you down; if well, they will raise you up. "It is extraordinary," observes Cicero, "that every man can tell how much wealth he possesses, but not how many friends; and in selecting them also they are more negligent than in choosing a dog or a horse; and yet," he continues, "of all that he possessed, of all that fortune or nature had bestowed on him, there was nothing he valued so highly as the friendship of Scipio." We should choose our friends, moreover, for what they are, not for what they have, and then we shall have them always with us—preserved in absence and even after death, in the "amber of memory." Yet, much as worthy friends add to the happiness and value of life, we must in the main depend on ourselves. Brown, in his Christian Morals, quaintly observes that "unthinking heads who have not learnt to be alone, are a prison to themselves if they be not with others; whereas, on the contrary, those whose thoughts are in a fair and hurry within, are sometimes fain to retire into company to be out of the crowd of themselves."

But to be good company for yourself you must store your mind well; fill it with pure and happy thoughts, with pleasant memories of the past, and reasonable hopes for the future. You must, as far as may be, protect yourselves from self-reproach, from care, and from anxiety. We shall make our lives pure and happy, not so much by resisting evil, by placing any conscious restraint upon our appetites, as by strengthening and developing our tendencies to good. Be careful, then, how you choose your thoughts. You cannot keep your minds pure if you allow them to dwell on detailed accounts of crime and sin; the soul is dyed by its thoughts. Peace of mind, as Ruskin beautifully observes, "must come in its own time, as the waters settle themselves into clearness as well as quietness; you can no more filter your mind into purity than you can compress it into calmness; you must keep it pure, if you would have it pure; and throw no stones into it, if you would have it quiet." I wish earnestly to impress upon you that not only whether you are good and useful, or useless and evil, but also whether you are happy or unhappy, is very much in your own power, and will depend on yourselves. Whatever your occupation or profession in life may be, I would strongly recommend you to create for yourselves some other special interest. To try to know, as Lord Brougham well said, "not only something of everything, but everything of something." In the choice of a subject, consult your own instincts and interests. I will not attempt to suggest whether you should pursue art; whether you should study the motes in the sunbeam, or the heavenly bodies

themselves, you will find enough, and more than enough, to repay the devotion of a lifetime. Life no doubt is paved with enjoyments, but we must all expect times of anxiety, of suffering, and of sorrow; and when these come you will find it an inestimable comfort to have some deep interest, which will, at any rate to some extent, enable you to escape from yourself.

It is, of course, impossible to deny the existence of evil; and the reason for it has long exercised the human intellect. The savage solves it by the supposition of evil spirits. The Greeks attributed the misfortunes of men in great measure to the antipathies and jealousies of Gods and Goddesses. Others have imagined two divine principles, opposite and antagonistic—the one friendly, the other hostile, to men.

Freedom of action, however, seems to involve the possibility of evil. In using the word "Omnipotence," we must bear in mind the necessary qualifications. Even if the world could have been so constituted that two and two made five, two and two could not make five and four also. Epictetus imagines Jupiter addressing Man as follows.

"If it had been possible to make your body and your property free from liability to injury, I would have done so. As this could not be, I have given you a small portion of myself."

This divine gift it is for us to use wisely. Most, indeed, of what we suffer we have brought on ourselves, if not by our fault, at least by our ignorance or thoughtlessness. Many of us fritter our lives away. Indeed, La Bruyère says that "most men spend much of their time in making the rest miserable;" or, as Goethe observes—

> Careworn man has, in all ages,
> Sown vanity to reap despair.

On the other hand, "if the heart be right," says the *Imitatio Christi*, "then would every creature be to thee a mirror of life, a book of holy doctrine." St. Bernard, indeed, states that "nothing can work me damage except myself; the harm that I sustain I carry about with me, and never am a real sufferer but by my own fault."

Few of us, however, can go as far as this; most of us can be rendered unhappy by the unkindness, the loss, the faults, even the coldness, of those we love; but it is certainly true that no one was ever yet made utterly miserable except by himself. Marcus Aurelius wisely tells us to "Remember on every occasion which leads thee to vexation to apply this principle: that this is not a misfortune, but that to bear it nobly is good fortune;" and he elsewhere observes "that we suffer much more from the anger and vexation which we allow acts to rouse in us, than we do from the acts themselves at which we

are angry and vexed." How much most people, for instance, allow themselves to be distracted and disturbed by quarrels and family disputes. Yet in nine cases out of ten one ought not to suffer from being found fault with. If the condemnation is just, it should be welcome as a warning; if it is undeserved, why should we allow it to distress us?

Even events which look like misfortune, if boldly faced, may often be turned to good. Helmholtz dates his start in science to an attack of typhoid fever. This illness led to his acquisition of a microscope, which he was enabled to purchase, he tells us, "by having spent my autumn vacation, in 1841, in the hospital, prostrated by typhoid fever; being a pupil I was nursed without expense, and on my recovery I found myself in possession of the savings of my small resources." If indeed we cannot be happy the fault is generally in ourselves Think how much we have to be thankful for. Few of us appreciate the number of our every-day blessings; we forget them, because they are always with us; and yet for each of us, as Mr. Pater well says of his hero, Marius, "these simple gifts and others equally trivial, bread and wine, fruit and milk, might regain that poetic, and, as it were, moral significance which surely belongs to all the means of our daily life, could we but break through the veil of our familiarity with things by no means vulgar in themselves." The importance of small things has been pointed out by philosophers over and over again from Æsop downwards. "Great without small makes a bad wall," says a quaint Greek proverb, which seems to go back to Cyclopean times. In an old Hindoo story Ammi says to his son, "Bring me a fruit of that tree and break it open. What is there?" The son said, "Some small seeds." "Break one of them, and what do you see?" "Nothing, my lord." "My child," said Ammi, "where you see nothing there dwells a mighty tree." It may almost be questioned whether anything can be truly called small.

> There is no great and no small
> To the soul that maketh all;
> And where it cometh all things are,
> And it cometh everywhere.

"Paradise indeed might," as Luther said, "apply to the whole world." "Every sort of beauty," says Mr. Greg, "has been lavished on our allotted home; beauties to enrapture every sense, beauties to satisfy every taste; forms the noblest and the loveliest; colours the most gorgeous and the most delicate; odours the sweetest and subtlest; harmonies the most soothing and the most stirring; the sunny glories of the day, the pale Elysian grace of moonlight; the lake, the mountain, the primrose, the forest and the boundless ocean; 'silent pinnacles of aged snow' in one hemisphere, the

marvels of tropical luxuriance in another; the serenity of suns sets, the sublimity of storms; everything is bestowed in boundless profusion on the scene of our existence; we can conceive or desire nothing more exquisite or perfect than what is round us every hour; and our perceptions are so framed as to be consciously alive to all. The provision made for our sensuous enjoyment is in overflowing abundance; so is that for the other elements of our complex nature. Who that has revelled in the opening extacies of a young imagination, or the rich marvels of the world of thought, does not confess that the intelligence has been dowered at least with as profuse a beneficence as the senses. Who that has truly tasted and fathomed human love in its dawning and crowning joys has not thanked God for a felicity which indeed 'passeth understanding.' If we had set our fancy to picture a Creator occupied solely in devising delight for children whom He loved we could not conceive one single element of bliss which is not here."

You have now your lives before you. You have a glorious birthright, but a great responsibility. We read of and admire the heroes of old, but every one of us has to fight his own Marathon and Thermopylæ; everyone meets the Sphinx sitting by the road he has to pass; to each of you, as to Hercules, is offered the choice of Vice and Virtue; you may, like Paris, give the apple of life to Venus, or Juno, or Minerva. Make a wise choice, and your life will grow happier and happier as the years roll on, and, as in the description which Mr. Pater gives of the Roman philosopher Cornelius, "each trait of youth as it departs from you will be replaced by an equivalent grace of culture." I do not wish for you what Browning calls the "the wild joy of living," but rather the peace which passeth all understanding. I offer you my best wishes for the future, expressing the hope that those who have won nothing this time may be successful on the next occasion; and as regards those whom we have had the pleasure of congratulating to-day, that their present prizes may be an encouragement and stimulus to further effort, and the preludes of a prosperous, a happy, and useful life.

The Rev. C. H. Wood, B.C.L., in proposing a vote of thanks to Sir John and Lady Lubbock said: You have imposed upon me, Mr. President, a duty which I gladly accept, but which, at the same time, I feel utterly incompetent to perform in the manner in which I should like to see it done. I count it, nevertheless, no small honour to be allowed to propose a vote of thanks to so eminent and distinguished a person as Sir John Lubbock.

His fame as a man of science and literature has gone forth to the world at large. We have heard of him by the ear; we

have become more intimately acquainted with his mind and line of thought by the study of his works; and now we are confronted face to face with him, giving us a closer intercourse and communion with him.

I have read with great pleasure, and no small profit, a little work written by Sir John Lubbock, entitled, *British Wild Flowers and their Relation to Insects*. He calls it only a fragmentary and incomplete work. He may choose to term it incomplete, but to my mind, it is replete with information and instruction in Insect Life and Plant Lore. The different methods by which flowers are reproduced and varieties raised, by cross fertilization, and the visits of different insects to the flowers, especially those of bees, and the adaptability of the several flowers to the insects, are fully exemplified in it. It contains a host of other information, far too much even to glance at. I have told you sufficient to arouse an interest in the minds of all you young students in Botany, and I strongly recommend you to go to the Library of the Harris Institute, and read it for yourselves, for you will find it a most profitable investment.

Whilst touching on the subject of insect life, I do not know that I can assimilate the Harris Institute to any thing so well as a hive of Bees. The hive is full of inmates to overflowing; the heat of the hive has risen to swarming pitch; but, unlike the bees, we cannot suspend ourselves in the nearest bush, nor take possession of the hollow of a tree. Our hive has increased so rapidly that we are cramped for want of room. We have, it is true, a small cast from the mother hive, it is but a nucleus, planted in another part of the town; we are already crowded in that, we want another, and again another. But here we are crippled for want of means, two very bad things to contend against. What are we to do? we must strive and struggle on, I suppose, as best we can, and hope for better times to come.

To you, young students, the bees afford an admirable lesson of industry. Each has its appointed lot in life. One gathers honey, another brings in pollen, some feed the queen, guarding her with a jealous care, others stand as sentinels at the door, and *all* labour diligently for the common wealth of the hive, storing up supplies against inclement times. When there is a full flow of honey, the bees are tolerant of the drones; but when in the autumn season it begins to fail, then they determine to get rid of them, and set to work to persecute them in every possible form, bite off their legs, cripple their wings, and never cease worrying them till they have exterminated the last drone.

Take another lesson from the bees. Tolerate no drones in the Harris Institute, for they only occupy the room of good workers. Study with all diligence and assiduity while you have

the opportunity; it is a golden opportunity, such as your fathers never had, and in all probability will never return to you. Keep in mind that, like the bees, you have a place to occupy in the social world, a destiny to fulfil in life. Fill that position nobly, faithfully, and well.

I have departed somewhat from the line originally laid out for me, which was, to propose a vote of thanks to Sir John and Lady Lubbock. Yet, there is still a matter of some considerable interest to you, that I should like briefly to notice.

You have all of you heard of a Bank Holiday, and you have many of you doubtless greatly enjoyed these holidays. They have come, and they have gone, with all their attendant pleasures, and, I dare say, the thought never entered your mind How did I come possessed of these now universal holidays? I may tell you that a Banker and a prominent Member of Parliament was instrumental in getting the Bank Holiday Act passed, and so you got your holiday and perhaps never troubled yourselves further about it. Need I tell you that that Banker and that Member of Parliament is present among you to-night in the person of Sir John Lubbock. This is an additional motive for your giving him a hearty vote of thanks this evening.

Now when such men of science and culture can be induced to leave their homes, their duties and other labourious calls, and come amongst you, and show the liveliest interest in your studies and pursuits—men as Sir Richard Cross, Professor John Tyndall, the Earl of Lathom, and now, to-night, Sir John Lubbock, men of nobility of mind, as well as nobility of birth;—it should form the strongest motive power, the very highest incentive, to you young people, so to labour, so to persevere, and so to study, that you may be an honour and credit to the Harris Institute, a success to yourselves in after life, and the glory and wealth of your Fatherland.

Sir, in the name of this vast concourse of people assembled here, in the name of our worthy President, if he will permit me to use his name, and the other Members of the Council, in the name of all those who are interested in the progress of Art, Science, and Literature, I beg to tender to you our most profound and grateful thanks for honouring us with your presence to-night.

I must not be allowed to pause here without including in our tribute of praise and thanksgiving your good and estimable wife. I can assure you, Lady Lubbock, and I know that I am echoing the sentiment of these young people, when I say that your presence here has lent a graceful charm to this evening's entertainment, and given an additional value to those prizes which have been bestowed by your hand to-night. In the name of these young students, I simply offer to you their best thanks.

The Very Rev. Dean PYKE seconded the motion. After acknowledging the distinction which Lady Lubbock had conferred on the Institute by distributing the prizes, he referred to Sir John Lubbock, who, he happily observed, had a distinction which was not common, for it was not to everyone to have the honour of canonisation before death. Whilst there was one day given to St. George, he believed thatfour days were given to St. Lubbock. Sir John was constantly manifesting his interest in the welfare of the people of this country, for not only did he give greater opportunity for freedom and pleasure by increasing bank holidays, but he had only on the previous night taken an active part in an effort which was being made in the cause of shortening the hours of labour for the great mass of the people. In conclusion, the very rev. gentleman paid a warm tribute to the impetus the Harris Institute was giving to the education of the town.

Mr. W. E. M. TOMLINSON, M.P., in supporting the resolution, said Mr. Wood had mentioned four men who had occupied the position Sir John Lubbock occupied that evening. With regard to two of them, Lord Cross and Lord Lathom, they were connected with the town, and they never scrupled to ask them to come to Preston when they wanted them, and both Lord Cross and Lord Lathom were always ready and willing to come. (Hear, hear.) But the President of the Harris Institute had wisely determined that it was desirable to go outside sometimes to seek amongst the eminent men of the time someone to come and give the people of Preston the ripe view of his experience on the occasion of the distribution of prizes. He thought it was with the same trepidation that two years ago the President, in asking Professor Tyndall to come and perform the ceremony, reminded him that at an earlier period of his life he had some connection with the town, and would not come as a stranger. Mr. Ascroft's success on that occasion emboldened him to ask Sir John Lubbock to come that evening, because he knew they always accorded a stranger as good a welcome as they bestowed on their friends. They were exceedingly fortunate in having Sir John with them. He was one of the most eminent men of the time, one of those who, by their original research, had pushed forward the limits of the country's knowledge of those branches of science to which he had applied himself. There were two kinds of scientific men—those who devoted their lives entirely to scientific subjects, and those eminent men who put science in a secondary position with regard to their pursuit of life. Sir John Lubbock was eminent in the commercial world, and was also a worthy representative of a distinguished university. They in Preston lived in a busy town; and whatever their occupation or profes-

sion was, let them not absorb their lives in it. If they wanted to live the highest life, they must have something higher, and whether it was science or art, or whatever it was, let them pursue it as if they intended to make it an addition to themselves, to lift them out of the common drudgery of life, and elevate them in the scale of human beings. That object they were enabled to effect by such institutions as the Harris Institute, and he commended to the attention and study of the members the excellent address Sir John Lubbock had just delivered.

The motion was cordially adopted.

Sir JOHN LUBBOCK, in his reply, said he had been delighted to witness the energy, activity, and life going on at the Harris Institute. He hoped and believed it would have a long career of success. For if England was to remain a happy and prosperous country, it would be through the means of such institutions. He could hardly doubt that the Harris Institute would be a benefit to Preston and the county at large.

His Worship the MAYOR, W. Bibby, Esq., J.P. proposed a vote of thanks to the President, and stated that the town of Preston was greatly indebted to Mr. Ascroft for the warm interest he had always taken in the furtherance of education.

Mr. Alderman BENSON, J.P. had great pleasure in seconding the resolution which had be so ably moved. He considered the President the right man in the right place, and worthy of the best thanks of the meeting, not only for presiding on that occasion, but for his watchful care over the interests of the Institute.

The motion was carried with acclamation.

Mr. ASCROFT, in reply, expressed the indebtedness of the audience to Mr. Tomlinson (the organist), Mr. Cowell, and the choir.

During the evening Mr. James Tomlinson (the Corporation Organist) gave an organ recital, and the Harris Choir, under the baton of Mr. W. H. Cowell, sang several selections with great skill. The choir have attended the rehearsals well, the chorus was well balanced, and it would have been difficult to have presented a more acceptable programme. Mr. Cowell is to be highly complimented on the result. Spofforth's sprightly glee, "Hail, smiling morn," was sung after the President's address, and after the distribution, Smart's popular part songs "Stars of the summer night" and "Nature's praise." Sullivan's evening hymn, "O gladsome light," was given with great taste after the address of Sir John Lubbock, and afterwards Beethoven's chorus, "Hallelujah." The proceedings ended with the National Anthem.

LIST OF PRIZES AND CERTIFICATES AWARDED TO STUDENTS ATTENDING THE CLASSES AT THE HARRIS INSTITUTE, SESSION 1885-6.

SCIENCE.

† These Students have obtained Queen's Prizes.

* These Students have obtained Local Prizes.

A signifies Advanced. E Elementary. I First Stage. II Second Stage.

Name.	Class of Success.	Subject.
*Attwater, Richard	E 1st	Applied Mechanics.
,,	E 2nd	Steam.
Atherton, Henry	E 2nd	Machine Construction.
Atherton, Frederick	E 2nd	Physiography.
Atherton, John	A 2nd	Machine Construction.
Atherton, Arthur	I, 2nd	Mathematics.
Abbatt, Frank	E 2nd	Animal Physiology.
Ball, John Henry	E 2nd	Sound, Light, and Heat.
,,	A 2nd	Geology.
,,	E 2nd	Physiography.
Brewer, John C.	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Physiography.
Baker, Elizabeth	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Physiography.
Barton, John	E 2nd	Magnetism and Electricity.
Bramwell, Edward	E 2nd	Magnetism and Electricity.
Bostock, Daniel E.	E 2nd	Magnetism and Electricity.
,,	E 2nd	Geology.
Bostock, Lillian	E 2nd	Magnetism and Electricity.
Blogg, Stephen	E 2nd	Practical, P., and Solid Geometry.
Ball, Richard	E 2nd	Machine Construction.
Burrows. Joseph T.	A 2nd	Agriculture.
Bashall, Henry	E 2nd	Building Construction.
†*Binfield, James H.	I 1st	Mathematics.
,,	E 1st	Magnetism and Electricity.
,,	A 1st	Steam
†*Boddy, Hubert W.	II 1st	Mathematics.
,,	E 1st	Magnetism and Electricity.
,,	E 1st	Inorganic Chemistry.
,,	A 1st	Geology
,,	A 1st	Physiography.
*Bennison, Benjamin	E 1st	Magnetism and Electricity.
*Bailey, John	E 1st	Geology.
,,	A 2nd	Magnetism and Electricity.
*Bailey, John S.	E 1st	Botany.
†*Barnes, John	A 1st	Machine Construction.
,,	A 1st	Applied Mechanics.
*Bridge, Richard W.	E 1st	Building Construction.
*Bennett, William P.	E 1st	Machine Construction.

Name.	Class of Success.	Subject.
*Bradley, Oswald J.	E 1st	Inorganic Chemistry.
,,	E 2nd	Applied Mechanics.
,,	E 2nd	Sound, Light, and Heat.
Bradshaw, William	E 2nd	Building Construction.
Brown, Thomas	A 2nd	Building Construction.
,,	E 2nd	Applied Mechanics.
Breakell, William	E 2nd	Steam.
Bannister John W.	E 2nd	Theory Inorganic Chemistry.
Bannister, Lewis	E 2nd	Theory Inorganic Chemistry.
Bradley, Kate	E 2nd	Physiography.
Blackhurst, John	E 2nd	Animal Physiology.
*Bentham, George H.	E 1st	Machine Construction.
*Butler, Wm. E. F.	E 1st	Building Construction.
*Bryce, Thomas	E 1st	Botany.
,,	E 2nd	Agriculture.
*Bolton, Thomas B.	E 1st	Practical Chemistry.
,,	A 2nd	Inorganic Chemistry.
*Bottrill, Samuel J.	A 1st	Agriculture.
,,	E 2nd	Animal Physiology.
Cookson, John W.	E 2nd	Practical, P., and Solid Geometry.
*Clitheroe, John	E 1st	Practical, P., and Solid Geometry.
,,	A 2nd	Magnetism and Electricity.
,,	E 1st	Botany.
Calvert, John W.	E 2nd	Machine Construction.
†*Charlton, James S.	A 1st	Building Construction.
,,	E 2nd	Sound, Light, and Heat.
Corner, William H.	A 2nd	Machine Construction.
Corner, Alexander	E 2nd	Machine Construction.
*Cunliffe, Thomas	E 1st	Building Construction.
Croft, James	A 2nd	Building Construction.
Croft, William	E 2nd	Building Construction.
*Cockshott, Samuel	E 1st	Machine Construction.
,,	A 2nd	Applied Mechanics.
*Cross, William	Honors 2nd	Botany.
Clarke, Frederick	II 2nd	Mathematics.
Crook, Dora	E 2nd	Physiography.
Coker, Thomas	E 2nd	Animal Physiology.
Crozier, William	A 2nd	Magnetism and Electricity.
Crozier, James	A 2nd	Magnetism and Electricity.
,,	E 2nd	Physiography.
Catterall, Ralph	E 2nd	Magnetism and Electricity.
Dandy, Charles	E 2nd	Practical, P., and Solid Geometry.
,,	E 2nd	Machine Construction.
Dunn, Henry	E 2nd	Practical, P., and Solid Geometry.
,,	A 2nd	Building Construction.
Dobson, Adam	E 2nd	Machine Construction.
Davies, Joseph	E 2nd	Magnetism and Electricity.
Dall, Jessie E.	E 2nd	Botany.
Ditchfield, Agnes A.	E 2nd	Physiography.
*Dewhurst, Henry	E 1st	Inorganic Chemistry.
,,	E 1st	Physiography.
,,	A 2nd	Magnetism and Electricity.
*Davies, Thomas C.	E 1st	Inorganic Chemistry.
,,	E 2nd	Practical Chemistry.
Dobson, John	E 2nd	Physiography.
Eastham, Alice	E 2nd	Botany.

Name.	Class of Success.	Subject.
Edwards, Henry	E 2nd	Physiography.
*Eaves, Henry	E 1st	Practical Inorganic Chemistry.
Frame, John	E 2nd	Machine Construction.
Foster, Charles T.	E 2nd	Machine Construction.
*Fairnie, James S.	I 1st	Mathematics.
,,	E 2nd	Magnetism and Electricity.
Foster, Robert G. O.	E 2nd	Applied Mechanics.
,,	E 2nd	Steam.
,,	E 2nd	Physiography.
Fallowfield, John	E 2nd	Sound, Light, and Heat.
France, Richard S.	E 2nd	Machine Construction.
Fraher, Joseph B.	E 2nd	Magnetism and Electricity.
Freeman, Henry S.	E 2nd	Theory Inorganic Chemistry.
Freeman, Thomas J.	A 2nd	Theory Inorganic Chemistry.
Fawcett, Richard	E 2nd	Animal Physiology.
Gilbert, Thomas	E 2nd	Machine Construction.
,,	E 2nd	Steam.
Grime Robert	E 2nd	Machine Construction.
,,	E 2nd	Applied Mechanics.
,,	E 2nd	Steam.
Gregson, George E.	A 2nd	Building Construction.
Gardner, Sarah H.	E 2nd	Physiography.
Goodier, Oswald	E 2nd	Sound, Light, and Heat.
Gardner, Jesse	E 2nd	Magnetism and Electricity.
,,	E 2nd	Steam.
*Gregson, Richard	E 1st	Practical, P., and Solid Geometry
,,	A 2nd	Building Construction.
*Grimshaw, Thomas	E 1st	Practical, P., and Solid Geometry
,,	E 2nd	Applied Mechanics.
,,	E 2nd	Steam.
*Gardner, Edward	E 1st	Applied Mechanics.
Grandison, Robert	E 2nd	Machine Construction.
*Hull, Richard N.	E 1st	Building Construction.
,,	E 2nd	Practical, P., and Solid Geometry.
Harring, Joseph	E 2nd	Practical, P., and Solid Geometry.
,,	A 2nd	Building Construction.
Hodson, George	E 2nd	Practical, P., and Solid Geometry.
,,	A 2nd	Building Construction.
Hodgkinson, Joseph	E 2nd	Machine Construction.
Halliday, William	E 2nd	Machine Construction.
,,	E 2nd	Applied Mechanics.
Harrison, Henry	I 2nd	Mathematics.
Hunter, William F.	A 2nd	Applied Mechanics.
,,	A 2nd	Steam.
Holmes, Martha	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Physiography.
Horrocks, Charles	E 2nd	Sound, Light, and Heat.
Holderness, Sarah E.	E 2nd	Physiography.
Hesketh, Annie	E 2nd	Magnetism and Electricity.
Hesketh, Mary E.	E 2nd	Magnetism and Electricity.
Hindle, Caroline	A 2nd	Physiography.
Halewood, Alfred	A 2nd	Magnetism and Electricity.
,,	A 2nd	Physiography.
Hargreaves, Bernard	E 2nd	Theory Inorganic Chemistry.
Howarth, Harry	E 2nd	Theory Inorganic Chemistry.
Hartley, John	E 2nd	Theory Inorganic Chemistry.
Howarth, George	E 2nd	Animal Physiology.
,,	E 2nd	Physiography.

Name.	Class of Success.	Subject.
†*Hargreaves, Richard H.	A 1st	Applied Mechanics.
"	A 2nd	Steam.
*Hartley, Charles Henry	E 1st	Botany.
"	E 2nd	Agriculture.
Irvin, George	I 2nd	Mathematics.
Iddon Robert	A 2nd	Sound, Light, and Heat.
"	A 2nd	Magnetism and Electricity.
Jump, Thomas B.	A 2nd	Machine Construction.
"	I 2nd	Mathematics.
Johnson, William	E 2nd	Machine Construction.
Johnson, Frederick	E 2nd	Navigation.
Jackson, John	E 2nd	Magnetism and Electricity.
Jenson, James	A 2nd	Theory Inorganic Chemistry.
*Jones, James C.	E 1st	Practical, P., and Solid Geometry.
"	E 1st	Machine Construction.
*Jones, Isaac	E 1st	Steam.
"	E 2nd	Machine Construction.
*Johnston, Walter Henry	A 1st	Building Construction.
*Kirkham, Thomas	E 1st	Machine Construction.
Knagg, William Henry	I 2nd	Mathematics.
*Kinloch, John	E 1st	Applied Mechanics.
Kitchen, Margaret	E 2nd	Physiography.
*Kennedy, Joseph	E 1st	Navigation.
Kilroe, Patrick	A 2nd	Botany.
*Kennedy, George	E 1st	Sound, Light, and Heat.
* "	E 1st	Physiography.
"	E 2nd	Animal Physiology.
Kent, Richard	E 2nd	Magnetism and Electricity.
"	E 2nd	Agriculture.
Lynex, Edwin G.	II 2nd	Mathematics.
Ladyman, Eldred	E 2nd	Theory Inorganic Chemistry.
Lancaster, Henry P.	I 2nd	Mathematics.
"	E 2nd	Applied Mechanics.
"	E 2nd	Steam.
*Leach, William	E 1st	Building Construction.
Mallott, Arthur J.	E 2nd	Machine Construction.
*Maquade, William E.	E 1st	Building Construction.
"	E 2nd	Practical, P., and Solid Geometry.
Monk, John	E 2nd	Practical, P., and Solid Geometry.
*McGuire, John	E 1st	Magnetism and Electricity.
"	E 2nd	Physiography.
*Macfarlane, Sidney	E 1st	Magnetism and Electricity.
*Metcalfe, Charles	E 1st	Geology.
"	E 2nd	Inorganic Chemistry.
"	E 2nd	Physiography.
*Makin, Samuel	A 1st	Practical Inorganic Chemistry.
†*Marsden, James	A 1st	Geology.
McCarter, Albert G.	A 2nd	Machine Constrction.
"	A 2nd	Applied Mechanics.
"	E 2nd	Theory Inorganic Chemistry.
McMahon, William	E 2nd	Machine Construction.
McManus, Edward	A 2nd	Navigation.
Metcalf, John	A 2nd	Building Construction.
Miller, George	I. 2nd	Mathematics.
McDonald, William	E 2nd	Sound, Light, and Heat.
Matthews, Percy M. A.	E 2nd	Magnetism and Electricity.
Martland, James	E 2nd	Theory Inorganic Chemistry.

Name.	Class of Success.	Subject.
Marshall, Robert	E 2nd	Animal Physiology.
Marshall, Elizabeth	A 2nd	Physiography.
Mayor, John James	E 2nd	Physiography.
Newsham, Ralph H. R.	A 2nd	Machine Construction.
,,	I 2nd	Mathematics.
,,	A 2nd	Applied Mechanics.
Napthen, Mary Cozbi	E 2nd	Magnetism and Electricity.
*Nickson, Francis	E 1st	Magnetism and Electricity.
*Proctor, David	E 1st	Building Construction.
*Parker, Charles R.	E 1st	Practical, P., and Solid Geometry.
*Pritt, Thomas	E 1st	Building Construction.
†*Pilkington, Thomas	A 1st	Applied Mechanics.
,,	A 1st	Steam.
,,	A 2nd	Practical, P., and Solid Geometry.
Purves, Elizabeth	E 2nd	Magnetism and Electricity.
,,	E 2nd	Physiography.
*Parker, Fred W.	E 1st	Applied Mechanics.
,,	E 1st	Steam.
Purves, John	II 2nd	Mathematics.
,,	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Physiography.
Penny, Isabella	E 2nd	Physiography.
*Penny, John	I 1st	Mathematics.
Parkinson, Thomas	E 2nd	Machine Construction.
Parkinson, Edward	E 2nd	Practical, P., and Solid Geometry.
†*Parish, Thomas	A 1st	Magnetism and Electricity.
*Parker, Robert	E 1st	Inorganic Chemistry.
,,	E 1st	Practical Inorganic Chemistry.
Phillipson, John	E 2nd	Practical, P., and Solid Geometry.
†*Parker, Fred. J	A 1st	Practical Inorganic Chemistry.
,,	A 2nd	Inorganic Chemistry.
,,	A 2nd	Botany.
Pateson, Dora E.	E 2nd	Sound, Light, and Heat.
†*Pimblett, William Henry	E 1st	Inorganic Chemistry.
,,	E 1st	Animal Physiology.
,,	A 2nd	Botany.
,,	A 1st	Hygiene.
Quick, Joseph	E 2nd	Machine Construction.
*Roberts, William Henry	E 1st	Practical, P., and Solid Geometry.
,,	E 2nd	Sound, Light, and Heat.
Rigby, James	A 2nd	Practical, P., and Solid Geometry.
Rowbotham, Felicia	E 2nd	Physiography.
Redmond, Albert	E 2nd	Practical, P., and Solid Geometry.
Redmond, William D.	E 2nd	Magnetism and Electricity.
Richardson, James	A 2nd	Machine Construction.
Ribchester, Edward	A 2nd	Physiography.
Rhodes, John C.	I 2nd	Mathematics.
,,	A 2nd	Sound, Light, and Heat.
,,	A 2nd	Magnetism and Electricity.
Rigby, John R.	E 2nd	Magnetism and Electricity.
Riley, Helen	E 2nd	Botany.
Rob nson, Ellen C.	E 2nd	Botany.
Renwick, Thomas	E 2nd	Magnetism and Electricity.
†*Shaw, John	E 1st	Machine Construction.
,,	2nd Gr'de Prize.	Machine Drawing.
,,	A 1st	Sound, Light, and Heat.
,,	A 1st	Magnetism and Electricity.

Name.	Class of Success.	Subject.
*Sykes, Albert	E 1st	Magnetism and Electricity.
*Sumner, Edward	E 1st	Inorganic Chemistry.
*Shaw, Peter	E 1st	Practical, P., and Solid Geometry.
,,	II 2nd	Mathematics.
,,	E 1st	Machine Construction.
,,	E 1st	Inorganic Chemistry.
Sanderson, Robert	I 2nd	Mathematics.
*Sanderson, John	E 1st	Building Construction.
Sanderson, Daniel	I 2nd	Mathematics.
,,	E 2nd	Magnetism and Electricity.
Shaw, Thomas	A 2nd	Applied Mechanics.
Shaw, George	A 2nd	Applied Mechanics.
Shaw, Frederick	E 2nd	Sound, Light, and Heat.
Smith, Margaret	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Magnetism and Electricity.
,,	E 2nd	Physiography.
Sedgwick, Christopher	E 2nd	Magnetism and Electricity.
Sergeant, Margaret	E 2nd	Physiography.
Sinclair, James	E 2nd	Magnetism and Electricity.
,,	A 2nd	Physiography.
Seed, Frances	E 2nd	Magnetism and Electricity.
,,	E 2nd	Physiography.
Stuart, William	A 2nd	Theory Inorganic Chemistry.
,,	A 2nd	Practical Inorganic Chemistry.
,,	A 2nd	Botany.
Singleton, Edward	E 2nd	Animal Physiology.
Smith, Joseph	E 2nd	Theory Inorganic Chemistry.
Sharples, William	E 2nd	Animal Phhysiology.
Southworth, Richard	E 2nd	Botany.
*Smethurst, Charles Wm.	E 1st	Practical Inorganic Chemistry.
*Spibey, Thomas	E 1st	Practical Inorganic Chemistry.
,,	E 1st	Practical Inorganic Chemistry.
*Southworth, William	E 1st	Botany
*Sellers, Thomas D.	E 1st	Botany.
Thornber, John T.	E 2nd	Magnetism and Electricity.
*Threlfall, Frederick H.	I 1st	Mathematics.
,,	E 1st	Physiography.
Thornton, Joseph E.	A 2nd	Physiography.
Walker, Roger	E 2nd	Practical, P., and Solid Geometry.
*Wilkinson, Robert J.	E 1st	Inorganic Chemistry.
,,	E 1st	Geology.
*Whalley, Stephen	E 1st	Inorganic Chemistry.
Wignall, John	E 2nd	Practical, P., and Solid Geometry.
Worthington, Benjamin	E 2nd	Practical, P., and Solid Geometry.
Worden, William	E 2nd	Machine Construction.
,,	E 2nd	Applied Mechanics.
,,	E 2nd	Steam.
Wilkinson, William W.	E 2nd	Building Construction.
Woodhouse, Frank	A 2nd	Applied Mechanics.
,,	E 2nd	Steam.
Whiteside, Annie	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Physiography.
Walker, William H.	E 2nd	Sound, Light, and Heat.
Whitwell, John W.	E 2nd	Sound, Light, and Heat.
Woolley, Herbert J.	A 2nd	Sound, Light, and Heat.
,,	A 2nd	Magnetism and Electricity.

Name.	Class of Success.	Subject.
Williamson, Frederick A.	A 2nd	Magnetism and Electricity.
Webster, William	E 2nd	Botany.
†*Wilkinson, David.....	E 1st	Practical, P., and Solid Geometry.
,, ...	II. 1st	Mathematics.
,, ...	IV. 2nd	Mathematics.
,, ...	E 1st	Animal Physiology.
,, ...	A 1st	Theoretical Mechanics.
,, ...	A 1st	Applied Mechanics.
,, ...	E 1st	Organic Chemistry.
,, ...	A 1st	Practical Inorganic Chemistry.
,, ...	A 1st	Sound, Light, and Heat.
,, ...	A 1st	Magnetism and Electricity.
,, ...	A 1st	Physiography.
,, ...	A 1st	Geology.
,, ...	A 2nd	Theory Inorganic Chemistry.
Yates, James.....	I 2nd,	Mathematics.
,, ...	E 2nd	Magnetism and Electricity.

SCHOOL OF ART.

GOVERNMENT SECOND GRADE EXAMINATION.

P signifies Pass.
E signifies Excellent and also the winning of a Government Prize.
* Scholarship and Local Prize awarded.

Names.	Free-hand.	Geo-metry.	Per-spective.	Model.
*Ainley, Francis	P	...	...	P
Ambler, Lillie	...	...	...	P
*Bamford, Sarah E.	P	...	P	P
Banks, Margaret W.	...	...	...	P
Bentham, Frances M.	P	...	...	...
Billsborough, Thomas	P	...	...	...
Bostock, Daniel E.	...	...	...	P
Bowen, Louisa	...	...	...	P
*Bowling, James T.	P	...	...	P
Bradley, Kate	...	...	...	P
*Branson, Annie	P	...	...	P
2*Busby, John	E	...	...	E
Carr, Zephaniah	P	...	...	...
Carter, John James	P	...	...	...
*Dodgson, Walter J.	...	...	...	E
*Fairnie, James S.	P	P	...	...
*Goodier, Hubert	...	...	E	...
Gray, Charles	...	...	P	...
3*Haydock, John	E	E	E	P
*Haydock, William	E	...	...	P
Hindle, Caroline	P	...	...	...
*Hodge, Edward G.	P	...	...	P
*Horrocks, Annie	...	P	E	...
*Horrocks, Charles W.	E	...	...	E
Howarth, James L.	...	...	P	...
Iddon, Robert	P	...	...	...
Kirkham, Mary E.	P	...	...	...
*Macfarlane, Sidney	...	...	E	...
Mansley, James L.	...	...	...	P
McKie, Mary Jane	...	...	...	P
*Milner, William	...	...	E	..
*Morgan, Charles	P	...	...	P
Ogden, Sarah J.	P	...	...	...
*Parker, Elizabeth Ann	...	...	...	E
Pye, William H.	P	...	...	...
Rowbotham, Felicia	P	...	...	...
Rowbotham, George C.	...	...	P	...
*Royle, Herbert	P	P	E	...
Taylor, Annie	...	...	...	P
Taylor, Charles T.	P	...	..	...
Topping, James	P	...	...	...
*Walker, William Henry	E	...	...	P
Warburton, Winifred A.	...	...	...	P
Waumsley, Thomas H.	...	...	...	E
*Wilkinson, Mary Jane	P	...	...	...
Wrigley, Frank	P	...	...	P

Students who have completed their 2nd Grade Certificate during the year:—Miss Caroline Hindle, Miss Annie Horrocks, Mr. John Haydock, Mr. Charles Morgan, Mr. Herbert Royle.

NATIONAL COMPETITION AWARDS.

Miss EMILY J. RAW obtained a Bronze Medal, in the National Competition, for Drapery Study in Plaster.

GOVERNMENT CERTIFICATES AND PRIZES OF THE THIRD GRADE.

Seven Candidates sat for 3rd Grade Examinations, of whom six passed, four obtaining the award excellent, and the remaining two the award good.

** Indicates the winner of both a 3rd grade prize and a 3rd grade certificate.
* Indicates the winner of a 3rd grade prize.
† Indicates the winner of a 3rd grade certificate.

Name.	Subject.
*Bennett, Harrison O.	Modelling.
*Elliott, John W.	Anatomised Antique Figure.
** ,,	Anatomy Examination.
** ,,	Theory and Practice of Perspective.
*Howden, William	Modelling.
**Longmaid, William Henry	Theory and Practice of Perspective.
† ,,	Architecture.
*Merigold, Albert E.	Modelling.
*Poole, Lizzie	Design.
*Poole, Marie E.	Modelling.
**Poole, Florence	Theory and Practice of Perspective.
† ,,	Anatomy Examination.

ART CLASS TEACHERS' CERTIFICATES.

JAMES N. PARKER and ROBERT FAIRCLOUGH have each passed the full examination for the Art Class Teachers' Certificate.

Miss HANNAH R. OGDEN has passed in Stages 5a and 5b.

Miss EMILY SHAW and Miss LIZZIE POOLE have passed in Stage 5a.

SPECIAL ART PRIZES (LOCAL COMPETITION.)

Names.	Class of Success.	Subject.
Ainley, George	2nd Prize	Still Life, Fruit, &c.
Ambler. Lilly	1st ,,	Landscape in Water Colour.
Busby, John	1st ,,	Set of Freehand from the flat.
,,	2nd ,,	Drawing and Shading from Ornament in Relief and from Models.
Baverstock, William	2nd ,,	Shaded head from the cast.
Dodgson, Walter J	2nd ,,	Set of Outlines, Hands and Feet.
,,	1st ,,	Drawing and Shading from Ornament in Relief and from Models.
Fairclough, Robert	Mr. Moore's Prize.	For Landscape in Water Color.
Fairnie, James S.	1st Prize	Set of Geometrical Problems.
Goodier, Hubert	1st ,,	Shaded Drawing from the Antique.
Haydock, John	1st ,,	Set of Model Drawings.
,,	1st ,,	Set of Perspective Diagrams.
,,	2nd ,,	Set of Geometrical Problems.
Haydock, William	2nd ,,	Set of Model Drawings.
Horrocks, Annie	2nd ,,	Set of Perspective Diagrams.
,,	3rd ,,	Drawing and Shading from Ornament in Relief and from Models.
Jones, Henry	2nd ,,	Set of studies, Historic Styles of Ornament.
,,	2nd ,,	Landscape in Water Color.
Miller, Sarah J.	2nd ,,	Shaded Ornament from the Cast.
Moyle, John	1st ,,	Shading from the Cast.
Owens, Arthur J.	2nd ,,	Set of Freehand, from the Flat.
Poole, Clara	Mr. Healey's Prize	Design for Damask.
,,	1st Prize	Set of Outlines of Hands and Feet from the Cast.
,,	1st ,,	Set of Studies, Historic Ornament.
,,	2nd ,,	Drawing in Water Color of a Plant with analysis for decorative purposes.
Poole, Lizzie	2nd ,,	Design for Damask.
,,	1st ,,	Ornamental Design.
,,	1st ,,	Outline of Ornament from Cast.
,,	2nd ,,	Still Life, Fruit, &c.
,,	1st ,,	Drawing in Water Color of a Plant with analysis for decorative purposes.
Poole, Florence	2nd ,,	Ornamental Design.
,,	1st ,,	Still Life, Fruit, &c.
,,	1st ,,	Memory Sketches; Hands and Feet.

Name.	Class of Success.	Subject.
Royle, Herbert	1st Prize	Landscape in Oil.
,,	2nd ,,	Drawing in Sepia of Group of Models.
,,	Extra Prize	Landscape in Water Color.
Shaw, Emily	1st ,,	Shaded Head from Cast.
Simpson, Mary	2nd ,,	Studies of Anatomy.
Thorp, Theresa	1st ,,	Study from Life; any Medium.
Waterhouse, Samuel S.	1st Prize	Shaded Ornament from Cast
,, ,,	2nd ,,	Outline of Ornament from Cast.
Whiteside, Agnes	Mr. Willis's Prize	Studies of Anatomy.

ART MODELLING.

Bennett, Harrison O.	1st Prize	Modelling; Original Design.
,, ,,	1st ,,	Modelling Cast, from Photograph.
Jones, Henry	2nd ,,	Modelling Cast, from Photograph.
Poole, Marie	2nd ,,	Modelling; Original Design.

SKETCHING CLUB PRIZES.

Names.	Subjects.
Ambler, Lilly	Study in Water Color.
Fairclough, Robert (Special Prize)	Landscape in Water Color.
Graham, Agnes	Study of Head from Life.
Poole, Lizzie	Best Drawings in Monthly Competitions
Poole, Florence	Landscape in Water Color.
,,	Still Life in Oil.
,,	Study of Flowers.
Poole, Clara	Design for Printed Calico.
Royle, Herbert	Landscape in Water Color.
Smith, Rose A.	Study of Flowers in Water Color.
,,	Drawing of a Group in Outline.
Thorp, Theresa	Study of a Single Tree.

TECHNICAL.

CITY AND GUILDS OF LONDON INSTITUTE EXAMINATION.

* These Students received Local Prizes.

Names.	Class and Grade of Success.	Subject.
Binfield, James Henry ...	Ordinary 2nd	Mechanical Engineering.
*Brierley, Richard.....	Ordinary 1st	Plumbers' Work.
*Brown, Walter	Honors 2nd	Cotton Manufacture.
Charlton James S.....	Ordinary 2nd	Carpentry and Joinery.
Dean, Samuel J.	Ordinary 2nd	Weaving & Pattern Designing
Dunn, Henry.....	Ordinary 2nd	Carpentry and Joinery.
Gardner, Edward.....	Ordinary 2nd	Mechanical Engineering.
*Gardner, Jesse	Honors 2nd	Cotton Manufacture.
Gardner, John Henry	Ordinary 2nd	Typography.
*Gask, Sidney.....	Ordinary 1st	Cotton Manufacture.
Gorst, Henry T.	Ordinary 2nd	Carpentry and Joinery.
*Gray, Charles E.	Ordinary 1st	Plumber's Work.
*Green, George	Honors 2nd	Cotton Manufacture.
*Grime, Robert	Ordinary 1st.....	Cotton Manufacture.
Harrison, Edward	Ordinary 2nd	Cotton Manufacture.
Harrison, Thomas R.	Ordinary 2nd	Cotton Manufacture.
Hibbert, William A.	Ordinary 2nd	Typography.
*Houghton, Robert	Honors 1st	Cotton Manufacture.
Jackson, John James	Ordinary 2nd	Carpentry and Joinery.
*Kenyon, James H.	Ordinary 1st	Weaving & Pattern Designing
Maquade, William E.....	Ordinary 2nd	Carpentry and Joinery.
Marsden, Jomes	Ordinary 2nd	Carpentry and Joinery.
Miller, George	Ordinary 2nd	Cotton Manufacture.
Newsham, Ralph H. R....	Ordinary 2nd	Mechanical Engineering.
*Ogden, James	Honors 1st	Cotton Manufacture.
*Redmond, Albert.....	Honors 1st	Carpentry and Joinery.
*Roddy, John...	Ordinary 1st	Cotton Manufacture.
*Walker, Roger	Honors 2nd	Carpentry and Joinery.

MISCELLANEOUS.

* Scholarships and Local Prizes awarded.

§ Signifies "Honors."

† Scholarships only awarded.

Name.	Subject.
	Cambridge Lectures.
§*Ball, Thomas S.	Literature.
†Dewhurst, Thomas	,,
†Dixon, Edith	,,
†Dixon, Francis E.	,,
†Foster, Sarah A.	,,
†Graham, Agnes	,,
*Grime, Annie J.	,,
†Hargreaves, Esther	,,
†Marshall, Elizabeth A.	,,
†Tullis, Mary	,,
†Turner, Mary	,,

Names.	Class of Success.	Subjects.
		Society of Arts.
*Ainsworth, William	2nd Class	Theory of Music.
*Bell, George	2nd ,,	,, ,,
*Bell, Robert	2nd ,,	,, ,,
*Brown, Mary C.	2nd ,,	,, ,,
*Burrows, Joseph T.	2nd ,,	,, ,,
Davies, Edith C.	3rd ,,	,, ,,
*Dall, Jessie E.	2nd ,,	,, ,,
Hayton, Margaret	3rd ,,	,, ,,
*Hargreaves, Esther	2nd ,,	,, ,,
Hargreaves, Mary A.	3rd ,,	,, ,,
*Nelson, James	2nd ,,	,, ,,
*Poole, Florence	2nd ,,	,, ,,
*Riley, Jane E.	2nd ,,	,, ,,
Seed, Mary F. L.	2nd ,,	,, ,,
*Stacey, Charles E.	2nd ,,	,, ,,
*Stothert, Richard	2nd ,,	,, ,,
Taylor, Bertha	2nd ,,	,, ,,
Taylor, Sarah A.	3rd ,,	,, ,,
*Walker, James S.	2nd ,,	,, ,,
Yates, Arthur	3rd ,,	,, ,,

Names.	Class of Success.	Subject.
		Society of Arts.
*Ainsworth, Robert Carr ...	2nd Class	Shorthand.
Black, John.....	3rd ,, ...	,,
*Bramwell, John Joseph ...	2nd ,, ...	,,
Burrow, Harry	3rd ,, ...	,,
*Cook, John H.	2nd ,, ...	,,
Dawson, David	3rd ,, ...	,,
Denham, Percy N.	3rd ,, ...	,,
*Hayes, William H.	1st ,, ...	,,
Orrell, Frederick J.	3rd ,, ...	,,
*Preston, James	2nd ,, ...	,,
*Smalley, Robert E.	1st ,, ...	,,
Smith, Wm. Henry	3rd ,, ...	,,
Walker, Herbert	3rd ,, ...	,,
Walsh, Alfred.....	3rd ,, ...	,,
Whittaker, John W.	3rd ,, ...	,,
*Yates, Frederick S.	1st ,, ...	,,
		Society of Arts.
Ball, John Henry	3rd ,, ...	English.
Bannister, John.....	3rd ,, ...	,,
Blacklock, John R.	3rd ,, ...	,,
Blakey, Eunice	3rd ,, ...	,,
*Bleasdale, William	1st ,, ...	,,
Bownass, Raymond	3rd ,, ...	,,
*Buck, Isabella	2nd ,, ...	,,
Cartwright, Thomas E.....	3rd ,, ...	,,
Cookson, Henry.....	3rd ,, ...	,,
Dawson, David	3rd ,, ...	,,
*Day, Annie	2nd ,, ...	,,
De Rome, William	3rd ,, ...	,,
Dunn, Elizabeth E.	3rd ,, ...	,,
*McGavin, Bessie	2nd ,, ...	,,
*Merigold, Frederick W. ...	2nd ,, ...	,,
Napthen, Mary C.....	3rd ,, ...	,,
*Orrell, Frederick J.	2nd ,, ...	,,
*Rimmer, Margaret H.	1st ,, ...	,,
Robinson, James	3rd ,, ...	,,
*Seed, Frances	2nd ,, ...	,,
Willmoth, Florence A.....	3rd ,, ...	,,
		Society of Arts.
*Allen, Amelia A.	2nd ,, ...	Arithmetic.
De Rome, William	3rd ,, ...	,,
Ogden, Hannah R.	3rd ,, ...	,,
Ormrod, Thomas W.....	3rd ,, ...	,,
Seed, Frances.....	3rd ,, ...	,,
Willmoth, Florence A. ...	3rd ,, ...	,,
		Society of Arts.
*Bentham, Frances M.....	1st Class	French.
Birchall, Alice	3rd ,, ...	,,
Foster, Sarah A.....	3rd ,, ...	,,
Grime, Annie J.....	3rd ,, ...	,,
*Parker, Priscilla.....	2nd ,, ...	,,
Poole, Clara	3rd ,, ...	,,
*Poole, Lizzie	2nd ,, ...	,,

Names.	Class of Success.	Subject.
		Union of Lancashire and Cheshire Institute's Prize.
Birchall, Alice	2nd Class	Commercial French.
Billsborough, Elizabeth	2nd ,,	,,
Parker, Priscilla	2nd ,,	,,
§Poole, Lizzie	Honors	,,
		Union of Laancshire and Cheshire Institutes.
§Bramwell, John J.	Honors	Shorthand.
§Hayes, William Henry	,,	,,
§Smalley, Robert E.	,,	,,
§Yates, Frederick, S.	,,	,,
Dawson, David	1st Class	,,
Preston, James	1st ,,	,,
Black, John	2nd ,,	,,
Orrell, Frederick J.	2nd ,,	,,
Walsh, Alfred	2nd ,,	,,
		Union of Lancashire and Cheshire Institutes.
Ball, John Henry	2nd ,,	English.
Blakey, Eunice	2nd ,,	,,
Buck, Isabella	2nd ,,	,,
Bownass, Raymond	2nd ,,	,,
Cookson, Henry	2nd ,,	,,
M'Gavin, Bessie	2nd ,,	,,
Orrell, Frederick J.	2nd ,,	,,
Bleasdale, William	Passed	,,
Bannister, John	,,	,,
Bentham, Frances M.	,,	,,
Carter, John J.	,,	,,
Dawson, David	,,	,,
Dunn, Elizabeth E.	,,	,,
De Rome, William	,,	,,
Merigold, Frederick Wm.	,,	,,
Napthen, Mary E.	,,	,,
Robinson, James	,,	,,
Rimmer, Margaret H.	,,	,,
Seed, Frances	,,	,,
Simpson, James D.	,,	,,
Whittaker, John W.	,,	,,
Whittam, William	,,	,,
Willmoth, Florence A.	,,	,,
Williamson, John	,,	,,

The following Students have been awarded Special Prizes by the Union of Lancashire and Cheshire Institutes, and open to all Students in these Counties:—

Yates, Frederick S., Shorthand, 1st Prize; Hayes, William H., Shorthand, 2nd Prize; Cross, William, 1st Prize, Botany; Shaw, John, 1st Prize, Advanced Stage Magnetism and Electricity; Poole, Lizzie, 1st Prize (Females), Commercial French.

Names.	Class of Success.	Subject.
		Tonic Sol-fa Association.
*Barlow, Agnes	Intermediate	*Certificates.*
*Brown, Mary E.	,,	,,
*Critchley, James W.	,,	,,
*Hindle, John	,,	,,
*Kirby, Harriett A.	,,	,,
*Kirkham, Mary E.	,,	,,
*Lynex, Mary	,,	,,
*Ogden, Hannah R.	,,	,,
*Purves, Elizabeth A.	,,	,,
*Smalley, Margaret H.	,,	,,
*Windle, Minnie	,,	,,
†Barlow, Emily	Elementary	,,
†Butler, Mary E. F.	,,	,,
†Clegg, Edward A.	,,	,,
†Critchley, James W.	,,	,,
†Cunningham, Andrew	,,	,,
†Frame, Elsie	,,	,,
†Green, Caroline	,,	,,
†Hall, Elizabeth	,,	,,
†Hindle, John	,,	,,
†King, Agnes	,,	,,
†Parker, Ethel	,,	,,
†Thornley, John W.	,,	,,
†Wilmoth, Florence A.	,,	,,
		Harris Institute Local Examination.
Burrows, Joseph T.	2nd Class	Advanced Latin.
Hargreaves, Bernard	2nd ,,	,, ,,
†Toulmin, William	1st ,,	Elementary Latin.
†Parkinson, John T.	1st ,,	,, ,,
†Robinson, Ellen C.	1st ,,	,, ,,
†Billsborough, Elizabeth	1st ,,	,, ,,
Berry, Ada	2nd ,,	,, ,,
Bentham, Frances M.	2nd ,,	,, ,,
Fallowfield, John M.	3rd ,,	,, ,,
†Foster, Sarah A.	1st ,,	Advanced French.
†Grime, Annie J.	1st ,,	,, ,,
†Parker, Priscilla	1st ,,	,, ,,
Birchall, Alice	2nd ,,	,, ,,
Bentham, Frances M.	2nd ,,	,, ,,
Billsborough, Elizabeth	3rd ,,	,, ,,
Sumner, Emily	3rd ,,	,, ,,
†Goodier, Hubert	1st ,,	Elementary French.
†Bottrill, Samuel J.	1st ,,	,, ,,
†Robinson, James	1st ,,	,, ,,
†Proctor, John P.	1st ,,	,, ,,
†Rigby, Betsy	1st ,,	,, ,,
†Billington, Thomas	1st ,,	,, ,,
Rowbotham, Felicia	2nd ,,	,, ,,
Whiteside, Edward	2nd ,,	,, ,,
Rawcliffe, Mary R.	2nd ,,	,, ,,
Miller, Sarah J. C.	2nd ,,	,, ,,
Whiteside, Agnes	2nd ,,	,, ,,
Topping, James	2nd ,,	,, ,,
Taylor, Alfred	3rd ,,	,, ,,
Goodyear, Joseph	3rd ,,	,, ,,

Names.	Class of Success.	Subject.
		Harris Institute Local Examination.
Birch, John	3rd Class	Elementary French.
Rhodes, John C.	3rd ,,	,, ,,
Horrocks, Annie	3rd ,,	,, ,,
Gornall, Mary	3rd ,,	,, ,,
Derham, William	3rd ,,	,, ,,
Good, Alexander	3rd ,,	,, ,,
*Lowe, Henry	1st ,,	Shorthand, Elementary.
*Gardner, Anthony	1st ,,	,, ,,
*Houghton, James	1st ,,	,, ,,
*Robinson, James	1st ,,	,, ,,
Hargreaves, William James	1st ,,	,, ,,
Rainford, Wm. C.	1st ,,	,, ,,
Slater, John Jas.	1st ,,	,, ,,
Miles, Arthur J.	1st ,,	,, ,,
Worthington, William	1st ,,	,, ,,
Jump, Sydney B.	2nd ,,	,, ,,
Whitehead, Robert	2nd ,,	,, ,,
De Rome, Percy	2nd ,,	,, ,,
Clough, Arthur	2nd ,,	,, ,,
Crook, Leonard	2nd ,,	,, ,,
Walmsley, Charles	2nd ,,	,, ,,
Burton, Richard	2nd ,,	,, ,,
Holden, Anthony	2nd ,,	,, ,,
Ratcliffe, Henry	2nd ,,	,, ,,
Greenwood, Frederick C.	2nd ,,	,, ,,
Simpson, Josiah	3rd ,,	,, ,,
Wilcock, George	3rd ,,	,, ,,
Lambert, Robert F. W.	3rd ,,	,, ,,
Saul, Robert	3rd ,,	,, ,,
Callow, John W.	3rd ,,	,, ,,
Kent, Richard	3rd ,,	,, ,,
Hacking, Robert	3rd ,,	,, ,,
Stythe, Wm. T.	3rd ,,	,, ,,
Robert, Frank	3rd ,,	,, ,,
Goulden, Arthur F.	3rd ,,	,, ,,
Wootton, George J.	3rd ,,	,, ,,
Johnston, Walter Henry	3rd ,,	,, ,,
Roberts, Wm. Henry	3rd ,,	,, ,,
†Halliwell, Edward	1st ,,	Arithmetic.
Harrison, Henry M.	2nd ,,	,,
Halewood, Alfred	2nd ,,	,,
Williamson, John	2nd ,,	,,
Meehan, John	2nd ,,	,,
Haworth, Eli	2nd ,,	,,
Simpson, James H.	2nd ,,	,,
Airey, Charles	3rd ,,	,,
Etherington, Thomas	3rd ,,	,,
Breakell, William	3rd ,,	,,
Bailey, William	3rd ,,	,,
Bamber, Arthur P.	3rd ,,	,,
Sharples, William	3rd ,,	,,

INSTITUTE SCHOLARSHIPS AWARDED TO DAY SCHOLARS AT ELEMENTARY SCHOOLS.

SCIENCE.

Walker, Alice J.
Grafton, Alice
Wignall, John
Coward, Sarah J.
Crossthwaite, William H.
Dailley, Edgar
Morant, Arthur
Toulmin, Mary
Duckworth, David
Hardman, John K.
Hall, John E.
Frankland, Dora
Bomont, Lucia
Wilding, Henry
Proctor, Sarah P.
Morris, Robert Hy.
Garstang, Henry
Goodwin, John T.
Clegg, Minnie

Clayton, Bertha
Hothersall, Robert
Parker, John Richard
Whitwell, Frank
Roberts, Ernest
Payne, Frances Mary
Ward, George H.
Stothert, James Wm.
Dixon, Mary A.
Sharples, Charles E.
Cornall, James
Stephenson, Annie
Turner, Samuel J.
Gemson, Lawrence
Taylor, Miriam
Gardner, Harry M.
Lowe, John
Greenhalgh, John E.
Gordon, James F.

Chaloner, Richard
Cunliffe, W.
Billing, George
Dowbiggin, Thos. R.
Fraser, Maggie
Ley, Percy
Clarke, Nathaniel
Mulgrew, Thomas
Twist, John
Pritt, Stephen
Balshaw, Arthur
Wilkinson, Thomas
Wootton, Harry
Vernon, Mary E.
Gardner, Edward
Gardner, Gertrude
Leach, Thomas
Dixon, Frederick A.

ART.

Harkness, David
Nichols, Henry
Walker, Alice J.
Lamb, George
Greenhalgh, John E.
Cowell, Clarence C.
Payne, Frances M.

Roberts, Ernest
Hunter, John
Worthington, A. T.
McGavin, John
Chaloner, Richard
Morris, Robert Henry
Taylor, Thomas

Proctor, Sarah P.
Twist, John
Tomlinson, Robert
Gardner, Harry M.
Hardman, John K.
Toulmin, Mary

HARRIS INSTITUTE £45 SCHOLARSHIPS.

SCIENCE.	ART.
H. W. Boddy.	Florence Poole.

Table showing the number of Students who sat for Examination in connection with the Science and Art Department at the Harris Institute, May, 1886.

SUBJECT.	Harris Institute.	Cross Street.	St. Paul's.	Moor Lane.	Externals.	Totals.
ART.						
Model Drawing	49	2	4	...	6	61
Freehand ,,	77	3	6	...	21	107
Perspective (Theory)	4	...	...	...	...	4
Geometry	17	2	4	...	6	29
Perspective	12	5	...	...	6	23
Perspective (Practice)	4	1	...	...	...	5
Drawing in Stage 5a	6	...	...	...	1	7
,, ,, 5b	7	...	...	...	1	8
,, ,, 3b	3	...	...	...	1	4
Elementary Architecture	1	...	...	...	1	2
Anatomy	3	...	...	...	1	4
Elementary Principles of Ornament	...	1	...	...	..	1
Painting in Monochrome	...	1	...	...	...	1
Drawing from the Antique	...	1	...	...	...	1
SCIENCE.						
Animal Physiology	13	...	...	...	3	16
Machine Construction	50	...	9	...	1	60
Building Construction	34	...	...	...	...	34
Mathematics, stages 1, 2, 3	38	...	7	3	6	54
Sound, Light, and Heat	59	...	...	2	3	64
Magnetism and Electricity	54	...	17	5	9	85
Physiography	86	...	...	2	13	101
Principles of Agriculture	7	...	...	...	10	17
Practical Plane and Solid Geometry	38	...	10	2	3	53
Navigation	4	...	...	...	...	4
Geology	11	...	...	2	1	14
Mathematics, stages 4, 5	...	...	...	...	1	1
Hygiene	1	...	...	...	4	5
Theoretical Mechanics	...	...	...	...	6	6
Applied Mechanics	34	...	...	...	...	34
Inorganic Chemistry	48	...	18	3	2	71
Practical Inorganic Chemistry (E Stage)	7	...	...	...	2	9
Botany	20	...	...	2	12	34
Organic Chemistry	...	...	...	...	2	2
Steam	35	...	...	...	2	37
Practical Inorganic Chemistry (advanced stage)	5	...	...	...	...	5
Totals	727	16	75	21	124	963

HARRIS INSTITUTE, PRESTON. ABSTRACT OF CLASS REGISTERS,

1885-6.

NAME OF CLASS.	TEACHER.	Sept., 1885.		Oct., 1885.		Nov., 1885.		Dec., 1885.		Jan., 1886.		Feb., 1886.		March, 1886.		April, 1886.		Number of Students who sat at Examination.	Number of Students who obtained Certificates.
		No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.		
SCIENCE.																			
Practical. Plane, and Solid Geometry	Mr. F. J. Pye	69	61	75	62	75	59	75	56	75	59	75	58	75	59	75	58	38	27
Machine Construction	Mr. J. T. Buckley	75	66	89	55	88	52	89	52	89	54	89	54	89	53	89	54	50	40
Building Construction (Elementary)	Mr. F. J. Pye	22	18	25	19	25	18	25	18	25	19	25	18	25	16	25	17	34	24
Do. (Advanced)	Do.	22	19	24	17	24	16	24	17	24	16	24	17	24	16	24	17		
Mathematics, Stage I. (Elementary)	Mr. F. B. Osborne	54	39	60	44	66	47	67	44	67	45	67	43	67	47	67	48	38	25
Do. Stage II.	Mr. G. Rogerson, M.A.	18	15	20	17	20	13	20	12	20	14	20	15	20	14	20	13		
Applied Mechanics	Mr. R. Pendlebury	49	37	60	48	69	43	60	42	60	45	60	47	60	46	60	46	34	24
Sound, Light, and Heat (Elementary)	Mr. J. Gardner.	74	60	74	60	79	57	79	51	79	56	79	58	79	59	79	60	59	26
Do. (Advanced)	Do.	8	6	9	7	10	5	10	5	10	6	10	6	10	7	10	7		
Magnetism and Electricity (Elementary)	Do.	43	38	46	38	55	44	55	46	55	45	55	46	55	45	55	44	54	46
Do. (Advanced)	Do.	22	17	24	19	24	15	24	15	24	16	24	15	24	16	24	17		
Inorganic Chemistry, Theoretical (Elementary)	Mr. A. F. Atkinson	46	39	52	45	52	45	53	42	53	40	53	41	53	40	53	41	48	29
Do. do. (Advanced)	Do.	15	12	15	12	15	12	15	11	15	10	15	10	15	10	15	10		
Do. Practical (Elementary)	Do.	9	8	10	8	10	7	10	9	10	8	10	7	10	8	10	9	7	6
Do. do. (Advanced)	Do.	8	8	9	8	9	7	9	6	9	7	9	7	9	7	9	7	5	4
Geology (Elementary)	Mr. F. C. King	6	5	6	5	6	5	6	5	6	6	6	6	6	6	6	6	11	10
Do. (Advanced)	Do.	6	4	6	4	6	5	6	5	6	5	6	5	6	5	6	5		
Animal Physiology	Mr. H. O. Pilkington, M.R.C.S.	17	13	19	16	20	17	20	15	20	14	20	14	20	13	20	14	13	13
Botany (Elementary)	Mr. S. J. Elliott	25	21	27	24	28	19	28	21	28	18	28	19	28	20	28	21	20	17
Do. (Advanced)	Do.	7	6	8	8	8	9	8	7	8	7	8	6	8	6	8	6		
Navigation	Mr. G. Lynch	6	6	9	6	9	6	9	6	9	7	9	8	9	8	9	8	4	3
Steam and Steam Engine	Mr. R. Pendlebury	45	34	51	42	51	37	51	38	51	39	51	38	51	37	51	38	35	20
Physiography (Elementary)	Mr. J. Gardner	69	56	77	60	83	64	83	65	83	65	83	64	83	63	83	64	86	43
Do. (Advanced)	Do.	23	18	27	21	29	18	30	17	30	18	30	19	30	18	30	19		
Agriculture	Mr. J. Stacey	13	9	15	9	15	8	15	7	15	10	15	10	15	9	15	9	7	6
Hygiene	Mr. H. O. Pilkington, M.R.C.S.	16	13	18	14	18	12	18	11	18	12	18	14	18	13	18	14	1	1
ART.																			
Day Class	Mr. W. B. Barton	22	14	26	17	27	18	27	16	27	14	27	13	28	14	28	15	183	77
Evening Class	Do.	140	59	163	60	166	63	166	68	166	73	166	78	171	80	171	86		
Modelling Class	Do.	4	3	4	3	4	3	4	3	4	3	4	3	4	4	4	4		
High School	Do.	50	44	50	44	50	46	50	43	50	46	50	46	50	46	50	47		
TECHNICAL.																			
Cotton Spinning	Mr. W. I. Hannan	34	32	38	33	39	27	39	28	39	32	39	33	39	34	39	35	26	11
Cotton Weaving	Mr. W. Taylor	50	36	58	42	59	29	59	30	59	20	59	24	59	28	59	30	13	2
Mechanical Engineering	Mr. R. Pendlebury	24	19	31	23	31	23	31	21	31	21	31	22	31	22	31	23	14	3
Plumbing	Mr. F. Jolly	15	12	19	15	19	14	21	14	21	15	21	14	21	15	21	15	16	2
Printing	Mr. R. Parkinson	12	9	13	8	14	9	14	10	14	11	14	12	14	12	14	12	10	2
Carpentry and Joinery	Mr. F. J. Pye	30	26	36	26	36	28	36	24	36	27	36	25	36	24	36	25	20	8
MISCELLANEOUS.																			
Music (Singing and Harmony)	Mr. J. Tomlinson	...	..	27	23	27	21	27	20	27	19	27	20	27	19	27	20	*22	*18
Singing (Tonic Sol-fa)	Mr. W. H. Cowell	...	...	89	76	90	79	90	76	90	74	90	72	90	68	90	73	30	26
Latin (Elementary	Rev. W. S. Matthews, B.A.	...	...	16	14	16	14	16	13	16	13	16	12	16	13	16	14	§17	§10
Do. (Advanced)	Do.	...	...	7	6	9	6	9	6	9	6	9	5	9	6	9	6		
French (Elementary)	Do.	...	...	48	39	51	43	51	40	51	42	51	40	51	41	51	41	*7 †4	*7 †4
Do. (Advanced)	Do.	...	...	21	18	21	16	21	15	21	15	21	14	21	14	21	13	§38	§27
Cambridge Lectures (Shakspere	Mr. R. G. Moulton, M.A.	...	...	...	...	...	...	...	...	50	50	52	52	52	52	...	...	11	11
Shorthand (Elementary)	Mr. H. Cartmell	128	118	146	122	148	107	148	99	148	109	148	107	148	108	148	109	*21 †47	*16 †17
Do. (Advanced)	Do.	53	35	60	41	60	41	60	40	60	46	60	45	60	46	60	47	§56	§32
English (Elementary)	Do.	56	45	67	55	68	49	68	44	68	48	68	46	68	48	68	49	*31	*20
Do. (Advanced)	Do.	18	15	23	19	23	17	23	16	23	16	23	16	23	16	23	17	†40	†25
Arithmetic	Mr. F. B. Osborne	117	91	119	95	120	89	120	78	120	77	120	79	120	80	120	83	*17	*5
																		22	§13
	Total	1520	1186	1916	1447	1963	1382	1969	1327	2019	1418	2021	1423	2027	1431	1975	1416	1189	700

* Society of Arts. † Lancashire and Cheshire Institutes. § Local.

T. R. JOLLY, Secretary.

In addition to the foregoing table, the following shows the number of Students of the Harris Institute, examined at the Institute in connection with other Classes:—

City and Guilds of London Institute, viz. :—		
Cotton Spinning	26	
Weaving and Designing	13	
Mechanical Engineering	14	
Printing	10	
Carpentry and Joinery	20	
Plumbing	16	
		99
Cambridge Extension Lectures—		
Literature		11
Society of Arts—		
Shorthand	21	
English	31	
French	7	
Music	22	
Arithmetic	17	
		98
Lancashire and Cheshire Union of Institutes—		
Shorthand	47	
English	40	
French	4	
		91
Examined Locally—		
Arithmetic	22	
French	38	
Latin	17	
Tonic Sol Fa	30	
Shorthand	56	
		163
		462
Students sitting for Science and Art as above		727
Total of Harris Institute Students Examined		1189

Harris Institute, Preston.—Cash Statement, year ending 30th September, 1886.

RECEIPTS.	£ s. d.	£ s. d.
To Interest received from Capital	1274 8 9	
Less:—Transferred to Scholarship Fund	159 6 1	
		1115 2 8
FEES AND GRANTS FOR 1884-85, VIZ.:—		
Science Fees	101 0 0	
,, Grants	384 12 0	
	485 12 0	
Art Fees	94 6 6	
,, Grants	115 18 0	
	210 4 6	
Technical Fees	19 5 0	
,, Grants	27 0 0	
	46 5 0	
		742 1 6
Miscellaneous Fees		137 6 0
Rent, High School		10 0 0
Subscriptions		23 2 0
Balance carried down		610 13 3
		£2638 5 5
To Amount due to Preston Banking Company	610 13 3	
	£610 13 3	

EXPENDITURE.	£ s. d.	£ s. d.
By Balance overdrawn, Sep. 30th, 1885.		693 10 2
SALARIES, VIZ.:— £ s. d.		
Science 526 12 0		
Art 409 10 0		
Technical 105 17 6		
Miscellaneous 166 13 6		
	1208 13 0	
,, Secretary, Custodian, & Auditor	157 9 0	
,, Alterations and Improvements	61 3 6	
,, Apparatus, Appliances, & Books	69 9 4	
,, Expenses Cambridge Lectures	49 13 4	
,, Printing and Stationery	46 5 5	
,, Advertising	17 3 6	
,, Lighting and Firing	125 9 8	
,, Washing and Cleaning	40 7 1	
,, Rates, Taxes, and Insurance	30 10 11	
,, Expenses *re* Distribution of Prizes and Opening Ceremony	33 9 8	
,, Examinations & Entrance Fees for Students	42 4 0	
,, Miscellaneous Expenses	31 4 10	
,, Bank Interest and Commission	31 12 0	
		1944 15 3
		£2638 5 5
By Balance brought down	610 13 3	
	£610 13 3	

Examined and found correct,
W. F. MOORE, F.C.A., Chartered Accountant.
6th December, 1886.

Wm. ASCROFT, President.
T. R. JOLLY, Secretary.

To the President and Council of the Harris Institute.

GENTLEMEN,—I have examined the Accounts for the year ending 30th September, 1886, and have pleasure in certifying to their correctness, and to the neatness with which they are kept. I have seen vouchers for all payments, and the securities for the capital investments.

Yours truly, W. F. MOORE, F.C.A.

HARRIS INSTITUTE.

Scholarship and Prize Fund Account, Year ending September 30th, 1886.

RECEIPTS.	£	s.	d.
To Balance in hand September 30th, 1886	158	16	9
,, Amount transferred from General Account, as per Balance Sheet, for year ending 30th September, 1885	158	17	9
,, Bank Interest	2	4	4
	£319	18	10
To Balance brought down.....	£164	16	5

EXPENDITURE.	£	s.	d.
By Paid Miss B. H. Smith for Art Scholarship..	45	0	0
,, ,, Mr. A. J. Moulton, for Science Scholarship (half).....	22	10	
,, ,, for Free Elementary Scholarship	60	9	6
,, ,, for Prizes	26	14	2
,, Bank Commission	0	8	9
	155	2	5
,, Balance in hand	164	16	5
	£319	18	10
By Balance in Preston Bank....£164 16 5			

Examined and found correct,

W. F. MOORE F.C.A., Chartered Accountant.

6th December, 1868.

WM. ASCROFT,
President.

T. R. JOLLY,
Secretary.

HARRIS INSTITUTE, PRESTON.

TRUSTEES' ACCOUNT, Year ending September 30th, 1886.

	£ s. d.	£ s. d.
To Balance in hand, Sep. 30th, 1885		36339 8 3
,, Interest from Corporation.....	271 17 5	
,, ,, County.....	253 15 0	
,, ,, Savings' Bank....	41 19 1	
,, ,, Corporation.....	90 12 5	
,, ,, ,, ...	271 15 0	
,, ,, County.....	253 17 5	
,, ,, Corporation.....	90 12 5	
		£1274 8 9
		£37613 17 0
To Balance brought down	36196 16 9	
		£36196 16 9

	£ s. d.	£ s. d.
By Amount transferred to Institute account, being Interest from Capital		1274 8 9
1885		
Nov. 4 Paid J. Walmsley, new window in Art School.....	111 1 6	
,, 7 Paid J. Hibbert, plans do.	10 10 0	
1886		
Jan. 16 ,, Messrs. Metcalf and Dilworth, boiler.....	21 0 0	
		142 11 6
		1417 0 3
By Balance carried down.....		36196 16 9
		£37613 17 0
By invested with Corporation....	20000 0 0	
,, ,, County.....	15000 0 0	
,, ,, Savings Bank ..	1196 16 9	
		£36196 16 9

Examined and found correct,
W. F. MOORE. F.C.A.,
6th Dec. 1886. Chartered Accountant.

7th February, 1887, Exhibited and Approved,
C. R. JACSON,
DAVID IRVIN,
C. H. WOOD,
J. S. OLIVER.

T. R. JOLLY,
Secretary.

LIST OF SUBSCRIBERS.

	£	s.	d.
Ascroft, Mr. W.	1	1	0
Ascroft, Mr. A. E. (two years)	2	2	0
Atherton, Mr. John	1	1	0
Atherton, Mr. W.	1	1	0
Benson, Mr. R.	2	2	0
Birchall, Mr. A. M.	1	1	0
Booth, Mr. Y. W.	1	1	0
Brown and Deighton, Messrs.	1	1	0
Dickson, Mr. E.	1	1	0
Easterby, Mr. R. F.	1	1	0
Healey, Mr. J.	1	1	0
Hibbert, Mr. Jas.	1	1	0
Jacson, Mr. C. R. (two years)	2	2	0
Maynard, Mr. M. S.	1	1	0
Moore, Mr. F. A.	1	1	0
Oliver, Mr. J. S.	1	1	0
Robinson, Mr. R. C.	1	1	0
Steele, Rev. Geo.	1	1	0
Thorp, F.	1	1	0
Willan, Mr. W.	1	1	0
Wood, Rev. C. H.	1	1	0

Harris Institute

PRESTON.

FIFTH

ANNUAL REPORT

AND

STATEMENT OF ACCOUNTS

FOR THE YEAR 1887,

AND

ADDRESS

GIVEN BY

R. W. HANBURY, Esq., M.P.

AT THE

Distribution of Prizes

ON

31st JANUARY, 1888.

PRESTON:
Printed by MATHER BROS., 17, Chapel Walks.
1888.

OFFICERS FOR THE YEAR 1888.

Trustees:

Mr. C. R. Jacson, J.P., D.L.
Mr. D. Irvin, J.P.
Rev. C. H. Wood, B.C.L.
Mr. W. Ascroft, J.P.
Mr. G. B. Dalby.
Mr. J. S. Oliver.

President:

Mr. Wm. Ascroft, J.P.

Vice-President:

The Rev. Geo. Steele, M.A.

Council:

Mr. C. R. Jacson, J.P., D.L.
Mr. D. Irvin, J.P.
Rev. C. H. Wood, B.C.L.
Rev. Geo. Steele, M.A.
Rev. Jon. Shortt, M.A.
Mr. J. Healey, J.P.
Dr. Hammond, J.P.
Mr. W. Ascroft, J.P
Mr. W. Atherton.
Mr. S. A. Hermon, J.P.
Mr. A. E. Ascroft.
Mr. Y. W. Booth.
Mr. E. Dickson.
Mr. R. F. Easterby.
Mr. W. Calvert M.A,
Mr. Jas. Hibbert.
Mr. M. S. Maynard, J.P.
Mr. J. S. Oliver.
Mr. F. A. Moore.
Mr. R. C. Robinson.
Mr. E. Greenwood, J.P.

Hon. Treasurer:

Mr. J. S. Oliver.

Secretary:

Mr. T. R. Jolly.

Auditor:

Mr. W. F. Moore.

Bankers:

Preston Banking Company, Limited.

Fifth Annual Report

OF THE

HARRIS INSTITUTE,

PRESTON.

THE number of entries on the class registers is this year 2,092, with an average attendance of 1,649. The number of individual students is 1,397. At the examinations of the students, which have been conducted as on previous occasions, 798 certificates have been awarded. The Cambridge lectures have been discontinued this year. The lectures have not been so largely attended as the council could have wished. It is under consideration whether or not to renew the course in the next session. New classes have been formed in bookkeeping, in german, and in theoretical mechanics, attended by 120, 38, and 25 students respectively. During this year the Harris Trustees have made to the Institute a further grant of £30,000; a supplemental scheme has been framed for the application of this fund, under the provisions of which £10,000 may be applied in the building and furnishing of a technical school, the remaining £20,000 being held as an endowment fund. The council made application to the Corporation of Preston to assist them in providing a technical school adequate to the wants of the town, and the Corporation in response to this application and to a resolution passed at the meeting called by the Mayor to consider the best mode of celebrating the Jubilee of our Most Gracious Sovereign, have decided to provide a site, and are seeking Parliamentary powers to enable them to carry out this decision. It is hoped that the Corporation may further aid the project by making a money grant, so as to enable the erection of a more complete technical school than can be provided with the £10,000 already available. The council call attention to the formation of the National Association for the Promotion of Technical Education, of which the Marquis of Hartington, M.P. is President. Meetings in support of this movement have been held in London and Manchester, at which the council were represented. In the art school Mr. Rhodes has resigned, having obtained a more valuable

appointment in America, and Mr. Parker has left the school having obtained the art scholarship, and has gone to pursue his studies at South Kensington. The vacancies thus caused have been filled up by the appointment of Mr. Gater, of Crewe, and Miss Smith, a former holder of the art scholarship. The council have to refer with deep regret to the loss by death of two of their members—Mr. Alderman Benson and Mr. A. M. Birchall. In their places have been elected Mr. William Calvert, M.A., and the Rev. Jonathan Shortt, M.A. Mr Swire Smith, a member of the Royal Commission on Technical Instruction, visited Preston on the 14th September last, on the invitation of the council, and delivered a most interesting and instructive address on that subject to a meeting held in the Council Chamber of the Town Hall, and presided over by the Mayor. Sir Henry E. Roscoe, M.P., F.R.S., D.C.L., L.L.D., the President of the British Association, to whom the Institute is much indebted for very valuable assistance in the past, has undertaken to distribute the prizes awarded at the last examination. The distribution will take place in the Public Hall, on Tuesday, the 31st January next.

W. ASCROFT,

PRESIDENT.

Dec. 23rd, 1887.

HARRIS INSTITUTE.

Proceedings of the Annual Meeting.

HELD 23rd December, 1887.

ON the above date the fifth annual meeting of donors and subscribers to the Harris Institute was held in the library of the Institute. There were present :—Mr. W. Ascroft, J.P., president of the Institute, in the chair ; the Rev. Geo. Steele, H.M.I.S., and C. H. Wood, B.C.L. ; Councillor Y. W. Booth, Messrs. R. C. Robinson, R. F. Easterby, S. Lee, and T. R. Jolly, Secretary. The President said the meeting was called in pursuance of a clause in the scheme, and the only business which they were compelled to transact was the election of a member of the Council. As there was only one nomination, that of Mr. Oliver by Mr. Easterby, they were bound to elect that gentleman. On the proposition of Mr. R. F. Easterby,, seconded by Mr. Councillor Booth, Mr. Oliver was accordingly re-elected a member of the Council.

The SECRETARY (Mr. T. R. Jolly) read the fifth annual report of the council of the Institute.

Mr. Councillor BOOTH asked how they stood in numbers compared with last year, and Mr. Jolly replied that they compared favourably. Last year the total number on the register was 2,069, individual students 1,384, certificates obtained 700, so that there was an increase all round. There had been a slight increase in the number of students, and a great increase in the number of certificates.

Mr. Councillor BOOTH considered the report very satisfactory.

The balance sheet presented by Mr. Jolly showed receipts from interest on capital account £1,278 19s. 5d. ; total amount received for fees and grants, £921 14s. ; subscriptions, &c., £33 2s. ; total, £2,233 15s. 5d. On the payment side the amount paid for salaries of teachers was shown to be £1,278 1s. 6d, ; paid to secretary, custodian, and examiners, £183 4s. ; alterations and improvements, £143 0s. 6d. ; apparatus, appliances, and books, £129 14s. 7d. ; expenses of the Cambridge Lectures, £47 1s. 6d. ; the total expenses. which also included printing and stationery,

advertising, lighting, firing, cleaning, rent, expenses of distribution, examinations, &c., being £2,322 19s. The balance overdrawn, Mr. Jolly explained, at the end of the year was £699 16s. 10d., which showed a deficit on the year's work of £80. That deficit was chiefly attributable to the opening of the new school in Lancaster Road, upon which a large sum had been spent in alterations and in appliances and apparatus. It might be stated that the Harris Institute on its formation had a debt of £500, taken over from the old Avenham Institution. Now, however, that the council had a further grant of £30,000 from the Harris trustees, they hoped with the interest from that, that the adverse balance would be wiped off during the coming year.

The PRESIDENT said he had nothing whatever to add to the report, which he considered a very satisfactory one.

Mr Councillor BOOTH : Of course there is a lot of the Medes and Persians' expenses about this balance sheet, but I think it is very desirable that they should be kept down as much as possible. For instance, in the matter of firing and lighting, what was it last year?

Mr. JOLLY : These expenses are a trifle over what they were last year, but that has been caused by the extra charges in connection with the Lancaster Road School.

The PRESIDENT remarked that they hoped with the interest from the extra grant of £30,000 to soon wipe off what adverse balance there was. It was a very handsome grant on the part of the Harris trustees, and it was pleasing to know that the work of the Council of the Institute had been so much approved of as to induce the trustees to make the grant. The adverse balance had been caused almost entirely by an outlay on capital account. They had spent a good deal of money in decorating and cleaning, providing apparatus, and improvements, which possibly they might have repaid out of capital, but they had paid it all out of revenue, and that was the reason that their revenue account showed an adverse balance. But the accumulations at the bank from the additional grant would, by the end of the ensuing year he hoped, do away with the adverse balance and leave them with a balance in hand. The Lancaster Road School had been a source of great expense, but there was this to be said that the taking of that school was an absolute necessity. There was no room for the Technical Classes or place to put the machinery, and the taking of the school had relieved them very considerably. The Council desired to express their thanks to the public for their assistance. The spinning class had been kindly allowed to visit the works of Mr. Adam Dugdale, at Blackburn; Messrs. Horsfall and Beckham, Pendleton; and Mr. G. Anderton,

of Preston; printing class, the Star Paper Mills, Feniscowles, and for these priviliges the Council were desirous of expressing their thanks. Their thanks were also due to Mr. Parkinson, printer, and Mr. Dewhurst, plumber, for the use of their workshops for practical demonstrations ; to Mr. Hibbert, for a loan of pictures, and to Messrs. Stone and Burnett, for material used by the Weaving Class at Lancaster Road.—(hear, hear). The only other matter he wished to refer to was their loss of two gentlemen during the past year who were members of the council, Mr. Alderman Benson and Mr. Birchall. They were both gentlemen well-known in the town, and respected for their great usefulness, and in them the council of the Institute had lost two very able colleagues. Mr. Benson was a gentleman of a very kindly nature, and had devoted his best energies to the interest of that institution. Mr. Birchall, too, for many years spent a good deal of time and exerted valuable energy in the work of the institution, and the loss that had been sustained by his death had been a serious one and very much felt by the council—(hear, hear). Alluding to the progress that the institute had made, the President said they were all proud and glad of the advancement shown, and offered his congratulations on the consent of Sir Henry Roscoe to distribute the prizes to the students next month—(hear, hear).

The Rev. C. H. Wood moved a vote of thanks to the president for the time and attention he had devoted to the interests of the institution.

Mr. Lee seconded, and the motion was put and carried.

The President in replying regretted the small number of subscribers, not so much that they wanted the money, but because he thought it desirable that a larger number of people should identify themselves with the work of the institution, and should take a practical interest in it.

Mr. Councillor Booth remarked that each subscriber had the privilege of a student's ticket.

The President replied in the affirmative, and added that in many towns where there was a large body of subscribers many students were got together through students' tickets being given, because the donors in so many cases gave them to whomsoever they chose. Then the donors and subscribers elected three members of the governing body.

Mr. Lee said that no doubt the fact that the institute was handsomely endowed was a source of weakness, in as much as the president had pointed out there was not so many donors as there otherwise would be, and not so much individual interest.

Mr. JOLLY, in answer to a question, said that there were twenty-two subscribers to that institute, and went on to say that the argument used when persons were applied to for subscriptions was that the Institute had sufficient money.

Mr. Councillor BOOTH: There is one thing to say, that if we go on like this much longer we shall have to build another Harris Institute.

The PRESIDENT: At the present time we have a larger number of students than we have ever had before; and the results are better in every way.

The meeting then terminated.

DISTRIBUTION OF PRIZES TO THE STUDENTS

BY

MRS. HANBURY,

31st JANUARY, 1888.

THE annual Distribution of Prizes and Certificates to the Students who attend the Harris Institute took place at the Public Hall, on Tuesday, the 31st January, 1888. The building was crowded in every part, but the arrangements were, as usual, of the most perfect character. Mr. Councillor Atherton, Mr. F. A. Moore, and Mr. Johnson had charge of the students, and Mr. R. F. Easterby and Mr. R. C. Robinson superintended the arrangements for the seating of the public. Mr. T. R. Jolly, the secretary of the Institution, had mapped out the general arrangements, which were so perfectly carried out. The musical programme opened at 7 o'clock, and the business of the evening half-an-hour later. The arrival of Mr. Ascroft, J.P., President of the Institution, Mr. and Mrs. Hanbury, and others of the invited, was signalised by a hearty outburst of cheering. Mr. Ascroft, J.P., presided, and among those present were:—Mr. W E. M. Tomlinson, M.P., Mr. R. W. Hanbury, M.P., Mr. W. J. Fitzherbert Brockholes, J.P., Mrs. Hanbury, Mrs. Ascroft, Rev. C. H. Wood, Mr. R. F. Easterby, Mr. Councillor Booth, Mr. E. Dickson, Col. Oliver, Captain Calvert, Mr. F. A. Moore, Mr. W. F. Moore, Mr. R. C. Robinson, Mr. E. Greenwood, J.P., the Mayor, (Alderman Burrow), Rev. G. Steele, M.A., Mr. Councillor W. Atherton, Mr. Alderman M.S. Maynard, J.P., Messrs. W. B. Barton, J. Stacey, S. J. Elliott, J. T. Buckley, R. Pendlebury, F. B. Osborne, Geo. Rogerson, J. C. Forrester, H. Cartmell, F. C. King, A. F. Atkinson, F. J. Pye, and J. Yates, the Rev. W. S. Matthews, and Dr. Pilkington, teachers of classes at the Institute; the Mayoress and party, Mrs Rawdon and party, Mrs. Hammond and Party, Miss Horrocks, Mr. R. W. Ascroft, Mr. A. Tullis, Mrs. M. S. Maynard, Revs. Frs. Pyke, Bond, and Papall, Mr. J. Brown, J.P., Mr. Alderman Roper, J.P., Mr. John Healey, J.P., Drs. Dixon, Walmsley, Robert Trimble and C. J. Trimble, Rev. J. S. Huntley, Capt. Ibbetson, Capt. Collins, and Capt.

Foster, Messrs. G. Toulmin, junr., J. Rawcliffe, W. Rawcliffe, R. Pateson, B. Sykes, J. H. Hebdon, W. Gardner, J. Meers, J. Elton, H. Hamer, Forrester, Wilkinson, L. Clarke, Westworth, J. K. Bolton, T. Jump, J. Harrison, T. Rawlinson, R. B. Preston, J. Horrocks, J. S. Taylor, J. Farnworth, W. Jones, R. Howarth, R. Ogden, J. Crook, R. Clitheroe, J. Greenwood, J. Stanley, J. Rawsthorne, T. Nevett, J. S. Warburton, J. Harkness, J. Ormerod, Denham, W. Jones, C. Sharples, H. W. Johnson, J. Carter, D. Bostock, W. K. L. Armytage, Alfred King, J. Hillidge, R. Poole, Andrew, W. W. Cottam, J. S. Park, Goulding, Rowbotham, J. Duthie, E. Edelston, W. B. Norwood, J. Proffit, W. Willan, Bramwell, Tyson, R. Gregson, James Gregson, James Green, J. S. Ball, and J. S. Archer, &c.

The musical part of the programme at these annual distributions is always looked forward to by the audience with the most lively pleasure. It could not be in better hands than those of Mr. W. H. Cowell whose energetic and sustained labours always end with the success which they deserve. The Harris Choir, assisted by a number of ladies and gentlemen, rendered an excellent programme, part of which was given before the actual proceedings commenced, and the remainder at intervals during the evening. Mr. Tomlinson, the Corporation organist presided at the Dewhurst organ. Among the vocal selections that were given during the evening were "The Bridal Chorus," from Cowen's "Rose Maiden," "The Heavens are Telling." (Creation), "Hail Bright Abode," from Tannhauser, "Daybreak" (Gaul), "The Hunting Song" (Benedict), "Cradle Song" (Smart), "You stole my love" (Macfarren), "When Evening's Twilight" (Hatton), and "The Parting Kiss" (Pinsuti). The chorus was well balanced and the singing throughout was effective.

The CHAIRMAN opened the meeting by presenting Mrs. Hanbury with a handsome bouquet, which she gracefully accepted. He then observed that he had to apologise for the non-attendance of Mr. C. R. Jacson and Mr. D. Irvin, both of whom were unable to be with them owing to indispostion. He then proceeded: My first duty is to express our sympathy with Sir Henry Roscoe in his very painful attack of gout, which has deprived us of the advantage of his presence to-night, and our hope for his speedy recovery, and that he may at some time in the early future be able to visit us, and to favour us with the very valuable address which doubtless we should have listened to had he been able to be with us. In the next place I have a much more pleasing duty to perform in expressing our acknowledgments to Mrs. Hanbury for having so kindly undertaken to distribute our prizes. If we lose the advantage of the assistance of the great ability and high repute of Sir Henry Roscoe, the students will regard their

prizes with no less satisfaction when they receive them at the hands of a lady so esteemed as Mrs. Hanbury. Since the last distribution of prizes we have had the importance of our Institute increased, and its means of usefulness enlarged, by the additional grant of £30,000 by the Harris Trustees, for the primary purpose of building and endowing a technical school. As you know, the Corporation of Preston have decided, as a fitting mode of celebrating the Jubilee of her Most Gracious Majesty the Queen, to give us a site for the school, and are seeking Parliamentary powers to enable them to carry out this object. It is difficult to imagine a more suitable mode of celebrating the Jubilee, or one more likely at the same time to accord with the wishes of her Majesty and to benefit the town. The late Prince Consort was one of the first to call attention to the need of improving the artistic tastes and technical skill of the people, and it is greatly owing to his enlightened views and practical wisdom that the Schools of Art and Science were founded, which have already done so much to supply this need, and are laying the foundation for the more thorough training in art and science, which is being developed throughout the kingdom. We have ventured to ask the Corporation to assist us also with a grant of money to enable us to provide a more complete and comprehensive school than we can provide with our available means. We see that a similar movement is going on in most of the towns about us. Indeed, its importance has been recognised by the Government and all political parties. It has become a national movement, and I hope will be furthered by some legislation in the approaching session. It is obviously important, therefore, that the work of founding the school should be well done and in a manner in all respects worthy af the town. If the Corporation should see fit, as I hope they will, to comply with our requests that they should aid us with a money grant, they will, I am certain, be supported in their decision by their constituents as heartily as they have been supported in their decision to furnish us with a site. We have been able to give to some portion of our teaching a more practical character. For the weaving school we have provided a number of jacquard and other looms and other machines, which will much assist the teaching, and in the art classes especially, under Mr. Barton and Mr. Gater; great attention has been paid to the study of design as applied to the local trades, and under Mr. Elliott has been formed a large class for gratuitous instruction in free-hand drawing adapted for the students attending the technical classes. We have also formed classes in German and Book-keeping, which have met with great success. The German class taught by Mr. Osborne is attended by 38 students. That in commercial book-keeping, taught by Mr. Forrester, a chartered accountant, is attended by 120

students, and has been divided into two sections. Both subjects are most useful, and form important branches of what is now spoken of as commercial education. We also teach many subjects included in the programme sketched out for the commercial certificate proposed by the syndicate of the Universities of Oxford and Cambridge and the Society of Arts. We have not yet arranged classes in Geography, but we are prepared to do so, especially in the subject of commercial geography, when we meet with a thoroughly competent and suitable teacher, The importance of the subject of commercial education, a kindred one to that of technical instruction, is now being fully realised. The recent commission on the Depression of Trade and Industry gave to it their attention, and they report:—"In the matter of education we seem to be particularly deficient, as compared with some of our foreign competitors, and this remark applies not only to what is usually called technical education, but to the ordinary commercial education which is required in mercantile houses, and especially the knowledge of foreign languages." According to many of the witnesses, "The foreigner is at present the better all-round-man, better equipped, with the special technical knowledge of his particular industry, and with the wider culture which enables him to adapt his knowledge and his training to the varying demands of modern commerce." It has always appeared to me that it requires as much, if not more intelligence, indeed, trained and cultivated intelligence, to manage with success most industrial and commercial pursuits, as it does to follow any of the so-called learned professions, most of which are becoming sadly overstocked. We are convinced of the great importance of providing greater means of obtaining a good commercial education, and are desirous of taking our part in it. We do not neglect the subjects which we have hitherto taken up; on the contrary, we hope to treat them in a manner still more thorough and more practical, and to make our classes in art and science and technology year by year more efficient for Students, both in the elementary and the advanced stages. But we hope to give attention also to those other subjects which tend to make young people engaged in commercial pursuits more fitted for their occupations, and, so far as our opportunities will allow, to provide suitable instruction for them as well as for those who are engaged in our productive industries. I wish to call attention to some of the students who were successful in our recent examinations, and to whom prizes will be awarded to-night. We have this year awarded two science scholarships of £45 each—one to Jas. H. Binfield and the other to Wm. Stuart. Those two young men have passed remarkably successful examinations in the Science and Art Department. Binfield has taken first-class in eight subjects—sound, light,

and heat; magnetism, and electricity; theoretical chemistry; practical chemistry; machine construction; theoretical mechanics; applied mechanics, and steam. He took a second class in practical plane and solid geometry. (Applause). That shows the very wide range of studies he has made himself thoroughly efficient in. Wm. Stuart has passed first class in mathematics, sound light and heat, geology, botany, and physiography. He has also passed second class in one subject. I may say that it was our intention to award but one £45 scholarship, but the two students I have named were so near each other that we decided to award a scholarship to each of them. (Applause). The art scholarship of £45, has been awarded to James N. Parker, who has been a very able and attentive teacher in our art classes for some time, and it affords us great pleasure to see him obtain his present success. Another young man to whom I wish to draw special attention is John Atherton, son of a well-known townsman, and a well-known member of our Town Council. He has obtained first prize in mathematics, Union of Lancashire and Cheshire Institutes, obtaining the highest number of marks in this subject in the two counties. (Applause). A young man, named William Clitheroe, stands same in regard to physiography. Honours certificates in science were obtained by Thomas Coker for agriculture, and Albert Redmond for building construction. Thomas Spiby, who was third in order of merit for the £45 scholarship, obtained a first-class certificate in mathematics, magnetism and electricity, theoretical chemistry, and practical chemistry, winning the president's prize. The following also deserve special mention for their successes in science:—John Clitheroe, Henry Dewhurst, John Shaw, and John Riding. The art results have been highly satisfactory, and in addition to J. N. Parker, who has already been mentioned, the following obtained high honours:—A. H. Greenwood, Jas. Whiteside, Clara Poole, Frances M. Bentham, Danl. E. Bostock, Walter J. Dodgson, Sarah J. Miller, Sarah J. Ogden, John Moye, Emily J. Raw. In technology (all weaving and spinning) first class honours have been obtained by Jesse Gardiner, Robert Grime, Edward Harrison, Jno. Reddy, and Jas Marsden got a first in carpentry and joinery. The class conducted by Mr. Tomlinson in the theory of music has been very successful, first class certificates being taken by Mary C. Brown, Esther Hargreaves, Jane E. Riley, and Jas. S. Walker. In English (Society of Arts) Fred J. Orrell and Frances Seed have taken first classes. Thos. R. R. Ogden has passed the matriculation Tonic Sol-fa Association. In the Ambulance classes Florence M. Johnston has passed the final examination. The winners of our three scholarships are at present pursuing their studies at South Kensington, and owing to the period necessarily

fixed for this distribution, they, as well as other prizeholders, are unable to make their appearance to-night. The numbers of students this year as compared with last are as follows:

	Dec., 1886.	Dec., 1887.
Number on register.....	2 069	2,092
Individual students.....	1,384	1,397
	May, 1886.	May, 1887.
Certificates obtained.....	700	798
Prizes.....	163	190

These results are very gratifying and encouraging. They show that our Institute is doing more than holding its own. It is our aim to feel our way gradually, and to make sure of our ground as we go on. We believe that the instruction which we give is good, useful, and practical, and must be of benefit to those who receive it. The students derive advantage not merely from the information which they acquire, but also from the habit of thought and apitude for learning which the mere fact of study confers. We hope as time goes on to spread these advantages amongst even a larger number than we influence at present, and in addition by degrees to work up to a higher level, and to do work of a more important character than that work, good as we believe it to be, which as yet we have been able to accomplish. (Loud applause).

After Mrs. Hanbury had distributed the prizes, the choir gave Benedict's "Hunting Song" with considerable spirit.

Mr. R. W. HANBURY, M.P., who was received with cheers then addressed the meeting. Personally, he said, he should like to begin with thanking the choir very much for that inspiriting "Hunting Song," for he could assure them it required something to give courage to him when he was confronted with the task of addressing so vast and critical an audience. More than once in the last two or three years the audiences which on those occasions assembled in that hall had had the rare advantage of the direct personal teaching of men the most prominent in science and art. Last year they had the benefit of the knowledge of Sir John Lubbock, a year or two before they had Professor Tyndall, and this year they were to have had the advantage of the teaching of Sir Henry Roscoe. He could heartily sympathise with them—for he had good reasons indeed for doing so—in the very deep and keen disappointment that they must feel at Sir Henry Roscoe's absence. Whilst he sympathised with them, he asked them to sympathise with him in the difficult task which the kindness—almost cruel kindness—of the Council of the Harris Institute had put upon him by transferring Sir Henry Roscoe's work to his most unworthy shoulders. They would not hear from

him any of that fresh and original knowledge which came from, for instance, the broad and brilliant deductions of Professor Tyndall, or those marvellous, minute, and patient observations of animal life which had given such a name to Sir John Lubbock. He could only speak to them and give them the very commonplace reflections of an ordinary politician. He was not going to hurl a whole mass of statistics at their heads that night, and for that no doubt they would be grateful. It was too much, he believed, the practice of some politicians to endeavour, when they got up a speech, to try and bolt the very indigestible matter often found in Blue Books. There were very good reasons why he had not been able to gorge himself with educational statistics that night; one was because the invitation of the Council, of necessity, reached him rather late—only a week ago; and another reason was that ever since he had received their kind invitation he had been busily engaged in London, giving all the best minutes of his time to the work of the Royal Commission which was inquiring into the great services of the State; and as they were that night discussing the relations of science to practical life he should like to say that in that matter the State set a very bad example indeed. There was no scientific classification whatever of the great departments of State, and he was sorry to say that within those departments there was none of that practical business-like habit of work which ought to distinguish public departments, as it distinguished our private firms in England (Hear, hear.) As an illustration he referred them to three departments of the State with which they, in their science and art schools, were most connected. Take the Educational Department. With all the tremendous importance that attaches to education in England, there was no one called by the name of Minister of Education. We had no regular education department. To find officials responsible for education throughout England we had to look in the holes and corners of the Privy Council office, and the official at the head of that department was not called by the name of Minister of Education, but had the nondescript title of Vice-President of the Privy Council. They wanted to have a Minister of Education in England who should, throughout the length and breadth of the land, be responsible for so important a matter as education. (Hear, hear). Then, again, take the department of the Board of Trade, at the head of which, certainly in his recollection, they generally put the man who knew the least about trade. The Harris Institute, to take another subject, dealt with agriculture. Why, there was no Minister of Agriculture, one of the most important industries in this country. They found the official connected with that department hidden away in another corner of the Privy Council office; they had not even a name to give to the Min-

ister ; they had to borrow one ; the Chancellor of the Duchy of Lancaster was, in fact, the head of our agricultural department throughout England. He next proceeded to address them shortly on the subject of technical education, which he hoped would occupy the attention of Parliament during the coming session. He warned them that they must not expect too much from technical education, and in return it must not expect to much from them. He did not suppose that technical education would ever make a stupid people clever, although, of course, it would give opportunities to those who had not had them under our present system of education of developing their peculiar talents. It would not bring us prosperity with a sudden rush, and on the other hand we had got to recollect that it would cost money. In the matter of education they had to steer between two very different sets of people. They had to steer between those people who thought education was so good that it would be well to teach everybody everything, and on the other hand those people who, having been disappointed with the present results of education, and finding that it cost them money, and perhaps took away their children's labour from them for a long time, did not regard it with much enthusiasm. He believed that technical education, if properly developed, would meet the requirements of both to a great extent. What was the one great advantage of technical education ? It would give them more variety in meeting their natural tastes. Children whose talent had not hitherto had a fair opportunity of developing, and who had a taste for the industrial arts, would, he hoped, have a better chance than they had hitherto under the present system. He did hope that while they had variety, they would have no dilletanteism in their technical education. He hoped they would make it their rule as much as possible to restrict the people brought up in those technical schools to one or two subjects, so that they should know those subjects thoroughly well. It was much better to know one or two subjects thoroughly well than to dally with a great many and only know them superficially. (Hear, hear). He did hope that the subjects that were taken up would be subjects which would have a definite object in them, and would be calculated to advance boys or girls in the trades in which they were expected to succeed. (Hear, hear). Again, those people who thought we had enough of education already, he had no doubt were frightened by the somewhat high-sounding name of science, art and technical training. But they need not be frightened on that score, because this technical education should be of a very practical sort indeed. He could not say exactly how it might be in a manufacturing community like Preston, but he knew that in agriculture and farming the possession of such knowlege would bring grist to the mill. A quart of cream would make a pound of

butter, and a gallon of milk a pound of cheese; but if you made the cheese well you would get perhaps 7d. a pound for it; and if you made it badly only 4d. or 5d. The difference of price was produced by skill alone; and technical training was meant to give such skill, and so increase the property of agriculture or of trade. He would be ashamed to go on a platform like that and give them mere theory; therefore he had selected an illustration upon a subject of which he had practical knowlege. In the neighbourhood where he resided he did not believe there was more than one farmer out of twenty who could make out a balance sheet. Yet it would be said that these men had been taught the rules of arithmetic at school. But they did not want men taught mere rules of arithmetic, they wished them to be in a position to apply them in practical life when they came to take up their trades and professions afterwards. (Hear, hear). But some would say we had done well enough without this technical education in the past, and why could we not do without it now. Well, he, for one, doubted very much whether our education of to-day was so much ahead of that of our forefathers relatively to other nations. Our forefathers were very fine fellows, and they left us some great heritages of which we had reason to be proud. They left us the healthiest race in Europe, and the greatest Empire the world had ever seen. It might be said that our ancestors made a mistake in teaching too much Latin, but in those days Latin was the language of diplomacy just as French and German were used for that purpose to-day, and it was necessary to teach it for many practical reasons. Again, our forefathers encouraged another side of human nature that was still worth encouraging and which we were too apt to loose sight of in the present day. If we were to keep our place in the advance of the world we must not only promote the developement of the mind but keep up our physique too. (Hear, hear). Those old English sports were a leading part of our educational system in the past, and they did very much to bring this country to the position which our forefathers gained for it. English homes, too, were great centres of our influence in the past, and this, too, was a feature which should not be lost sight of. The English housewife of the past was a proverb for her home management. Then there was one other feature wherein England surpassed other nations, while intellect was justly highly respected, great respect was also entertained for manual labour. He did not know whether it was by reason of the more common intermingling of the classes in those olden times, but there was certainly in England an amount of respect entertained for manual labour that was unprecented in the history of the world. (Hear, hear). Had we advanced in these directions? He was afraid

that in some respects we had gone back. The introduction of machinery, while it had undoubtedly conferred enormous benefits on our nation, had done us harm to some extent. It had overshadowed the natural superiority of Englishmen, had congregated the people in large, and often unhealthy towns, and by reason of the minute sub-divisions of labour it had been rendered less interesting, and there was little or no opportunity for the workman to develop his individual tastes, intellects, and talents. From the recent development of education in England, a most useful thing in itself, and which, if properly carried out, was the most useful reform ever introduced, a certain danger had arisen. It had taught men to look to much to literary attainments and too little to manual labour. In this respect so far as it had tended to lower the respect for manual labour, it had been a decided disadvantage. There was reason too, to fear that during the past half-century our national physique had deteriorated, and that only one side of our manhood had been adequately cultivated. He believed the advance of technical education would go far to remove these objectionable features. Great efforts would be necessary if we were to retain our foremost place as a nation. We must practice economy, not in regard to money merely, but economy of what was far more valuable—our men, by bringing out all their talents and capabilities. He urged them that they should give every child in their schools full opportunity for developing his or her special natural talents, whether physical or mental. In Preston, they seemed to be carrying out this principle in a practical way. It was a place where sports of all kinds were encouraged, their cricket and football clubs taking champion rank, and he really did not know whether he was prouder of being one of the members for a borough which boasted the best elementary schools in England, or of being representative of a borough which could produce the North End Football Club. (Loud cheers). He trusted that as technical education extended, people would be led more and more to see that it was to their advantage to improve themselves as far as possible in their respective trades, which were just as honourable as clerkships. Mr. Hanbury gave statistics showing that the supply of clerks was out of all proportion to the market for them. While he did not by any means decry literary pursuits if young people had talents in that direction, he wished them to understand and appreciate the fact that manual labour was equally honourable. The hon. gentleman concluded with some valuable practical advice to the students, and expressed a hope that in the coming session legislation would extend these schools of science and art throughout the length and breadth of the kingdom. (Applause).

Mr. Tomlinson, M.P., proposed a vote of thanks to Mrs. Hanbury for so gracefully distributing the prizes, and to Mr. Hanbury for his appropriate and able address. He remarked that Mrs. Hanbury had kindly consented at short notice to distribute the prizes, for they all rembered how gracefully Lady Lathom undertook that duty two years ago, and how Lady Lubbock honoured them last year. (Hear, hear). He was sure nothing could give greater pleasure to those students who had come forward to receive prizes than that they should receive them from the kindly and genial hand of a lady they knew so well as Mrs. Hanbury. (Cheers). Mr. Hanbury had given them some valuable ideas, and was entitled to their thanks for his address. The Harris Institute in its present form had now lasted for several years, and its history was characterised by much progress and advancement. If they would look at the figures they would see that though the number of students in the past few years had not greatly increased, still there was the best evidence of steady progress in that the number of prizes had contiuually increased; and he thought good proofs of the excellent spirit in which the training was received were highly manifested in the results of the examination. Preston was to be congratulated on having an institution of that kind. In these days of technical knowledge and scientific research, we could not afford to be behind the other nations of the world, and anybody who had read the comprehensive reports of the Royal Commission would at once see that unless we exerted ourselves we should assuredly be left behind. He might especially point to Switzerland, where municipal and private aid was given to technical education, and to other places on the Continent where technical instruction was given at great cost. It was satisfactory to know that the Harris Institute was taking such a useful part in educating the youth of Preston in technology, and that we were soon to have a Technical School, towards the erection and endowment of which the Harris Trustees had granted £30,000. The Corporation was properly manifesting its desire to advance this great educational movement by giving a site for the school, and in a bill which was being introduced in the ensuing session powers were being sought with this object. A grant to the school was also suggested out of the public funds. The advantages of the school could not be fully appreciated, and it would not be the fault of those who managed this institution if Preston fell behind in the race. (Cheers).

Mr. Fitzherbert Brockholes said that he had been asked to perform the very pleasant duty of seconding the vote of thanks to Mrs. Hanbury for distributing the prizes, and to Mr. Hanbury for his address, which had been proposed in such suitable terms by Mr. Tomlinson. He felt sure that he was only ex-

pressing the feelings of each and everyone in the large assemblage in tendering their very best thanks to Mr. and Mrs. Hanbury for the way in which they had come to the rescue on such a short notice. The Council had made a specially happy choice in asking Sir Henry Roscoe to come to preside on this occasion. Not only is he one of the foremost men of the day in the fields of science, but he may be said to be one of the fathers of technical education. A more suitable person to preside here to-day they could not therefore have chosen. However "Man proposes but God disposes," illness had unfortunately prevented him keeping his engagement, and at almost the last moment your Council had to secure a substitute. None who had heard Mr. Hanbury's able address could hesitate for a moment in saying that they found a most efficient substitute for Sir Henry Roscoe. The Harris Institute is one of which this town may well be proud. Though but 5 years old it bids fair to become a model of such institutions, and it does the greatest credit to all who have had a share in organizing and carrying it on. The technical schools attached to it are simply invaluable in an important manufacturing town like Preston, and the wide-spread interest that is taken in them shows how thoroughly the benefits to be derived from them are understood and appreciated.

There was a very common proverb that anyone could take a horse to the water, but that none could make him drink. The originators and organizers of this Institute have brought the educational advantages to be derived from it to your doors; the charitable donors through whose generosity it has been started and endowed have placed these advantages within the reach of those who would otherwise be unable to afford the necessary expenses, but it remains entirely in the hands of the people of Preston whether they choose to profit or not by the opportunities given to them. If he mistook not, the people of Preston, a town that has produced so many successful men of business are not the people to waste these opportunities. In fact, this large gathering of every class and the evidences we have had of successful examinations showing hard study on the part of so many students, demonstrate clearly that these opportunities are not being wasted, and that the labours of those who have organized it, and the generosity of those who have found the requisite funds have not been bestowed in vain. He felt that he was trespassing on their time in speaking of matters that have already been brought to their notice by abler tongues than his, and moreover was diverging from his point which was that of seconding the vote of thanks to Mrs. Hanbury for distributing the Prizes, and to Mr. Hanbury for his address. He knew that by the manner in which they would receive this vote of thanks, they would express more elo-

quently and forcibly than any words of his how much their efforts had been appreciated and how successful they had been.

Mr. HANBURY, in responding, said it had been not only a pleasure but an honour to Mrs. Hanbury and himself to attend that magnificient gathering. He assured them that both he and Mrs. Hanbury would at all times be glad to do all in their power for such sound and valuable public institutions as the Harris Institute. (Cheers).

On the motion of the MAYOR, seconded by Colonel OLIVER, hearty thanks were accorded to the President.—Mr. ASCROFT, in briefly responding, expressed their indebtedness to Mr. Cowell and the Harris Choir for the entertainment they had afforded.

LIST OF PRIZES AND CERTIFICATES AWARDED TO STUDENTS ATTENDING THE CLASSES AT THE HARRIS INSTITUTE, SESSION, 1886-7.

SCIENCE.

† These Students have obtained Queen's Prizes and Local Scholarships.

* These Students have obtained Local Prizes and Scholarships.

A signifies Advanced. E Elementary. I First Stage. II Second Stage.

Name.	Class of Success.	Subject.
*Atherton, John	I 1st	Mathematics.
,,	E 1st	Applied Mechanics.
,,	E 1st	Steam.
*Atherton, Frederick	I 2nd	Mathematics.
,,	E 1st	Sound, Light, and Heat.
,,	E 1st	Physiography.
*Atherton, Arthur	E 1st	Physiography.
Buckley, Fredk. H.	E 2nd	Botany.
*Beesley, Robert W.	I 1st	Mathematics.
,,	E 2nd	Theoretical Inorganic Chemistry.
*Berry, Charles W.	I 1st	Mathematics.
*Bennison, Benjamin	I 1st	Mathematics.
Bonney, James	II 2nd	Mathematics.
*Boddy, Hubert W.	3rd 2nd	Mathematics.
,,	E 1st	Sound, Light, and Heat.
,,	A 2nd	Magnetism and Electricity.
,,	A 2nd	Theoretical Inorganic Chemistry.
*Bostock, Lillian	E 1st	Sound, Light, and Heat.
,,	E 2nd	Magnetism and Electricity.
,,	A 2nd	Physiography.
Bailey, John	A 2nd	Sound, Light, and Heat.
,,	E 2nd	Theoretical Inorganic Chemistry.
*Bradshaw, William A.	E 2nd	Sound, Light, and Heat.
,,	E 1st	Magnetism and Electricity.
*Bradley, Oswald J.	E 1st	Sound, Light, and Heat.
,,	A 2nd	Theoretical Inorganic Chemistry.
Brewer, John C.	E 2nd	Magnetism and Electricity.
*Ball, John Hy.	E 1st	Sound, Light, and Heat.
,,	E 1st	Physiography.
Bridge, Richard W.	E 2nd	Practical, Plane, & Solid Geometry.
Barnes, John	E 2nd	Practical, Plane, & Solid Geometry.
Barton, Thomas	E 2nd	Machine Construction.
Bentnam, George H.	A 2nd	Machine Construction.
,,	E 2nd	Steam.
Ball, Richard	E 2nd	Machine Construction.
Baker, Elizabeth	A 2nd	Physiography.

Name.	Class of Success	Subject.
*†Binfield, James H.	A 2nd	Practical, Plane, & Solid Geometry.
,,	A 1st	Machine Construction.
,,	E 1st	Theoretical Mechanics.
,,	A 1st	Applied Mechanics.
,,	E 1st	Sound, Light, and Heat.
,,	A 2nd	Magnetism and Electricity.
,,	E 1st	Theoretical Inorganic Chemistry.
,,	E 1st	Practical Inorganic Chemistry.
,,	A 1st	Steam.
*Breakell, William	E 2nd	Machine Construction.
,,	E 1st	Physiography.
*Bennett, William P.	A 2nd	Machine Construction.
,,	E 2nd	Applied Mechanics.
,,	E 1st	Steam.
*Bennett, Samuel P.	E 1st	Building Construction.
,,	E 2nd	Animal Physiology.
Burns, James	E 2nd	Building Construction.
Beckett, Thomas A.	E 2nd	Animal Physiology.
Ball John	A 2nd	Building Construction.
Bostock, Daniel E.	E 2nd	Theoretical Inorganic Chemistry.
*Barratt, John T.	E 1st	Theoretical Inorganic Chemistry.
*Barber, Edward H.	E 1st	Theoretical Inorganic Chemistry.
,,	E 2nd	Practical Inorganic Chemistry.
Bingant, Thomas K.	E 2nd	Theoretical Inorganic Chemistry.
,,	E 2nd	Geology.
Bolton, Thomas B.	A 2nd	Practical Inorganic Chemistry.
Burrows, William	E 2nd	Geology.
*Banister, Lewis	E 1st	Geology.
Banister John W.	E 2nd	Geology.
Bolton, Edith C.	E 2nd	Physiography.
Blakey, Eunice	E 2nd	Physiography.
*Brown, Mary E.	E 1st	Physiography.
*Bradley, Kate	E 1st	Physiography.
*†Clitheroe, William	E 1st	Geology.
,,	A 1st	Physiography.
*†Clitheroe, John	E 1st	Geology.
,,	A 2nd	Botany.
,,	A 1st	Physiography.
*†Cockshett, Samuel	A 1st	Machine Construction.
,,	A 2nd	Applied Mechanics.
,,	E 1st	Steam.
Cooper, Thomas	E 2nd	Machine Construction.
*Capstick, John	E 1st	Machine Construction.
,,	E 1st	Applied Mechanics.
,,	E 2nd	Steam.
Corner, William Hy.	A 2nd	Machine Construction.
,,	2nd G'de Prize	Machine Construction Works.
,,	E 2nd	Steam.
Cunliffe, Thomas	A 2nd	Building Construction.
Cunliffe, Arthur B.	A 2nd	Building Construction.
Croft, James	A 2nd	Building Construction.
Croft, William	E 2nd	Building Construction.
Croasdale, John H.	E 2nd	Building Construction.
Cooke, James	E 2nd	Building Construction.
Crerar, James	I 2nd	Mathematics.
,,	E 2nd	Magnetism and Electricity.

Name.	Class of Success.	Subject.
Coward, Sarah J.	E 2nd	Physiography.
Clarke, Fredk.	II 2nd	Mathematics.
,,	A 2nd	Sound, Light, and Heat.
Clarke, Nathaniel C.	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Navigation.
*Crossthwaite, William G.	E 1st	Sound, Light, and Heat.
,,	E 2nd	Magnetism and Electricity.
,,	E 2nd	Physiography.
Coupe, Charles	E 2nd	Sound, Light, and Heat.
*Crozier, James	E 2nd	Magnetism and Electricity.
,,	E 1st	Physiography.
*Cottom, Henry	E 1st	Theoretical Inorganic Chemistry.
Cocker, Horace E.	E 2nd	Theoretical Inorganic Chemistry.
Cross, William	A 2nd	Geology.
Chaloner, Richard	E 2nd	Navigation.
Conolly, Herbert	E 2nd	Physiography.
Cowell, Rose M.	E 2nd	Physiography.
Coker, Thomas	Honors 2nd	Agriculture.
*Dandy, Charles	E 1st	Practical, Plane, & Solid Geometry.
Dobson, Adam	E 2nd	Machine Construction.
*Dawson, Edwin	E 1st	Machine Construction.
,,	E 2nd	Steam.
*Davis, Joseph	I 1st	Mathematics.
Dobson, John	E 2nd	Physiography.
*Derome, William	I 1st	Mathematics.
,,	E 3nd	Magnetism and Electricity.
*†Dewhurst, Henry	I 1st	Mathematics.
,,	A 1st	Theoretical Inorganic Chemistry.
,,	E 1st	Geology.
,,	E 1st	Botany.
,,	A 2nd	Physiography.
*Ditchfield, Agnes A.	E 2nd	Sound, Light, and Heat.
,,	E 1st	Agriculture.
Duckworth, David	E 2nd	Physiography.
Eaves, Alfred E.	E 1st	Applied Mechanics.
,,	E 1st	Steam.
Frame, Elsie	E 2nd	Physiography.
Fare, Jane	E 2nd	Botany.
Fallowfield, Charles C.	E 2nd	Geology.
*France, Eliza	E 1st	Physiography.
*Foster, Charles T.	E 1st	Machine Construction.
Fish, Edith	E 2nd	Sound, Light, and Heat.
Fallowfield, John E.	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Geology.
Fraher, Joseph B.	A 2nd	Magnetism and Electricity.
,,	E 2nd	Theoretical Inorganic Chemistry.
Fawcett, Richard	E 2nd	Animal Physiology.
Fairnie, James S.	E 2nd	Botany.
*Grime, Robert	E 1st	Machine Construction.
,,	E 2nd	Applied Mechanics.
,,	E 2nd	Steam.
*Greenwood, Fredk. C.	E 1st	Building Construction.
*†Gorst, Henry T.	A 1st	Building Construction.
*Greenhalgh, John E.	I 1st	Mathematics.
,,	E 2nd	Magnetism and Electricity.
,,	E 2nd	Animal Physiology.

Name.	Class of Success.	Subject.
Gray, Charles E.	A 1st	Building Construction.
*Gardner, Charles F.	I 1st	Mathematics.
Gardner, Elizabeth	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Physiography.
Gardner, Gertrude	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Physiography.
Gardner, Sarah H.	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Physiography.
*Gardner, John L.	A 2nd	Sound, Light, and Heat.
,,	E 1st	Theoretical Inorganic Chemistry.
,,	E 2nd	Botany.
Gardner, Harry M.	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Magnetism and Electricity.
Gillow, Aloysius R.	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Theoretical Inorganic Chemistry.
*Gibson, Henry	E 1st	Theoretical Inorganic Chemistry.
,,	E 1st	Practical Inorganic Chemistry.
Green, Caroline	E 2nd	Botany.
,,	E 2nd	Physiography.
*Gemson, Lawrence	E 1st	Navigation.
*†Hull, Richard N.	E 1st	Practical, Plane, & Solid Geometry.
,,	A 1st	Building Construction.
Hart, Moses	E 2nd	Machine Construction.
*Hodgkinson, Joseph	E 1st	Machine Construction.
Harrison, Harry M.	I 2nd	Mathematics.
*Holmes, Martha	E 1st	Sound, Light, and Heat.
,,	E 2nd	Agriculture.
Harrison, Richard R. H.	E 2nd	Magnetism and Electricity.
,,	E 2nd	Steam.
*Halewood, Alfred	E 1st	Theoretical Inorganic Chemistry.
,,	E 1st	Geology.
,,	A 2nd	Physiography.
Howarth, Harry	E 2nd	Theoretical Inorganic Chemistry.
,,	E 2nd	Physiography.
Howarth, Lucy A.	E 2nd	Physiography.
Hothersall, Robert	E 2nd	Physiography.
Irvin, Joseph	E 2nd	Magnetism and Electricity.
*Johnson, William	E 1st	Steam.
*Jackson, Alfred	I 1st	Mathematics.
*Johnston, Walter H.	E 1st	Theoretical Inorganic Chemistry.
Jolly, Rebecca J.	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Magnetism and Electricity.
,,	E 2nd	Physiography.
*Jeffs, Frederick	E 1st	Theoretical Inorganic Chemistry.
*†Jones, James C.	A 1st	Machine Construction.
,,	E 2nd	Applied Mechanics.
,,	E 1st	Steam.
*†Jump, Thomas B.	A 1st	Machine Construction.
,,	E 2nd	Applied Mechanics.
,,	E 1st	Steam.
Kinloch, John	A 2nd	Machine Construction.
King, Henry C.	E 2nd	Machine Construction.
King, Agnes A.	E 2nd	Theoretical Inorganic Chemistry.
,,	E 2nd	Physiography.
King, Edith E.	E 2nd	Theoretical Inorganic Chemistry.
,,	E 2nd	Physiography.
Kelly, William	I 2nd	Mathematics.

Name.	Class of Success.	Subject.
*†Kennedy, George	A 1st	Sound, Light, and Heat.
,,	E 2nd	Magnetism and Electricity.
Kent, Richard	E 2nd	Magnetism and Electricity.
Kennerly, Arthur	E 2nd	Agriculture.
*Knagg, William H.	E 2nd	Magnetism and Electricity.
,,	E 1st	Physiography.
Knowles, James	E 2nd	Building Construction.
Lancaster, Henry P.	E 2nd	Steam.
Livesey, Emma	E 2nd	Physiography.
Lambert, Charles E.	E 2nd	Practical, Plane, & Solid Geometry.
Ley, Ernest	E 2nd	Machine Construction.
Ley, Percy	I 2nd	Mathematics.
Leach, William	A 2nd	Building Construction.
*Macfarlane, Sidney	E 1st	Theoretical Inorganic Chemistry.
Mangan, Gerald P.	E 2nd	Physiography.
*Marsden, James	E 1st	Practical, Plane, & Solid Geometry.
,,	A 2nd	Building Construction.
McMannus, Edward	E 2nd	Practical, Plane, & Solid Geometry.
,,	A 2nd	Magnetism and Electricity.
*McCarter, James	E 1st	Theoretical Inorganic Chemistry.
McCarter, Albert G.	A 2nd	Machine Construction.
,,	A 2nd	Applied Mechanics.
McGavin, Bessie	E 2nd	Physiography.
*†Maquade William E.	E 1st	Practical, Plane, & Solid Geometry.
,,	A 1st	Building Construction.
*Metcalfe, Charles	I 2nd	Mathematics.
,,	E 2nd	Applied Mechanics.
,,	E 1st	Theoretical Inorganic Chemistry.
,,	A 2nd	Geology.
Matthews, Percy M. A.	A 2nd	Magnetism and Electricity.
Napthen, Mary C.	E 2nd	Magnetism and Electricity.
*Nevett, Thomas C.	I 1st	Mathematics.
*Orrell, Isaac	I 1st	Mathematics.
Parker, Thomas R. G.	E 2nd	Machine Construction.
Parker, Fred W.	A 2nd	Steam.
Peat, Edward T.	E 2nd	Practical, Plane, & Solid Geometry.
Penny, Isabella	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Agriculture.
*Penny, John	E 1st	Sound, Light, and Heat.
*Pilkington, Thomas	A 2nd	Practical, Plane, & Solid Geometry.
,,	E 1st	Sound, Light, and Heat.
Pincock, Thomas	E 2nd	Magnetism and Electricity.
Pimblett, William Hy.	A 2nd	Theoretical Inorganic Chemistry.
,,	E 2nd	Practical Inorganic Chemistry.
,,	A 2nd	Animal Physiology.
*Powell, Fredk.	E 1st	Machine Construction.
*Pomfrett, Prudence M.	E 1st	Sound, Light, and Heat.
,,	E 1st	Physiography.
Proctor, Sarah P.	E 2nd	Physiography.
Proctor, William E.	E 2nd	Magnetism and Electricity.
Pritt, Stephen	E 2nd	Physiography.
*†Purves, John	II 2nd	Mathematics.
,,	A 1st	Physiography.
Purves, Elizabeth A.	E 2nd	Physiography.
*Robinson, James	E 1st	Geology.
Roseway, David	E 2nd	Practical, Plane, & Solid Geometry.
,,	E 2nd	Building Construction.

Name.	Class of Success.	Subject.
*†Rigby, James	A 1st	Practical, Plane, & Solid Geometry.
,,	E 1st	Building Construction.
Renwick, Thomas	E 2nd	Machine Construction.
Rowbotham, George	E 2nd	Building Construction.
,,	I 2nd	Mathematics.
*Rowbotham, Felicia	E 1st	Sound, Light, and Heat.
,,	E 1st	Physiography.
Roddy, Joseph	E 2nd	Sound, Light, and Heat.
Robinson, Ellen C.	E 2nd	Theoretical Inorganic Chemistry.
,,	E 2nd	Physiography.
Robinson, Tirzah	E 2nd	Physiography.
Roberts, William Hy.	E 2nd	Sound, Light, and Heat.
*†Rhodes, John C.	II 2nd	Mathematics.
,,	A 2nd	Sound, Light, and Heat.
,,	A 2nd	Magnetism and Electricity.
,,	E 1st	Geology.
,,	A 1st	Physiography.
*Redmond, Albert	Honors 2nd	Building Construction.
*Redmond, William D.	E 1st	Sound, Light, and Heat.
,,	E 1st	Physiography.
*Riding, John	E 1st	Sound, Light, and Heat.
,,	E 1st	Theoretical Inorganic Chemistry.
,,	E 1st	Botany.
*†Shaw, John	E 1st	Practical, Plane, & Solid Geometry.
,,	A 1st	Machine Construction Works.
,,	2nd G'de Prize	Machine Construction.
,,	II 1st	Mathematics.
,,	E 1st	Steam.
Shaw, James	E 2nd	Geology.
Slater, Charles B.	E 2nd	Machine Construction.
,,	E 2nd	Magnetism and Electricity.
Stevenson, James	E 2nd	Machine Construction.
Steele, William	E 2nd	Building Construction.
Sykes, Robert	E 2nd	Building Construction.
Swarbrick, Henry	E 2nd	Building Construction.
*Stuart, William	I 1st	Mathematics.
,,	E 1st	Sound, Light, and Heat.
,,	E 1st	Geology.
,,	A 2nd	Botany.
,,	E 1st	Physiography.
Stephenson, John R.	I 2nd	Mathematics.
*Shorrock, James	I 1st	Mathematics.
*†Spiby, Thomas	I 1st	Mathematics.
,,	E 1st	Magnetism and Electricity.
,,	A 1st	Theoretical Inorganic Chemistry.
,,	A 1st	Practical Inorganic Chemistry.
*Sedgwick, Christopher	E 1st	Sound, Light, and Heat.
,,	E 1st	Physiography.
Sanderson, John	E 2nd	Applied Mechanics.
,,	E 2nd	Steam.
Sergeant, William J.	E 2nd	Steam.
Sergeant, Edith	E 2nd	Physiography.
Sergeant, Margaret	E 2nd	Physiography.
*Smith, Margaret A.	E 2nd	Magnetism and Electricity.
,,	E 1st	Physiography.

Name.	Class of Success.	Subject.
*†Sellers, Thomas D.	A 1st	Botany.
*Sumner, Edward	E 1st	Practical Inorganic Chemistry.
Southworth, William	A 2nd	Botany.
,,	A 2nd	Agriculture.
Taylor, Henry J.	E 2nd	Theoretical Inorganic Chemistry.
*Taylor, Bertha	E 1st	Theoretical Inorganic Chemistry.
Taylor, Elizabeth	E 2nd	Botany.
Taylor, Miriam	E 2nd	Physiography.
*Taylor, Annie	E 1st	Physiography.
Threlfall, Fredk. H.	A 2nd	Physiography.
Thompson, William	E 2nd	Physiography.
,,	E 2nd	Sound, Light, and Heat.
*Thornber, William Hy.	E 1st	Geology.
*Topping, James	E 1st	Magnetism and Electricity.
,,	E 1st	Agriculture.
Turner, John J.	E 2nd	Sound, Light, and Heat.
*Twist, John	E 2nd	Sound, Light, and Heat.
,,	E 1st	Navigation.
Waddington, William	E 2nd	Magnetism and Electricity.
,,	E 2nd	Agriculture.
Walker, Roger	E 2nd	Practical, Plane, & Solid Geometry.
,,	A 2nd	Building Construction.
*Walker, William Hy.	E 1st	Sound, Light, and Heat.
*Walmsley, Fred T.	I 1st	Mathematics.
Warburton, Winifred A.	E 2nd	Geology.
Webster, William	E 2nd	Animal Physiology.
,,	E 2nd	Botany.
*Whiteside, Annie	E 1st	Sound, Light, and Heat.
Whalley, John	A 2nd	Building Construction.
*Whinnerah, William	E 2nd	Practical, Plane, & Solid Geometry.
,,	I 1st	Mathematics.
White, Jeremiah S.	E 2nd	Theoretical Inorganic Chemistry.
*Whittam, William	I 2nd	Mathematics.
,,	E 1st	Magnetism and Electricity.
Wilcock, Edward	A 2nd	Physiography.
Wilcock, William	E 2nd	Sound, Light, and Heat.
,,	E 2nd	Physiography.
Wilkinson, Thomas	E 2nd	Magnetism and Electricity.
,,	E 2nd	Physiography.
Wilkinson, David	Honors 2nd	Agriculture.
*Wilkinson, Robert J.	A 1st	Geology.
Wilkinson, Elizabeth A.	E 2nd	Physiography.
Worden, Edith	E 2nd	Physiography.
*Woolley, Herbert J.	A 1st	Physiography.
*Wrigley, Frank	E 2nd	Sound, Light, and Heat.
,,	E 1st	Geology.
Worden, William	E 2nd	Practical, Plane, & Solid Geometry.
*Yates, James	E 1st	Sound, Light, and Heat.

Thomas Spiby, obtained the Special Prize given by the President, W. Ascroft, Esq., J.P.

The following Students have been awarded Special Prizes by the Union of Lancashire and Cheshire Institutes, for obtaining highest number of marks in the two counties, at the Science and Art Examinations :—

John Atherton, 1st Prize ; 1st Stage Mathematics.

Wm. Clitheroe, 1st Prize, advanced 1st Physiography.

SCHOOL OF ART.

GOVERNMENT SECOND GRADE EXAMINATION.

P signifies Pass.
E signifies Excellent and also the winning of a Government Prize.
* Scholarship and Local Prize awarded.

Names.	Free-hand.	Geo-metry.	Per-spective.	Model.
*Ambler, Lilly	P	..	E	..
Ambler, Mary	..	..	P	..
Baines, Mary J.	P	..	..	..
*Billington, Richard	E	..	..	E
*Billsborough, Elizabeth	P	..	..	P
*Billsborough, Thomas	..	..	E	P
*Birchall, Alice	P	P	..	..
*Bentham, Frances M.	..	P	P	P
*Bostock, Daniel E.	P	P	P	..
Bowen, Louisa	P	..	..	..
Bowen, Elizabeth	..	..	..	P
Branson, Annie	..	..	P	..
Bunting, Louisa	..	..	..	P
Clegg, Edward A.	P	..	..	..
*Cockshott, Samuel	E	..	..	..
Croasdale, John H.	P	..	..	..
*Cotton, Charlotte G.	..	..	E	P
*Dodgson, Walter	..	..	..	E
Fairley, John	..	..	P	..
Fairnie, James S.	..	..	P	..
Greenwood, Frederick C.	P	..	..	..
*Greenwood, Alfred H.	..	P	P	..
Greenhalgh, John E.	..	..	..	P
*Hall, Frederick	P	..	..	P
*Hargreaves, John	P	..	..	P
*Haydock, William	..	..	E	..
Hodge, Edwin G.	P	..	..	..
Hull, Robert	P	..	..	..
Heathcote, Arthur T.	..	..	..	P
*Lynex, Edwin G.	..	..	E	..
Lamb, George	..	..	P	..
*Macfarlane Sidney	E	..	..	P
*McGuire, John	.	..	E	..
*Merigold, Albert E.	P	..	P	..
*Miller. Sarah J. C.	P	..	P	P
Melling, Hettie	P	..	..	..
Napthen Mary C.	P	..	..	..
*Ogden. ,Mary E.	P	P	P	..
*Ogden, Sarah J.	..	P	P	P
Owens, Albert R.	..	..	..	P
*Penny Margaret C.	..	P	P	..
Poole, Clara	..	..	P	..
*Pomfret, Robert R.	..	..	..	E
Roberts, Frank	..	..	..	P

Names.	Free-hand.	Geo-metry.	Per-spective.	Model.
Richardson, Elizabeth	..	..	..	P
Robinson, Robert B.	P	..	..	..
*Seed, Frances	P	P	..	..
*Thornley, Agnes	P	..	..	..
*Topping, James	..	..	E	P
Twist, John	..	P	..	..
Ure, James Mc.L.	..	..	..	..
Wales, Kate	P	..	..	..
Warburton, Winifred A.	P	..	..	..
Ward, Annie	P	..	..	..
Watt, David W.	P	..	..	..
Webb, John W.	P	..	..	..
*Whiteside, James	P	P	P	P
Wilkinson, William	P	..	..	..
Worden, Amy	P	..	..	..

Students who have completed their 2nd Grade Certificate during the year:—Miss Frances M. Bentham, Miss Clara Poole, Daniel E. Bostock, Sidney Macfarlane, James Whiteside.

NATIONAL COMPETITION AWARDS.

ROBERT FAIRCLOUGH obtained a Book Prize, in the National Competition, for a Set of Studies of Anatomical Details, which were afterwards purchased by the Government Art Department, to serve as examples.

GOVERNMENT CERTIFICATES AND PRIZES OF THE THIRD GRADE.

**Indicates the winner of both a 3rd grade prize and a 3rd grade certificate.
*Indicates the winner of a 3rd grade prize.
†Indicates the winner of a 3rd grade certificate.

Name.	Subject.
† Elliott, John William	Elementary Principles of Ornament.
† ,,	Painting in Monochrome.
** ,,	Painting Still Life.
** ,,	Anatomy.
**Fairclough, Robert	3rd Grade Prespective.
† ,,	Painting Still Life.
** ,,	Anatomy.
† Moyle, John	Elementary Principles of Ornament.
† ,,	Original Designs.
* ,,	Ornamental Design, as applied to Decorative or Industrial Art.
† Murdin, Charles	Elementary Principles of Ornament.
** Poole, Clara	Elementary Principles of Ornament.
* ,,	Studies of Historic Styles of Ornament.
* ,,	Ornamental Design, as applied to Decorative or Industrial Art.
** Poole, Lizzie	Anatomy.
* Raw, Emily J.	Modelling in Relief Figure Composition.
** Smith, Barbara H.	3rd Grade Prespective.
,,	Ornamental Design, as applied to Decorative or Industrial Art.

ART CLASS TEACHERS' CERTIFICATES.

Miss BARBARA H. SMITH and Miss LIZZIE POOLE have passed the full examination and obtained the Art Class Teachers' Certificate.

ALFRED H. GREENWOOD has passed the full examination for the Art Class Teachers' Certificate.

WILLIAM BAVERSTOCK, JOHN BUSBY, WALTER J. DODGSON, Miss ANNIE HORROCKS have passed in Stage 5b.

WILLIAM BAVERSTOCK and JOHN HAYDOCK have passed in Stage 3b.

WALTER J. DODGSON, JOHN HAYDOCK, and Miss MARY H. SIMPSON have passed in Stage 5a.

SPECIAL ART PRIZES.

Names.	Class of Success.	Subject.
Ambler, Lilly	2nd Prize	Landscape in Water Color.
Baverstock, William	2nd ,, ...	Shaded Ornament from the Cast
,, ...	2nd ,, ...	Shading Group of Models.
Billsborough, Elizabeth.....	2nd ,, ...	Set of Freehand Drawings.
Dodgson, Walter J.....	1st ,, ...	Set of Studies of Geometry, carefully inked in.
,, ...	2nd ,, ...	Set of Studies, Perspective Problems, carefully inked in.
,, ...	2nd ,, ...	Set of Outline Studies.
,, ...	2nd ,, ...	Special Prize.
Fairclough, Robert	1st ,, ...	Study of Head from life
Farnie, James	1st ,, ...	Set of Geometry Studies.
Fairley, John	2nd ,, ...	Set of Perspective Problems.
Goodier, Hubert	1st ,, ...	Set of Studies of Anatomical Details.
Greenwood, Alfred H.	1st ,, ...	Landscape in Water Color (Special Prize given by Mr. W. F. Moore).
,, ...	1st ,, ...	Set of Perspective Problems, carefully inked in. (1st Special Prize).
,, ...	2nd ,, ...	Set of Geometry Studies, carefully inked in.
Greenwood, Frederick C.	1st ,, ...	Set of Freehand Drawings.
Haydock, John.....	1st ,, ...	Shading Models.
,, ...	2nd ,, ...	3rd Grade Perspective. (Special Prize given by Mr. Councillor Rd. Strickland).
Jones, Henry	2nd ,, ...	Set of Geometry Studies.
Lynex, Edwin G.....	1st ,, ...	Set of Perspective Problems.
Moyle, John T.	1st ,, ...	Original Design.
Morris, Mary L.	2nd ,, ...	Set of Studies of Anatomical Details
Owens, Albert R.....	1st ,, ...	Set of Model Drawings.
Parker, James N.	1st ,, ...	Shaded Ornament from the Cast
,, ...	2nd ,, ...	Study of Head from life
Poole, Lizzie	1st ,, ...	Outline of a Plant from Nature.
,, ...	1st ,, ...	Set of Outline Studies.
Poole, Clara	2nd ,, ...	Drawing and Painting Plant from Nature.
,, ...	2nd ,, ...	Original Design.
Royle, Herbert.....	1st ,, ...	Landscape Foreground.
Roberts, Frank.....	2nd ,, ...	Set of Model Drawings.
Smith, Barbara.....	1st ,, ...	Drawing and Painting a Plant, together with three Designs based upon it.
,, ...	1st ,, ...	Outline of the Figure from the Antique.
,, ...	1st ,, ...	3rd Grade Prespective.
,, ...	2nd ,, ...	Outline of a Plant from Nature.
,, ...	Extra Prize	For Original Design.

ART MODELLING.

Merigold, Albert E.	2nd Prize	Modelling in Clay, Original Design.
Poole, Marie E.	1st „	Modelling in Clay, Original Design.
„	Equal.....	Bramble from Nature.
Raw, Emily	1st „	Modelling in Clay, Original Design.
Smith, Barbara H.	1st „	Modelling in Clay, Original Design.
„	Equal.....	Bramble from Nature.

SKETCHING CLUB PRIZES.

Names.	Class of Success.	Subject.
Branson, Annie	2nd Prize	Set of Studies in Outline.
„	2nd „	Study of a Simple Foreground
Bentham, Frances M.....	1st „	Outlined Drawing of a Plant
Fairclough, Robert	1st „	Landscape Foreground.
„	1st „	Studies of Skies and Clouds.
Horrocks, Annie	1st „	Study of Flowers.
„	1st „	Study of a Single Tree.
Morris, Mary L.....	Highest Aggregate Marks in Monthly Competition	
„	1st Prize	Still Life in Oil Colour.
Poole, Florence..... ...	2nd „	Landscape Foreground.
„	1st „	Portrait in Chalk.
Poole, Lizzie	1st „	Study of a Single Tree.
„	1st „	Study of Flowers in Water Colour.
„	1st „	Study of a Plant in Water Colour.
„	1st „	Outlined Drawing of a Plant.
Royle, Herbert.....	1st „	Study of a Simple Foreground
„	1st „	Set of Studies in Outline.
Smith, Barbara H.	1st „	Study of a Plant in Water Colour.
„	2nd „	Outlined Drawing of a Plant.

TECHNICAL.

CITY AND GUILDS OF LONDON INSTITUTE EXAMINATIONS.

* These Students received Local Prizes and Scholarships.

Names.	Class of Success.	Subject.
Atkinson, James	Ordinary 2nd	Cotton Manufacture.
*Beech, William T.	Ordinary 1st	Cotton Manufacture.
Bolton, Ralph	Ordinary 2nd	Cotton Manufacture.
*Brindle, Thomas	Ordinary 1st	Carpentry and Joinery.
Bownass, Raymond W.	Ordinary 2nd	Typography.
Bridge, Richard W.	Ordinary 2nd	Brickwork and Masonry.
*Cockshott, Samuel	Ordinary 1st	Mechanical Engineering.
*Dean, Samuel J.	Ordinary 1st	Weaving and Designing.
Eaves, Henry	Ordinary 2nd	Typography.
*Gardner, Jesse	Honors 1st	Cotton Manufacture.
*Grandison, Walter	Ordinary 1st	Carpentry and Joinery.
*Gray, Charles E.	Ordinary 1st	Brickwork and Masonry.
Gregson, Richard	Ordinary 2nd	Carpentry and Joinery.
*Grime, Robert	Honors 1st	Cotton Manufacture.
*Harring, Joseph	Ordinary 1st	Carpentry and Joinery.
*Harrison, Edmund	Honors 1st	Cotton Manufacture.
*Hull, Richard N.	Ordinary 1st	Carpentry and Joinery.
*Kirby, Luke	Ordinary 1st	Plumbers' Work.
Lancaster, Henry P.	Ordinary 2nd	Mechanical Engineering.
Mills, Richard	Ordinary 2nd	Cotton Manufacture.
*Marsden, James	Honors 1st	Carpentry and Joinery.
McCarter, Albert G.	Ordinary 2nd	Mechanical Engineering.
*Parker, Frederick W.	Ordinary 1st	Mechanical Engineering.
*Redmond, Albert	Ordinary 1st	Brickwork and Masonry.
*Reynolds, William	Ordinary 1st	Typography.
*Riley, John	Honors 2nd	Cotton Manufacture.
*Roddy, John	Honors 1st	Cotton Manufacture.
Sharples, Charles P.	Ordinary 2nd	Weaving and Pattern Designing.
Sowerbutts, Henry	Ordinary 2nd	Weaving and Pattern Designing.
Tattersall, Farington	Ordinary 2nd	Weaving and Pattern Designing.
Taylor, John	Ordinary 2nd	Weaving and Pattern Designing.
*Threlfall, James	Honors 2nd	Cotton Manufacture.
Walker, Roger	Ordinary 2nd	Brickwork and Masonry.
*Walsh, George W.	Honors 2nd	Cotton Manufacture.
Waterhouse, James	Ordinary 2nd	Cotton Manufacture.
*Whittam, William	Honors 2nd	Cotton Manufacture.
Whalley, John	Ordinary 2nd	Brickwork and Masonry.
Yates, Joseph	Ordinary 2nd	Cotton Manufacture.

MISCELLANEOUS.

*Scholarships and Local Prizes awarded.
** Signifies "Honors."
† Scholarships only awarded.

Names.	Subject.
	Cambridge Lectures.
**Clitheroe, William	Astronomy
**Dewhurst, Thomas	,,
Evans, Caroline	,,
Graham, Agnes	,,
**Hargreaves, Esther	,,
Tullis, Mary	,,

Names.	Class of Success.	Subject.
		Society of Arts.
Ainsworth, William	2nd Class	Theory of Music.
Bell, George	2nd ,,	,,
*Brown, Mary C.	1st ,,	,,
Beebee, Beatrice	3rd ,,	,,
*Catterall, Florence C.	2nd ,,	,,
*Dall' Jessie E.	2nd ,,	,,
Frankland, William	3rd ,,	,,
*Greenwood, James S.	2nd ,,	,,
Hall, Frederick	3rd ,,	,,
*Hargreaves, Esther	1st ,,	,,
*Hargreaves, Mary A.	2nd ,,	,,
*Harrison, Sarah E.	2nd ,,	,,
*Hayton, Margaret	2nd ,,	,,
Leeming, Mary	3rd ,,	,,
Nelson, James	3rd ,,	,,
Pitchford, Catherine H.	3rd ,,	,,
*Riley, Jane E.	1st ,,	,,
Scott, Alice T.	3rd ,,	,,
*Taylor, Sarah A.	2nd ,,	,,
*Walkden, James	2nd ,,	,,
*Walker, James S.	1st ,,	,,
*Warburton, Gertrude A.	2nd ,,	,,
Warburton, Winifred A.	3rd ,,	,,
*Whitehead, William A.	2nd ,,	,,
		Society of Arts.
Ainsworth, Robert Carr	2nd Class	Shorthand.
*Bailey, William	3rd ,,	,,
Black, John	3rd ,,	,,

Names.	Class of Success.	Subject.
		Society of Arts.
Bramwell, John J.....	3rd ,, ...	Shorthand.
*Burrow, Harry.....	2nd ,, ...	,,
Chantler, John.....	3rd ,, ...	,,
Cook, John H.....	3rd ,, ...	,,
Dawson, David.....	3rd ,, ...	,,
*Denham, Percy N.....	2nd ,, ...	,,
Dodson, Edward Hy.....	3rd ,, ...	,,
Houghton, James.....	3rd ,, ...	,,
Lonsdale, Nicholas.....	3rd ,, ...	,,
Matthews, John H. S.....	3rd ,, ...	,,
*Morgan, Peter.....	2nd ,, ...	,,
*Orrell, Fred J.....	2nd ,, ...	,,
Parker, George	3rd ,, ...	,,
Robinson, James.....	3rd ,, ...	,,
Whittaker, John Wm.....	3rd ,, ...	,,
		Society of Arts.
Atherton, Arthur.....	3rd ,, ...	English.
Bannister, John	3rd ,, ...	,,
*Bennison, John.....	3rd ,, ...	,,
Bentham, Frances M.....	3rd ,, ...	,,
Bownass, Raymond.....	3rd ,, ...	,,
Dawson, David.....	3rd ,, ...	,,
Day, Annie	2nd ,, ...	,,
*Green, Caroline.....	2nd ,, ...	,,
*Lonsdale Nicholas	2nd ,, ...	,,
McGavin, Bessie	3rd ,, ...	,,
Merigold, Fred W.....	2nd ,, ...	,,
*Napthen, Mary C.....	2nd ,, ...	,,
*Orrell, Fred.....	2nd ,, ...	,,
Parker, George.....	3rd ,, ...	,,
Purves, John	3rd ,, ...	,,
*Seed Frances.....	3rd ,, ...	,,
*Smalley, Robert E.....	2nd ,, ...	,,
		Society of Arts.
Halliwell, Edward	3rd ,, ...	Arithmetic.
*Hartley, John.....	2nd ,, ...	,,
Robinson, Alfred	3rd ,, ...	,,
Smalley, Robert E.....	3rd ,, ...	,,
		Society of Arts.
Poole, Clara.....	3rd ,, ...	French.
Poole, Lizzie.....	3rd ,, ...	,,
Sumner, Emily.....	3rd ,, ...	,,
		Union of Lancashire and Cheshire Institutes.
Sumner, Emily.....	3rd ,, ...	Commercial French.
		Union of Lancashire and Cheshire Institute.
Black, John.....	Honours.	Shorthand.
Burrows, Harry	,, ...	,,
Cook, John H.....	,, ...	,,
Denham, Percy N.....	,, ...	,,
Ainsworth, Robert C.....	1st Class	,,
Lonsdale, Nicholas	1st ,, ...	,,

Names.	Class of Success.	Subject.
		Union of Lancashire and Cheshire Institutes.
Lindley, Richmond J	1st ,, ...	Shorthand.
Matthews, J. H. S	1st ,, ...	,,
Morgan, Peter	1st ,, ...	,,
Orrell, Fred J	1st ,, ...	,,
Roseway, David	1st ,, ...	,,
Whittaker, John W	1st ,, ...	,,
Bailey, William	2nd ,, ...	,,
Chantler, John	2nd ,, ...	,,
Dodson, Edward H	2nd ,, ...	,,
Gardner, Anthony	2nd ,, ...	,,
Hargreaves, W. J	2nd ,, ...	,,
Holden, Anthony	2nd ,, ...	,,
Houghton, James	2nd ,, ...	,,
Lang, Joseph	2nd ,, ...	,,
Miles, Arthur	2nd ,, ...	,,
Merigold, Fred W	2nd ,, ...	,,
Napthen, Samuel	2nd ,, ...	,,
Newbound, Harry C	2nd ,, ...	,,
Pye, Richard C	2nd ,, ...	,,
Robinson, James	2nd ,, ...	,,
Wilkinson, James	2nd ,, ...	,,
Wood, Charles R	2nd ,, ...	,,
		Tonic Sol-fa Association Certificates.
*Purves, Elizabeth Alice.....	Martriculation....	,,
*Ogden, Thomas Rushton	,, ...	,,
*Ogden, Hannah R.....	,, ...	,,
*Bailey, Benjamin	,, ...	,,
*Barlow, Emily	Intermediate	,,
*Barlow, Edith.....	,, ...	,,
*Town, Joe	,, ...	,,
*Wrigley, Henry.....	,, ...	,,
*Woolley, Herbert J.....	,, ...	,,
*Penny, John	,, ...	,,
*Lynex, Edwin G.....	,, ...	,,
*Fallowfield, Charles L.....	,, ...	,,
*Clegg, Edwin A.....	,, ...	,,
*Green, Caroline	,, ...	,,
*Kitchen, Margaret.....	,, ...	,,
*Coward, Isabel	,, ...	,,
*Frame, Elsie	,, ...	,,
*Hall, Elizabeth	,, ...	,,
*Newsham, Thomas	,, ...	,,
†Penny, John	Elementary	,,
†Lynex, Edwin G.....	,, ...	,,
†Gilmore, Kate	,, ...	,,
†Gilmore, Flora	,, ...	,,
†Kitchen, Margaret.....	,, ...	,,
†Buck, Isabella	,, ...	,,
†Kearney, Ellen	,, ...	,,
†Harrison, Isabella	,, ...	,,
†Newsham, Thomas	,, ...	,,
†Cunningham, Eleanor	,, ...	,,
†Williamson, Elizabeth J....	,, ...	,,
†Penny, Emily J	,, ...	,,
†Williamson, Grace.....	,, ...	,,
†Town, Joe	,, ...	,,
†Wrigley, Henry.....	,, ...	,,

T. R. Ogden, John Penny, Thos. Newsham, and Eleanor Cunningham, were awarded Special Prizes given by Mr. S. Lee.

HARRIS INSTITUTE LOCAL EXAMINATIONS.

Names.	Class of Success.	Subject.
†Lynex, Richard H.	1st Class	Advanced Latin.
Hargreaves, Bernard	3rd ,,	,,
†Bentham, Frances M.	1st ,,	Elementary Latin.
Dall, Jessie E.	2nd ,,	,,
Maguire, Theresa	2nd ,,	,,
†McGavin, Annie	1st ,,	,,
Miller, William C.	2nd ,,	,,
Williamson, Frederick A.	2nd ,,	,,
Mullineaux, Frederick	3rd ,,	,,
†Harkness, Ada	1st ,,	Advanced French.
Crerar, James	2nd ,,	,, ,,
†Rawlinson, George E.	1st ,,	Elementary French.
†Maguire, Theresa	1st ,,	,, ,,
†Bleasdale, William	1st ,,	,, ,,
†Harkness, Ada	1st ,,	,, ,,
Miller, William C	2nd ,,	,, ,,
Crowe, Henry	2nd ,,	,, ,,
Kershaw, Charles	2nd ,,	,, ,,
Eccles, Thomas	2nd ,,	,, ,,
Mercer, Joseph J	2nd ,,	,, ,,
Lang, Edward	2nd ,,	,, ,,
*Jones, John E.	1st ,,	Elementary Shorthand.
*Bleasdale, William	1st ,,	,, ,,
*Lamb, Frederick	1st ,,	,, ,,
*Kent, Samuel H.	1st ,,	,, ,,
*Turner, Charles W.	1st ,,	,, ,,
Whittam, William	2nd ,,	,, ,,
Callow, John W.	2nd ,,	,, ,,
Saul, Robert	2nd ,,	,, ,,
Roberts, Frank	2nd ,,	,, ,,
Lambert, Robert F. W.	2nd ,,	,, ,,
Jump, Sydney B.	2nd ,,	,, ,,
Westworth, Arthur	2nd ,,	,, ,,
Hartley, John	2nd ,,	,, ,,
Robinson, Alfred	2nd ,,	,, ,,
Archer, Frank S.	2nd ,,	,, ,,
Pye, William Henry	2nd ,,	,, ,,
Wrigley, Frederick	3rd ,,	,, ,,
Sanderson, John	3rd ,,	,, ,,
Mallott, George E.	3rd ,,	,, ,,
Lamb, George	3rd ,,	,, ,,
Sowerbutts, Thomas	3rd ,,	,, ,,
Taylor, William	3rd ,,	,, ,,
Miller, William C.	3rd ,,	,, ,,
Lang, Simeon	3rd ,,	,, ,,
Haydock, William	3rd ,,	,, ,,
Hully, Frederick	3rd ,,	,, ,,
Johnston, Walter Henry	3rd ,,	,, ,,
Hayton, George E.	3rd ,,	,, ,,
Eaves, Thomas	3rd ,,	,, ,,
Sanderson, David	3rd ,,	,, ,,

Names.	Class of Success.	Subjects.
*Harrison, Henry M.....	1st ,, ...	Arithmetic.
*Bailey, William	1st ,, ...	,,
Rimmer, Margaret H.....	2nd ,, ...	,,
Livesey, Richard Henry	2nd ,, ...	,,
Weir, E. S	2nd ,, ...	,,
Beesley, George	3rd ,, ...	,,
Poulton, John	3rd ,, ...	,,
Lucas, Annie J.....	3rd ,, ...	,,
Simpson, John Henry	3rd ,, ...	,,
Duffy, William H.....	3rd ,, ...	,,
Mallott, George E.....	3rd ,, ...	,,
Lomax, Ada G.....	3rd ,, ...	,,
Dean, Thomas E.....	3rd ,, ...	,,
Jump, Sydney B.....	3rd ,, ...	,,
Hulme, Annie H.....	3rd ,, ...	,,
Robinson, William.....	3rd ,, ...	,,
Purves, John	1st ,, ...	English.
Orrell, Fred J.....	1st ,, ...	,,
Black, John	1st ,, ...	,,
Bennison, Benj.....	2nd ,, ...	,,
Napthen, Samuel	2nd ,, ...	,,
Parker, George	2nd ,, ...	,,
Gerrard, Annie	2nd ,, ...	,,
Orrell, Isaac	2nd ,, ...	,,
Ormrod, Elizabeth	2nd ,, ...	,,
Marland, James	2nd ,, ...	,,

INSTITUTE SCHOLARSHIPS AWARDED TO DAY SCHOLARS AT ELEMENTARY SCHOOLS.

SCIENCE.

Armstrong, H.
Armstrong, Hy. J.
Addison, Robert
Ashton, Robert
Bannister, Jesse
Busher, Ellen
Baldwin James P.
Berry, Philemon W.
Chaloner, J.
Crossthwaite, Thos. E.
Croasdale, Henrietta
Carter, Prudence
Clitheroe, Maria
Dailly, Edgar F.
Etherington, Christopher
Edwards, Thomas
Fallowfield, Richard
Frame, Elizabeth
France, Wm.
Forrest, Jane
Gregson, Margaretta
Gordon, Graham D.
Garner, Charles Hy.
Gregson, John
Holmes. Elizabeth
Hollinhurst, Wm. Hy.
Hesketh, John
Hindle, Edmund
Hartley, John Hy.
Irvin, James
Kenyon, Thomas R.
Kellie, Robert
Kellett, Charles
Littlefair, Robert
Lawson, Minnie M.
Lutener, Charles E.
Martin, Robert
Mackey, Mary E.
Moxham, Thomas
Moss, Robert
Moss, George F.
Mullineux, J.
Merigold, W. E.
Nelson, Edward
Parkinson, Jane
Preston, Alice
Parkinson, Charles
Procter, Wm. E.
Patchett, Clement
Parker, Charles E.
Prince, George
Pickup, Henry
Parkinson, Wilfred
Rimer, Henry
Rawcliffe, James
Richardson, Charles
Smails, Frederick
Southworth, Herbert T.
Tomlinson, John
Walsh, Mary A.
Whittam, Arthur
Woodhouse, F. W.
Woods, George
Watson, Joseph
Worthington, A. T.
Wignall, Henry
Wignall, George
Ward, Joseph
Wilson, John W.
Whitwell, Theresa.
Whalley, Wm.

ART.

Bannister, Jessie
Bibby, Thomas
Bennett, R.
Coward, Miles A.
Cameron, William D.
Crossthwaite, T. E.
Dennison, John
Exton, William
Etherington, Christopher
Gregson, Margaretta
Garstang, Edward C.
Hayton, Samuel
Hardacre, Wm. Hy.
Hesketh, Mary E.
Jump, Helen M.
Kenyon, Thomas E.
Lutener, Chas. E.
Maynard, Fred. J. W.
Nelson, Edward
Parkinson, Jane
Read, Edward
Smails, Fred.
Turner, Alfred P.
Turner, Hy.
Wilding, Chas. A.
Wignall, George
Williamson, W. M.

Harris Institute, Preston. Abstract of Class Registers, 1886-7.

NAME OF CLASS.	TEACHER.	Sept., 1886.		Oct., 1886.		Nov., 1886.		Dec., 1886		Jan., 1887.		Feb., 1887.		March, 1887.		April, 1887.		Number of Students who sat for Examination	Number of Students who obtained Certificates.
		No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.		
SCIENCE.																			
Agriculture	Mr. J. Stacey	7	7	9	7	9	7	9	6	9	7	9	7	9	6	9	5	7	7
Animal Physiology	Mr. H. O. Pilkington, M.R.C.S.	17	17	22	20	22	19	22	18	22	17	22	16	22	16	22	14	11	6
Applied Mechanics	Mr. R. Pendlebury	30	30	36	32	38	30	38	31	38	30	38	31	38	30	38	30	24	12
Botany (Elementary)	Mr. S. J. Elliott, A.P.S.	14	14	17	14	18	14	18	13	18	14	18	13	18	13	18	13	18	14
Do. (Advanced)	Do.	7	7	11	10	13	8	13	9	13	8	13	8	13	8	13	7		
Building Construction (Elementary)	Mr. F. J. Pye	30	30	32	29	32	29	32	27	32	26	32	25	32	25	32	24	34	25
Do. (Advanced)	Do.	16	16	15	12	15	13	15	12	15	11	15	12	15	11	15	12		
Chemistry, Elements of	Mr. A. F. Atkinson	13	13	13	10	13	10	13	11	13	10	13	10	13	9	13	9	44	32
Do. Theoretical, Inorganic (Elementary)	Do.	37	37	44	37	45	34	45	36	45	36	45	36	45	35	45	33		
Do. do. (Advanced)	Do.	15	15	16	11	16	9	16	10	16	11	16	10	16	10	16	11		
Do. Practical (Elementary)	Do.		...	14	12	14	12	14	11	14	12	14	12	14	11	14	12	11	5
Do. do. (Advanced)	Do.		...	6	4	7	5	7	6	7	5	7	6	7	6	7	6	2	2
Geology (Elementary)	Mr. F. C. King	19	10	22	20	23	18	23	19	23	19	23	19	23	19	23	19	22	21
Do. (Advanced)	Do.	6	6	7	5	7	6	7	7	7	6	7	7	7	7	7	6		
Hygiene	Mr. H. O. Pilkington, M.R.C.S.	7	7	14	10	14	11	14	10	14	10	14	10	14	10	14	9	—	—
Machine Construction	Mr. J. T. Buckley	43	43	80	38	81	46	81	49	81	53	81	50	81	49	81	46	44	28
Mathematics, Stage I	Mr. F. B. Osborne	85	85	94	82	94	81	94	80	94	78	94	78	94	76	94	74	64	32
Do. Stage II.	Mr. G. Rogerson, M.A.	16	16	22	17	22	18	22	17	22	18	22	17	22	17	22	15		
Magnetism and Electricity (Junior Elementary)	Mr. J. E. Southworth	25	25	27	25	24	22	24	19	24	18	24	18	24	18	24	17		
Do. (Senior Elementary)	Mr. J. Gardner	36	30	41	37	42	32	42	33	42	34	42	34	42	33	42	32	51	31
Do. (Advanced)	Do.	8	8	9	7	10	8	10	8	10	7	10	7	10	7	10	7		
Navigation	Mr. G. Lynch	4	4	5	5	5	5	5	5	5	5	5	5	5	4	5	4	4	4
Physiography (Junior Elementary)	Mr. J. E. Southworth	30	30	33	31	30	26	30	24	30	24	30	24	30	23	30	23		
Do. (Senior Elementary)	Mr. J. Gardner	52	52	61	48	70	55	70	58	70	59	70	58	70	57	70	56	88	62
Do. (Advanced)	Do.	17	17	30	26	32	20	32	23	32	22	32	23	32	22	32	21		
Practical, Plane and Solid Geometry	Mr. F. J. Pye	50	50	64	58	64	58	64	55	64	54	64	53	64	51	64	49	29	16
Sound, Light, and Heat (Junior Elementary)	Mr. J. E. Southworth	17	17	22	19	22	19	22	18	22	18	22	18	22	17	22	17		
Do. (Senior Elementary)	Mr. J. Gardner	51	51	54	45	56	43	56	45	56	46	56	45	56	45	56	44	62	44
Do. (Advanced)	Do.	8	8	11	9	11	8	11	9	11	9	11	8	11	8	11	8		
Steam and Steam Engine	Mr. R. Pendlebury	23	23	30	27	32	23	32	21	32	23	32	24	32	24	32	24	23	15
ART.																			
Day Class	Mr. W. B. Barton	21	21	30	16	30	26	30	25	36	30	36	31	36	30	36	30		
Evening Class	Do.	120	120	146	65	146	80	146	84	149	87	149	89	149	90	149	92	304	122
Modelling Class	Do.	2	2	..	..	26	6	26	6	25	6	25	6	25	5	26	5		
High School	Do.	50	50	74	74	74	74	74	74	74	74	74	74	74	74	74	74		
TECHNICAL.																			
Brickwork and Masonry	Mr. F. J. Pye	8	8	10	8	10	8	10	8	10	8	10	8	10	8	10	8	7	5
Carpentry and Joinery	Do.	20	20	25	21	25	21	25	20	25	21	25	20	25	19	25	19	15	6
Cotton Spinning	Mr. W. I. Hannen	25	25	32	27	33	27	33	26	33	27	33	26	33	27	33	26	23	14
Mechanical Engineering	Mr. R. Pendlebury	16	10	14	11	14	11	14	11	14	11	14	11	14	10	14	10	12	4
Plumbing	Mr. F. Jolly	10	10	10	8	10	8	10	8	10	8	10	8	10	8	10	8	7	1
Printing	Mr. R. Parkinson	10	10	10	9	10	9	10	9	10	9	10	9	10	9	10	8	7	3
Weaving and Designing	Mr. J. T. Taylor	58	58	72	61	73	61	73	52	73	41	73	40	73	43	73	38	27	5
MISCELLANEOUS.																			
Music—Class Singing & Harmony (Elementary)	Mr. J. Tomlinson	...	..	26	22	26	24	26	23	26	22	26	22	26	23	..	..	*28	25
Do. do. (Advanced)	Do.	...	...	15	12	15	13	15	12	15	12	15	12	15	11	..	..		
Singing—Tonic Sol-Fa	Mr. W. H. Cowell	60	60	71	63	71	63	71	64	71	63	71	63	71	62	71	62	§32	27
Do. Madrigals and Matriculation	Do.	20	20	20	18	20	17	20	16	20	14	20	13	20	12	20	11		
Latin (Elementary)	Rev. W. S. Matthews, B.A.	6	6	17	15	17	15	17	14	17	13	17	12	17	12	..	..	§9	5
Do. (Advanced)	Do.	4	4	6	4	6	5	6	4	6	4	6	4	6	4	..	..	§18	13
French (Elementary)	Do.	44	44	46	41	46	39	46	37	46	36	46	36	46	35	..	..	*4	3
Do. (Advanced)	Do.	21	21	23	21	23	18	23	18	23	17	23	17	23	17	..	..	†2	1
Cambridge Lectures—Astronomy	Mr. J. D. McClure, LL.B., &c.	51	51	53	44	53	48	53	43	..	..	..	..	..	..	..	..	6	6
Shorthand (Elementary)	Mr. H. Cartmell	104	104	117	95	118	98	118	99	118	98	118	98	118	98	118	96	§53 *29	30 19
Do. (Advanced)	Do.	46	46	45	35	47	34	47	36	47	36	47	36	47	37	47	36	†40	28
English (Elementary)	Do.	70	70	77	65	78	65	78	66	78	67	78	67	78	68	78	66	*36	17
Do. (Advanced)	Do.	25	25	31	26	31	24	31	23	31	24	31	24	31	23	31	22	§14	10
Arithmetic	Mr. F. B. Osborne	138	138	150	136	151	118	151	117	151	118	151	116	151	117	..	..	*8 §58	3 18
St. John Ambulance Classes	Mr. H.O. Pilkington, M.R.C.S.	..	..	..	..	108	108	108	108	..	..	..	..	..	..	..	..	79	42
St. John Nursing Classes	Do. Do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40	40	32	27
	Total	1600	1600	1981	1614	2122	1706	2122	1693	1989	1536	1989	1526	2029	1549	1746	1299	1388	790

* Society of Arts. † Lancashire and Cheshire Institutes. § Local.

T. R. JOLLY, Secretary.

Table showing the number of Students who sat for Examination in connection with the Science and Art Department at the Harris Institute, May, 1887.

SUBJECT.	Harris Institute.	Cross Street.	St. Paul's.	Moor Lane.	Winckley Square.	Externals.	Totals.
ART.							
Model Drawing	64	2	4	...	...	5	75
Freehand	95	4	7	...	...	21	127
Painting from Still Life	3	...	...	...	...	1	4
Geometry	30	1	2	...	...	6	39
Perspective	40	2	...	...	...	3	45
Perspective (Theory and Practice)	5	1	...	...	...	...	6
Drawing in Stage 5a	23	...	...	...	...	...	23
,, ,, 5b	13	...	...	...	...	...	13
,, ,, 3b	10	...	...	...	...	...	10
Anatomy	7	...	...	...	...	...	7
Elementary Principles of Ornament	6	1	...	...	...	1	8
Painting in Monochrome	3	1	...	...	...	...	4
Drawing from the Antique	1	1	...	...	...	...	2
Design Ornament (23c)	5	...	...	...	...	1	6
SCIENCE.							
Animal Physiology	11	...	...	...	...	1	12
Machine Construction	44	...	...	...	...	...	44
Building Construction	34	...	...	...	...	...	34
Mathematics, stages 1, 2, & 3	64	...	4	5	...	53	126
Sound, Light, and Heat	62	...	...	2	21	3	88
Magnetism, and Electricity	51	...	...	6	21	3	81
Physiography	88	...	...	10	...	2	100
Principles of Agriculture	7	...	...	...	...	8	15
Practical Plane & Solid Geometry	29	...	...	...	...	1	30
Navigation	4	...	...	...	...	2	6
Geology	22	...	...	...	...	1	23
Mathematics, stages 4 & 5	...	...	...	...	...	1	1
Hygiene	...	...	...	...	...	2	2
Theoretical Mechanics	...	...	...	...	...	6	6
Applied Mechanics	24	...	...	...	...	2	26
Inorganic Chemistry	44	...	...	6	...	4	54
Practical Inorganic Chemistry (E Stage)	11	...	...	1	...	...	12
Botany	18	...	...	...	...	23	41
Organic Chemistry	...	...	...	...	...	1	1
Steam	23	...	...	...	...	3	26
Practical Inorganic Chemistry advanced stage)	2	...	...	...	...	...	2
TOTALS	842	9	17	30	42	154	1095

In addition to the foregoing table, the following shows the number of Students of the Harris Institute, examined at the Institute in connection with other Classes :—

City and Guilds of London Institute, viz :—		
Cotton Spinning	23	
Weaving and Designing	27	
Mechanical Engineering	12	
Printing	7	
Carpentry and Joinery	15	
Plumbing	7	
Brickwork and Masonry	7	
		98
Cambridge Extention Lectures :—		
Astronomy		6
Society of Arts :—		
Shorthand	29	
English	36	
French	4	
Music	28	
Arithmetic	8	
		105
Lancashire and Cheshire Union of Institutes :—		
Shorthand	40	
French	2	
		42
Examined Locality–		
Arithmetic	58	
French	18	
Latin	9	
Tonic Sol Fa	32	
Shorthand	53	
English	14	
Ambulance	111	
		295
		546
Students sitting for Science and Art as above		842
Total of the Harris Institute Students Examined		1388

HARRIS INSTITUTE.

Scholarship and Prize Fund Account, Year ending September 30th, 1887.

RECEIPTS.	£ s. d.	£ s. d.
To Balance in hand 30th Sept., 1886		164 16 5
,, Amount transferred from General Account, as per Balance sheet, for year ending 30th Sept, 1886	159 6 1	
do. do. do. 1887	182 14 2	
		342 0 3
,, Bank Interest.....		2 5 3
		£509 1 11
To Balance brought down.....	£293 1 2	

EXPENDITURE.	£ s. d.	£ s. d.
By Paid Miss Florence Poole (Art)		45 0 0
,, ,, Mr. David Wilkinson (Science)		45 0 0
,, ,, Mr. A. J. Moulton (Science		22 10 0
,, ,, for Free Scholarships to Institute Classes		76 19 6
,, ,, for Prizes.....		26 5 9
,, ,, Bank Commission.....		0 5 6
		£216 0 9
,, Balance in hand.....		293 1 2
		£509 1 11
By Balance in Preston Bank.....	£293 1 2	

Examined and found correct,
W. F. MOORE, F.C.A.,
Chartered Accountant.
2nd December, 1887.

WM. ASCROFT,
President,
T. R. JOLLY,
Secretary.

HARRIS INSTITUTE, PRESTON.

TRUSTEES ACCOUNT, Year ending September 30th, 1887.

	£ s. d.	£ s. d.
To Balance in hand, 30th Sept., 1886		36196 16 9
„ Amount received from the Trustees under the will of the late E. R. Harris Esq.....		30000 0 0
„ Interest—Corporation of Preston	271 17 5	
„ „ County of Lancaster..	253 15 0	
„ „ Corporation of Preston	90 12 5	
„ „ do. do.	271 17 5	
„ „ Savings' Bank.....	39 0 10	
„ „ County of Lancaster..	342 0 11	
„ „ Corporation of Preston	91 0 3	
„ „ do. do.	101 9 4	
		1461 13 7
		£67658 10 4
To Balance brought down.....	66196 16 9	

	£. s. d.	£ s. d.
By amount transferred to Institute A/c, being Interest from Capital		1461 13 7
By balance carried down.....		66196 16 9
		£67658 10 4
By invested with County.....	35000 0 0	
„ „ Corporation....	30000 0 0	
„ „ Savings' Bank..	1196 16 9	
		£66196 16 9

Examined and found correct,
W. F. MOORE, F.C.A.,
2nd December, 1887. Chartered Accountant.

Exhibited and approved.
C. R. JACSON.
C. H. WOOD.
DAVID IRVIN.
W. ASCROFT.
J. S. OLIVER.

T. R. JOLLY,
Secretary.

Harris Institute, Preston.—Cash Statement, year ending 30th Sept. 1887.

RECEIPTS.	£ s. d.	£ s. d.
To Interest received from capital	1461 13 7	
Less:—Transferred to Scholarship Fund	182 14 2	
		1278 19 5
FEES AND GRANTS	£ s. d.	
Science Fees	109 17 6	
,, Grants	345 8 0	455 5 6
Art Fees	95 2 6	
,, Grants	135 14 0	230 16 6
Technical Fees	19 9 6	
,, Grants	33 0 0	52 9 6
Miscellaneous Fees		183 2 6
		921 14 0
Rent, High School		10 0 0
Subscriptions		23 2 0
Balance carried down		699 16 10
		£2933 12 3
To Amount due to Preston Banking Company	£699 16 10	

EXPENDITURE.	£ s. d.	£ s. d.
By Balance overdrawn, 30th Sept. 1886.		610 13 3
SALARIES, VIZ:—	£ s. d.	
Science	499 18 0	
Art	443 0 0	
Technical	147 13 0	
Miscellaneous	187 10 6	
	1278 1 6	
,, Secretary, Custodian, & Examiners	183 4 0	
,, Alterations and Improvements	143 0 6	
,, Apparatus, Appliances, & Books	129 14 7	
,, Cambridge Lectures	47 1 6	
,, Printing and Stationery	67 3 7	
,, Advertising	13 13 9	
,, Lighting and Firing	150 10 9	
,, Washing and Cleaning	55 4 4	
,, Rent, Rates, and Insurance	89 4 0	
,, Expenses *re* Distribution of Prizes, ,, Exhibition, & Opening Ceremony	47 16 4	
,, Expenses *re* Ambulance Classes	16 9 8	
,, Examinations & Entrance Fees	39 5 6	
,, Miscellaneous Expenses	32 3 9	
,, Bank Interest and Commission	30 5 3	
		2322 19 0
		£2933 12 3
By Balance brought down	£699 16 10	

Examined and found correct,
W. F. MOORE, F.C.A., Chartered Accountant.
2nd December, 1887.

Wm. ASCROFT, President.
T. R. JOLLY, Secretary.

To the President and Council of the Harris Institute,

GENTLEMEN,—I have examined the Accounts of the Institute, for the year ending 30th September, 1887, and have pleasure in certifying to their correctness. I have examined all the Fee Books, and have seen proper vouchers for all payments, and have also examined the securities for the investments and Capital Account,

Yours truly, W. F. MOORE, F.C.A.

LIST OF SUBSCRIBERS.

	£	s.	d.
Ascroft, Mr. W.	1	1	0
Ascroft, Mr. A. E.	1	1	0
Atherton, Mr. John	1	1	0
Atherton, Mr. W.	1	1	0
Booth, Mr. Y. W.	1	1	0
Brown and Deighton, Messrs.	1	1	0
Dickson, Mr. E.	1	1	0
Easterby, Mr. R. F.	1	1	0
Healey, Mr. J.	1	1	0
Hibbert, Mr. Jas.	1	1	0
Jacson, Mr. C. R.	1	1	0
Lee, Mr. S.	1	1	0
Maynard, Mr. M. S.	1	1	0
Moore, Mr. F. A.	1	1	0
Oliver, Mr. J. S.	1	1	0
Robinson, Mr. R. C.	1	1	0
Steele, Rev. Geo.	1	1	0
Thorp, F.	1	1	0
Toulmin, Mr. Joseph	1	1	0
Willan, Mr. W.	1	1	0
Wood, Rev. C. H.	1	1	0

Harris Institute, Preston.

SIXTH

ANNUAL REPORT

AND

STATEMENT OF ACCOUNTS

FOR THE YEAR 1888,

AND

THE ADDRESS

GIVEN BY THE

Right Hon. The Earl of Derby, K.G.

AT

THE DISTRIBUTION OF PRIZES

On 31st JANUARY, 1889.

PRESTON:
Printed by Chas. Greenall, Cannon Street.

OFFICERS FOR THE YEAR 1889.

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Col. Oliver.

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Rev. Jon. Shortt, M.A.
Mr. J. Healey, J.P.
Dr. Hammond, J.P.
Mr. W. Ascroft, J.P.
Mr. W. Atherton.
Mr. S. A. Hermon, J.P.
Mr. A. E. Ascroft.
Mr. Y. W. Booth.
Mr. E. Dickson.
Mr. R. F. Easterby.
Mr. W. Calvert, M.A.
Mr. Jas. Hibbert.
Mr. M. S. Maynard, J.P.
Mr. J. S. Oliver.
Mr. F. A. Moore.
Mr. R. C. Robinson.
Mr. E. Greenwood, J.P.

Hon. Treasurer:

Mr. J. S. Oliver.

Secretary:

Mr. T. R. Jolly.

Auditor:

Mr. W. F. Moore, Chartered Accountant.

Bankers:

Preston Banking Company, Limited.

Sixth Annual Report

OF THE

HARRIS INSTITUTE,

PRESTON.

The past year of the Institute has been one of continued progress. The classes, with the exception of that in navigation, have been continued, and one has been formed under Mr. Cardwell for the study of commercial geography. As an introduction to the latter, a meeting was held in the Institute on Monday, the 24th September, 1888, which was addressed by Mr. Eli Sowerbutts, F.R.G.S., the secretary of the Manchester Geographical Society, to whom the Council are much indebted for his assistance, and for the very interesting address which he delivered. Elementary classes have been formed for girls for the study of physiography, and for boys for the study of physics, chemistry, and mechanics. These subjects are taught in a manner adapted to the age of the pupils, and without reference to any special examination. They are intended for young people leaving the elementary schools. The formation of these classes has been attended with satisfactory results, both as regards the numbers and the efficiency of the teaching. The Council are much indebted to the managers for the use of the schools at Christ Church, the Church of the English Martyrs, and the Wesleyan Chapel, in St. Mary Street, which have been granted to them free of charge for the use of the elementary classes for boys. Mr. Rogerson, M.A., has, on leaving town, resigned his appointment as one of the teachers of the mathematical classes, and Mr. Sainsbury, B.A., has been appointed as his successor.

The Council have during the year largely increased the supply of models and examples for some of the trade classes, and thus added to the practical value of the instruction. Sir H. E. Roscoe, M.P., was unable, through indisposition, to distribute the prizes in January last. Mrs. Hanbury very

kindly undertook the distribution, and Mr. R. W. Hanbury, M.P., delivered a very valuable address. The Right Hon. the Earl of Derby, K.G., will distribute the prizes awarded at the last examinations, at the Public Hall, on Thursday, 31st January next. The following are comparisons between the years 1887 and 1888:—

	1887.	1888.
Students on Register	2,092	2,247
Average attendance	1,649	1,740
Individual Students	1,397	1,649
Certificates awarded	798	965
Prizes awarded	190	221

One scholarship has been awarded to Mr. John C. Rhodes, and the other to Miss Frances M. Bentham. Both are pursuing their studies at South Kensington—the former in the science school, and the latter in the art training school. The Council desire to express their acknowledgments to the following gentlemen and firms for the undermentioned gifts and privileges for the use of the students:—Mr. W. F. Moore, "Krupp and Debarge on Gun Mauufacture, &c.;" Messrs. Doulton and Co., models of sanitary appliances; Mr. Joseph Hamblet, encaustic tiles, &c.; Messrs. Brundrit and Co., bricks, stones, &c.; Messrs. the Thurstonland Brick and Stone Co., ditto; Messrs. T. Lawrence and Sons, ditto; Mr. T. Pilkington, model to illustrate the principle and action of the tangent galvanometer. The thanks of the Council are also due to A. Dugdale, Esq., of Blackburn; Messrs. W. Bashall and Co., of Farington; G. Anderton, Esq., and M. S. Maynard, Esq., of Preston, for allowing the students attending the cotton spinning classes to visit their works.

W. ASCROFT,

19TH DECR., 1888. PRESIDENT.

HARRIS INSTITUTE.

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Proceedings of the Annual Meeting,

HELD 31ST DECEMBER, 1888.

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The sixth annual meeting of subscribers of the Harris Institute, Preston, was held at the Institute on the 31st December, 1888. Mr. W. Ascroft, J.P., President, occupied the chair, and there were present Alderman Maynard, J.P., Councillors Atherton and Y. W. Booth, Messrs. Joseph Toulmin, J.P., R. C. Robinson, H. Gibson, and T. R. Jolly (Secretary).

The PRESIDENT said the meeting was called in pursuance of a clause in their scheme, the principal business being to elect a member of the Council of the Institute in the place of Mr. F. A. Moore, who retired by rotation, but was eligible for re-election. As Mr. Moore was the only gentleman who had been nominated, it would he supposed, be their duty to re-elect him.—On the motion of Councillor ATHERTON, seconded by Councillor Y. W. BOOTH, Mr. Moore was unanimously re-elected a member of the Council.

The SECRETARY (Mr. T. R. Jolly) read the sixth annual report of the Council.

Councillor BOOTH suggested the desirability of a return being made showing the receipts from grants year by year. The SECRETARY produced a tabulated statement giving these particulars, which the PRESIDENT remarked showed, taking it altogether, that they were making progress, and that their receipts from grants were increasing.

The PRESIDENT, in moving the adoption of the report, said he thought it contained all the information that could possibly be afforded with regard to the working of the Institute during the past year. Their history had been very much that of several previous years. The number of students had increased, their results in the way of teaching were

highly satisfactory, and the financial position of the Institute had improved. They had discontinued the class in navigation, because they considered that the time of Mr. Lynch, whose services to the Institute had been most valuable, could be more advantageously employed in teaching several of the elementary classes which had been formed for the benefit of young people who were leaving school. The numbers attending the navigation class had been very small, but still, if there should be a demand for the subject in the future, the Council would be quite prepared to take it up again, and to arrange for a renewal of the class. The other principal change that they had made was the formation of a class for the study of commercial geography, a subject which they deemed very valuable, Mr. Cardwell, of St. Bede's College, Manchester, a gentleman of considerable reputation, was the teacher, and the instruction which he afforded to the pupils was exceedingly valuable. He (the President) had visited the class, and he had been very much struck with the ability of the teacher and the admirable manner in which he imparted information to the students; and he was surprised that the class was not more numerously attended. He felt convinced that no one who attended the class and followed the course of instruction would find his time thrown away. The elementary classes which they had established proved very successful. They met at three different schools; their teachers were extremely able, and the classes were working very well. The scheme had been taken up in a very satisfactory manner, and he had no doubt the classes would grow in importance year by year. There were now between 200 and 300 boys, and about 40 girls attending these elementary classes, and they were being taught the various subjects in a very admirable manner. (Hear, hear.) Some of the trade classes, including those in bricksetting, carpentry and joinery, and applied mechanics—the two former especially—they had supplied with very valuable and complete sets of models to illustrate the teaching, and with these accessories he thought the subjects were being admirably taught. In this and other ways they were endeavouring year by year to add to the value of the Institute and to enhance the practical nature of the subjects taught. The financial position of the Institute might also be regarded as very satisfactory. They started the year with a debit balance of nearly £700, occasioned by a considerable outlay on buildings and materials which might well have been defrayed from capital account. They had, however, charged it upon revenue, and the account showed that in September the debt had been reduced to £69, which by this time he supposed was entirely cleared off.

Their increased revenue had been derived principally from interest on the £30,000 granted them by the Harris Trustees. Part of this, as they were aware, had to be applied to the erection of a technical school when the proper time came for the carrying out of that object. He had a letter from the Town Clerk, informing him that Mr. Greenwood, who had proved himself a very useful member of their body, had been re-elected for three years as Corporation representative on the Institute Council. (Hear, hear.) In conclusion, the President expressed his satisfaction at the presence of Mr. Gibson, a former student at the Institute, who had gained very considerable distinction. It was extremely gratifying to find old students retaining their interest in the Institute. (Applause.)

Councillor ATHERTON seconded the motion for the adoption of the report.

Councillor Y. W. BOOTH in supporting the proposition, said they had not only reduced the debit balance to the extent indicated by the President, but they had also equipped the Institute very fully. He hoped that as time went on they would advance the status of their teaching, and he thought that in separating the younger from the older students they had taken a step in the right direction. If in the coming session they could see their way with the means at their disposal to pursue higher studies they would be doing more to advance education. He thought, however, they might be permitted to congratulate themselves on the continued success of the Institute. (Hear, hear.)

Mr. JOS. TOULMIN also spoke briefly in support of the motion, observing that they were all highly pleased to find the Institute had been of so much service to the town, and that it was likely to be of greater use in the future. (Hear, hear.)

The motion was adopted unanimously, and a vote of thanks to the President, proposed by Mr. R. C. ROBINSON, seconded by Alderman MAYNARD, and passed cordially, concluded the business.

DISTRIBUTION OF PRIZES TO THE STUDENTS

BY

The Right Hon. The Earl of Derby, K.G.

31st JANUARY, 1889.

ON Thursday, the 31st January, 1889, the prizes won at the Harris Institute during the past year were distributed in the Public Hall by The Right Honourable The Earl of Derby, K.G. The ceremony usually takes place in December, and the arrangements were completed for the distribution last month, but the day before the function His Lordship was prevented from attending owing to a cold which he had contracted, and it was wisely resolved rather than hastily to secure a substitute, to postpone the ceremony. The Council of the Institute have been exceedingly fortunate in securing the presence of distinguished and honoured men to perform the ceremony of prize distribution, and to deliver an address, bearing upon various phases of the great question of education. Some of these addresses have been of surpassing value and interest, and that delivered by the Earl of Derby, bearing the full impress of his calm and philosophic temper, is one of the most valuable contributions of the series, bearing as it did so immediately and wisely on the question of technical instruction. The arrangements for the proceedings were, as usual, of the most perfect character. They had been mapped out by Mr. T. R. Jolly, the secretary, who was ably assisted by the Rev. Geo. Steele, M.A., Councillors Atherton and Booth, Mr. R. F. Easterby, Mr. J. Goulding, and Mr. Johnson. The Public Hall was crowded. On His Lordship entering the hall, accompanied by the President and Council of the Institute, he was received with hearty plaudits. Mr. W. Ascroft, J.P., presided, and among those present were the Mayor (Alderman Burrow), Major-General Cotton, Alderman Edelston, Mr. L. Rawstorne, J.P., D.L., Mr. W. F. Moore, Alderman Walmsley, Mr. A. Tullis, Alderman Galloway, J.P., Councillors Gregson, Hale, Pearson, Breakell, Cookson, Barber, Bee, Foster, Clegg, Badger, Myerscough, and Rawcliffe; the following members of the Council of the Institute—Dr. Hammond, J.P., Rev. C. H. Wood, Rev. George Steele, M.A.,

Alderman Maynard, J.P., Mr. R. F. Easterby, Mr. J. Healy, J.P., Councillor E. Greenwood, J.P., Councillor W. Atherton, Councillor Y. W. Booth, Mr. Edmund Dickson, and Mr. T. R. Jolly, Secretary.

Before the distribution commenced, and at intervals during the evening, the Harris Choir sang selections, Mr. Cowell conducting, and Mr. Tomlinson presiding at the organ. The introductory selection was the chorus "Achieved is the Glorious Work," from the "Creation;" and then followed between the speeches, "Rest thee on this mossy pillow" (Smart), and "Stars of the Summer night" (Smart). The last named, a dreamy, reposeful medody, was immediately followed by the spirited rendering of an old English composition (1550), "Now is the month of Maying." The musical portion of the programme, which caused much enjoyment, also included "Strike the Lyre," and concluded with the National Anthem.

The CHAIRMAN said: It is my duty to open the meeting, and in doing so I will refer very briefly to the work and progress of the Institute. In this respect I have but little to add to what I have said on previous occasions, our work being continued very much on the same lines as those which were laid down on the foundation of the Institute, now more than five years ago. All the classes which were at work this time last year are, with one exception, now going on satisfactorily both as to numbers and efficiency. We do not desire to continue in our programme any class which does not appear to meet a practical want, and mainly for this reason we have dropped out of our list the class on navigation. Whether at some later period of our history, the growing needs of our future port will call for the revival of this class, time alone can tell. We have had our attention for some time directed to the question of commercial education, and in furtherance of our desire to extend this branch of learning, our class in commercial geography has been formed under Mr. Cardwell. The subject is a useful one, and the teaching has been all that can be desired. Mr. Cardwell is conducting the class to the entire satisfaction of the Council, but the attendance has not been so large as we had hoped for. This may be owing to the novelty of the subject, which however is one not only of so great interest, but of so much practical importance, that I thought it my duty to call especial attention to it, and to say that we propose to continue the class, and to make it a standing part of our programme, in the hope that as the subject becomes better understood, the efficiency of the teaching may in future years attract to it a larger number of

students. Our art school has received a large accession of numbers, and the work of the students has greatly improved in character. Increased attention has been paid to the development of original design, and in this department the students have made great progress, leading to the expectation that in time it may have a marked effect on the local industries. Our class in cotton weaving and designing is now attended by a very large number of young men engaged in that branch of trade, and the rest of our technical and other classes generally are in a state of great activity and progress. We have this year formed several elementary classes in different subjects of science intended for young persons leaving the elementary schools, who are invited to them in the hope that their habit of study may be continued as they enter on the active duties of life, that their taste for learning may be stimulated, and that they may gradually be prepared for the more advanced classes of the Institute. We have to acknowledge the appreciative spirit in which we have been met by the managers and teachers of the elementary schools, who have encouraged their old pupils to take advantage of this opportunity in large numbers. We believe that we have thus formed an important adjunct to our Institute, supplying a large number of promising youths, who, as they grow up, will continue their attachment to it. A beneficial change in the regulations of the department of science and art has led to many of the students taking up simultaneously fewer subjects of study. Even further changes in this direction might be made with advantage, and it is important that consideration should be given to the question of requiring on the part of the students some regulated arrangement as to the sequence of their studies, and the bearing of the work of one year upon the work of the year which has preceded it. The new regulations to which I have referred accounts for a comparative decrease in the entries on the registers. The numbers are as follow:—Number on registers in December, 1887, 2,092, in December, 1888, 2,247; number of individual students December, 1887, 1,397, and December, 1888, 1,651. (Applause.) The number of certificates and prizes are: Certificates, May, 1887, 798, and May, 1888, 965; prizes, May, 1887, 190, and May, 1888, 221. (Applause.) The Corporation of Preston have obtained from Parliament power to provide us with a site for our Technical School. No site has as yet been provided; indeed, we have not formulated our project for a school of practical work. The Council have had the matter under their serious consideration. The subject is one of some difficulty. On the one hand the provision of such a school of some description is an admitted necessity, but on

the other hand the problem of what shape such a school ought to take has hardly yet been thoroughly solved. Those who have read the many and somewhat conflicting views which competent persons have expressed on the subject must feel that the question of how far practical work can with the greatest advantage be taught in what is, after all, a school and not a workshop, and in what manner practical work can with the greatest benefit be introduced in aid of theoretical teaching is one of some nicety. In view of this consideration, and of the fact that legislation has been twice attempted without result, and that this attempt will probably be repeated with the approval of all political parties, and that the outlay in providing a school in which practical work can to any extent be introduced must necessarily be great, it will be thought that the Council are not unmindful of their duty if they well and fully consider the subject before embarking upon this enterprise, which must in any case be a costly one, but which, if well conceived and executed, must tend greatly to the future development of the industries of the town. (Applause.) With reference to the results of the recent examinations and the prize winners who will come before you to-night, I would wish to call particular attention to the following students :—William Whittam has won five science certificates (three first class), and first-class honours in cotton spinning. (Applause.) Thomas Jameson has won three first-class certificates in science, and passed the Civil Service laboratory examination at Somerset House (Applause.) James Marsden has passed advanced in two science subjects. He has also won the fifth prize in the United Kingdom in brickwork and masonry, gaining the bronze medal of the City and Guilds of London ; also first class in carpentery and joinery at the Carpenter's Hall. (Applause.) G. F. Nelson has won the first prize in printing in the United Kingdom, securing the City and Guilds of London silver medal. (Applause.) John Shaw has won four first-class certificates in science ; the first-class certificate City and Guilds of London in mechanical engineering, passing first in the United Kingdom, and gaining the silver medal. (Applause.) John C. Rhodes has won seven science certificates, of which two are first-class, and a £45 science scholarship. He is now at South Kensington. (Aplause.) Frances Bentham has gained an art scholarship of £45, and she is now at South Kensington. (Applause.) And J. T. Moyle has obtained a National Scholarship for two years, and an allowance of £50 per year, at the National Art Training School in London. (Applause.) In conclusion, I desire on the part of the Council to express our very grateful acknowledgments to the Earl of Derby for undertaking to

distribute our prizes. There is no one whose approval we value more highly than his. (Applause.) His high position, his great abilities, his clear and thoughtful intellect, his distinguished public services, the attention which he has given to the subject of education generally, and the interest which he and his family have always shown in anything relating to Preston render his presence to-night of exceptional importance, affording the greatest encouragement to us in the work in which we are engaged. We have a very grateful recollection of the interest which his lordship took in the old Mechanics' Institution and our early efforts to form our School of Art. He will probably remember distributing in the Preston Theatre, in 1863, the prizes to the students of that school. At a still earlier period, before the Mechanics' Institution had been able to form either of its Schools of Art and Science, his lordship had lent the aid of his eloquence to the work of its managers then carried on under circumstances of some pressure and difficulty. The noble earl's visits have marked the progress of the old institution, and the development of its influence. I believe that he will view with satisfaction the rise and progress of this larger and more comprehensive Institute, the outgrowth of the old one—and will join with us in the hope that it may have before it a long and prosperous career of extended and growing usefulness, and that it may be in the future, as we believe that it has been in the past, the means of spreading useful and practical knowledge, and of producing an influence for good upon the large numbers from time to time attending its classes. (Loud Applause.)

His Lordship then gracefully performed the ceremony of distribution, speaking a kindly word to each student, and distinguishing those who carried off the highest honours by a shake of the hand.—At the conclusion,

The Noble Earl said: I do not know exactly what is the mossy pillow to which reference has been made in the song we have just heard; but I am afraid in these days people who are engaged in public life are rolling stones which are not likely to gather much moss, whether for the purpose of pillows or anything else. (Laughter.) I received your invitation to come here and to attend this meeting with very mixed feelings. On the one hand, I could but feel it an honour and a pleasure to take part in useful work of this kind, especially in a town with which I have so many connections both personal and hereditary. (Applause.) To some of these reference has been made by the chairman in his speech just now, and I can assure you that to me, after the lapse of a quarter of a century in one case, and of considerably more

in another, they are still a source of agreeable recollection. (Applause.) On the other hand, I could not but feel that if what you want is a lecture on technical instruction, which will tell you anything new and valuable, you have come to the wrong man. (Laughter.) First, because if novelty on such a subject is not absolutely impossible, it is possible only to those who have more practical knowledge than I can claim; and, next, because discussion is useless and unmeaning where there is no difference—where there is nothing to contend for on the one hand, and nothing to oppose on the other. Now, in this matter of technical instruction we are all on one side. Some of us expect more from it, and some of us less. Some have more faith in theory, and some in rule of thumb. That is a difference of view which we find everywhere, but in the main we are agreed. The most eager educationists would not tell you that school teaching can supersede the actual practical training of the workshop, the farm, or the office. The most obstinate sceptic would scarcely argue that a lad is the worse for knowing something more of the general principles on which he is working than he can learn in the ordinary routine of his business. Now, I speak cautiously, because every good cause is liable to be injured by exaggeration, and that is peculiarly true in such matters as these. I have listened to speeches and read addresses which seem to imply a belief that a ploughman would draw a furrow straighter if he knew the geology of the soil on which he was working, and that a loom would be more carefully tended if the factory hand attending it were well up in the natural history of the cotton plant. (Laughter.) Now, if we want to be believed, we must keep to what is probable, and, speaking as an outsider in this matter, I should say that the strongest argument, to my mind, in favour of technical training is this—that every nation which is our rival in productive arts has gone in for it zealously. I can understand a soldier of the old school seeing no good in breechloaders and magazine rifles and all the new arms of precision, but I scarcely imagine that any one would deny the necessity of introducing those weapons when he knew that every army with whom his own could be brought into collision was adopting them. It is an old story that we are competing with all the world, that the competition is likely to be more severe than ever, that in many cases it is fed and stimulated by English capital, and that we shall probably be harder put to it than we have ever been yet to hold our own. (Hear, hear.) The Americans would have been far more dangerous rivals than they are if they had not—in the spirit, let us hope, of pure generosity—(laughter)—handicapped themselves

by a protectionist system which has gone far to neutralise their many advantages. That system will not last for ever, and when it ceases we shall have even more trouble with them than we have now. You may ask what is the particular deficiency in our training which needs to be supplied. Well, I suspect that we don't always realise the change that has come over business in these later days. Men require to be more specially trained to it. They require, for dealings abroad, more knowledge of foreign languages than is usually got in the course of an English education. They require also more knowledge of the demands of foreign countries, and more readiness to adapt themselves to the supply of those demands. It is said —I speak, of course, only at second hand of such matters, but our consuls frequently repeat it—that we lose a great deal of business, which we might keep or acquire, by either not knowing or not caring what it is exactly that the foreign customer asks for; that we don't like to be put out of our way, or disturbed in our accustomed routine, and that we are very apt to offer to supply rather what we think our customers ought to want than what they really do want. (Hear, hear.) If that be so, it is exactly the sort of prejudice that a more extended and more thorough commercial education would remove. I believe that what I am saying is tolerably familiar to those who have been led by their business or their tastes to look into this subject. At any rate the English public have felt the difficulty of the situation; they have felt that they cannot afford to throw a chance away; and, however much may still remain to be done, and no doubt a good deal does remain, I doubt if there is any country where the provision for technical instruction has been more rapidly increased in the last few years than in England. (Hear, hear.) Teaching of the kind is not open to any of the objections which are frequently brought against our ordinary school system. If I rightly understand what it means, and in what it consists, it does not admit of cramming—that much abused practice to which so many reasonable and so many unreasonable objections are constantly taken. It does not involve the constant appeal to memory, and nothing but memory, which is the weak point of our literary schooling. (Hear, hear.) You teach lads in these technical schools to do something, and to understand what they are doing. Now, I think it is a rule without exception, that whereas facts, or figures, or names, or definitions which are merely swallowed down, and which require no mental action beyond that of learning or remembering them, get speedily forgotten, what you learn to do is a possession retained for life. (Applause.) The books which we read at school leave a very dim impression, after

20 or 30 years; but nobody who has learnt to ride, to row, to swim, to skate, to play cricket, or to speak or write a foreign language, ever entirely forgets his skill. It may get rusty from disuse, but he soon regains it if wanted, and I suppose it is the same with drawing, with music, and with all other work in which the hand has a share as well as the head. And I think, further, that it is the general experience, that whereas learning, where the memory alone comes into play, is to most people tedious, unless the subject be one of exceptional interest, learning to do something, no matter what, where a certain degree of skill and practice are necessary, is to most people agreeable rather than otherwise. Early lessons in drawing, I know, are often remembered with pleasure; so is learning to speak and write a new language, but nobody, as far as I know, ever yet connected pleasing associations with the memory of the Latin grammar. (Laughter.) Now, I don't know whether I shall be diverging too widely from the subject immediately before us, if I make a few remarks on one closely connected with it, which of late has attracted a good deal of attention. You cannot have teaching of any kind without examination in some form; and a storm of controversy has lately raged—perhaps it is still raging—round the question whether examinations have been a success or not. That is a question of large public interest, for if we were to condemn them as a system the relations of the school to the State would be profoundly affected; and as regards public patronage, we should lose what is at any rate an effective check upon jobbery and a security against absolute stupidity in those who succeed. I believe that checks upon public patronage were never more likely to be wanted than now. (Hear, hear.) The danger is not the same as it was 40 years ago. It comes from a different quarter. When we first heard of the system of appointments to be made by competition, what reformers were afraid of, and what they wanted to do away with, was the undue influence of peers and rich men and members of Parliament. That is a very shadowy danger now, but things will not be better if for their influence be substituted that of election agents and wire-pullers. (Hear, hear, and applause.) The fatal phrase of the American President Jackson, some 60 years age, that "to the victors belong the spoil," has, by the common consent of all intelligent Americans, done more harm to their administrative system than any other event in their history,—(hear, hear)—because it means that the efficiency of the Civil Service is always to be subordinated to the exigencies of part politics. That is a risk which we must avoid at all hazards. (Applause.) We have probably now the best and purest Civil Service that

exists in the world, and we have got to keep it so. (Hear, hear.) I believe that our present arrangements do effectually check jobbery, and that is a merit which makes up for many defects. Some of the faults which may be found—which are found—in the competitive system I have no hesitating in declaring to be imaginary. You see frightful pictures drawn of the health of young men destroyed by excessive competition and overwork. I will venture to assert that for one young man whose health has suffered from those causes, you will find half a dozen who have suffered from idleness—(laughter)—and from the habits of life which idleness in young men is almost always sure to produce. (Applause.) There is no better security for steadiness of conduct in a young man than regular work for a definite object. (Hear, hear.) He cannot afford to play tricks with himself, or to do anything which may weaken him physically or mentally for the time of trial. I don't tell you there are no instances in which mischief has been done by over study—I know there are some such—but I think it will almost always be found where that has happened that it is due to one of two causes—either the youth is too weak physically to bear any strain, and in that case failure at an examination is only a fair warning of the more serious failure to which he would be liable in active life, or, which I suspect is the more common case, he has been badly prepared or disinclined to work, or has been brought prematurely into the field and then has tried to make up in a few months the ground which ought to have been covered by the work of years. (Hear, hear.) Given a sound mind and body to begin with, and the exercise of ordinary prudence, I don't believe there is anything unwholesome in competitive examination, and the best proof of it is that most of our successful lawyers and professional men have gone through that ordeal, and most of those who have taken the highest university degrees have been distinguished in later life, except when, as no doubt often happens, they were content with some quiet and useful employment, and did not care to try for the big prizes. But I don't think it can be denied that in those sweeping denunciations we have heard of the competitive system as now administered, there is some admixture of truth. Two evils it undoubtedly has, one I am afraid not capable of amendment, but inherent in the very nature of things; the other remediable, if not wholly, yet at least to a great extent. What is incurable is this, that when a very large number of candidates have to be examined at the same time, the process is necessarily a rough and ready one, leaving a good deal to chance; because the full extent of a man's or even of a boy's knowledge cannot be really tested by half a dozen examination

papers, and the time necessary for a complete and therefore absolutely fair comparison cannot be given. That is a weak point in the system, and, as far as I can see, it must remain so; at least no remedy occurs to me. The other fault which I find is that under examination tests as now applied, memory is apt to be too exclusively relied upon, so that the question is not so much what the student understands as what he can recollect; and then come in all the dodges of cramming and all those attendant abuses of which we hear so much, and which I think really are abuses, though they may be exaggerated by popular report. These are days in which we hold commissions of enquiry upon everything. As a rule, not much comes of them except the multiplication of blue books. But that makes no difference; there are always people ready to serve on them, and, though I rather shrink from suggesting an addition to the number, yet possibly a thorough overhauling of our examination system might serve the double purpose of silencing wild and fantastic objections, and bringing to light incidental errors. (Hear, hear.) I am afraid this is rather a digression from our proper subject, but I trust to your kindness to excuse it, the more so because in this Institution, as everywhere else, you have examinations; and, in fact, to carry on any plan of teaching without them, whatever the subject matter may be, would be like carrying on a business without keeping accounts. (Applause.) You must have some means of testing the work which you are doing, and no other or better has yet been devised. I will not speak to you as to the local affairs of this institution, with which many here present are better acquainted than I can pretend to be. For 60 years it has existed, first as a Mechanics' Institution, of the type which was ordinary half a century ago, then as a School of Art also, and, later again, as a School of Science, both being in connection with South Kensington. How it has flourished, thanks mainly to the liberality of one man, the late Mr. Harris, you do not require to be told. (Applause.) I doubt if there is any instance of a happier or more complete adaptation of a long established educational institution to the wants and requirements of the present day. I won't touch on the ground which your President has already traversed, but if words of mine were likely to be of any value I would earnestly recommend this Institution to the support both of the municipal authorities and of the public. (Applause.)

Major-General COTTON said that in the absence of Mr. Jacson, of Barton Hall, which they all regretted, the more because it was on account of indisposition, the agreeable task had been allotted to him of moving the following resolution:—

"That the best thanks of the meeting be accorded to the Right Hon. the Earl of Derby for his great kindness in distributing the prizes, and for his interesting, valuable, and able address given on this occasion." He was sure they would all feel personally gratified at the presence of the Earl of Derby, and would be pleased with his most valuable efforts on behalf of the Harris Institute. (Applause.)

Alderman EDELSTON, in seconding the motion, said: The peerage of this country contains, as you know, a great many members. There are two of those members who are more to Preston people than any other members either are or could be; and we feel that when we have amongst us either Lord Derby or Lord Stanley of Preston—(applause)—we have amongst us an old neighbour and an old friend. I am quite sure that the traditions of old times in respect to the connection which has so long subsisted between this ancient borough and that distinguished family are not and cannot be more tenderly remembered than they are by the people of Preston, and I am sure you will share with me the hope that Lord Derby's life and the life of his distinguished brother will long be spared, and that they may be able to continue to take an important part in the public business of this country. Lord Derby has referred to two of his visits to Preston. One of them seems to have some connection—not very remote—with the subject which has called us together this evening. Some of you may not remember that Lord Derby took a very active part indeed in his younger manhood in promoting the Free Library movement. I am afraid it must be 35 years since I first heard his voice, and that was at a meeting in the old Institution to promote the Free Library movement. It was not at that time successful. It was sought by two committees, one composed of working men and the other of persons who are not, in the ordinary acceptation of the term working men, to raise capital for the purpose of purchasing books, but the movement was not successful. Later on, however, through the benevolence of the late Mr. Harris, an opportunity was presented of erecting a building which will be a pride and an honour to the town, and which at no very distant date will be opened as a Free Library. (Hear, hear.) I think it will be in accordance with the fitness of things that Lord Derby, who was present at the laying of the foundation stone of that institution, should again connect his name with the Free Library movement in Preston by taking some part in the opening of that building. The Chairman has told you of the work which the Harris Institute is doing; Lord Derby has also referred to it, and has most forcibly advocated its claims.

I do not know that I can possibly add anything to what they have said which would be worth hearing, but it does occur to me to mention this, that I am very much struck with the apparent thoughtfulness of the students who have taken prizes to-night. The unsuccessful students need not be discouraged ; they ought not to be discouraged if they have maintained their self-respect by making the best efforts that they could. Let them also bear in mind that if they have not carried away prizes to-night, it is still within their power, if they exercise self-denial, industry, frugality, and perseverance, to win some of the greater prizes in the battle of life. I am not able just at this moment to speak the words which convey my impression of what the Harris Institute is doing. I can only indicate it by making a comparison. I do not claim to be a very old man, but it is a considerable period since I left school. At that time the education which was given to the ordinary sons of working men was so meagre, that they did not even learn how to learn. I cannot help thinking of the immense advantages which the students of the Harris Institute now possess over their forerunners. They have a better education in the elementary schools. Those in my office are far better educated than I was when I left school, and when I had been at work and earning my own living for a considerable number of years. I am glad to see that change. It has been said that at school you only learn how to learn. You have the opportunity now when you leave school, and in your leisure hours, after the business of the day is over, of learning that which may do two things—and must do one, unless it be through some fault of your own—you may so far extend your education as certainly to increase your potentiality to enjoy life ; you can, at any rate, by the pursuits of those studies, lay up for yourselves pleasure in the future : and if you go into it thoroughly and practically, you will not, as Lord Derby has said, readily forget ; and it is possible that this large education may, if again there be application, fit you to compete more efficiently and successfully with those you have to meet in what I must again refer to as the battle of life. Now this rests with yourselves. The managers of the Harris Institute may teach you ; they may instruct you ; gentlemen like Lord Derby may come and speak to you, and urge you to make the most of this institution ; but it rests with yourselves whether you succeed. To put it more clearly, books may be given to you, but not brains. The practical use to which you will apply what you will learn at this institution, whether it will be to increase your daily enjoyment of life and so assist to make the sum of human life more happy and more enjoyable, or whether you carry it still further and apply what you

learn to the acquiring of increased material comfort and prosperity, rests entirely with yourselves. In one of the speeches Lord Derby made many years ago, he uttered these words, which I have never forgotten. There are very few of his speeches I have left unread. He said, "A little which you can teach people to do for themselves is better than a great deal which you can do for them." Now, I think, if I rightly understand the mission of the Harris Institute, it is to teach you how you can do a great deal for yourselves. Whether you do it or not must depend upon yourselves. (Applause.)

The motion was carried.

Lord DERBY, on rising to respond, was received with cheers. He said:—Ladies and gentlemen, I am very much obliged to the mover and seconder, for the kind things they have said to me, and to you for the reception which you have given me, and I am still more indebted to you for the singular patience with which you listened just now to an address which I know cannot have been of an exciting character. Questions of the kind we have dealt with this evening are not exciting; they have not the kind of interest which belongs to a sensational speech or to a popular novel, but though they may not be exciting, they are interesting in the truest and deepest sense of the word. (Hear, hear.) I remember very well after the Reform Bill of 1867 passed, Lord Sherbrooke, then Mr. Lowe, told us that after what we had done the next thing to do was to educate our masters. (Laughter.) And he was quite right. We have been educating them ever since, and I think we have done it with some success. Now there are very few subjects upon which more platitudes have been uttered, or more absurdities taught, than this of public instruction, but that is rather a proof of the undying interest of a subject which in itself will never lose its importance so long as we remain a nation. (Applause.) I hope that this Institution may long continue to flourish, and that it may retain, what undoubtedly it appears now to enjoy, the confidence and the support of the local public. (Cheers.)

The MAYOR proposed a vote of thanks to the Chairman for presiding. He said he cordially echoed Lord Derby's closing remark, in which he wished success to the Harris Institute. They had in the president of the Institute a gentleman who devoted a very large portion of his time to that army of young persons who were instructed in art, science, and technical subjects at the Harris Institute. There was something very noble in the idea that some 1,650 young people of the rising generation attended the various classes in con-

nection with the Institute. The influence upon them must be very good and great, and the re-acting influence from those young people on society must be very great also. (Applause.)

Mr. L. RAWSTORNE, J.P., seconded the motion. The members of the Institute were very greatly to be congratulated on having such a president, and he thought he might go further and say that the town of Preston might be almost equally congratulated. (Hear, hear.) In giving his most valuable time and service to this Institution he thought Mr. Ascroft was conferring the highest possible benefit on this town with which his family had been so long connected—(hear, hear)—and in carrying out the work and presiding over that Institution he was sure he was deserving of the best thanks of the people of Preston. (Cheers.)

The motion was put by Earl Derby and carried with acclamation.

The CHAIRMAN, in responding, said he was exceedingly obliged to the mover and seconder of the resolution for their observations, and to the audience for the hearty manner in which they had carried the proposal. He assured them that he was pleased to devote himself to the Harris Institute and its important objects. He was sometimes surprised to find the depth to which the Institute had reached among the people of Preston. He often had conversations with working men and others who spoke in grateful terms of the benefits the Institute had conferred upon their families by the instruction their sons and daughters had received. (Hear, hear.) Expressions such as these, and the hearty approval received from them that evening, were a full return to himself and fellow-workers for any trouble which they might have had in conducting the affairs of the Institute. Allow him on behalf of that audience, to express their hearty thanks to Mr. Cowell, Mr. Tomlinson, and the choir for the very beautiful music with which they had favoured them that night. (Applause.) He would ask them also to remember that not only had they delighted them that evening with their performance, but at Christmas time they gave to the public of Preston that excellent performance of the Messiah they would all remember. They had shown a great deal of disinterestedness, and bestowed a great deal of their time in their practices and performance, and for these they deserved their very hearty thanks, the more so when they recollected that from their services on the occasion of the performance of the Messiah a surplus of more than £40 had been handed over to the charities of the town. (Applause.)

The proceedings then ended with the singing of the National Anthem.

LIST OF PRIZES AND CERTIFICATES AWARDED TO STUDENTS ATTENDING THE CLASSES AT THE HARRIS INSTITUTE, SESSION 1887-8.

SCIENCE.

† *These Students have obtained Queen's Prizes and Local Scholarships.*
* *These Students have obtained Local Prizes and Scholarships.*
A signifies Advanced. E Elementary. I First Stage. II Second Stage.

NAME.	Success. Stage	Class	SUBJECT.
*†Atherton, John	A	1st	Steam
Ashworth, Joseph	E	2nd	Practical Plane and Solid Geometry
Askew, Frederick	II	2nd	Mathematics
*Atherton, Frederick	E	1st	Magnetism and Electricity
,, ,, ...	A	2nd	Physiography
Armstrong, Herbert J.	E	2nd	Sound, Light, and Heat
,, ,, ...	E	2nd	Magnetism and Electricity
*Buck, Isabella..	E	1st	Agriculture
,, ,, ...	E	2nd	Botany
*Barton, John	E	1st	Magnetism and Electricity
,, ,, ...	E	2nd	Physiography
Biggins, Arthur H.	E	2nd	Magnetism and Electricity
*Bostock, Daniel E...	E	1st	Magnetism and Electricity
,, ,, ...	E	2nd	Physiography
Bostock, Lillian	E	2nd	Magnetism and Electricity
*Beesley, Robert Wm.	E	1st	Inorganic Chemistry
Barratt, John T.	A	2nd	Practical Chemistry
*Barber, Edward H...	E	1st	Practical Chemistry
,, ,, ...	E	2nd	Inorganic Chemistry
,, ,, ...	E	2nd	Geology
Barlow, Emily	E	2nd	Botany
Bennett, William P.	A	1st	Machine Construction
*† ,, ,, ...	E	1st	Applied Mechanics
Brown, Emily E. M.	E	2nd	Inorganic Chemistry
*Bowling, Thomas	E	1st	Building Construction
Bradshaw, William A.	E	2nd	Physiography
*Barrow, Mary..	I	1st	Mathematics
Begley, Edwin	E	2nd	Practical Plane and Solid Geometry
,, ,, ...	E	2nd	Building Construction
Barton, Thomas	E	2nd	Machine Construction
Burns, James	A	2nd	Building Construction
Blakey, Eunice	E	2nd	Physiography
,, ...	E	2nd	Agriculture

NAME.	Success. Stage Class	SUBJECT.
Bennett, Samuel P.	A 2nd	Building Construction
Brindle, Thomas	A 2nd	Building Construction
Balshaw, Emma J.	E 2nd	Physiography
Bradshaw, Herbert	II 2nd	Mathematics
,, ...	A 2nd	Inorganic Chemistry
Bond, William	E 2nd	Theoretical Mechanics
,, ...	E 2nd	Inorganic Chemistry
Blewitt, Kate	A 2nd	Practical Chemistry
*Boddy, Hubert W...	III 2nd	Mathematics
,, ...	E 1st	Theoretical Mechanics
,, ...	A 2nd	Sound, Light, and Heat
Cunliffe, Thomas	A 2nd	Building Construction
Croasdale, John H.	A 2nd	Building Construction
Cooke, James	E 2nd	Building Construction
Crossthwaite, William G. ..	E 2nd	Building Construction
Cunliffe, Arthur B.	A 2nd	Building Construction
Cottam, Henry	E 2nd	Inorganic Chemistry
Clarke, Fred.	E 2nd	Theoretical Mechanics
,, ...	E 2nd	Sound, Light, and Heat
Catterall, Ralph	A 2nd	Physiography
Chaloner, Ignatius A.	E 2nd	Sound, Light, and Heat
,, ...	E 2nd	Magnetism and Electricity
,, ...	E 2nd	Navigation
Coward, Fred.	E 2nd	Magnetism and Electricity
,, ...	E 2nd	Physiography
*†Corner, William Hy.	A 1st	Machine Construction
,, ...	E 2nd	Applied Mechanics
Carter, Roger..	E 2nd	Magnetism and Electricity
*Capstick, John	A 2nd	Machine Construction
,, ...	A 2nd	Applied Mechanics
,, ...	E 1st	Steam
Clitheroe, John	A 2nd	Geology
,, ...	E 2nd	Botany
*Clayton, James	E 2nd	Applied Mechanics
,, ...	E 1st	Steam
Clarke, Thomas H.	E 2nd	Geology
*Clarke, Nathaniel	E 1st	Sound, Light, and Heat
,, ...	E 1st	Navigation
,, ...	E 2nd	Physiography
Charlton, James S.	E 2nd	Geology
*Chaloner, Richard	E 1st	Sound, Light, and Heat
,, ...	E 2nd	Magnetism and Electricity
,, ...	E 1st	Navigation
Catlow, Miles	E 2nd	Physiography
*Crozier, Sarah E.	E 1st	Magnetism and Electricity
*†Clitheroe, William	A 1st	Geology
,, ,, ...	E 2nd	Botany
,, ,, ...	A 2nd	Animal Physiology
Dobson, John	E 2nd	Magnetism and Electricity
,, ,, ...	E 2nd	Physiography
*Dobson, Adam	E 1st	Machine Construction
Davies, Joseph	I 2nd	Mathematics
Ditchfield, Agnes A.	**E 2nd**	**Inorganic Chemistry**

NAME.	Success. Stage	Class	SUBJECT.
Dawson, Edwin	E	2nd	Steam
Dailey, Edgar T.	E	2nd	Physiography
*Ellis, Effie	E	1st	Magnetism and Electricity
,,	E	2nd	Physiography
Fish, Edith M.	E	2nd	Magnetism and Electricity
Fallowfield, Charles C.	E	2nd	Magnetism and Electricity
Fallowfield, Richard	I	2nd	Mathematics
*Fallowfield, John E.	E	1st	Sound, Light, and Heat
Farquharson, Albert J.	E	2nd	Machine Construction
Foster, John	E	2nd	Machine Construction
Fazackerley, Nicholas	E	2nd	Building Construction
Fraher, Joseph B.	E	2nd	Sound, Light, and Heat
Foster, Alexander	E	2nd	Sound, Light, and Heat
Freeman, Henry S.	E	2nd	Inorganic Chemistry
Fawcett, Richard	E	2nd	Physiography
Frame, Elsie	E	2nd	Physiography
*Fielding, Albert D.	E	1st	Magnetism and Electricity
*France, Eliza	E	1st	Sound, Light, and Heat
*Fairnie, James S.	E	1st	Physiography
*Fleming, Frances M.	E	1st	Agriculture
,,	E	2nd	Physiography
,,	E	2nd	Magnetism and Electricity
Graham, Agnes	E	2nd	Botany
Graham, Annie M.	E	2nd	Botany
*†Gardner, Edward	A	2nd	Machine Construction
,,	A	1st	Applied Mechanics
,,	A	1st	Steam
Gardner, Gertrude	E	2nd	Physiography
*Grime, Robert	A	2nd	Machine Construction
,,	E	2nd	Applied Mechanics
,,	E	1st	Steam
Gardner, Edward	E	2nd	Physiography
*†Gregson, Richard	A	1st	Building Construction
*Gillibrand, Walter	E	1st	Building Construction
*†Greenwood, Fred. C.	A	1st	Building Construction
*Gardner, John L.	E	1st	Magnetism and Electricity
,,	A	2nd	Sound, Light, and Heat
,,	A	2nd	Physiography
,,	E	2nd	Inorganic Chemistry
*Gardner, Harry M.	E	1st	Magnetism and Electricity
,,	E	2nd	Sound, Light, and Heat
,,	E	2nd	Physiography
Gornall, Mary	E	2nd	Sound, Light, and Heat
Gregson, George E.	E	2nd	Botany
Gardner, Elizabeth	E	2nd	Sound, Light, and Heat
,,	E	2nd	Botany
Gibson, Henry	A	2nd	Inorganic Chemistry
,,	A	2nd	Practical Chemistry
Horrocks, John	E	2nd	Practical Plane and Solid Geometry
,,	E	2nd	Building Construction
Haycroft, Arthur H.	E	2nd	Building Construction
Heavyside, Esther	E	2nd	Physiography
Horsefield, William	E	2nd	Building Construction

NAME.	Success. Stage	Class	SUBJECT.
Hardman, John K.	I	2nd	Mathematics
Holliday, Helena A.	E	2nd	Physiography
Hargreaves, Richard	II	2nd	Mathematics
,, ...	A	2nd	Steam
Hodson, James	E	2nd	Sound, Light, and Heat
,, ...	E	2nd	Physiography
Howson, Robert	E	2nd	Magnetism and Electricity
Hopkins, James H.	E	2nd	Inorganic Chemistry
Hutchinson, Richard T. ..	E	2nd	Inorganic Chemistry
Hargreaves, Jane	E	2nd	Botany
*Howorth, Harry	E	1st	Practical Chemistry
*Hayhurst, James	E	1st	Steam
,, ...	E	1st	Machine Construction
*Hanna, John	E	1st	Building Construction
*Hayworth, Lucy A.	E	1st	Physiography
*Howorth, John H.	E	1st	Magnetism and Electricity
*Holmes, Martha	E	2nd	Inorganic Chemistry
,, ...	E	1st	Physiography
Irving, George	E	2nd	Magnetism and Electricity
*Johnson, Fred.	E	1st	Magnetism and Electricity
Johnston, Walter H.	E	2nd	Botany
,, ...	E	2nd	Animal Physiology
*Jolly, Rebecca J.	E	1st	Sound, Light, and Heat
,, ...	E	2nd	Magnetism and Electricity
,, ...	E	2nd	Physiography
*†Jameson, Thomas	A	1st	Sound, Light, and Heat
,, ...	E	1st	Magnetism and Electricity
,, ...	A	1st	Inorganic Chemistry
Jones, Fred. W.	E	2nd	Machine Construction
,, ...	E	2nd	Steam
*†Jones, James C.	I	2nd	Mathematics
,, ...	E	1st	Applied Mechanics
,, ...	A	1st	Steam
Jackson, Fred.	II	2nd	Mathematics
*Jackson, Alfred	I	1st	Mathematics
Jackson, Thomas	E	2nd	Inorganic Chemistry
*Jump, Thomas B.	E	1st	Applied Mechanics
,, ...	E	2nd	Sound, Light, and Heat
,, ...	E	2nd	Magnetism and Electricity
*Jowett, H. A. D.	E	1st	Sound, Light, and Heat
,, ...	A	2nd	Practical Chemistry
,, ...	E	1st	Botany
Johnston, William	E	2nd	Applied Mechanics
,, ...	E	2nd	Steam
*King, Edith E.	E	1st	Geology
King, Agnes A.	E	2nd	Inorganic Chemistry
,, ...	E	2nd	Geology
Knowles, Joseph	E	2nd	Practical Plane and Solid Geometry
Kent, Richard..	E	2nd	Applied Mechanics
,, ...	E	2nd	Magnetism and Electricity
,, ...	E	2nd	Steam
Kirkham, Mary E...	E	2nd	Physiography
Kennerley, Arthur E.	E	2nd	Agriculture

NAME.	Success. Stage Class	SUBJECT.
Livesey, Ernest A.	II 2nd	Mathematics
,, ...	E 2nd	Inorganic Chemistry
Ladyman, Frank	II 2nd	Mathematics
Ladyman, Eldred	E 2nd	Theoretical Mechanics
*Lambert, Charles E.	E 1st	Practical Plane and Solid Geometry
Lancaster, Emily	E 2nd	Inorganic Chemistry
Lonsdale, Thomas	E 2nd	Sound, Light, and Heat
,, ...	E 2nd	Inorganic Chemistry
Livesey, Emma	E 2nd	Sound, Light, and Heat
Ley, Ernest	E 2nd	Sound, Light, and Heat
Leeming, Mary	E 2nd	Physiography
Morley, John W.	E 2nd	Building Construction
Miller, Thomas H.	II 2nd	Mathematics
,, ...	E 2nd	Inorganic Chemistry
Mill, Richard	E 2nd	Applied Mechanics
Merigold, Walter	E 2nd	Magnetism and Electricity
Mather, John	E 2nd	Inorganic Chemistry
Milner, William	E 2nd	Botany
Meakin, Rosamund	E 2nd	Physiography
*†Marsden, James	A 2nd	Practical Plane and Solid Geometry
,, ...	A 1st	Building Construction
*Mottram, John H.	E 1st	Building Construction
*Metcalf, Charles	I 1st	Mathematics
,, ...	E 2nd	Theoretical Mechanics
,, ...	E 1st	Applied Mechanics
*Mc.Gavin, Bessie	E 1st	Sound, Light, and Heat
,, ...	E 1st	Physiography
*Marsden, Charles H.	E 1st	Practical Chemistry
*Margerison, Kate	E 1st	Physiography
Nevitt, Thomas C.	E 2nd	Inorganic Chemistry
*Ogden, Thomas R.	E 1st	Practical Plane and Solid Geometry
,, ...	A 2nd	Sound, Light, and Heat
,, ...	E 1st	Magnetism and Electricity
Orrell, Isaac	II 2nd	Mathematics
Parker, Thomas R. G.	E 2nd	Practical Plane and Solid Geometry
,, .. .	E 2nd	Machine Construction
Purves, Elizabeth	E 2nd	Physiography
Parish, John	E 2nd	Machine Construction
Payne, Frances M.	E 2nd	Physiography
Parkinson, Thomas	E 2nd	Machine Construction
,, ...	E 2nd	Applied Mechanics
Parkinson, Edmund	A 2nd	Building Construction
Parker, Ethel	E 2nd	Physiography
Pilkington, Thomas	II 2nd	Mathematics
,, ...	A 2nd	Magnetism and Electricity
Penny, John	E 2nd	Theoretical Mechanics
,, ...	E 2nd	Geology
Pearson, Thomas R.	E 2nd	Applied Mechanics
Parker, Charles E.	E 2nd	Magnetism and Electricity
Proctor, William E.	E 2nd	Magnetism and Electricity
Proctor, Sarah P.	E 2nd	Physiography
Penny, Isabella	A 2nd	Physiography
,, ...	A 2nd	Agriculture

NAME.	Success. Stage Class	SUBJECT.
*Purves, John	E 1st	Practical Plane and Solid Geometry
,, ...	E 2nd	Inorganic Chemistry
,, ...	E 1st	Magnetism and Electricity
*Pridmore, Herbert W.	E 1st	Geology
*Powell, Fred...	A 2nd	Machine Construction
,, ...	E 2nd	Applied Mechanics
,, ...	E 1st	Steam
Rimer, Harry..	E 2nd	Inorganic Chemistry
*†Rhodes, John C.	E 2nd	Practical Plane and Solid Geometry
,, ...	E 2nd	Theoretical Mechanics
,, ...	A 1st	Magnetism and Electricity
,, ...	A 2nd	Sound, Light, and Heat
,, ...	E 2nd	Inorganic Chemistry
,, ...	E 2nd	Practical Chemistry
Reeder, Clara..	E 2nd	Physiography
*Renwick, Thomas	E 1st	Machine Construction
,, ...	E 2nd	Applied Mechanics
*Redmond, Albert	Honours 2nd	Building Construction
*†Rigby, James	A 1st	Building Construction
*Riding, John	E 1st	Magnetism and Electricity
,, ...	E 2nd	Animal Physiology
Raby, John T.	E 2nd	Practical Plane and Solid Geometry
,, ...	E 2nd	Applied Mechanics
Relph, John H.	E 2nd	Sound, Light, and Heat
,, ...	E 2nd	Magnetism and Electricity
Robb, Andrew	A 2nd	Magnetism and Electricity
,, ...	A 2nd	Inorganic Chemistry
,, ...	A 2nd	Practical Chemistry
*Robinson, Ellen C.	E 1st	Geology
,, ...	E 2nd	Inorganic Chemistry
,, ...	E 2nd	Physiography
Robinson, James	A 2nd	Geology
*Sedgwick, Christopher	E 1st	Magnetism and Electricity
*†Shaw, John	A 1st	Practical Plane and Solid Geometry
,, ...	A 1st	Steam
,, ...	E 1st	Theoretical Mechanics
,, ...	E 1st	Applied Mechanics
Stevenson, James W.	E 2nd	Machine Construction
*Steele, William	E 1st	Building Construction
Swarbrick, Henry	E 1st	Building Construction
*†Spiby, Thomas	II 2nd	Mathematics
,, ...	E 1st	Theoretical Mechanics
,, ...	E 2nd	Sound, Light, and Heat
,, ...	A 1st	Magnetism and Electricity
,, ...	E 1st	Physiography
*Scott, Alice T.	E 1st	Inorganic Chemistry
*†Southworth, William	A 1st	Agriculture
,, ...	A 2nd	Botany
Slater, Charles B.	E 2nd	Machine Construction
,, ...	E 2nd	Steam
Starkie, Fred..	I 2nd	Mathematics
Sykes, Robert	**A 2nd**	**Magnetism and Electricity**

NAME.	Success. Stage Class	SUBJECT.
Sisson, William	E 2nd	Sound, Light, and Heat
,, ...	E 2nd	Physiography
Stephenson, John R.	E 2nd	Magnetism and Electricity
,, ...	E 2nd	Physiography
Seed, Thomas..	E 2nd	Magnetism and Electricity
,, ...	E 2nd	Physiography
Shaw, Robert..	E 2nd	Magnetism and Electricity
Southworth, Herbert	E 2nd	Magnetism and Electricity
Smith, Margaret	E 2nd	Magnetism and Electricity
,, ...	A 2nd	Physiography
Stacey, Charles E.	A 2nd	Inorganic Chemistry
,, ...	A 2nd	Practical Chemistry
Sumner, Edward	A 2nd	Inorganic Chemistry
,, ...	A 2nd	Practical Chemistry
Starkie, Gilbert	E 2nd	Inorganic Chemistry
Starkie, Frank	E 2nd	Practical Chemistry
Slinger, Maggie F.	E 2nd	Animal Physiology
Stirzaker, Thomas C.	E 2nd	Physiography
Taylor, Charles T....	E 2nd	Machine Construction
Twist, John	E 2nd	Sound, Light, and Heat
Thompson, Katherine	E 2nd	Physiography
*+Toulmin, William	II 1st	Mathematics
*Thornley, Agnes	E 1st	Magnetism and Electricity
,, ...	A 2nd	Physiography
Taylor, Henry J.	E 2nd	Practical Chemistry
*Taylor, Sarah A.	E 1st	Inorganic Chemistry
Taylor, Miriam	E 2nd	Physiography
*Threlfall, James	E 1st	Geology
Threlfall, Jeanie G.	E 2nd	Geology
*Walker, Roger..	E 1st	Practical Plane and Solid Geometry
,, ...	A 2nd	Building Construction
Wilkinson, Elizabeth A. ..	E 2nd	Physiography
*Wignall, John	E 1st	Practical Plane and Solid Geometry
,, ...	E 2nd	Machine Construction
Wilcock, Edward	A 2nd	Physiography
*Williamson, Ellis	E 1st	Building Construction
Waddington, William	E 2nd	Magnetism and Electricity
*+Walmsley, Frederick T. ..	II 1st	Mathematics
,, ..	E 2nd	Inorganic Chemistry
Whittam, Arthur	E 2nd	Magnetism and Electricity
*Whittam, William	E 1st	Theoretical Mechanics
,, ...	I 2nd	Mathematics
,, ...	A 2nd	Magnetism and Electricity
,, ...	E 1st	Physiography
Whitwell, William	E 2nd	Applied Mechanics
*Whitehouse, Miriame	E 1st	Magnetism and Electricity
,, ...	E 1st	Physiography
Woods, Esther	E 2nd	Sound, Light, and Heat
Woolley, Herbert J.	E 2nd	Agriculture
*Wrigley, Frank	E 1st	Sound, Light, and Heat
,, ...	E 2nd	Physiography
,, ...	E 1st	Agriculture
Walker, Alice J.	E 2nd	Physiography

NAME.	Success. Stage Class	SUBJECT.
*Walker, William H.	E 2nd	Magnetism and Electricity
,, ...	E 1st	Physiography
Worden, Edith	E 2nd	Physiography
Worden, Amy..	E 2nd	Physiography
Whinnerah, William	A 2nd	Building Construction
,, ...	II 2nd	Mathematics
Yates, James	E 2nd	Theoretical Mechanics
,, ...	E 2nd	Inorganic Chemistry
,, ...	A 2nd	Physiography

SCHOOL OF ART.

GOVERNMENT SECOND GRADE EXAMINATION.

E Signifies Excellent and also the winning of a Government Prize.

** Scholarship and Local Prize awarded.*

NAME.	Freehand. Class.	Geometry. Class.	Perspective. Class.	Model. Class.
Ashcroft, Annie	2nd	—	—	—
Atherton, Hugh T.	2nd	—	—	—
Barlow, Emily	2nd	—	—	—
*Barlow, Edith	2nd	—	—	2nd
*Brown, William	2nd	—	—	2nd
*Bannister, Arthur	1st	—	—	2nd
Bibby, Thomas	2nd	—	—	—
Breakell, Robert	2nd	—	—	—
Booth, George Wm.	2nd	—	—	—
*Bostock, Lillian	2nd	—	—	2nd
Bulmer, Marie I...	2nd	—	—	—
*Bannister, Dora	2nd	—	—	2nd
Banister, Lewis	2nd	—	—	—
Banister, John Wm.	2nd	—	—	—
Banks, Margaret W.	—	—	2nd	—
*Billington, Richard	—	2nd	1st E	—
Bond, John	—	—	2nd	—
Bowen, Louisa	—	—	2nd	—
*Bowen, Elizabeth..	—	—	1st	—
*Birchall, Alice	—	—	1st E	1st
Boddy, Hubert W.	—	—	—	2nd
Coleclough, Mary S.	—	—	—	2nd
*Corbishley, William	2nd	—	—	2nd
Carter, George Rd.	2nd	—	—	—
*Clarkson, William	1st E	—	—	2nd
*Croasdale, John H.	2nd	—	—	2nd
Coles, Arthur	2nd	—	—	—
Crossthwaite, Thomas.. ..	2nd	—	—	—
*Crerar, Andrew	2nd	—	—	2nd
*Crozier, William	—	2nd	—	2nd
*Dennison, Minna	2nd	—	—	2nd
*Dodgson, Walter J. .. .	—	1st E	—	—
*Edge, Squire..	2nd	—	—	2nd
*Eccles, John Wm.	2nd	—	—	2nd
Exton, William	—	—	—	2nd
*Fielding, Joseph	2nd	—	—	2nd
*Fisher, Joseph	1st	—	2nd	2nd
*Fish, Edith	2nd	—	—	2nd

NAME.	Freehand. Class.	Geometry. Class.	Perspective. Class.	Model. Class.
Foster, James	2nd	—	—	—
Fraser, Agnes	2nd	—	—	—
Fairnie, James S...	—	—	—	2nd
Gerrard, Annie	2nd	—	—	—
Green, George	2nd	—	—	—
*Gardner, Gulielma	2nd	—	—	2nd
*Gardner, John	1st	—	—	2nd
Greenall, Charles E.	2nd	—	—	—
*Greenwood, Fred. C.	—	1st	—	—
Greenhalgh, John E.	—	—	2nd	—
Hankin, Arthur	2nd	—	—	—
*Hodgkinson, Jessie	2nd	—	—	2nd
*Hodgkinson, Verna	2nd	—	—	2nd
*Hindle, Maud	2nd	—	—	2nd
*Holliday, Helena A.	1st	—	—	2nd
*Hothersall, Thomas	2nd	—	—	2nd
*Hesketh, Mary E.	2nd	—	—	2nd
*Hornby, Robert	—	2nd	—	2nd
*Harrison, Frederick	—	2nd	1st E	2nd
*Hodge, Edward G.	—	2nd	1st E	—
Hull, Robert E.	—	—	—	2nd
Hardacre, William Hy. ..	—	—	—	2nd
Hayton, Samuel	—	—	—	2nd
*Irvin, Joseph	—	2nd	2nd	—
Johnston, Ada	2nd	—	—	—
*Jump, Helena M...	2nd	—	—	2nd
*Jury, Eliza Alberta	2nd	—	2nd	—
*Lawrenson, Jonathan	2nd	—	—	2nd
*Livesey, Walter	2nd	—	—	2nd
Melling, Hettie	—	—	—	2nd
Mangan, Gerald P.	2nd	—	—	—
Mangan, James Hy.	2nd	—	—	—
*Mayor, Peter	2nd	—	—	2nd
Maclurkin, Martha J.	2nd	—	—	—
Mc.Gavin, Bessie..	2nd	—	—	—
*Merigold, John Jas.	2nd	—	—	2nd
Meehan, Arthur P.	2nd	—	—	—
Miller, Sarah J. C.	—	2nd	—	—
*Morley, Thomas	—	1st E	1st E	—
Merigold, Albert E.	—	—	—	2nd
Mayor, Martha A.	—	—	—	2nd
*Napthen, Mary C.	—	2nd	—	2nd
*Owens, Albert R.	1st	—	—	—
Ormrod, Elizabeth	2nd	—	—	—
Ogden, Mary E.	—	—	—	2nd
*Penny, Margaret C.	2nd	—	—	2nd
Payne, Frances M.	2nd	—	—	—
Proctor, Sarah P...	—	—	—	2nd
*Read, Edward	2nd	—	—	2nd
Richardson, Edith A.	2nd	—	—	—
Richardson, Emily C.	2nd	—	—	—
Reah, Helena	2nd	—	—	2nd
*Rowbotham, George	—	2nd	—	1st E

NAME.	Freehand. Class.	Geometry. Class.	Perspective. Class.	Model. Class.
*Slater, Annie E. H.	2nd	—	—	2nd
*Singleton, Joseph..	2nd	—	—	2nd
Sergeant, Edith	2nd	—	—	—
*Smith, Edmund H.	2nd	—	—	2nd
Smails, Fred.	2nd	—	—	—
*Smith, Clara	—	—	1st E	—
Spencer, Henry J.	2nd	—	—	—
Simpson, Mary	—	—	2nd	—
Sowerbutts, Henry R.	—	—	—	2nd
Sumner, Constance K... ..	—	—	—	2nd
Sowerbutts, Florence I. M ..	—	—	—	2nd
*Thompson, James A.	1st	—	—	2nd
*Turner, Samuel J.	2nd	—	—	2nd
Topping, Thomas	2nd	—	—	—
Turner, Arthur	2nd	—	—	—
*Thornley, Agnes	—	—	1st E	2nd
Webb, John W.	—	—	—	2nd
Wilding, Charles	—	—	—	2nd
*Wales, Kate	—	2nd	—	2nd
Walsh, George W.	2nd	—	—	—
Walker, Alice J.	2nd	—	—	—
Walker, May F. D.	2nd	—	—	—
*Watts, Mary M.	—	2nd	1st E	—
Wrigley, Frank	—	1st E	—	—
Worden, Amy	—	—	—	2nd
Ward, Annie..	—	—	—	2nd
*Yates, James	2nd	—	1st E	2nd

Students who have completed their 2nd Grade Certificates during the year:

Rd. Billington
Miss Alice Birchall
Walter J. Dodgson
Miss Sarah J. C. Miller
Miss Agnes Thornley
Miss Mary E. Ogden
Miss Sarah J. Ogden
Miss Clara Smith
Frank Wrigley

THE NATIONAL SCHOLARSHIP,

Entitling the holder to Free Tuition at the Art Training School, South Kensington, for two years, and an allowance of £50 per annum, has been awarded to JOHN T. MOYLE.

This is the second time that a student of the Harris Institute has been successful in the competition for this Scholarship, which is open to students of Schools of Art throughout the Kingdom.

GOVERNMENT CERTIFICATES AND PRIZES OF THE THIRD GRADE.

** *Indicates the winner of both a 3rd Grade Prize & a 3rd Grade Certificate*
* *Indicates the winner of a 3rd Grade Prize.*
† *Indicates the winner of a 3rd Grade Certificate.*

NAME.	Class.	SUBJECT.
*Dodgson, Walter J.		Shading from the Cast
Elliott, John W.	2nd	Drawing from Life
** ,, ...	1stE	Drawing from the Antique
† ,, ...	1st	Painting in Monochrome
Fairclough, Robert	2nd	Drawing from the Antique
Greenwood, Fred C. ..	2nd	Elementary Principles of Ornament
†Haydock, John	1st	Perspective, 3rd Grade
†Moyle, John T...	1st	Elementary Principles of Ornament
,, ...	2nd	Design Ornament
* ,, ...		Ornamental Design as applied to Decorative Art
* ,, ...		Original Design
†Poole, Florence	1st	Painting Still Life
† ,, . ..	1st	Historic Ornament
† ,, ...	1st	Painting in Monochrome
† ,, ...	1st	Painting Technical Questions
,, ...	2nd	Drawing from the Antique
+Poole, Lizzie	1st	Painting Technical Questions
+Poole, Clara	1st	Anatomy
+Smith, Barbara H.	1st	Anatomy

ART CLASS TEACHERS' CERTIFICATES.

Passed in Stage 5a : Herbert Royle, Wm. Baverstock, Richard Billington, John E. Greenhalgh.

Passed in Stage 3b : Frances M. Bentham, Walter J. Dodgson.

Passed in Stage 5b : Herbert Royle, Frances Mary Bentham.

SPECIAL ART PRIZES.

NAME.	Success.	SUBJECT.
Billsborough, Elizabeth ..	1st Prize	Outline Ornament from the Cast
,, ..	2nd ,,	Painting in Monochrome
,, ..	1st ,,	Shaded Group of Models
Branson, Annie	2nd ,,	Still Life Group
Bentham, Frances M. ..	1st ,,	Design for Metal Work
Baverstock, William	2nd ,,	Design Surface Decoration
Dodgson, Walter J.	1st ,,	Shaded Antique Figure
,, ...	Equal	Outline Ornament from the Cast
Greenwood, Fred. C... ..	Equal	Outline Ornament from the Cast
,, ...	2nd Prize	Set of Problems in Geometry
Haydock, John	1st ,,	Set of Problems in Geometry
,, ...	2nd ,,	Outline Ornament from the Cast
,, ...		Special Prize given by Mr. Councillor Wm. Atherton
Harrison, William Hy. ..	2nd ,,	Design for Damask Weaving
Horrocks, Annie	1st ,,	Shaded Antique Figure
,, ...	2nd ,,	Shaded Group of Models
Jury, Eliza Alberta	2nd ,,	Sheet of Foliage from Nature
Mayor, Martha A.	1st ,,	Still Life Group
Murray, Thomas	1st ,,	Design for Damask Weaving, Special Prize given by Mr. John Healey, J.P.
Poole, Clara	1st ,,	Sheet of Foliage from Nature
,, ...	2nd ,,	Design Surface Decoration
,, ...	1st ,,	Landscape Foreground
Poole, Lizzie	1st ,,	Historic Style of Ornament
,, ...	1st ,,	Set of Perspective Diagrams
,, ...	3rd ,,	Design for Damask Weaving
Poole, Florence	1st ,,	Study of Living Model
,, ...	1st ,,	Design Surface Decoration
Richardson, Lizzie	1st ,,	Painting in Monochrome
Royle, Herbert	2nd ,,	Landscape Foreground
,, ...	2nd ,,	Set of Studies of Anatomy
,, ...		Landscape in Water Colours, Special Prize given by Mr. W. F. Moore
Simpson, Mary H.	1st ,,	Set of Studies of Anatomy
Shaw, Margaret	2nd ,,	Painting in Monochrome

ART MODELLING.

Howarth, James L.	2nd Prize	Modelling in Clay from Nature
Merigold, Albert E.	1st ,,	Modelling in Clay, Design
Poole, Marie E...	1st ,,	Modelling in Clay from Nature
Smith, Barbara H.	2nd ,,	Modelling in Clay, Design

SKETCHING CLUB PRIZES.

NAME.	Success.	SUBJECT.
Billsborough, Elizabeth ..	1st Prize	Landscape in Light and Shade
Bentham, Frances M. ..	1st ,,	Study of Foreground
Elliott, John W.	1st ,,	Study of a Head from Life
Graham, Agnes	1st ,,	Study of a Single Tree
Jury, Eliza A.	1st ,,	Set of Studies in Outline
,, ...	1st ,,	Outline Drawing of a Plant
Mayor, Martha A.	1st ,,	Study of Still Life
Poole, Clara	1st ,,	Outline Drawing of a Plant
Poole, Lizzie	1st ,,	Study of Still Life
Poole, Florence	1st ,,	Study of an Interior
Royle, Herbert	1st ,,	Landscape in Oil Colour
,, ...	1st ,,	Landscape Foreground
,, ...	1st ,,	Landscape in Water Colour
,, ...		Highest Marks in Monthly Competition

TECHNICAL.

CITY AND GUILDS OF LONDON INSTITUTE EXAMINATIONS.

* *These Students received Local Prizes and Scholarships.*

NAME.	Success. Grade.	Class.	SUBJECT.
*Beech, William T.	Honours	1st	Cotton Manufacture
*Baxendale, James	Ordinary	1st	Cotton Manufacture
Barton, Thomas	Ordinary	2nd	Cotton Manufacture
*Banister, John W.	Ordinary	1st	Weaving and Designing
*Banister, Lewis	Ordinary	1st	Weaving and Designing
Blackwell, Thomas	Ordinary	2nd	Weaving and Designing
*Bradshaw, Herbert	Ordinary	1st	Weaving and Designing
Blinkhorn, Edward	Ordinary	2nd	Weaving and Designing
Brindle, Thomas	Ordinary	2nd	Brickwork and Masonry
Croft, William	Ordinary	2nd	Brickwork and Masonry
Croft, James	Ordinary	2nd	Brickwork and Masonry
*Capstick, James	Ordinary	1st	Weaving and Designing
Capstick, John..	Ordinary	2nd	Mechanical Engineering
*Clarke, John	Ordinary	1st	Cotton Manufacture
(Bronze Medal, 4th Prize, City and Guilds of London Institute)			
De Rome, William	Ordinary	2nd	Cotton Manufacture
*Dean, Samuel J.	Honours	1st	Weaving and Designing
*Fielding, Albert D... ..	Ordinary	1st	Weaving and Designing
Grime, Richard	Ordinary	2nd	Weaving and Designing
Gardner, Edward . ..	Ordinary	2nd	Mechanical Engineering
Garnett, Thomas B. ..	Ordinary	2nd	Carpentry and Joinery
Gregson, Richard	Ordinary	2nd	Carpentry and Joinery
*Holden, Benjamin	Ordinary	1st	Weaving and Designing
Hayes, James	Ordinary	2nd	Weaving and Designing
*Haworth, John H.	Ordinary	1st	Cotton Manufacture
Heathcote, Herbert C. ..	Ordinary	2nd	Carpentry and Joinery
Ingham, Francis	Ordinary	2nd	Weaving and Designing
*Jones, James C.	Ordinary	1st	Mechanical Engineering
Kirby, Luke	Practical	2nd	Plumbers' Work
*Miles, William	Ordinary	1st	Cotton Manufacture
Mills, Richard	Ordinary	2nd	Cotton Manufacture
*Marsden, James	Ordinary	1st	Brickwork and Masonry
(Bronze Medal, 5th Prize, City and Guilds of London Institute)			
Maquade, William E. ..	Ordinary	2nd	Carpentry and Joinery
Mottram, John H.	Ordinary	2nd	Carpentry and Joinery
Mather, John	Ordinary	2nd	Plumbers' Work

NAME.	Success. Grade.	Class.	SUBJECT.
Nelson, George F.	Honours	1st	Typography
(Silver Medal, 1st Prize, City and Guilds of London Institute)			
Parkinson, Edmund ..	Ordinary	2nd	Brickwork and Masonry
*Riley, John	Honours	1st	Cotton Manufacture
Ratcliffe, Silvester	Ordinary	2nd	Weaving and Designing
Rigby, Alfred	Ordinary	2nd	Plumbers' Work
Rigby, Thomas	Ordinary	2nd	Carpentry and Joinery
Redmond, Albert	Ordinary	2nd	Brickwork and Masonry
*Shaw, John	Ordinary	1st	Mechanical Engineering
(Silver Medal, 1st Prize, City and Guilds of London Institute)			
*Sergeant, Gilbert	Ordinary	1st	Weaving and Designing
*Smith, Samuel..	Ordinary	1st	Weaving and Designing
Taylor, William	Ordinary	2nd	Weaving and Designing
*Tattersall, Arthur	Ordinary	1st	Weaving and Designing
*Tattersall, Farington ..	Ordinary	1st	Weaving and Designing
*Turner, James	Honours	2nd	Weaving and Designing
*Threlfall, Richard	Ordinary	1st	Cotton Manufacture
Turner, John E.	Ordinary	2nd	Cotton Manufacture
*Walsh, George W.	Honours	1st	Cotton Manufacture
Welch, Thomas F.	Ordinary	2nd	Cotton Manufacture
*Whittam, William	Honours	1st	Cotton Manufacture
*Walker, Roger	Ordinary	1st	Brickwork and Masonry
*Yates, Joseph	Ordinary	1st	Weaving and Designing
*Yates, Richard B.	Ordinary	1st	Cotton Manufacture

MISCELLANEOUS.

* *Scholarships and Local Prizes awarded.*
† *Scholarships only awarded.*

NAME.	Success.	SUBJECT.
		Society of Arts.
*Abbott, Frank	2nd Class	Bookkeeping
Atherton, Thomas	3rd ,,	,,
Austin, Robert	3rd ,,	,,
*Chadwick, Thomas..	1st ,,	,,
Cornall, Thomas	3rd ,,	,,
*Crearar, James	2nd ,,	,,
*Eccles, Thomas	1st ,,	,,
*Hall, John	1st ,,	,,
*Hulley, George R.	2nd ,,	,,
*Hynes, Thomas	1st ,,	,,
*Kent, Samuel	2nd ,,	,,
Miller, George	3rd ,,	,,
*Morgan, Peter..	2nd ,,	,,
Morley, William	3rd ,,	,,
*Newbound, Henry C.	2nd ,,	,,
*Orrell, Fred. J.	1st ,,	,,
Pitchford, Joseph	3rd ,,	,,
*Pomfret, Edwin	2nd ,,	,,
*Roseway, David	2nd ,,	,,
*Salter, Edmund	2nd ,,	,,
*Sharples, John T.	2nd ,,	,,
*Smith, Wm. Hy.	2nd ,,	,,
Sumner, Charles J.	3rd ,,	,,
		Society of Arts.
*Arnoux, Margaret	2nd Class	Theory of Music
Beebee, Beatrice	3rd ,,	,,
*Catterall, Florence S.	2nd ,,	,,
Frankland, William	3rd ,,	,,
*Greenwood, John S.	1st ,,	,,
*Griffay, William T.	1st ,,	,,
Hall, Fred.	3rd ,,	,,
*Hayton, Margaret	2nd ,,	,,
*Heaton, Albert V.	2nd ,,	,,
*Kelly, Edward..	2nd ,,	,,
Leeming, Mary	3rd ,,	,,
Nelson, Alfred	3rd ,,	,,
*Orrell, Fred. J.	2nd ,,	,,
Preston, James	3rd ,,	,,
*Pritt, William	2nd ,,	,,
*Scott, Alice T.	2nd ,,	,,
Southworth, Ellen	3rd ,,	,,
Taylor, Sarah A.	3rd ,,	,,
*Walkden, James	1st ,,	,,
Warburton, Gertrude A. ..	3rd ,,	,,

NAME.	Success.	SUBJECT.
		Society of Arts.
Dean, Florence	3rd Class	German
Walker, May F. D.	3rd ,,	,,
		Society of Arts.
Berry, Charles W...	3rd Class	Arithmetic
*Orrell, Fred. J.	1st ,,	,,
		Society of Arts.
Ainsworth, Robert C.	3rd Class	Shorthand
Black, John	3rd ,,	,,
Cook, John H.	3rd ,,	,,
Denham, Percy N...	3rd ,,	,,
Dodson, Edward H.	3rd ,,	,,
Fielding, Albert D.	3rd ,,	,,
Kent, Samuel H.	3rd ,,	,,
Lindley, Richard J.	3rd ,,	,,
Lonsdale, Nicholas	3rd ,,	,,
Matthews, Hoghton S.	3rd ,,	,,
Parker, George	3rd ,,	,,
Wilkinson, James..	3rd ,,	,,
		Society of Arts.
*Bannister, John	2nd Class	English
Dawson, David	3rd ,,	,,
De Rome, Percy	3rd ,,	,,
Gaunt, George E...	3rd ,,	,,
*Hartley, John	2nd ,,	,,
Jackson, Lavinia F.	3rd ,,	,,
Mc.Gavin, Annie	3rd ,,	,,
Mc.Gavin, Bessie	3rd ,,	,,
*Napthen, Mary C.	2nd ,,	,,
*Napthen, Samuel	2nd ,,	,,
Pendlebury, Nellie E.	3rd ,,	,,
Robinson, Henry H.	3rd ,,	,,
Sanderson, Ellen	3rd ,,	,,
		Union of Lancashire and Cheshire Institutes.
Ainsworth, R. Carr	Honours	Shorthand
Black, John	,,	,,
Burrow, Harry	,,	,,
Denham, Percy N...	,,	,,
Dodson, Edward H.	,,	1*st Prize Union of Lancashire & Cheshire Institutes.*
Orrell, Fred. J.	,,	Shorthand
Roseway, David	,,	,,
Preston, George	1st Class	,,
Lambert, Robert F.	2nd ,,	,,
Newbound, Harry C.	2nd ,,	,,
Roberts, Frank	2nd ,,	,,
Robinson, Alfred	2nd ,,	,,
Westworth, Arthur..	2nd ,,	,,

NAME.	Success.	SUBJECT.
		Union of Lancashire and Cheshire Institutes.
Gaunt, George E.	2nd Class	English
Hartley, John..	2nd ,,	,,
Mc.Gavin, Bessie	2nd ,,	,,
Orrell, John R.	Passed	,,
Bannister, John	,,	,,
Coward, Edith F.	,,	,,
Crozier, Thomas R.	,,	,,
Swarbrick, Edward	,,	,,
Hartley, Charles H.	,,	,,
Napthen, Mary C.	,,	,,
Walker, Walter	,,	,,
Jackson, Lavinia F.	,,	,,
Parker, George	,,	,,
Napthen, Samuel	,,	,,
Pendlebnry, Nellie E.	,,	,,
Smith, Joseph..	,,	,,
		Union of Lancashire and Cheshire Institutes.
Bourne, Henry	Passed	Bookkeeping
Eccles, Thomas	,,	,,
Jump, Sidney B.	,,	,,
Livesey, Francis J.	,,	,,
Smith, Wm. Hy.	,,	,,
		Tonic Sol-fa Association.
*Frame, Elsie D.	Matriculation	*Certificate.*
*Haworth, James	,,	,,
*Newsham, Thomas..	,,	,,
*Penny, John	,,	,,
*Worsley, John, Senr.	,,	,,
*Dodson, Edith	,,	,,
*Woolley, Herbert J.	,,	,,
*Brocklehurst, Martha J. ..	Intermediate	,,
*Buck, Isabella..	,,	,,
*Geldeard, Rd. T.	,,	,,
*Haworth, Frederick G.	,,	,,
*Haworth, Frank T.	,,	,,
*Haworth, Charles T.	,,	,,
*Hindle, James	,,	,,
*Kelly, Edward	,,	,,
*Ogden, Sarah J.	,,	,,
*Ogden, Mary E.	,,	,,
*Penny, Emily J.	,,	,,
*Williamson, Grace	,,	,,
*Worsley, John, Junr.	,,	,,
*Whitehouse, Miriame	,,	,,
†Brocklehurst, Martha J. ..	Elementary	,,
†Atherton, Maud	,,	,,
†Critchley, Ada	,,	,,
†Critchley, Louisa	,,	,,
†Coleclough, Mary S.	,,	,,

NAME.	Success.	SUBJECT.
†Clinning, Harry	Elementary	*Tonic Sol-fa Association. Certificate.*
†Fairnie, James S.	,,	,,
†Fenton, Mary H.	,,	,,
†Geldeard, Rd. T.	,,	,,
†Haworth, Charles T.	,,	,,
†Hulmes, Anna H.	,,	,,
†Hindle, James..	,,	,,
†Hopwood, David	,,	,,
†Miller, Sarah C.	,,	,,
†Ogden, Sarah J.	,,	,,
†Ogden, Mary E.	,,	,,
†Penny, Mary J.	,,	,,
†Parkinson, Joseph	,,	,,
†Pomfret, Sarah J.	,,	,,
†Richardson, Amelia	,,	,,
†Scragg, John	,,	,,
†Toulmin, James	,,	,,
†Taylor, Lucy	,,	,,
†Weaver, Bertha	,,	,,
†Worsley, John, Junr.	,,	,,
†Wales, Kate	,,	,,

Joseph Parkinson, Thos. Newsham, John Worsley, Senr.; and Emily Jane Penny, were awarded Special Prizes given by Mr. Sam Lee.

NAME.	Success.	SUBJECT.
		St. John Ambulance Association.
Atkinson, Ann	Passed	*First Aid.*
Allen, Alice	,,	,,
Ascroft, Emma C.	,,	,,
Ascroft, Gertrude G.	,,	,,
Beebee, Susan	,,	,,
Booth, Josephine	,,	,,
Booth, Beatrice	,,	,,
Brierley, Alice	,,	,,
Catterall, Jane	,,	,,
Foster, Mary	,,	,,
Giles, Mary A.	,,	,,
Hargreaves, Mary	,,	,,
Hargreaves, Hannah	,,	,,
Hebblethwaite, L. L. G.	,,	,,
Johnston, Florence M.	,,	,,
Ketton, Catherine A.	,,	,,
Parker, Alice	,,	,,
Threlfall, Josephine	,,	,,
Williamson, Jane	,,	,,
Wilson, Mary C.	,,	,,
Wilson, Edith	,,	,,
Atherton, Joseph	,,	,,
Brierley, Arnold	,,	,,
Davies, John H.	,,	,,
Davies, Walter	,,	,,
Goodier, Hubert	,,	,,
Houlgate, John Wm.	,,	,,
Merigold, Albert E.	,,	,,
Mullineaux, Fred.	,,	,,
Parker, Clince	,,	,,
Taylor, Harry J.	,,	,,
Smalley, Robert E.	,,	,,
Waddington, William	,,	,,
Beckett, William	,,	,,
Denham, Arthur H.	,,	,,
Dewhurst, Henry	,,	,,
Johnston, John A.	,,	,,
Burnett, James	,,	,,
Gregson, George E.	,,	,,
Nuttall, John	,,	,,
		St. John Ambulance Association.
Allen, Alice	Passed	*Nursing.*
Gratrix, Jane	,,	,,
Giles, Mary E.	,,	,,
Hargreaves, Mary	,,	,,
Hargreaves, Hannah	,,	,,
Halliday, Annie E.	,,	,,
Ketton, Catherine E.	,,	,,
Mears, Fanny	,,	,,
Parker, Alice	,,	,,
Threlfall, Josephine	,,	,,
Wilson, Mary C.	,,	,,
Wilson, Edith	,,	,,
Williamson, Jane	,,	,,

HARRIS INSTITUTE LOCAL EXAMINATIONS.

* *Scholarship and Local Prize awarded.* † *Scholarship awarded.*

NAME.	Success.	SUBJECT.
†Ladyman, Eldred	1st Class	Advanced Latin
†Breakell, John Jas.	1st ,,	,,
Hopkin, James Hy.	2nd ,,	,,
Bentham, Frances M.	2nd ,,	,,
†Mc.Gavin, Annie	1st ,,	Elementary Latin
†Bulmer, Marie J.	1st ,,	,,
†Orrell, Fred. J.	1st ,,	,,
†Thornber, Layland G.	1st ,,	,,
Rushton, Thomas R.	2nd ,,	,,
Bonney, James	2nd ,,	,,
†Bulmer, Marie J.	1st ,,	Advanced French
†Dean, Florence	1st ,,	,,
†Walker, May F. D.	1st ,,	,,
†Bleasdale, William..	1st ,,	,,
Dewhurst, James A.	2nd ,,	,,
Breakell, John Jas.	2nd ,,	,,
Bolton, Mary E.	2nd ,,	,,
Cockshott, Margaret M. ..	2nd ,,	,,
†Ogden, Thos. R.	1st ,,	Elementary French
†Harrison, Fred.	1st ,,	,,
†Woolley, Herbert J.	1st ,,	,,
†Kershaw, Charles	1st ,,	,,
†Eccles, Thomas	1st ,,	,,
Lucas, Annie J.	2nd ,,	,,
Rawlinson, Walter R.	2nd ,,	,,
Harkness, Ada	2nd ,,	,,
Fallowfield, Richard	2nd ,,	,,
†Harkness, Ada	1st ,,	German
†Bentham, Frances M.	1st ,,	,,
†Bulmer, Marie J.	1st ,,	,,
Bleasdale, William	2nd ,,	,,
Poole, Lizzie	2nd ,,	,,
Poole, Florence	2nd ,,	,,
Poole, Clara	3rd ,,	,,
Bentham, George H.	3rd ,,	,,
Graham, Agnes	3rd ,,	,,
Cockshott, Margaret M. ..	3rd ,,	,,
†Bourne, Harry	1st ,,	Bookkeeping
†Purves, John	1st ,,	,,
Parker, George D...	2nd ,,	,,
Berry, Charles W...	2nd ,,	,,
Jump, Sidney B.	2nd ,,	,,
Gardner, Anthony	3rd ,,	,,
Airey, Charles..	3rd ,,	,,
Black, John	3rd ,,	,,
Seed, W. L.	1st ,,	Arithmetic
Hull, Wm. P.	1st ,,	,,
Dean, T. E.	1st ,,	,,
Relph, Wm.	2nd ,,	,,

NAME.	Success.	SUBJECT.
Crozier, T. R.	2nd Class	Arithmetic
Smith, J...	2nd ,,	,,
Coupe, C.	2nd ,,	,,
Ormrod, Elizabeth..	2nd ,,	,,
Forshaw, P.	2nd ,,	,,
Halewood, H...	2nd ,,	,,
Mc.Courty, R...	2nd ,,	,,
Pritt, S.	2nd ,,	,,
Lomax, A. G...	2nd ,,	,,
Whitehead, J...	3rd ,,	,,
Duffy, W. H.	3rd ,,	,,
Walsh, G. W...	3rd ,,	,,
Mc.Gavin, A.	3rd ,,	,,
Mills, R.	3rd ,,	,,
Salter, C.	3rd ,,	,,
Mc.Gavin, M...	3rd ,,	,,
Holgate, E. J.	3rd ,,	,,
Charlton, R.	3rd ,,	,,
Pendlebury, E. E...	3rd ,,	,,
Coward, E. F..	3rd ,,	,,
Mc.Courty, M. J.	3rd ,,	,,
Pickup, W. H.	3rd ,,	,,
*Pye, William H.	1st ,,	Shorthand
*Limond, Walter N...	1st ,,	,,
*Crane, William	1st ,,	,,
Bourne, Harry	1st ,,	,,
Mayor, Peter	1st ,,	,,
Smith, Joseph..	1st ,,	,,
Fell, Ernest	1st ,,	,,
Bennett, John F.	1st ,,	,,
Swarbrick, Edward	2nd ,,	,,
Duckworth, Thomas C... ..	2nd ,,	,,
Wrigley, Fred.	2nd ,,	,,
Harkness, D.	2nd ,,	,,
Sanderson, D...	2nd ,,	,,
Leach, Thomas	2nd ,,	,,
Banister, R. C.	2nd ,,	,,
Dearden, W. H.	2nd ,,	,,
Woodall, Harry	2nd ,,	,,
Sowerbutts, Thomas	2nd ,,	,,
Goulden, Arthur	2nd ,,	,,
Wilkinson, Mary A.	3rd ,,	,,
Hayton, George	3rd ,,	,,
Napthen, Edwin	3rd ,,	,,
Hargreaves, Thomas A.. ..	3rd ,,	,,
Parker, Charles	3rd ,,	,,
Livesey, Francis J.	3rd ,,	,,
Rawlinson, George E.	3rd ,,	,,
Cornall, Roger	3rd ,,	,,
Crozier, James	3rd ,,	,,
Atherton, Fred.	3rd ,,	,,
Wilding, A.	3rd ,,	,,
Lang, John H.	3rd ,,	,,
Lamb, George	**3rd ,,**	,,

INSTITUTE SCHOLARSHIPS AWARDED TO DAY SCHOLARS AT ELEMENTARY SCHOOLS.

SCIENCE.

Holmes, Elizabeth
Hopwood, Fanny
Gardner, Rachel E.
Hewlitt, Amy
Purves, Isabella S.
Fazackerley, Isabella
Brown, Maud G.
Dixon, Mary I.
Corless, Mary E.
Rainford, Eliz. Jane
Penny, Emily J.
Hartley, Emma
Charnley, Margaret
Hall, Margaret
Bamber, Mabel
Billing, Maggie
Cookson, Mary
Prescot, Eliz. A.

Balmford, Emily A.
Gardner, Margaret
Tullis, Mary S.
Wharton, Elizabeth A.
Higginson, Margaret
Carefoot, Frances
Goulbourn, Margaret
Lund, Margaret
Myerscough, Annie
Smalley, Annie
Entwistle, Betsy
Bamber, Alice
Marsden, Florence
Irvin, Annie
Chapman, Elizabeth
Adamson, Elizabeth S.
Boyes, Annie
Lea, Jane

Westley, Catherine
Swarbrick, Maggie
Lonsdale, Barbara
Jackson, Mary A.
Turner, Sophia
Astley, Eliza
Farrer, Agnes
Kear, Annie A.
Lawson, Eliz.
Frankland, Alice
Fish, Alice Ann
Richardson, Eliz.
Fiddler, Mary
Robinson, M. A.
Butler, Eliz. E.
Balmford, Edith
Shorrock, Mary A.

ART.

Hopwood, Fanny
Toulmin, James
Heald, William
Greenall, Charles E.
Miller, Alex.
Billing, Walter
Attwater, Chris.
Bamber, Jas.
Coulson, William
Fish, James
Martin, Henry M.
Dewhurst, Thos.
Gardner, Thos. S.
Stephenson, O.
Holmes, Eliz.
Wilding, Chas. A.
Cameron, W. D.
Saul, Wm.
Sanders, Jabez

Howarth, Chas. H.
Webster, Chas.
Hardacre, Wm.
Parker, Isaac
Riches, Richard P.
Bradley, Henry
Hewitson, Jas.
Southworth, Herb. T.
Swarbrick, Maggie
Pilling, Maggie
Taylor, Leonard G.
Coopland, Geo. W.
Chaloner, Ignatius A.
Smith, James R.
Carr, William
Greenwood, Harry J.
Kay, Chas. F.
Lindsay, C. C.

Watson, John S.
Brocklehurst, Joseph
Burns, Frank
Cartmell, Chas.
Irvin, Annie
Holland, James M.
Bibby, Fred.
Jackson, Wm.
Hardman, Richard
Gornall, Frank
Alker, Frank
Crossley, Wm.
Shuttleworth, Wm.
Clinning, Harry
Hodgson, Thomas
Brown, Francis
Morris, Noah
Lang, George

HARRIS INSTITUTE £45 SCHOLARSHIPS.

RHODES, JOHN C., *Science.*

BENTHAM, FRANCES M., *Art.*

Table showing the number of Students who sat for Examination in connection with the Science and Art Department at the Harris Institute, May, 1888.

SUBJECT.	Harris Institute	Cross street.	Moor Lane.	Winckley square.	External.	Totals.
ART.						
Model Drawing	90	4	—	—	8	102
Freehand	120	3	—	—	17	140
Painting from Still Life	2	—	—	—	—	2
Geometry	24	1	—	—	13	38
Perspective	27	1	—	—	5	33
Perspective (Theory and Practice)	2	—	—	—	—	2
Drawing in Stage 5a	11	—	—	—	—	11
,, ,, 5b	11	—	—	—	—	11
,, ,, 3b	11	—	—	—	—	11
Anatomy	10	—	—	—	—	10
Elementary Principles of Ornament	5	—	—	—	—	5
Painting in Monochrome	2	—	—	—	—	2
Drawing from the Antique	4	—	—	—	—	4
Drawing from Memory	1	—	—	—	—	1
Design Ornament (23c)	5	—	—	—	—	5
Painting Technical Questions	5	—	—	—	—	5
Drawing from Life	2	—	—	—	—	2
Composition from a given Figure	1	—	—	—	—	1
Historic Ornament	3	—	—	—	—	3
SCIENCE.						
Animal Physiology	15	—	—	—	5	20
Machine Construction	36	—	—	—	—	36
Building Construction	40	—	—	—	—	40
Mathematics, stages 1, 2, and 3	44	—	3	—	36	83
Sound, Light, and Heat	47	—	5	12	1	65
Magnetism and Electricity	79	—	5	14	8	106
Physiography	91	—	—	—	10	101
Principles of Agriculture	10	—	—	—	3	13
Practical Plane and Solid Geometry	30	—	—	—	1	31
Navigation	5	—	—	—	1	6
Geology	15	—	—	—	3	18
Mathematics, stages 4 and 5	—	—	—	—	1	1
Hygiene	—	—	—	—	1	1
Theoretical Mechanics	22	—	—	—	4	26
Applied Mechanics	26	—	—	—	2	28
Inorganic Chemistry	50	—	6	—	5	61
Practical Inorganic Chemistry (E stage)	8	—	—	—	3	11
Botany	25	—	2	—	2	29
Organic Chemistry	—	—	—	—	1	1
Steam	21	—	—	—	—	21
Practical Inorganic Chemistry (A stage)	7	—	—	—	—	7
TOTALS	907	9	21	26	130	1093

Harris Institute, Preston. Abstract of Class Registers, 1887-8.

NAME OF CLASS.	TEACHER.	SEPTEMBER.		OCTOBER.		NOVEMBER.		DECEMBER.		JANUARY.		FEBRUARY.		MARCH.		APRIL.		Number who sat for Examination	Number who obtained Certificates.
		No. on Register	Average attendance.	No. on Register	Average attendance.	No. on Register	Average attendance.	No. on Register	Average attendance.	No. on Register	Average attendance.	No. on Register	Average attendance.	No. on Register	Average attendance.	No. on Register	Average attendance.		
SCIENCE.																			
Agriculture	Mr. J. Stacey	17	17	18	12	19	11	19	10	19	9	19	11	19	9	19	9	10	9
Animal Physiology	Mr. H. O. Pilkington, M.R.C.S.	21	20	27	21	27	20	27	19	27	18	27	18	27	16	27	17	15	8
Applied Mechanics	Mr. R. Pendlebury	36	32	44	35	44	30	44	28	44	29	44	29	44	28	44	28	26	21
Botany (Elementary)	Mr. S. J. Elliott, A.P.S.	24	22	36	30	37	31	37	30	37	29	37	28	37	26	37	26	25	11
Do. (Advanced)	Do.	5	5	5	5	5	5	5	5	5	4	5	4	5	4	5	4		
Building Construction (Elementary)	Mr. F. J. Pye	30	30	32	25	32	25	32	25	32	24	32	24	32	22	32	22	40	28
Do. (Advanced)	Do.	20	20	24	19	24	18	24	18	24	17	24	17	24	16	24	16		
Chemistry, Elements of	Mr. A. F. Atkinson	17	14	17	14	18	14	18	13	18	13	18	13	18	12	18	12	50	34
Do. Theoretical, Inorganic (Elementary)	Do.	43	43	46	38	47	39	47	38	47	37	47	38	47	36	47	37		
Do. do. (Advanced)	Do.	12	12	12	9	12	9	12	10	12	10	12	9	12	9	12	9		
Do. Practical (Elementary)	Do.	10	10	11	8	11	9	11	9	11	8	11	7	11	7	11	7	8	7
Do. do. (Advanced)	Do.	5	5	7	6	7	7	7	7	7	7	7	6	7	6	7	6	7	6
Geology (Elementary)	Mr. F. C. King	15	15	17	14	18	15	18	14	18	13	18	13	18	13	18	13	15	15
Do. (Advanced)	Do.	7	7	7	6	8	7	8	7	8	6	8	6	8	6	8	6		
Hygiene	Mr. H. O. Pilkington, M.R.C.S.	9	9	12	11	12	10	12	9	12	9	12	8	12	8	12	8	..	..
Machine Construction	Mr. J. T. Buckley	51	51	63	54	63	52	63	51	63	49	63	50	63	49	63	49	36	20
Mathematics, Stage I.	Mr. F. B. Osborne	50	50	49	42	49	42	49	41	49	40	49	41	49	39	49	40	44	31
Do. Stage II.	Mr. G. Rogerson, M.A.	20	20	21	19	21	18	21	18	21	17	21	18	21	18	21	18		
Magnetism and Electricity (Junior Elementary)	Mr. J. E. Southworth	28	27	30	26	30	25	30	25	30	26	30	23	30	22	30	22	79	52
Do. (Senior Elementary)	Mr. J. Gardner, F.R.G.S.	50	44	56	45	56	45	56	46	56	43	56	44	56	43	56	43		
Do. (Advanced)	Do.	11	10	12	9	12	8	12	9	12	8	12	7	12	7	12	7	5	3
Navigation	Mr. G. Lynch, M.R.C.P.	8	7	8	7	8	7	8	7	8	6	8	6	8	6	8	6		
Physiography (Junior Elementary)	Mr. J. E. Southworth	26	25	30	24	30	25	30	26	30	24	30	22	30	22	30	22	91	59
Do. (Senior Elementary)	Mr. J. Gardner, F.R.G.S.	55	44	66	49	66	50	66	49	66	47	66	46	66	46	66	46		
Do. (Advanced)	Do.	22	21	33	21	33	19	33	20	33	19	33	18	33	17	33	17		
Practical Plane and Solid Geometry	Mr. F. J. Pye	47	47	52	41	52	39	52	39	52	38	52	37	52	36	52	36	30	14
Sound, Light, and Heat (Junior Elementary)	Mr. J. E. Southworth	15	15	18	14	18	15	18	14	18	14	18	13	18	13	18	13	47	31
Do. (Senior Elementary)	Mr. J. Gardner, F.R.G.S.	37	34	44	32	44	33	44	34	44	32	44	33	44	32	44	32		
Do. (Advanced)	Do.	10	9	10	7	10	8	10	7	10	7	10	7	10	7	10	7		
Steam and Steam Engine	Mr. R. Pendlebury	29	29	34	27	34	26	34	26	34	25	34	25	34	24	34	24	21	16
Theoretical Mechanics	Mr. J. E. Southworth	24	23	25	20	25	19	25	19	25	18	25	20	25	19	25	19	22	13
ART.																			
Day Class	Mr. W. B. Barton	30	8	32	15	33	16	33	17	36	23	37	25	37	25	37	25	¶75	¶22
Evening Class	Do.	132	61	140	73	142	71	142	75	145	78	145	79	146	81	146	81	**261	**186
Modelling Class	Do.	4	4	6	6	6	5	6	4	6	2	6	2	6	2	6	2		
High School	Do.	70	70	70	65	70	66	70	64	70	65	70	66	70	64	70	64		
TECHNICAL.																			
Brickwork and Masonry	Mr. F. J. Pye	12	12	13	10	13	11	13	10	13	10	13	10	13	9	13	9	7	7
Carpentry and Joinery	Do.	28	28	29	24	29	23	29	22	29	23	29	23	29	22	29	22	17	6
Cotton Spinning	Mr. W. I. Hannen	33	33	39	34	39	31	39	31	39	29	39	31	39	31	39	30	24	15
Mechanical Engineering	Mr. R. Pendlebury	12	12	15	10	16	9	16	9	16	8	16	8	16	8	16	8	8	4
Plumbers' Work	Mr. F. Jolly	6	6	18	14	18	15	18	14	18	14	18	13	18	14	18	14	14	4
Weaving and Designing	Mr. J. T. Taylor	81	81	86	77	86	75	86	72	86	67	86	59	86	54	86	54	51	20
MISCELLANEOUS.																			
Music—Class Singing and Harmony (Elementary)	Mr. J. Tomlinson	..	..	17	17	17	16	17	15	17	14	17	14	17	14	17	14	§25	§21
Do. do. (Advanced)	Do.	..	..	14	14	14	13	14	12	14	13	14	12	14	12	14	12		
Singing—Tonic Sol-fa	Mr. W. H. Cowell	61	61	73	65	73	64	73	64	73	57	73	56	73	57	73	57	*70	*53
Do. Madrigals and Matriculation	Do.	6	6	8	8	8	8	8	7	8	7	8	6	8	7	8	7		
Latin (Elementary)	Rev. W. S. Matthews, B.A.	19	19	19	14	19	15	19	14	19	13	19	13	19	13	19	13	*13	*10
Do. (Advanced)	Do.	7	7	8	8	8	7	8	7	8	6	8	4	8	5	8	5		
French (Elementary)	Do.	24	24	24	20	24	21	24	20	24	19	24	18	24	18	24	18	*30	*17
Do. (Advanced)	Do.	18	18	19	16	19	17	19	16	19	15	19	16	19	15	19	15		
Shorthand (Elementary)	Mr. H. Cartmell	97	97	107	94	107	90	107	92	107	91	107	90	107	89	107	89	§28 †37	§14 †13
Do. (Advanced)	Do.	44	44	47	35	47	34	47	33	47	33	47	33	47	34	47	34	*50	*32
English (Elementary)	Do.	60	60	72	63	72	60	72	61	72	60	72	61	72	60	72	60	§34	§13
Do. (Advanced)	Do.	27	27	25	19	25	19	25	20	25	20	25	19	25	19	25	19	†39	†17
German	Mr. F. B. Osborne	33	33	37	29	37	24	37	23	37	21	37	18	37	18	37	18	§2 *12	§2 *10
Arithmetic	Do.	121	121	140	128	140	124	140	122	140	119	140	113	140	112	140	112	§4 *42	§2 *26
Bookkeeping (Elementary)	Mr. J. C. Forrester	49	39	60	51	60	49	60	48	60	46	60	39	60	41	60	41	§27 †14	§23 †5
Do. (Advanced)	Do.	45	35	55	47	55	42	55	40	55	37	55	31	55	33	55	33	*18	*8
Ambulance Classes (FEMALES) Afternoon	Mr. H. O. Pilkington, M.R.C.S.	..	..	..	..	13	13	13	13	..	..	9	9	9	9	..	..	‡21	‡31
Do. do. Evening	Do.	...	...	..	..	11	11	11	11	..	..	9	9	9	9	..	..	‖17	‖16
Do. (MALES) do.	Do.	..	..	..	..	19	19	19	19	..	..	..	..	..	..	...	..	20	20
	Total	1773	1623	2039	1646	2092	1649	2092	1628	2055	1526	2074	1518	2075	1493	2057	1477	1531	965

¶ 3rd Grade. ** 2nd Grade. § Society of Arts. † Lancashire and Cheshire Institutes. * Local. ‡ First Aid. ‖ Nursing.

T. R. JOLLY, SECRETARY.

In addition to the foregoing table, the following shows the number of Students of the Harris Institute, examined at the Institute in connection with other Classes :—

City and Guilds of London Institute, viz.:—		
Cotton Spinning	24	
Weaving & Designing .	51	
Mechanical Engineering	8	
Carpentry and Joinery.	17	
Plumbing	14	
Brickwork and Masonry	7	
		121
Society of Arts :—		
Shorthand	28	
English.	34	
German	2	
Music	25	
Arithmetic	4	
Bookkeeping	27	
		120
Lancashire & Cheshire Union of Institutes :—		
Shorthand	37	
English	39	
Bookkeeping	14	
		90
Examined Locally :		
Arithmetic	42	
French	30	
Latin	13	
Tonic Sol-Fa.	70	
Shorthand	50	
German	12	
Ambulance	58	
Bookkeeping	18	
		293
		624
Students sitting for Science and Art (see page 46) . .		907
Total of the Harris Institute Students Examined . . .		1531



HARRIS INSTITUTE.

TRUSTEES' ACCOUNT, 30th September, 1888.

	£	s.	d.
To Balance in hand, 30th Sept., 1887	66196	16	9
,, Interest from Capital	2298	18	5
	£68495	15	2
To Balance brought down	£66196	16	9

	£	s.	d.	£	s.	d.
By Amount transferred to General Account, as per Balance Sheet				2298	18	5
,, Balance carried down				66196	16	9
				£68495	15	2
By Invested with County	35000	0	0			
,, ,, Corporation	30000	0	0			
,, ,, Savings Bank ..	1196	16	9			
				£66196	16	9

Audited and found correct,
W. F. MOORE, F.C.A.
28th Dec., 1888.

7th January, 1889.—Exhibited,
C. R. JACSON.
D. IRVIN.
J. S. OLIVER.
W. ASCROFT.

T. R. JOLLY,
Secretary.

To the President and Council of the Harris Institute.

GENTLEMEN,—I have examined the Accounts for the year ending 30th September, 1888, and have pleasure in certifying to their correctness, and to the neatness with which they are kept. I have seen vouchers for all payments, and have examined the securities for the capital investments.—Yours truly,

W. F. MOORE, F.C.A.

HARRIS INSTITUTE.—GENERAL ACCOUNT, 30th September, 1888.

	£	s.	d.	£	s.	d.
To Interest received from Capital ..	2298	18	5			
Less :—Transferred to Scholarship Fund	287	7	4			
				2011	11	1
,, Fees and Grants :—	£	s.	d.			
Science Fees	112	2	6			
,, Grants....	401	8	0			
	513	10	6			
Art Fees	108	1	10			
,, Grants	180	6	0			
	288	7	10			
Technical Fees ..	18	15	0			
,, Grants..	49	0	0			
	67	15	0			
Miscellaneous Fees	158	12	0			
				1028	5	4
,, Rent, High School				10	0	0
,, Subscriptions				24	3	0
,, Balance carried down.....				37	16	8
				£3111	16	1
To Amount due to Preston Bank ..	£37	16	8			

	£	s.	d.	£	s.	d.
By Balance overdrawn, Sep. 30, 1887				699	16	10
,, Salaries, viz. :—						
Science	582	8	0			
Art	470	18	4			
Technical	164	3	0			
Miscellaneous	207	16	0			
				1425	5	4
,, Secretary, Custodian, and Examiners				184	2	0
,, Alterations and Improvements.....				47	16	1
,, Apparatus, Appliances, and Books				117	9	4
,, Cataloguing Library				30	0	0
,, Printing and Stationery.....				94	9	2
,, Advertising				15	4	9
,, Lighting and Firing				136	19	1
,, Washing and Cleaning				58	9	5
,, Rates and Insurance				78	16	8
,, Expenses *re* Distribution of Prizes				49	5	10
,, Lancaster Road, Rent and Taxes				53	8	6
,, Examinations and Entrance Fees				51	2	2
,, Miscellaneous Expenses.....				39	11	9
,, Bank Interest and Commission				29	19	2
				£3111	16	1
By Balance brought down	£37	16	8			

Audited and found correct,
W. F. MOORE, F.C.A.
28th December, 1888.

WILLIAM ASCROFT, President.
T. R. JOLLY, Secretary.

HARRIS INSTITUTE.

SCHOLARSHIP AND PRIZE FUND, 30th September, 1888.

RECEIPTS.	£	s.	d.
To Balance in hand, 30th September, 1887	293	1	2
,, Amount transferred from General Account, as per Balance Sheet	287	7	4
,, Bank Interest.....	1	19	11
	£582	8	5
To Balance brought down	£322	16	8

EXPENDITURE.	£	s.	d.
By paid J. N. Parker (Art).....	45	0	0
,, ,, J. Binfield (Science).....	45	0	0
,, ,, W. Stuart (Science)	45	0	0
,, ,, Free Scholarships to Institute Classes...	88	8	0
,, ,, Prizes	35	16	8
,, ,, Bank Commission.....	0	7	6
	259	11	9
,, Balance in hand	322	16	8
	£582	8	5
By Balance in Preston Bank	£322	16	8

Audited and found correct,
W. F. MOORE, F.C.A.
28th December, 1888.

WILLIAM ASCROFT,
President.

T. R. JOLLY,
Secretary.

LIST OF SUBSCRIBERS.

	£	s.	d.
Ascroft, Mr. W.	1	1	0
Ascroft, Mr. A. E.	1	1	0
Atherton, Mr. John	1	1	0
Atherton, Mr. W.	1	1	0
Booth, Mr. Y. W.	1	1	0
Brown and Deighton, Messrs.	1	1	0
Dickson, Mr. E.	1	1	0
Easterby, Mr. R. F....	1	1	0
Eccles, Messrs. T. & Co.	2	2	0
Healey, Mr. J.	1	1	0
Hibbert, Mr. Jas.	1	1	0
Jacson, Mr. C. R.	1	1	0
Lee, Mr. S.	1	1	0
Maynard, Mr. M. S.	1	1	0
Moore, Mr. F. A.	1	1	0
Oliver, Mr. J. S.	1	1	0
Robinson, Mr. R. C.	1	1	0
Steele, Rev. Geo.	1	1	0
Thorp, Mr. F.	1	1	0
Toulmin, Mr. Joseph	1	1	0
Willan, Mr. W.	1	1	0
Wood, Rev. C. H.	1	1	0

HARRIS INSTITUTE, PRESTON

SEVENTH

ANNUAL REPORT

AND

STATEMENT OF ACCOUNTS

FOR THE YEAR 1889,

AND

THE ADDRESS

GIVEN BY

SIR HENRY E. ROSCOE, M.P.,

F.R.S., D.C.L., LL.D.,

AT

THE DISTRIBUTION OF PRIZES,

19TH DECEMBER, 1889.

PRESTON:

THE GUARDIAN PRINTING WORKS, FISHERGATE.

Officers for the Year 1890.

Trustees:

Mr. C. R. JACSON, J.P., D.L.
Mr. D. IRVIN, J.P.
Rev. C. H. WOOD, B.C.L.
Mr. W. ASCROFT, J.P.
Mr. G. B. DALBY.
Col. OLIVER.

President:

Mr. WM. ASCROFT, J.P.

Vice-President:

The Rev. GEO. STEELE, M.A., H.M.I. Schools.

Council:

Mr. C. R. Jacson, J.P., D.L.
Mr. D. Irvin, J.P.
Rev. C. H. Wood, B.C.L.
Rev. Geo. Steele. M.A.
Rev. Jon. Shortt, M.A.
Mr. J. Healey, J.P.
Dr. Hammond, J.P.
Mr. W. Ascroft, J.P.
Mr. W. Atherton.
Mr. S. A. Hermon, J.P.
Mr. A. E. Ascroft.
Mr. Y. W. Booth.
Mr. E. Dickson.
Mr. R. F. Easterby.
Mr. W. Calvert, M.A.
Mr. Jas. Hibbert.
Mr. M. S. Maynard, J.P.
Mr. J. S. Oliver.
Mr. F. A. Moore.
Mr. E. Greenwood, J.P.
Mr. G. Buckston Browne.

Hon. Treasurer:

Mr. J. S. OLIVER.

Secretary:

Mr. T. R. JOLLY.

Auditor:

Mr. W. F. MOORE, Chartered Accountant.

Bankers:

PRESTON BANKING COMPANY, Ld.

SEVENTH ANNUAL REPORT

OF THE

HARRIS INSTITUTE,

PRESTON.

IN the proceedings of last year there is very little which calls for special mention. The work of the Institute has steadily progressed, and in some departments the numbers have very considerably increased. The classes formed for the elementary study of science, intended for boys and girls on their leaving the elementary schools, have been successful, and are this year attended by a larger number of pupils. In accordance with the arrangements on their formation, prizes were given to the students attending them who showed most proficiency in the examination held at the end of the session. These prizes, ninety-eight in number, were in September distributed by the Rev. G. Steele, M.A., H.M.I.S. To the teaching of elementary science has been added some instruction in mathematics, and in the case of the more promising pupils some instruction in freehand drawing. The Council propose to assist the teaching of these classes by the provision of some models and means of conducting simple experiments. It is hoped that these classes may continue to grow in numbers and importance, and be the means of leading a large number of young persons to continue their habits of learning after leaving the elementary schools. Some change has taken place in the teaching staff, the changes being rendered necessary in most cases by the old teachers leaving town. The vacancies have, in all cases, been supplied by the appointment of gentlemen of very competent abilities, and the staff was never more efficient than now. All the classes are working well, and with satisfactory results. The Council have had in view the importance of encouraging more advanced studies in the science department, and with this object have decided that free scholarships gained in the elementary stage of any subject shall be made use of during the next session for the study of the same subject in the advanced stage. This and the new regulation of the Department of Science and Art, allowing students to sit in not more than two subjects of science at the same examination, have had a good effect. This year more of our students have gained two first-class certificates in science than previously. The Council believe that this act on the part of the Department is a wise one, and would be glad to see framed further regulations in

the same direction, with the object of acquiring on the part of students some more systematic course of study than is usually pursued. In the cotton classes the Council have thought it important that the teaching should be directed less with a view to the results of the examination of the City and Guilds of London Institute, and more with reference to the special requirements of the trade of the district. This change has been appreciated by the students attending those classes. The result of the teaching will be tested by a local examination at the end of the session. The Council regret the loss of a valued colleague, Mr. R. C. Robinson, who died in July last. The vacancy thus caused has been filled up by the election of Mr. G. Buckston Browne. The prizes gained by the students in the examinations of May, 1888, were on the 31st July last distributed by the Right Hon. the Earl of Derby, K.G., and the prizes gained in the examination held in May, 1889, were on the 19th December inst., distributed by Sir Henry E. Roscoe, M.P., D.C.L., LL.D. On both occasions most valuable addresses were delivered bearing on the question of education and the work of the Institute. The progress of the Institute is shown by the following figures :—

	1888.	1889.
Students on Register	2,247	2,526
Average attendance	1,740	2,049
Individual students	1,649	1,994
Certificates awarded	965	1,026
Prizes awarded	221	184

The decrease in the number of prizes arises from the new regulation of the department before referred to. During the session most interesting and valuable courses of lectures have been given by the Rev. J. Shortt, M.A., on "English History," illustrated by names of places near Preston, and the Rev. Father Gerard, S.J., on "EvolutionaryTheories and Common Facts," and the Rev. Father Perry, S.J., has arranged to give a course of lectures on astronomy early in the New Year. The Council are greatly indebted to those gentlemen for their kind and valuable assistance. The Council are much indebted to Mr. Atherton for the great assistance rendered to the cotton weaving and designing by his continued permission to use a room and weaving machinery in his works for the practical illustration of the teaching, and which has been of great benefit to the students. The Council are also indebted to Messrs. J. Hetherington & Sons for the gift of a framed photograph of a carding engine, and to the following firms for permitting the students of the cotton classes to visit their works :—Messrs. Dugdale & Sons, Blackburn; Dobson & Barlow, Bolton; and John Hetherington and Sons, Manchester.

W. ASCROFT,

18th December, 1889. PRESIDENT.

HARRIS INSTITUTE.

Proceedings of the Annual Meeting

HELD 30TH DECEMBER, 1889.

ON Monday, the 30th day of December, 1889, the annual meeting of the donors and subscribers to the Harris Institute, Preston, was held. There were present Mr. W. Ascroft, J.P., in the chair, the Rev. Geo. Steele, H.M.I.S., Alderman Maynard, J.P., Councillor Greenwood, J.P., Councillor Y. W. Booth, Mr. W. F. Moore, and the Secretary, Mr. T. R. Jolly.

The CHAIRMAN said the meeting was called in accordance with some of the clauses of the Scheme of the Institute, by which they were bound to hold an annual meeting in the month of December, for the purpose of electing one representative member of the Council and transacting other business. The only vacancy caused in the Council was through the expiration of the term of office of Mr. Buckston Browne, who had been elected in the place of the late Mr. Robinson. Seeing that there had been no other nomination, probably some gentleman would propose Mr. Buckston Browne.

Councillor Y. W. BOOTH proposed that Mr. Buckston Browne be elected a member of the Council.

Councillor GREENWOOD seconded the motion, which was carried.

Mr. T. R. JOLLY, the Secretary, then read the Annual Report, which will be found on page 3.

The CHAIRMAN, in moving the adoption of the report, said he had not much to add at that meeting to what he said the other day, on the occasion of the distribution of prizes by Sir Henry Roscoe. They must congratulate themselves on the progress of the Institute, and on the large number of students attending the different classes. They already numbered close upon 2,000, and he had no doubt they would soon have considerably more than that number. All the classes were in a very efficient and progressive state; were working very satisfactorily; and the staff was never more efficient than at the present time. It was their duty and pleasure to acknowledge the services of the masters, and to say that they

considered the Institute ought to be extremely well satisfied in having so efficient a staff, which produced such satisfactory results. They desired to acknowledge the services of their teachers in very warm terms. With regard to the Art School, they thought it had made very satisfactory progress; and it had been suggested to them that a larger number of young people residing on the outskirts would attend their classes if they were made more convenient for them in point of access, and to meet this desire they had established a school in Fulwood, which met in a well-adapted room placed at their disposal by Mr. Cowell. The class was at work now in a very satisfactory manner, was attended by forty young people; and, he might say, if the experiment succeeded, as there was every prospect of its doing, and if the residents of the other suburbs, who lived too far away for their childern to come with convenience to the Institute, expressed a wish to have these classes, and gave them a reasonable prospect of holding them without loss and detriment to the Institute, they would endeavour to meet their wants in the same way. The class formed at Fulwood was a valuable one, and would in time form a feeder to their Art Day School, which they desired to encourage, and which he was very sorry to say was not attended in such large numbers as they would expect in a town like Preston. The teaching was good, they had a well-arranged room, excellent appliances, and the art classes were arranged to meet the requirements of all ranks, and he was sure many people in Preston would derive benefit if they could see their way to attend the art classes in the day time. (Hear, hear.) The teaching in the cotton classes had been most satisfactory, and would prove an advantage to the town, especially seeing that they were adapting it to the requirements of the local trade, and that in time it would have a beneficial effect in stimulating the development of that trade. He shortly referred to the Act passed last session for the development of technical institutions. There was placed in the hands of the Preston Corporation, the local authority, the power to aid the development of classes of this kind, and he believed the Act would be largely adopted throughout the country. A deputation from that Institute attended a meeting in Manchester a little while ago, and they were very much pleased to see that the Corporation had also sent a deputation, consisting of Councillors Booth and Greenwood, who no doubt would agree with him in thinking that the meeting was of an eminently satisfactory character, showing that a very strong feeling was being aroused throughout the country in favour of the adoption of the Act. He thought the meeting was of a practical character, and at it a great many authorities and organisations up and down the country were represented. They had heard of many towns where the Act was being adopted, and there was an expression of opinion by many

that it would be even more largely adopted before long. They knew that the Corporation of Preston had agreed to find them a site, but they had not sufficient means yet to erect a technical school. They had the matter seriously before them, and it was impressed upon them that they should not delay much longer into putting the matter into a practical shape. He hoped that when the time came, the Corporation would have, as he had no doubt they would have, a very strong feeling of appreciation of the importance of the subject as it affected Preston, and that they would show their usual public spirit in taking it up in a manner worthy of the town, and with the view to help us to keep abreast of our trade requirements. Other towns have, as he had observed, shown that they were fully alive to their interests in this particular direction. Other classes of their Institute which were working satisfactorily, and being highly developed, were those to which they attached very great importance, namely the elementary classes. They were desirous of stimulating those classes as much as they could; and of preparing the young to become members of the more advanced classes in that Institute. He thought that the managers and the masters of the various schools had taken up the subject in a very praiseworthy manner, and they were indebted to them for the hearty manner in which they had co-operated with them in promoting those classes, which in time would be of even greater importance than they were at present. Another matter to which he would refer was with respect to the Co-operative Society, which represented a very large body of people in Preston. They were waited on by a deputation from the managing body of the Co-operative Society, expressing their desire to co-operate with them in support of the objects of the Institute. They thought it was much better that it should be done by a central body like the Institute than by themselves, and they expressed a desire to further their work as much as they could, and he believed they proposed to offer a number of prizes for the purpose of encouraging attendance on the part of the members who belonged to their organisation. (Hear, hear.) The action of the representatives of the Co-operative Society gave the Council of that Institute great satisfaction, and they were extremely pleased to co-operate with them, and to receive assistance in that way. (Hear, hear.) He must, in conclusion, refer with deep regret to the death of their colleague, Mr. Robinson, who took a very active part in the work of that Institution, and who assisted them very greatly by the ready way in which he co-operated with them. The vacancy caused by the death of Mr. Robinson had been filled by the election of Mr. Buckston Browne, who he hoped would be a useful member of the Council. They had received that evening, before that meeting was held, a letter from the Town Clerk, intimating that Mr. Alderman Maynard was the member of

the Council of that Institute elected by the Corporation, and he assured that gentleman that they were much pleased to receive the notification, and he hoped that he would continue to act in useful association with them as he had done hitherto. (Applause.)

The Rev. GEO. STEELE, seconding the motion, said he would like to call attention to the provision the Institute made for what they might call mental culture or general education, as distinguished from those subjects which were directly utilitarian—useful in advancing trade, and advancing income. Sometimes it was supposed that they did not do as much as they might in that respect in direct mental culture, and he would like to call attention to the lectures they had had in that Institute by such gentlemen as Father Rickaby, on logic, and more recently by Mr. Shortt, vicar of Hoghton, who gave them a valuable series of lectures on local history, and then more recently still by Father Gerard on evolution, and shortly they were to have lectures on astronomical subjects by that very distingished astronomer, Father Perry, of Stonyhurst. During this session, and the last session also, they had had lectures by Mr. Cardwell, of St. Bede's College, Manchester, on the subject of commercial geography, which was more or less a literary subject, and now at the present moment they were having lectures by Mr. Hebblethwaite on English literature. The lecturer had drawn out a syllabus which he and others of the Council had seen, calling attention to certain books of value to the young in the study of English literature. He had heard one of the lectures himself, and was much gratified by it, and had no doubt that all the members of the class would have much pleasure and profit in hearing the address. Well, they had been blamed at times for not going on with the Cambridge Extension lectures. They need not enter into that subject again, because it had been discussed sufficiently before, but he would venture to make the remark that, although they had dlscontinued that particular branch of their instruction, yet he thought what they had substituted for it would bear fair comparison in every respect with what they had discontinued. (Hear, hear.) He thought the lectures they had had lately by Fathers Rickaby and Gerard and Mr. Shortt, for example, would bear comparision with anything they had had before, looked at not only from a literary point of view, but from the objects of the Cambridge Extension scheme. (Hear, hear.) He only wished that the inhabitants of Preston would support them better in these lectures and this instruction on English literature.

The SECRETARY presented the balance sheet as audited by Messrs. Moore and Sons.

The CHAIRMAN said the balance sheet was most satisfactory, for they started with an overdrawn account of £37, and they had now got £232 in hand, and this after having spent a great deal of

money in cleaning down and painting, and in getting a considerable number of appliances, apparatus, and books. Of course their expenses had gradually increased under the different heads, but they had carried on the Institute in the past year with considerable economy, without neglecting any efficiency in their work, but considerably increasing their numbers.

The balance sheet was adopted.

Councillor Y. W. BOOTH said he had a few observations to make supplementary to those of Mr. Steele—as to the different classes having for their object the cultivation of literature pure and simple, and those which were merely of a utilitarian character. Well, now, their experience here had been, as they all knew, with regard to the Cambridge Extension lectures, that they were extremely expensive to them, and that they were perhaps the dearest classes they had per head of those in attendance. As a matter of fact, their experience for a number of years had been that those classes received the best attendance which tended directly to encourage the wage-earning power of the students; and, on the contrary, those which tended least that way were least attended. They had had complaints in the press from outsiders to the effect that they did not properly supply a want which was felt by the upper middle classes in the town—those who had received a superior education. They tried to do that with the Cambridge Extension lectures, and they were bound to give them up. As Mr. Steele had said, they had tried to vary the subjects with the view to making them interesting—and happily to the advantage of a large number of people in Preston. (Hear, hear.) He did not know that the Council had at all made up their minds not to revert to the Cambridge Extension lectures when they felt that there was a growing feeling in that direction. But they had discontinued them because the attendance was so small, and on account of their comparatively enormous cost.

Mr. W. F. MOORE hoped that the Council would press on the question as to the Gilchrist lectures, which would be the means of doing a great deal of good to all the movements connected with the Harris Institute, because the lectures were really of a popular kind, and the last time we had them in Preston they were a great success. He understood that they were likely to get the next course in Preston next year.

The CHAIRMAN said the Co-operative organisation was interesting itself to obtain the Gilchrist lectures here next year, and they were doing what they could to second their efforts. He was told that there was a very good chance of their coming here next year.

Councillor BOOTH: We should have a much better chance of securing the lectures in Preston if the application comes from the working classes. (Hear, hear.)

Mr. MOORE said that when the lectures were given in Preston last time we had not a hall large enough, but now we had the Public Hall, which he thought would be filled, and in which he thought the lecturers could be easily heard.

A vote of thanks to the Chairman was then moved by Mr. Alderman Maynard, seconded by Mr. Councillor Booth, and supported by Mr. Councillor Greenwood and Mr. W. F. Moore, and carried; and acknowledged by the Chairmam.

DISTRIBUTION OF PRIZES TO THE STUDENTS

BY

SIR HENRY E. ROSCOE, M.P.,

F.R.S., D.C.L., LL.D.

19th DECEMBER, 1889.

ON Thursday, 19th December, 1889, Sir H. E. Roscoe distributed, in the Public Hall, Preston, the prizes to the successful students of the Harris Institute. There was a very large attendance. Mr. W. Ascroft, J.P., presided, supported by Sir Henry Roscoe, M.P., Mr. W. E. M. Tomlinson, M.P., Mr. J. Addison, Q.C., M.P., Major-General Cotton, Colonel Oliver, Mr. J. Stanning, J.P. (Leyland), the Rev. George Steele, H.M.I.S., the Rev. C. H. Wood, Mr. J. J. Sidgreaves, J.P., Dr. Hodgson, J.P., Mr. J. Brown, J.P., Councillor Greenwood, J.P., Alderman Satterthwaite, J.P., Dr. Holden, Mr. J. Sharp, J.P.; Councillors Barber, W. H. Woods, Y. W. Booth, Craven, Harding, and Atherton; Dr. Collinson, Messrs. J. Whiteside, R. F. Easterby, W. F. Moore, F. A. Moore, Whately Cooke-Taylor, H.M. Inspector of Factories; Mr. W. B. Barton, art master; and Messrs. R. Pendlebury, W. Clitheroe, F. W. Mackley, J. Redmond, J. Shaw, J. Gater, and A. F. Atkinson, teachers. The arrangements were of the usual perfect character, and all went with the greatest smoothness, the gentlemen who assisted in carrying them out being the Rev. Geo. Steele, H.M.I.S., Councillors Atherton and Y. W. Booth, Mr. Easterby, Mr. F. A. Moore, Mr. T. R. Jolly (secretary), and Mr. Johnson.

The CHAIRMAN said: We are glad to welcome Sir Henry Roscoe to our seventh yearly meeting and congratulate our students upon receiving their prizes from him. Sir Henry bears a name long distinguished in Lancashire, and to that name he has added an increased lustre by his high reputation and important services. His work at the Owens College and the Victoria University—the thoroughness and nature of his teaching of chemistry there, and his energy and force of character, have greatly contributed to the high position which that college and university have attained, and stimulated the spread in Lancashire of education of a practical character. The part which he took on the Royal Commission on Technical Education, and his subsequent work in that direction, both in and out of Parliament, have been of national benefit. (Applause.) In our own Institution we are especially indebted to him for the kind and ready help and useful advice which he afforded us in its formation. I am glad to have this opportunity of publicly expressing the sense of obligation which we feel to Sir Henry Roscoe for this help, which has been to us of so much value. During the last session, the expansion of our Institute has been mainly in the art department. In no direction could its development have taken place more advantageously. I have

more than once endeavoured to impress upon the employers of labour in Preston the importance of helping on the work of the Institute by encouraging their younger assistants to join our classes. I am sorry to say that hitherto my appeals have not met with much success. The greater credit is due to the workers themselves, who voluntarily have come to us in such large numbers. If employers could be induced to co-operate with us more largely, they could not do so in a way calculated more effectually to serve their own interests than by encouraging the work of the School of Art. (Applause.) On the Continent the art schools are very efficient and very largely attended, and designers and art workers are trained, it is said, almost regardless of cost. Their art schools are, I believe, directed mainly to the development of artistic talent and to the production of skilful designers, neglecting more or less the students of average abilities. Our English art schools are founded on a broader basis. They provide not only for the wants of the more skilful, but also for the average students, the one class acting upon and stimulating the other. (Hear, hear.) The work of the art schools has had a very marked effect on the taste and employment of the English people. Things would not be tolerated now which would readily have been bought 50 years ago, and the monopoly of French designing so far as English manufacture is concerned exists no longer. This is an important consideration, and opens a large and lucrative field of labour to numbers of our people. (Hear, hear.) Large numbers of men and women trained in the English art schools are at work as designers both in England and abroad. In Nottingham, the seat of the lace trade; in Macclesfield, the seat of the silk trade; in Belfast, in damask, and other art manufactures; in Birmingham; in the iron and the pottery districts; in Halifax, and other manufacturing towns are conspicuous instances of the employment of locally-trained students taking up the arts of design as applied to the local trades, and displacing the foreign artists who formerly had the monopoly of this well-paid employment. Messrs. Doulton's well-known works at Lambeth have produced results which would have been impossible but for the local art school, and find employment for some hundreds of people of both sexes engaged in art work, for which they have been specially trained in that school. (Hear, hear.) Our own staple trade in Preston is becoming more and more dependent for its success upon the taste and qualityof its productions. In our own art school we are doing our utmost, and with some success, to improve the work of design as applied to our local trades, and in the exhibition of the work of our students at the opening of our classes this session, some very creditable work in the way of original design was shown. I can, without hesitation, speak in high terms of the value of this kind of teaching and the progress made by the students. As a striking example, I may quote the case of a young man named John Moyle, who last year, in the national competition, won a national scholarship worth £50 a year, during its continuance, in addition to free art teaching at South Kensington. In the present year he has, at South Kensington, taken one out of four travelling scholarships awarded by the Government Art Department, which has enabled him to visit some of the great centres of design abroad. Mr. Moyle is a designer connected with the well-known printworks at Bannister Hall, and he has written to say how especially useful to him were the resources of the great Museum of Textile Fabrics at Lyons, in which his

scholarship enabled him to spend some weeks of study. Government prizes have been awarded to our students for original designs applicable to the following industries:—Wrought-iron work, silversmiths' work, textile fabrics, porcelain, encaustic tiles, surface decoration, wall paper. A design for a set of wrought-iron park gates by Miss Horrocks was chosen for exhibition in the National competition and gained a prize. (Applause.) A number of works executed to obtain teachers' certificates in advanced drawing and in designing and painting ornament were very successful, 23 being accepted out of a total of 26. This represents a high percentage, far above the average proportion Apart from these instances of high merit, an important result from the teaching of drawing is that workpeople so taught are able to work from drawings, and are always preferred to those who are not. A training in this art, however elementary, leads to accuracy of eye and correctness of workmanship, and in this sense alone, not to speak of its higher aims, the work of the art schools has an important bearing on technical education. In many towns which can be mentioned it is a rule on the part of masters to require their apprentices to attend regularly at the art schools. In Preston I regret to say that as yet this standard has not been generally reached. We have had it impressed upon us again and again that in matters of commerce and manufacture rivals in other countries are making giant strides, and stealing from us markets which formerly were almost exclusively our own. The very remarkable report of the Commission, of which Sir Henry Roscoe was a member, shows us cases without number, where this result is brought about by clever and well-trained men copying and improving upon our methods and using our machinery. The invariable process by which this is carried out is the cultivation of the tastes and knowledge and capacity of their people, in many cases enjoying greater educational opportunities than our own. (Hear, hear.) Our own country is now being awakened to the necessity of reforming our methods in the same direction, and a great impulse will be given to technical education by the Act passed during the last session. This Act places large powers in the hands of local authorities, and is already being adopted by some towns, and will shortly be taken up by many others, probably to a large extent by our neighbours at Blackburn. Hitherto our losses have been inflicted upon us by our foreign rivals. It will rest with each town to see that to those rivals shall not be added more dangerous rivals at home. (Hear, hear.) A remarkable instance of commercial disaster, suffered through the loss of neglected opportunities, is the city of Norwich, once the seat of the worsted trade carried on with antiquated means and old-fashioned appliances. A hundred years ago Norwich was the most important manufacturing city in the kingdom. It rested on its name, and lived in a dream of never-ending prosperity. It declined to adapt itself to modern requirements, and to march with the times. The result has been that its worsted trade has become a thing of the past, having been won from it by the more skilled and more enterprising people of the West Riding of Yorkshire. In the iron trade Preston once occupied a larger and more important position relatively to other Lancashire towns than it does now. We have still a considerable cotton trade, but that can only be maintained, and still more, can only be extended by enterprise and capacity on the part of employers and employed. (Hear, hear.) Trade follows enterprise and skill, and capacity, and can only exist where there is a body of efficient workers. (Hear, hear.) Our class in weaving

and designing is this year, I am glad to say, attended by a larger number of students than we ever had before. They number 140 of very fair representatives of the intelligent workers in our mills. (Applause.) We have some looms and other machinery to assist our very excellent teacher in his work, but we need much more space, and more complete appliances of this kind to develop our teaching in this and other technical classes, and I do not think that we ought much longer to delay our preparations for supplying this defect. (Hear, hear.) We have this year arranged that the teaching in our cotton classes shall be conducted less in the direction of the general scheme of the City and Guilds of London Institute, and more in the direction of the special requirements of our local trade, with, we believe, satisfactory results both as to numbers and practical efficiency. A very remarkable movement has taken place in the plumbing trade for the registration of masters and journeymen. Before this registration can be effected each applicant must prove his efficiency, and this has stimulated the desire for learning the principles of the trade, and has considerably increased the attendance at our class. This movement has been taken up as heartily by the employers as by the employed, and is an excellent instance of the good result of mutual co-operation by these classes in a matter affecting their common interests. In no trade will greater efficiency more benefit the community. The terrible scourge of typhoid fever striking at all ranks is in the main caused by defective work in the plumbers' branch. This disgrace attaches to all concerned in our present arrangements, whether architects, builders, or plumbers, and as a mere matter of safety to life our interests are bound up in the necessity of a better knowledge on their part of the scientific principles which apply to their several occupations. (Loud applause.) It is, therefore, no unmeaning observation to say that the interests of every one in the town—whether governing body, employer, owner of property, workman, or inhabitant —are concerned, and their duty lies in promoting the work of an Institute such as this, the object of which is to increase the knowledge and capacity of all who are engaged in doing the work which lies before them, and to add to their efficiency in the occupations in which they may be employed. (Loud applause.)

After a selection by the choir, Mr. Ascroft made brief reference to the achievements of the most successful of the students. He specially instanced, among others, Mr. John Atherton, who won the President's prize of £2 2s., and was the second for the £45 scholarship, and Mr. John L. Gardner, the winner of the £45 Science Scholarship. In speaking of the art department, Mr. Ascroft observed that a significant evidence of the success of this department was that out of twenty-six works submitted from the higher grade only three were unsuccessful. In the spinning class several students passed with honours, and in the weaving class Mr. Jos. Yates and Mr. J. B. Gardner passed with honours, the latter student also receiving a bronze medal and being third in the United Kingdom. In regard to the number of students that had passed in the Society of Arts, Preston stood third in the United Kingdom, only being beaten by the Birkbeck Institute, London, and by the Liverpool Institute. (Applause.) From the Birkbeck School 142 passed, and from the Liverpool Institute eighty-six passed, whilst the number from the Harris Institute was eighty. (Applause.) He had some interesting figures showing the progress the Harris Institute had made. In 1885-6 the number on the register was 2,019, the number of

individual students being 1,212, and the certificates awarded 700. In 1886-7 the number on register was 2,069, the number of individual students 1,384, the certificates awarded 798, and the number of prizes 190. In 1887-8 the figures were—number on register 2,092, individual students 1,397, certificates awarded (May, 1888) 965, and prizes 221. In 1888-9 the number on register was 2,247 the number of individual students 1,651, the number of certificates awarded (in May, 1889) 1,026, and the number of prizes 184. At present the number on register was 2,526, and the number of individual students 1,994. (Loud applause.) This, he thought, indicated a very satisfactory progress. The apparent falling off in the number of prizes in 1888-9, compared with the previous year, was owing to the fact that the Science and Art Department now allowed students to sit in two subjects only. Thus, instead of the attention of students being diffused over three subjects, it would be concentrated on two. It was much better to learn two subjects well than three badly. (Hear, hear, and applause.) That was indicated in the fact that more of their students had obtained two first-class certificates than previously.

Sir H. Roscoe then gracefully distributed the prizes, and paid hearty compliments to the winners of the principal honours. To Miss Horrocks he remarked that he admired very much her beautiful design for gates; it did her great credit, and he hoped that they would hear of her again; and to Mr. Gardner, who won the £45 scholarship, he said he hoped he would continue to make advances, and that in time the town would be proud of numbering him among her best sons.

Sir H. Roscoe, M.P., who was received with applause, said: When, this evening, I had the privilege of visiting, for the second time, the Harris Institute, and seeing the first time the magnificent building, which, I suppose, will be called the Harris Free Library and Museum, with which your town is now adorned, I thought to myself in what better way can a man make use of his money than was wisely done by the late Mr. Edmund Robert Harris—(applause)—and how fortunate any town or city may be of citizens like him living and dying among them. Mr. Chairman, you have spoken clearly and well of the objects of the Harris Institute. I congratulate you, and I congratulate the managers of this valuable Institution, and I congratulate the young men, and I am glad also to be able to congratulate the young ladies who obtained the prizes in this very valuable school. You have told us, sir, what is very true—that unless the people of England keep up the mark of their intellectual progress, that industrial supremacy which has hitherto marked our country will perhaps no longer be heard. You, sir, referred to what was being done elsewhere in other countries, and that reminds me of an observation a German made to me recently. He said, "whilst we have been educating our people you have been perfecting your machinery." (Hear, hear.) I hope and feel that that comparison no longer is true, that we, as well as improving and perfecting our machinery, are now engaged in doing the other portion and the essential portion of improving and perfecting our men. When we have accomplished this I think England has nothing to fear, for the raw material—I do not speak of coal and iron, but I speak of human material—with which we have to deal is better, I believe, than the raw material which any other country, at any rate any of the continental countries, can furnish. (Applause.) Not only may I congratulate Preston on the splendid Institution which it possesses for carrying out the higher instruction

of its children, bnt I believe that in the whole country the question of education is rapidly advancing, not but what there is much left to do; and I propose this evening to glance at one or two subjects in which our system of education is still very incomplete.

ABSENCE OF METHOD IN EDUCATION.

Unlike most Continental countries, we in England cannot boast of a complete system of national instruction. We have, indeed, made a commencement, but this only reaches the lower rungs of the ladder; whilst a system by which the highest point is reached is altogether wanting, and it is the absence of method in our education above the primary which calls for immediate attention from the Legislature; and the cry of Matthew Arnold of "Organise your secondary education," is one which is now taken up by all who interest themselves in the subject. That the country has, however, made an advance in respect to this higher instruction is seen from the fact that the Technical Bill proposed by the Government has become law, which recognises and gives Parliamentary sanction to the necessity of national assistance for secondary education. For this Act, as you know, enables Town Councils and other local authorities to apply rates to the extent of 1d. in the pound for the purpose of technical instruction throughout their district. To the consideration of this subject I will afterwards return.

THE ELEMENTARY SCHOOL SYSTEM UNSATISFACTORY.

I have said that our national education only affects the elementary subjects. Are we satisfied, however, with this system? Does the nation obtain adequate value for the seven millions which this education costs? That crime, and especially juvenile crime, is much diminishing, and that the general condition of those classes of society which are affected by the elementary school system has greatly improved since 1870 nobody will doubt, and this may be taken, to a considerable extent, as due to the education which the children have received in the elementary schools. On this point I have a few figures which will be of interest. The number of children under instruction in our public elementary schools 30 years ago was only 8·75 per cent. of the population, that is to say there were 1,693,000 in the schools. That seems a large number, but it is less than half the children who ought to have been at school.

THE SCHOOLMASTER THE BEST POLICEMAN.

Well, since 30 years ago the school accommodation has increased from 8·75 of the population to 18·71, and the number of children in attendance at school at the present time is 4,687,000. (Applause.) That shows at any rate they have got to school. What is the effect of the instruction they are receiving? There are many ways, but one of the most important, and I suppose in the presence of my friend the Recorder I may say the one mode of measuring the progress of a nation, is the quantity of crime committed in the country. (Hear, hear.) Well, there are 100,000 less juvenile criminals than there were 30 years ago. While 30 years ago the number of juvenile criminals amounted to 70 per 100,000 of the population, in 1888, 30 years afterwards, that number was reduced to 17·6, and that fact shows us, does it not, that after all the schoolmaster is the best policeman? (Hear, hear.) But if we ask ourselves, is the education there given thoroughly satisfactory; is it on a level with the requirements of the time, and are the results as good

as we should wish to see? I think that we must answer in the negative. In the first place, we are endeavouring, as Mr. Mundella says, to put a quart measure into a pint pot. English children leave school at far too early an age. In 8,000 parishes the fourth standard gives total exemption, for children go to work, and many leave school without even attaining that, and this cannot be said to be even the barest elementary education. Moreover, the better the teacher, and the better the appliances, the sooner this fourth standard is reached, and children are passing out of this standard earlier and earlier every year, so that this thin varnish of education rapidly becomes worn off as the children come in contact with the friction of ordinary life, and far too many of our children sink into the barbarism of the streets.

CONTINUATION SCHOOLS.

What we require to do therefore is to keep our children at school until they are at least thirteen Every child in Germany is obliged to stay at school until his 14th year, and after that he is obliged to attend evening or continuation schools, whilst in Switzerland the child's education is carried on even to a later age. This, then, points to the great necessity for the foundation of continuation schools, in which evening instruction is given of a more recreative character than that of the ordinary day-school. I am glad to learn, from what Mr. Ascroft said, that in Preston—as in many other great centres of population—you lately have established schools of this very character, and that these schools are now open, and attended by some 400 or 500 children. I only wish there were four or five thousand. Those children came to keep up their knowledge in the evening by a system of recreative classes—that is to say, something rather different from the ordinary class work which they had been accustomed to at school. They came in the evening to keep up and improve the knowledge which they gained during the day in their earlier years. (Applause.) I cannot conceive any object more important than the introduction of such a movement in our great centres of population. I do not see why it should not be introduced into the agricultural districts, too. Agriculturists need education as much as we people who live in towns. I cannot imagine anything more useful than continuation schools of this kind, and they should be made national. I trust that my friend, Mr. Samuel Smith, may succeed in carrying his bill in this next session of Parliament to sweep the streets of the boys who have left school, and gradually to carry them on to better knowledge and higher tastes. I am sure that all my friends on my left—whom I have the honour of sitting opposite to in the House of Commons—will join, as we are doing this evening, and that we shall push through this important bill for providing continuation schools for the great masses of our people. (Applause.) The great difficulty we in England have to contend with is the want of appreciation, on the part of the parents, of the value of education, and this will be accomplished when the richer classes feel that the thorough education of the poorer is the greatest possible safeguard against social upheaval, and the so-called working classes recognise that in education lies their best hope of ameliorating their condition. But even supposing that our children remain longer at school, and even supposing that continuation schools are founded on a national basis, are we satisfied that the system of education adopted is the right one? I, for my part, am strongly of opinion that it is not; and

in order to get the best results radical changes should be introduced into our system of elementary instruction, for I am one of those who think much greater attention should be paid to awakening the observational powers than is accomplished under the existing system.

SOUND SCIENTIFIC EDUCATION NEEDED.

This can only be attained by the introduction of sound scientific instruction. Do not let us be frightened by the word "scientific." Science is, in fact, nothing more than organised common sense, and scientific instruction can be given, and *is* given, in a way to interest and at the same time to awaken and stimulate the intellect of even the youngest of our children. What we need is to carry on throughout the standards the system of object lessons, which are satisfactorily given in the infant school. At the present time the moment the child comes into the standards these object lessons are entirely dropped, whereas they should be continued with higher developments as the child advances, leading up to more specialised teaching in elementary science. I believe that you in Preston have begun to take up that subject of science teaching, and I have no doubt that in the hands to which it has been entrusted it will prosper and become a most important element in your school teaching. But there is one other subject which I should like to speak of, because I do not wish to be always drawing out my own horse and riding my own hobby. I should like to say that I consider that drawing is one of the most important subjects, and that it ought to be introduced far more generally than it is. This afternoon, in the company of H.M. Inspector, Mr. Steele, and our Chairman, I had the great pleasure of going over the Harris Institute, and in seeing the drawings of the students. I was very much struck with the excellent character of the work. If I were to ask what drawing is taught in the elementary schools, I am afraid I should find that the answer was, "Very little indeed." If you are going to teach drawing in the higher classes you ought to teach it in the lower. Every child ought to be taught drawing, which ought to be nothing more than following on writing, and in the report of the Commission to which the Chairman has alluded we recommended that drawing should be made part of the writing lesson, and that every child should be made to learn to draw. (Applause.) My belief is that if children were made to learn to draw, and they were taught elementary science in the primary schools, then technical education would be a much easier matter. (Hear, hear.) Your Harris Institute would require much larger rooms than it has at present. At the present it is very sad to see that elementary science is almost neglected in the primary schools. The amount of science teaching now given as a class subject is lamentably small, and is year by year diminishing instead of increasing; and this last year, whilst only thirty-six schools took elementary science, 12,058 schools took geography, so that elementary science has scarcely obtained a footing as a class subject. Nor do we find that in the specific subjects science teaching is in a more favourable position, for whilst the number of scholars in the standards in which specific subjects may be taught has increased during the last six years from 286,000 to 472,000, there is not a single scientific subject, with the exception of mechanics, which shows a similar increase. And if we compare the percentage of children taking science subjects with the total number who might do so, we find that whilst in the year 1882-3 29 out of 100 children took science subjects, in 1887-8 the percentage

had fallen to 16·9. How can we account for this lamentable state of things? One good reason, I believe, is that it does not pay the teacher. In my opinion it is chiefly due to the system of payment on results on the individual child which is working, as I venture to think, destruction in our educational system; for this reason, that it is just those subjects which can be most easily taught and most easily crammed that are forced down the children's throats by the teacher, who, good man, naturally wishes to turn an honest penny; and we can scarcely wonder that the sale is large of a pamphlet lately published entitled "How to pass 90 per cent. and earn 'Excellent,' by one who does it." (Laughter.) Science being a subject which it is perhaps more difficult for the teacher to teach, he takes up a subject which he can get through with the least difficulty, and in which he can get his boys and girls to pass more readily. I remember going round with a friend of mine, an inspector, a very distinguished man. We went to a class where the children were learning geography, and he said, "I will show you that these children know geography. Now, boys, what are the seven rivers of the Punjaub?" I did not know the seven rivers in the Punjaub, and I do not know whether any one here can tell me—except the General [indicating General Cotton]. But the boy knew every one of those rivers. (Laughter.) Well, I will not say it was not creditable to the boy, but what on earth is the object of teaching children a whole lot of jargon about the rivers of the Punjaub when they cannot explain what happens when a candle burns? (Laughter and applause.) I suppose you have all heard about the Bishop who was examining the children in Scriptural lessons. His lordship exclaimed, "Now, my boys, who is your great spiritual adversary?" and a very little boy held up his hand, and replied, "Please, sir, the Bishop." (Laughter.) I am bound to say that if we were to ask the little boy who his great educational adversary was, I think he might, with almost equal and perhaps greater truth, reply, "Please, sir, payment by individual results." (Hear, hear.)

FREE EDUCATION MUST COME.

This system must be got rid of. The State must pay the money to the local authorities, who must distribute the same amongst the schools in proportion to their efficiency. The very fact of a school being fined for being below the mark would soon bring it up to a condition of efficiency. We have heard a great deal lately, and are likely to hear more, about what is called "free education," or, to use Lord Salisbury's expression, "assisted education," as though, by the way, education were not already largely assisted by the State, as well as by private or voluntary benevolence. I have no doubt that a measure for the abolition of schoolpence not only will come, but that when it does come it will exert a most beneficial influence on our education, if it is accompanied, as it must be, by public representation in the management. But, however advantageous such a measure may be, we must not lose sight of the fact that it is still more important to reform our system, and that after all it is the quality of the education given which is the most important factor, and needs most to be stimulated. We need to bear in mind that it is less the learning itself than the desire for it which our schools ought to teach.

I have already alluded to the passing of the Technical Instruction Act this year as a great step forward, but it is clear that if institutions

such as your own are to do the work thoroughly, and to take advantage of this Act, it is necessary that the scholars who come into such higher technical schools shall have the beginning of the subjects grafted in their minds in their preliminary stages in the elementary schools. Your classes cannot do their work properly unless the ground has been to some extent previously cultivated.

THE TECHNICAL BILL.

Much dissatisfaction has been expressed by the way in which the Technical Bill was forced through the House of Commons at the last moment. I myself might have good reason to complain of the action of the Government, inasmuch as the bill which I had the honour to introduce into the House, and which passed the second reading, and the principles of which, therefore, received the sanction of Parliament, was thrown out. But, although I naturally think that my bill was a more complete measure, as it covered the whole ground, I recognised that "half a loaf is better than no bread," and thought it my duty to assist the Government to pass their measure, and I have never regretted my action, for I believe that the present Act will prove most useful; and I am glad to think that many centres of population, both large and small, are now preparing to take advantage of its provisions, by which local authorities, should they think fit, will be able, out of the local rate, to supply or aid the supply of technical or manual instruction, subject to the restriction that the local rate shall not be applied to scholars receiving instruction at an elementary school in the standard subjects.

PROPOSED TECHNICAL SCHOOL FOR PRESTON.

Now, I am glad to learn from my friend the chairman that in Preston the matter of technical education is receiving considerable attention, and I believe I am correct in stating that under an act passed some little time ago your Corporation took powers to secure land for the purpose of handing it over or building upon it a technical school. (Hear, hear.) I hope it may not be very long before I have the pleasure of visiting you again—(applause)—and that I may be present at the opening of the Preston Technical School. (Applause.) I know that there are in Preston men who are determined—and among the foremost is my friend on the left—who are resolved not to let the question drop. They are working to bring it to the point to which it must be brought before action can be taken, but I believe you will succeed in having here a technical school worthy of your Harris Institute, worthy of the town, and that before long we shall here in Preston, like many other places, take advantage of the Technical Act. (Applause.)

THE POWERS AND MEANING OF THE ACT.

There seems no reason why elementary schools giving instruction to scholars out of the standards, or to adults, either in the day or evening, in subjects of technical instruction, subjects defined in the Act to mean "instruction in the principles of science and art applicable to the industries, and the application of special branches, of science and art to specific industries or employments, but not including the teaching of the practice of any trade or industry or employment." In the case of board schools receiving aid from the rates for this purpose, no

representation by the local authority on the management is required, whereas in the case of voluntary schools a representation of the rate-payers is required. Thus you will observe the Act not only enables the local authority to supply or aid the supply of higher technical schools in its district, but also to assist such teaching as is now carried on in evening classes in the elementary schools themselves. It is, however, always to be remembered that this aid is to be given for the establishment of classes in technical subjects as distinguished from the science and art classes now receiving grants from South Kensington, which are, as a rule, sufficient to enable the classes to be held. Thus, for example, if you in Preston desire to form classes or to establish a school for instruction in the scientific principles involved in the cotton manufacture —a matter of great importance to your population—similar to the admirable school recently established in Peter-street, Manchester, you can obtain aid from the rates, provided your Town Council thinks it expedient to grant it for the purpose, subject to the sanction of the Science and Art Department. It is clear that we should understand what is meant by technical training. There has been a good deal of misunderstanding, and in some places, where artisan classes have been established, tradespeople have set their faces against this sort of instruction because they believed it was interfering with their trade teaching. Now nothing can be further from the object of those who have this matter at heart, and we may say at once that the object of technical training is not to teach trade, but to teach the scientific and artistic principles upon which those trades depend. (Hear, hear.) The trade can only be taught in the workshop. You may teach in the school how to make the best article. For instance, you, Mr. Chairman, referred to the plumber. Now in London and other towns, in the technical classes there, there are classes carried on for the benefit of the plumbing trade, but they only teach the principles of the various operations of the plumber. They do not teach the plumber how to do his job quickly, but how to do it well; and so in other matters the object of the school is to produce the best article irrespective of price. The object of the workshop is to produce the best article cheapest. In the case of the school, economic and financial principles do not come into play; in the case of the workshop, economy of production is the most important factor; and, therefore, I say the tradespeople need not be afraid that by the teaching in the technical school their teaching in the workshop will be interfered with.

AN ILLUSTRATIVE ANECDOTE.

We cannot do without factory teaching; we cannot do without school teaching, but must have both. (Hear, hear.) Well, I may illustrate this by a story told me the other day at Manchester. A cotton operative—a minder—came to the secretary of the technical school there—one of that character, I hope, you will have before long —and said, "Mr. Reynolds, I have come to see if you will allow me to come to the class, and see the various kinds of cotton machinery." Mr. Reynolds replied, "What do you want?" and the man said, "I want to see what sort of a thing a carding machine is. I cannot get into the carding-room usually, but the boss allowed me to have one look at the machine on the payment to him of 4s. I have come to the class in order that I may have a good many looks at it both inside and out, so as to see how it works, and become acquainted with its principles." And so

my friend let this man come to the school. He found somebody to pay the fees for him, and so I name this to show you the use of the technical school. In the mill, in the factory, you are kept to one job, and, probably, not allowed to see anything else. In the school you are taught the whole thing, and get a general view of the whole nature of the manufactures and the principles upon which they are based. This, then, is the value of the technical school. (Applause.) It has been sometimes said that this Technical Act puts too much power into the hands of the Science and Art Department. You know people in the country are naturally jealous of the government of a centralised authority, and I also am very jealous. The great point about this Act is that the local effort and local requirements are to be settled by the local authority. (Hear, hear.) There is only one thing to be settled by the Central Government. Supposing, for instance, a teacher wanted to get a grant from the Government to start here a certain class not suitable to the district, the Government would say, "That subject is not suitable for this town; teach it somewhere else." There is no fear that the Science and Art Department will interfere at all excepting in regard to anything unreasonable; in fact, I only know of one case in which a Government department has interfered with the payment of a grant to local classes, and I will tell you what this thing was. It appears that a girls' class was started in the Midland district—I believe it was Birmingham—and the class was on navigation. (Laughter.) The Science and Art Department said, "This is going a little too far," and they properly refused to pay for such a class. (Hear, hear.) They would not interfere with you in Preston on such a subject, of course. (Laughter.) In Preston, when you have got your dock—(renewed laughter),—you will want a class on navigation, but I hope you will not have the young ladies in it. (Laughter, and hear, hear.) I trust I have now pointed out to you the great advantages which may accrue from the adoption of the Act, and I trust that Preston will not be long in following the example of so many other towns in making the provisions of the Act a reality in your district.

A MINISTER OF EDUCATION.

But in thus reviewing incompletely, as I have done, some of the needs and the shortcomings of our educational system, we are inevitably led to the conclusion that until the whole of the education of the country is placed under one responsible head, we cannot expect that the reforms which are so much called for will be made. At present there are three Government Departments charged with educational work—the Elementary Education Department in Whitehall, the Science and Art Department for the science classes, and the Charity Commission, and, in addition, a department for Technical Instruction not under Government, but managed by the City and Guilds of London Institute. In order to bring these different departments to one centre, in close touch and relation with every part of our now discordant educational system, we must have a Minister of Education appointed, of Cabinet rank. We have seen recently the appointment of a Minister for Agriculture, who has a seat in the Cabinet. Surely the subject of the education of the people is not a less important one than that of agriculture, and the presence in the Cabinet of a real educationist is the only means of securing that attention to education which we find is bestowed upon it in all other civilised countries in the world. (Loud applause.)

Mr. J. Addison, Q.C., M.P., in moving a vote of thanks to Sir Henry Roscoe, observed that he was not merely eminent as a scientific man, but his services in the cause of education were appreciated by the entire country as well as the House of Commons. (Applause.) As regards the bill to which allusion had been made, he might say that in the cheerful company of their member, Mr. Tomlinson, he sat up till four o'clock one morning and until three o'clock the next, to help Sir Henry Roscoe in passing that bill, and he might add that if it had not been for the zealous aid Sir Henry rendered to the Government it would have been utterly hopeless for them to have accomplished their task. That bill was a very important one, not merely in its immediate results, but because it seemed to afford some basis of compromise between conflicting interests in giving the distribution of those moneys to existing schools to the local bodies who were necessarily representatives of all parties and all creeds. He was glad that Sir Henry Roscoe was so pleased to find himself in the same lobby as himself (the speaker) and Mr. Tomlinson, and that he found no reason to regret the support which he gave to the Government. He felt sure that if Sir Henry Roscoe followed his own good example in the next session and supported the Government again he would have no reason to regret the course he took. He might say that what he liked in that Harris Institute was this, that it embodied two great results of modern progress; it made education attractive, and it made it useful. There was a time when it was supposed that education ought to be made repulsive, and that it ought to be given within bare walls, and administered under very harsh treatment by dominies who were the least sympathetic of mankind. But now, in such a place as the Harris Institute, they selected subjects that were congenial to the student; they selected hours that suited his occupation; they enabled him to study in bright and cheerful rooms, and with all the stimulus of pleasant company. In addition they gave education that was useful. When he heard of the studies of chemistry, botany, and all the applied sciences, he was surprised to remember for how many generations in this country it was the popular notion that fictitious learning alone should be the vogue, and that nothing that was worth knowing was worth teaching. If they wanted an illustration of that remark, they need only read that very interesting life of Darwin which had been so popular. They would find that though he was fond of the natural sciences even when young, and possessed great powers of observation, and though he was, he believed, fond of mathematics, he was considered a dunce both at the school and university, and he himself told them in his book that he never got the slightest good from either of those places. Sir Henry Roscoe had alluded to the different subjects which at the present time were crowded out of the elementary schools. Undoubtedly the foundation of all technical education must be laid in the elementary schools. At present a vast deal of time was wasted in the schools in the absorption of fictitious learning. He alluded to the immense amount of time spent in the trivialities of spelling. It was true that spelling was a useful thing, but it might easily be acquired by practice in reading and writing. Schoolmasters seemed to have for many years laboured to teach it as if it were a profound and exact science. He was glad to see that the Commission with which Sir Henry was connected, had recommended a reform in this respect. But

that was nothing to the enormous amount of time which was wasted upon that barbarous, fictitious, and useless subject called grammar. (Hear, hear, and laughter.) An enormous amount of children's time, which might be better employed, was absorbed in the study of grammar, and yet its rules were founded on no scientific or true basis. The declensions of nouns and conjugations of verbs were founded merely upon usage, and when the living tongue refused to be cramped, the grammarian cried out, "Oh, that is irregular." Those wonderful rules were never intelligible until they knew the illustrations, and when they knew the illustrations they were useless. (Laughter.) Any man who in after life desired to improve himself in reading, writing, or in speaking, adopted more natural and straightforward modes, and at once proceeded to cast from his mind all that rubbish to which so many hours were devoted in elementary schools. It was a great pity that physical science should be neglected, and that drawing did not hold the position it ought to hold. Time was taken up by pursuits that had just as little to do with real learning as hunting for autographs, collecting postage stamps, or telling the character by the bumps on the head or the marks on the hand. (Laughter.) He had said that word in season, because he hoped Sir Henry would take the matter up and urge it in the right place and at the right time. The advantage of real and true knowledge of the arts and the physical sciences was that they afforded never-ending pleasures, and those pleasures increased as one grew older. True learning would not always bring them prizes in life, but it would bring them solace and relief from the worry, the toils, and the anxieties of our often dull and money-grubbing lives. True knowledge was never-failing, and was always increasing in attraction. He asked them to remember that in this short apprenticeship of ours of three score years and ten we were always learners and always beginners. (Applause.)

Mr. STANNING, J.P., in seconding the resolution, stated that while he heartily agreed with it, he must not altogether be supposed to agree with the recommendations of the learned gentleman who had moved it. He felt compelled to take exception to the views that had been expressed by Mr. Addison as to the education which resulted from the study of grammar and certain other things. (Hear, hear.) Mr. Addison had said that in the study of physical science they would find solace from the cares of life. So he (Mr. Stanning) believed that even in a greater degree they would find it in the critical and earnest study of grammar, which Mr. Addison so much despised. (Laughter.) In the study of Homer, Horace, and Virgil the educated man would find equal solace. (Hear, hear.) At any rate, he would be very sorry if a study of these things was forsaken. He was sure all were agreed that Sir Henry Roscoe had given them encouragement and food for reflection. He believed that the raw material, the natural qualities this country of ours possessed were equal to those of any country, either in Europe or any part of the world, and he had indicated methods by which we might retain our commercial supremacy. In this county he thought they had thus reason to hope, for in Lancashire, which was now given up wholly to practical pursuits, they had a number of names distinguished in the annals of science, amongst whom were Dalton, Joule, Mercer, and Lightfoot—(applause)—whose name would always be associated with the discovery of artificial colours. (Applause.) If they looked on these names they might consider that in

Lancashire they had an opportunity of vieing with the Germans, French, and Swiss in that industrial contest which was coming, if it had not already, come upon us. From those 2,000 scholars who night after night attended the lectures at the Harris Institute, who knew that some great discoverer might not arise who would win for himself a name in Lancashire second to none of those great names he had mentioned? He had such confidence in the energy and vitality of his own countrymen, that he believed they would prove equal to those of any other nationality. We had never been wanting at any crisis. When the hour had come, somehow or other the man was always there. He alluded to the springing into existence of the great race of contractors when railways were developed, and remarked that whatever might be the industrial needs of this country, they would never be found wanting in energy, vitality, and adaptability. Englishmen had proved themselves in the past, and would prove themselves in the future, to be equal to any and to every fortune. He advised his hearers to lay to heart the instructive address of Sir Henry Roscoe. (Applause.)

The motion having been carried,

Sir HENRY ROSCOE said he would not attempt to settle the question between his two friends who had just spoken. All he could say was that he thought, as a rule, the literary people had got a deal to say for themselves that was quite worth hearing. He, for one, did not wish in advocating science not to advocate literature. All he would say was "Let science have its share." (Hear, hear.) He wished to endorse every word that had been said by the seconder of the motion about the power of the Lancashire people. He always thought what a very good remark was made by Lord Derby—who did make good remarks sometimes—(laughter)—namely, that Englishmen were often late, but that they had a habit of not being too late. (Hear, hear.) He believed that was very much the case with us now. We had been late, but we were determined that we should not be too late, and that we should win in the great race we were running. (Cheers.)

Mr. W. E. M. TOMLINSON, M.P., proposed a vote of thanks to the chairman, and, in doing so, referred to the very valuable services he had rendered to that Institute and to the cause of education in Preston, and observed that he thought they should remember how much they had to thank Mr. Ascroft for. They did not forget how he had made it his business for some years past to adorn that platform with the eloquence and instruction of one or other of the finest men of Great Britain. It had been his privilege in the past to hear excellent addresses from Lancashire men. That, he thought, was not owing to the fact that Mr. Ascroft looked out for Lancashire men, but because, as had been said before, Lancashire men themselves occupied a foremost place in science and art in the country. Mr. Ascroft was the heart and soul of that Institute, and his aim was intensely practical—to make the members of the Institute over which he presided useful members of society, an honour to the town in which they lived. (Applause.) He would urge that attention should be paid to one important branch of commercial education—the acquiring of foreign languages. We were behind some other countries in this respect, and he thought that in Preston a knowledge of the principal Continental tongues would be of the greatest value, especially seeing that our workmen had to go abroad. Sir Henry Roscoe had put forward the desire that education should be good rather than free, and in promoting that object he would

not only have the support of gentlemen like Mr. Ascroft, but of the great mass of the members who sat on the right of the Speaker. (Hear, hear, and applause.)

Alderman SATTERTHWAITE, J.P., seconded the motion. Mr. Ascroft's services in the chair that night were a fitting climax to the year's labours in support of the Harris Institute. A large measure of the success of the Institute was due to his labours, and he thought that in thanking him for his services that night they might also thank him for the work he had done for the Institute in the past and preceding years. (Applause.)

The motion was carried.

The CHAIRMAN said the thanks so heartily passed were a sufficient recompense to himself and his colleagues for the trouble they had taken in managing the affairs of the Institute. Before they closed, he desired, on behalf of the meeting, to tender their thanks to Mr. Cowell, Mr. Tomlinson, and to the choir for the beautiful music with which they had favoured them. (Applause.)

The selections that were rendered during the evening, and which were much admired, included, "Sing unto God," "Stars of the summer night," "The vale of rest," "Hunting song," "Auld Lang Syne," and "Sleep, gentle lady." The proceedings closed with the National Hymn.



List of Prizes and Certificates

AWARDED TO STUDENTS ATTENDING THE CLASSES AT THE HARRIS INSTITUTE, SESSION 1888-9.

SCIENCE.

† *These Students have obtained Queen's Prizes and Local Scholarships.*

* *These Students have obtained Local Prizes and Scholarships.*

A *signifies Advanced.* E *Elementary.* I. *First Stage.* II. *Second Stage.*

NAME.	Success. Stage.	Class.	SUBJECT.
*†Atherton, John	E	1st	Theoretical Mechanics
,, ,,	A	1st	Applied Mechanics
,, ,,	E	1st	Sound, Light, and Heat
,, ,,	E	1st	Magnetism and Electricity
,, ,,	E	1st	Physiography
*†Atherton, Frederick	E	1st	Geology
,, ,,	A	1st	Physiography
*†Alston, John T.	A	1st	Agriculture
Ainsworth, Edmund	E	2nd	Organic Chemistry
Addison, John	E	2nd	Practical Plane and Solid Geometry
,, ,,	E	2nd	Building Construction
Arton, Frederick	E	2nd	Building Construction
Ainsworth, John W.	E	2nd	Machine Construction
Almond, James	E	2nd	Machine Construction
Aspinwall, Fred.	E	2nd	Machine Construction
Askew, Fred. J.	II.	2nd	Mathematics
,, ,,	E	2nd	Inorganic Chemistry
Attwater, Charles	E	2nd	Inorganic Chemistry
*Bradley, Orlando	E	1st	Inorganic Chemistry
,, ,,	E	2nd	Botany
,, ,,	E	2nd	Animal Physiology
Bostock, Daniel E.	E	2nd	Inorganic Chemistry
,, ,,	E	2nd	Practical Organic Chemistry
,, ,,	E	2nd	Physiography
Billington, Richard	E	2nd	Physiography
*†Beckett, Thomas	A	1st	Physiography
,, ,,	E	1st	Sound, Light, and Heat
*Begley, Edwin	E	1st	Building Construction
,, ,,	E	2nd	Practical Plane and Solid Geometry
*Barber, Edward H.	I.	1st	Mathematics
*†Beaven, Alfred D. P.	II.	1st	Mathematics
Beaven, Harold C.	I.	2nd	Mathematics
*Beaven, Coningsby R.	I.	1st	Mathematics
Barton, Cooper	E	2nd	Practical Plane and Solid Geometry
,, ,,	E	2nd	Building Construction

NAME.	Success. Stage.	Class.	SUBJECT.
Barlow, Emily	E	2nd	Botany
Balshaw, Emma J.	E	2nd	Physiography
Bostock, Lillian	A	2nd	Physiography
,, ,,	E	2nd	Magnetism and Electricity
Blakey, Eunice	A	2nd	Agriculture
Buck, Isabella	E	2nd	Hygiene
Bramwell, Frederick	E	2nd	Theoretical Mechanics
Bramwell, James	E	2nd	Botany
Burns, James	E	2nd	Theoretical Mechanics
,, ,,	A	2nd	Building Construction
Breakell, William	E	2nd	Machine Construction
,, ,,	A	2nd	Steam
Burrows, Francis J.	II.	2nd	Mathematics
,, ,,	A	2nd	Magnetism and Electricity
Burrow, Harry	E	2nd	Magnetism and Electricity
Brown, Thomas	A	2nd	Building Construction
Bennett, Samuel P.	A	2nd	Building Construction
*Bentham, George H.	E	1st	Building Construction
*†Buckley, Albert S.	A	1st	Building Construction
*†Brindle, Thomas	A	1st	Building Construction
*Beesley, Robert W.	A	2nd	Inorganic Chemistry
,, ,,	E	1st	Practical Inorganic Chemistry
,, ,,	E	1st	Organic Chemistry
*Clitheroe, William	E	1st	Practical Plane and Solid Geometry
,, ,,	E	1st	Organic Chemistry
*Clayton, James	E	1st	Applied Mechanics
,, ,,	A	2nd	Steam
Clarkson, William	E	2nd	Practical Plane and Solid Geometry
*Coward, Frederick	E	1st	Practical Plane and Solid Geometry
,, ,,	E	1st	Building Construction
Crossthwaite, Wm. G.	E	2nd	Practical Plane and Solid Geometry
,, ,,	E	2nd	Building Construction
Clitheroe, John	A	2nd	Geology
Corner, William Henry	E	2nd	Applied Mechanics
,, ,,	E	2nd	Steam
Coward, Edith F.	E	2nd	Physiography
Coulthurst, Rebecca	E	2nd	Physiography
Crozier, Sarah E.	A	2nd	Physiography
,, ,,	E	2nd	Sound, Light, and Heat
Crozier, William	E	2nd	Sound, Light, and Heat
,, ,,	A	2nd	Physiography
*Collison, James	E	1st	Magnetism and Electricity
*†Croasdale, John H.	A	1st	Building Construction
Croft, James	A	2nd	Building Construction
Catlow, Miles	E	2nd	Physiography
Ditchfield, Agnes A.	A	2nd	Physiography
,, ,,	A	2nd	Agriculture
De Rome, James	I.	2nd	Mathematics
,, ,,	E	2nd	Physiography
*De Rome, William	E	1st	Practical Plane and Solid Geometry
*Ellis, Effie	E	1st	Sound, Light, and Heat
,, ,,	E	1st	Physiography
Easterby, Robert F.	I.	2nd	Mathematics
*Freeman, Henry S.	E	1st	Organic Chemistry

NAME.	Success. Stage.	Class.	SUBJECT.
Fletcher, James	E	2nd	Building Construction
Fazackerley, Nicholas	E	2nd	Building Construction
Foster, John	E	2nd	Machine Construction
Fielding, Joseph	E	2nd	Practical Plane and Solid Geometry
Fawcett, Richard	I.	2nd	Mathematics
Fleming, Frances M.	E	2nd	Magnetism and Electricity
Frame, Elsie D.	E	2nd	Physiography
*Fillmore, Frederick	E	1st	Machine Construction
,, ,,	E	1st	Steam
,, ,,	E	2nd	Applied Mechanics
Gardner, Gertrude	E	2nd	Sound, Light, and Heat
,, ,,	E	2nd	Physiography
*†Gardner, Edward	E	2nd	Theoretical Mechanics
*Gardner, John L.	A	1st	Magnetism and Electricity
,, ,,	A	2nd	Sound, Light, and Heat
,, ,,	A	2nd	Inorganic Chemistry
,, ,,	A	2nd	Physiography
,, ,,	A	2nd	Botany
,, ,,	II.	2nd	Mathematics
Gardner, John	E	2nd	Building Construction
*Greenwood, Robert B.	E	1st	Geology
*Gornall, Mary	E	1st	Sound, Light, and Heat
*Greenwood, Fred. C.	E	1st	Practical Plane and Solid Geometry
Gregory, William	I.	2nd	Mathematics
Goodier, Hubert	E	2nd	Hygiene
*Graham, Helena	E	1st	Inorganic Chemistry
Garfitt, Robert	E	2nd	Building Construction
Grime, Robert	A	2nd	Steam
,, ,,	A	2nd	Machine Construction
*†Hanna, John	E	1st	Practical Plane and Solid Geometry
,, ,,	A	1st	Building Construction
Haycroft, Arthur H.	E	2nd	Building Construction
Hoyle, Walter	E	2nd	Building Construction
Hull, Richard N.	A	2nd	Practical Plane and Solid Geometry
*†Holland, George A.	II.	1st	Mathematics
Horsefield, William J.	E	2nd	Machine Construction
Hodson, Robert C.	E	2nd	Magnetism and Electricity
,, ,,	E	2nd	Physiography
Harrison, Frederick	A	2nd	Physiography
,, ,,	E	2nd	Sound, Light, and Heat
,, ,,	A	2nd	Magnetism and Electricity
Harper, Mary A.	E	2nd	Magnetism and Electricity
Hardman, John K.	E	2nd	Magnetism and Electricity
Haworth, John H.	A	2nd	Magnetism and Electricity
Hurst, George	E	2nd	Magnetism and Electricity
,, ,,	E	2nd	Sound, Light, and Heat
Hilling, Henry	E	2nd	Magnetism and Electricity
,, ,,	E	2nd	Inorganic Chemistry
Higginson, Edward	E	2nd	Inorganic Chemistry
*Isaacs, Sarah	E	1st	Geology
Irvin, Joseph	A	2nd	Magnetism and Electricity
,, ,,	A	2nd	Physiography
*Jackson, Thomas	E	1st	Inorganic Chemistry
Johnson, Frederick	A	2nd	Physiography

NAME.	Success. Stage.	Class.	SUBJECT.
Johnson, William	E	2nd	Applied Mechanics
,, ,,	A	2nd	Steam
Johnston, Florence M.	E	2nd	Hygiene
Jolly, Rebecca J.	E	2nd	Physiography
Jones, Frederick	E	2nd	Steam
Kent, Richard	E	2nd	Steam
*Kershaw, Charles	I.	1st	Mathematics
*Knowles, Joseph	E	1st	Practical Plane and Solid Geometry
,, ,,	A	2nd	Building Construction
Kitson, Thomas	E	2nd	Building Construction
Kirkbride, Robert J.	E	2nd	Building Construction
Kewley, John J.	E	2nd	Building Construction
Kilroe, Patrick	E	2nd	Animal Physiology
King, Edith E.	A	2nd	Geology
,, ,,	E	2nd	Inorganic Chemistry
*King, Agnes A.	E	2nd	Inorganic Chemistry
,, ,,	E	1st	Geology
Ladyman, Harry	E	2nd	Building Construction
*Lake, Wyvil H.	E	1st	Machine Construction
Ley, Ernest	E	2nd	Practical Plane and Solid Geometry
Lonsdale, Thomas	E	2nd	Inorganic Chemistry
*†Marsden, James	A	1st	Practical Plane and Solid Geometry
,, ,,	E	1st	Applied Mechanics
Marsden, Charles H.	E	2nd	Sound, Light, and Heat
,, ,,	E	2nd	Magnetism and Electricity
Markland, Francis W.	E	2nd	Machine Construction
Martin, John	I.	2nd	Mathematics
Mc. Kinnell, Thomas	E	2nd	Building Construction
Mitchell, Arthur	E	2nd	Machine Construction
*Morley, John W.	E	1st	Building Construction
,, ,,	E	2nd	Magnetism and Electricity
Napthen, Mary C.	E	2nd	Magnetism and Electricity
,, ,,	E	2nd	Agriculture
Nelson, George	A	2nd	Inorganic Chemistry
Nevett, Thomas C.	E	2nd	Inorganic Chemistry
,, ,,	E	2nd	Practical Inorganic Chemistry
Ogden, Thomas R.	A	2nd	Practical Plane and Solid Geometry
Purves, John	A	2nd	Practical Plane and Solid Geometry
Purves, Elizabeth	E	2nd	Sound, Light, and Heat
,, ,,	E	2nd	Physiography
*Parker, Thomas R. G.	E	1st	Practical Plane and Solid Geometry
,, ,,	E	1st	Machine Construction
,, ,,	E	2nd	Applied Mechanics
,, ,,	E	2nd	Steam
Parker, John	E	2nd	Building Construction
Parkinson, Edmund	A	2nd	Building Construction
*Parish, John	E	2nd	Steam
,, ,,	E	2nd	Applied Mechanics
,, ,,	E	1st	Machine Construction
Pendlebury, Edward E.	E	2nd	Steam
Pomfret, Robert R.	I.	2nd	Mathematics
Preston, William	E	2nd	Botany
*†Pridmore, Herbert W.	A	1st	Geology
Proctor, William E.	E	2nd	Magnetism and Electricity

NAME.	Success. Stage. Class.	SUBJECT.
Proctor, William E.	E 2nd	Inorganic Chemistry
Rawcliffe, Fred. A.	II. 2nd	Mathematics
Raymer, Herbert J.	E 2nd	Magnetism and Electricity
Rawsthorn, Milton	E 2nd	Building Construction
Redmond, Albert	Honours 2nd	Building Construction
Rigby, Robert M.	E 2nd	Building Construction
Reeder, Clara	E 2nd	Physiography
Riley, John	E 2nd	Machine Construction
,, ,,	E 2nd	Applied Mechanics
*Raby, John F.	E 1st	Practical Plane and Solid Geometry
,, ,,	E 2nd	Applied Mechanics
,, ,,	E 1st	Steam
*Relph, John H.	I. 1st	Mathematics
,, ,,	E 1st	Magnetism and Electricity
*Robinson, Ellen C.	E 1st	Botany
*Southworth, William	Honours 2nd	Agriculture
,, ,,	E 2nd	Hygiene
*Shaw, John	A 1st	Applied Mechanics
,, ,, *3rd Grade*	*Prize for*	*Machine Drawing.*
*Slater, Charles B.	E 1st	Applied Mechanics
,, ,,	E 2nd	Magnetism and Electricity
,, ,,	E 1st	Steam
*Spiby, Thomas	E 1st	Practical Plane and Solid Geometry
*† ,, ,,	II. 1st	Mathematics
,, ,,	E 1st	Sound, Light, and Heat
,, ,,	E 1st	Organic Chemistry
,, ,,	A 1st	Physiography
Sargent, John J.	E 2nd	Practical Plane and Solid Geometry
Seed, John	E 2nd	Machine Construction
Seed, Mary F.	E 2nd	Physiography
Smith, John James	E 2nd	Sound, Light, and Heat
,, ,,	E 2nd	Physiography
Southworth, Dora	E 2nd	Agriculture
Southworth, Kate	E 2nd	Agriculture
Struthers, Charlotte	E 2nd	Agriculture
Stevenson, James W.	E 2nd	Machine Construction
,, ,,	E 2nd	Steam
Sumner, Fred. W.	II. 2nd	Mathematics
,, ,,	E 2nd	Inorganic Chemistry
Singleton, George	I. 2nd	Mathematics
Starkie, Gilbert	E 2nd	Practical Inorganic Chemistry
Slinger, Maggie F.	E 2nd	Botany
Sykes, Robert	A 2nd	Magnetism and Electricity
Snape, Thomas	E 2nd	Magnetism and Electricity
Steele, William	A 2nd	Building Construction
*Seed, Thomas	E 1st	Magnetism and Electricity
,, ,,	I. 2nd	Mathematics
,, ,,	E 2nd	Physiography
*Sumner, Richard	I. 1st	Mathematics
*†Stacey, Charles E.	A 1st	Magnetism and Electricity
,, ,,	A 1st	Inorganic Chemistry
,, ,,	A 2nd	Practical Chemistry

NAME.	Success. Stage.	Class.	SUBJECT.
*Stubbs, William J.	E	1st	Magnetism and Electricity
*Taylor, Miriam	E	1st	Physiography
,, ,,	E	2nd	Magnetism and Electricity
Taylor, Charles T.	E	2nd	Hygiene
*Taylor, Charles F.	E	1st	Machine Construction
,, ,,	E	2nd	Applied Mechanics
*Thornber, Layland G.	E	1st	Theoretical Mechanics
,, ,,	E	2nd	Magnetism and Electricity
,, ,,	E	2nd	Physiography
*Toulmin, George	E	1st	Applied Mechanics
,, ,,	E	1st	Steam
Toulmin, William	III.	2nd	Mathematics
Threlfall, James	E	1st	Magnetism and Electricity
Thompson, Katherine	E	2nd	Physiography
*Tomlinson, John	E	1st	Building Construction
Turner, John J.	E	2nd	Sound, Light, and Heat
*†Walker, Robert J. H.	A	1st	Physiography
,, ,,	E	2nd	Animal Physiology
*†Wrigley, Frank	I.	2nd	Mathematics
,, ,,	E	1st	Physiography
,, ,,	A	1st	Agriculture
Wrigley, Fred.	E	2nd	Physiography
Willmoth, Florence A.	E	2nd	Physiography
,, ,,	E	2nd	Sound, Light, and Heat
Woods, Esther H.	E	2nd	Sound, Light, and Heat
Wilkinson, John	E	2nd	Physiography
,, ,,	A	2nd	Magnetism and Electricity
Wain, Nora	E	2nd	Magnetism and Electricity
Wright, George	E	2nd	Magnetism and Electricity
*Webster, William	E	2nd	Inorganic Chemistry
,, ,,	E	1st	Botany
Walker, Roger	A	2nd	Building Construction
Waddington, Thomas A.	A	2nd	Building Construction
*Worthington, Joseph	E	2nd	Steam
,, ,,	E	1st	Machine Construction
Whitwell, William	E	2nd	Machine Construction

£45 SCIENCE SCHOLARSHIP:

GARDNER, JOHN L.

SCHOOL OF ART.

GOVERNMENT SECOND GRADE EXAMINATION.

E *Signifies Excellent and also the Winning of a Government Prize.*
* *Scholarship and Local Prize awarded.*

NAME.	Freehand. Class.	Geometry. Class.	Perspective. Class.	Model. Class.
*Archer, Walter	1st	—	—	2nd
*Anderton, George	—	2nd	1st E	—
*Bostock, Mabel	2nd	—	—	2nd
*Bostock, Lillian	1st	2nd	2nd	—
*Barlow, Edith	2nd	2nd	—	2nd
Barlow, Emily	2nd	—	—	—
*Bannister, Dora	2nd	2nd	—	2nd
*Bannister, Arthur	—	2nd	2nd	—
*Barton, Cooper	2nd	—	—	2nd
Beesley, John F.	2nd	—	—	—
*Brierley, Henry	2nd	2nd	2nd	2nd
Bee, Richard C.	2nd	—	—	—
Burton, Thomas	—	2nd	—	—
Billing, Walter	2nd	—	—	—
*Bomont, Albert	2nd	—	—	2nd
Blackhurst, Agnes	—	—	—	2nd
Cardwell, Thomas P.	2nd	—	—	—
Clegg Minnie	2nd	—	—	—
Corbishley, William	2nd	—	—	—
*Crowther, Amy	2nd	—	—	2nd
Cookson, Eleanor	2nd	—	—	—
*Clarkson, William	—	2nd	1st E	2nd
Crossley, William	—	—	—	2nd
Carr, William	—	—	—	2nd
Crerar, Andrew	—	2nd	—	—
Dryden, William	2nd	—	—	—
Dewhurst, Alberta	2nd	—	—	—
Dewhurst, Thomas H.	—	—	—	2nd
Eccles, John	2nd	—	—	—
Ellmer, Walter G.	2nd	—	—	—
*Easterby, Robert F.	2nd	—	—	2nd
*Easterby, Richard T.	2nd	—	—	2nd
*Eaves, Edward	2nd	—	—	2nd
*Fish, James	1st	—	—	2nd
Foster, James	2nd	—	—	—
*Fisher, Joseph	—	1st	1st E	1st E
Fraser, Agnes	2nd	—	—	—
*Gardner, Gulielma	—	2nd	—	2nd
*Garner, Chas. H.	2nd	—	—	1st E
*Gardner, John	—	—	2nd	2nd
*Gaunt, George E.	—	2nd	2nd	—
Greenall, Chas. E.	—	—	—	2nd
*Greenhalgh, John E.	—	2nd	1st	—
*Grime, Margaret	1st E	—	—	—
*Halsall, Kate R.	2nd	—	—	2nd

NAME.	Freehand. Class.	Geometry. Class.	Perspective. Class.	Model. Class.
*Harper, Mary A.	2nd	—	—	2nd
*Houghton, Reuben	2nd	—	—	2nd
*Hothersall, Thomas	2nd	—	—	2nd
Holland, John J.	2nd	—	—	—
Heald, William	2nd	—	—	—
*Hindle, Maud	2nd	2nd	—	2nd
Holmes, Elizabeth	2nd	—	—	—
Higginson, Edward	—	—	—	2nd
*Jury, Eliza A.	2nd	—	—	2nd
Knowling, Eliza J.	2nd	—	—	—
*Ladyman, Harry	2nd	—	—	2nd
Lawson, Minnie	2nd	—	—	—
*Lawrenson, Jonathan	2nd	2nd	—	2nd
*Ley, Percy	2nd	—	—	2nd
Longworth, Dorothy	2nd	—	—	—
Mangan, James H.	2nd	—	—	—
*Mangan, Gerald P.	2nd	—	—	2nd
*Mayor, Martha A.	2nd	—	2nd	1st E
Merigold, John J.	2nd	—	—	—
*Mayor, Peter	2nd	2nd	2nd	2nd
Martin, James	2nd	—	—	—
Martin, John	2nd	—	—	—
Martin, Henry M.	2nd	—	—	—
*Norcross, Wm. Hy.	2nd	—	—	2nd
Neild, Joseph	2nd	—	—	—
Napthen, Mary C.	—	2nd	—	—
*Owens, Albert R.	1st	—	2nd	1st E
Parker, Isaac	2nd	—	—	—
*Penny, John	2nd	—	1st E	—
Procter, Sarah P.	2nd	—	—	—
*Smith, Edmund H	2nd	2nd	2nd	2nd
Southworth, Herbert H.	2nd	—	—	—
Slater, Annie E. H.	2nd	—	—	—
Stephenson, Charles	2nd	—	—	—
*Simpson, Mary H.	—	2nd	2nd	—
Stafford, Alice M. M.	—	—	—	2nd
Snowden, May	—	—	—	2nd
Taylor, Leonard G.	2nd	—	—	—
Thornber, Leyland G.	—	—	—	2nd
*Toulmin, James	2nd	—	—	2nd
Topping, Henry M.	2nd	—	—	—
Tullis, David	2nd	—	—	—
*Wilding, Charles A.	2nd	—	—	2nd
*Webb, John W.	2nd	2nd	1st E	2nd
*Wain, Nora	2nd	—	—	2nd
Webster, Alphonso	2nd	—	—	—
*Wrigley, Lilly	2nd	—	—	2nd

Students who have passed all four subjects of the 2nd Grade Examination :

Lillian Bostock
Joseph Fisher
Henry Brierley
Peter Mayor
John W. Webb
William Clarkson
Edmund H. Smith

NATIONAL COMPETITION AWARDS.

Miss ANNIE HORROCKS obtained a Book Prize, in the National Competition, for an Original Design for Set of Iron Gates.

GOVERNMENT CERTIFICATES AND PRIZES OF THE THIRD GRADE.

‡ *Indicates the winner of both a 3rd Grade Prize and a 3rd Grade Certificate.*

* *Indicates the winner of a 3rd Grade Prize.*

† *Indicates the winner of a 3rd Grade Certificate.*

NAME.	Class.	Subject.
†Elliott, John Wm.	2nd	Drawing the Antique from Memory
† ,, ,,	1st	Drawing from the Life
† ,, ,,	2nd	Elementary Architecture
†Fairclough, Robert	2nd	Drawing the Antique from Memory
† ,, ,,	2nd	Drawing from the Antique
† ,, ,,	2nd	Plant Drawing in Outline
*Hibbert, Arnett		Original Design
†Jury, Eliza A.	2nd	Painting (Technical Questions on)
†Parker, James N.	1st	Painting Still Life
‡Poole, Lizzie	1st E	Painting (Technical Questions on)
*Poole, Clara		Original Design
‡Poole, Florence	2nd	Elementary Architecture
* ,, ,,		Original Design
†Royle, Herbert	1st	Painting Still Life
‡Smith, Barbara H.	1st	Painting Still Life
* ,, ,,		Original Design
* ,, ,,		Original Design as applied to Decorative Art

ART CLASS TEACHERS' CERTIFICATE.

Passed in Stage 3b: Henry Bedford, Richard Billington.

Passed in Stage 5b: Elizabeth Billsborough, Richard Billington, Clara Smith, Agnes Whiteside.

Passed in Stage 5a: Henry Bedford, Elizabeth Billsborough, Annie Horrocks, George E. Rowbotham, Clara Smith.

Those who are interested in the progress of Students will be pleased to learn that JOHN MOYLE, who last session won a Scholarship at South Kensington ("National Scholarship"), has during his stay there gained in addition one of four Travelling Scholarships, offered by the Government, enabling him to visit Continental Museums, &c.

SPECIAL ART PRIZES.

NAME.	Success.	SUBJECT.
Billsborough, Elizabeth.....	1st Prize	Design for Damask Weaving
,, ,, ...	1st ,,	Shaded Drawing of Head from Cast
Bowen, Louisa	1st ,,	Set of Anatomical Details
Billington, Richard	1st ,,	Shading from Models
,, ,, ...	2nd ,,	Shaded Drawing from the Cast
Dodson, Walter	1st ,,	Outline from the Cast
,, ,, ...	2nd ,,	Shading from Models
Horrocks, Annie.....	1st ,,	Design for Iron Gates
Hibbert, Arnett	2nd ,,	Design for Iron Gates
Jury, Eliza A.	1st ,,	Shaded Drawing from the Cast
,, ,, ...	3rd ,,	Shading from Models
Mayor, Martha A.....	1st ,,	Drawing in Sepia
Parker, James N.	1st ,,	Sheet of Ornament
Poole, Lizzie		Outline Design
,, ,, ...	2nd ,,	Antique Figure
Poole, Florence	1st ,,	Design for Surface Decoration
Royle, Herbert	2nd ,,	Outline from the Cast
,, ,, ...	2nd ,,	Shading from Models
Whiteside, Agnes	2nd ,,	Shaded head from Cast

SKETCHING CLUB PRIZES.

NAME.	SUBJECT.
Billsborough, Elizabeth.....	Outline Drawing of a Plant
,, ,, ...	Simple Foreground in Oil or Water Colour
Fairclough, Robert.....	Landscape Foreground in Colour
Horrocks, Annie.....	Study of a Head from Life
Jury, Eliza A.....	Landscape in Light and Shade
,, ,, ...	Study of Flowers in Water Colour
,, ,, ...	Study of Still Life in Oil or Water Colour
Parker, James N.	Landscape in Water Colour
,, ,, ...	Extra Prize
Poole, Clara	Study of Flowers in Water Colour
Poole, Florence	Still Life in Oil or Water Colour
Poole, Lizzie	Outline Drawing of a Plant
Royle, Herbert	Landscape in Water Colour
,, ,, ...	Highest Marks in Monthly Competition

TECHNICAL.

CITY AND GUILDS OF LONDON INSTITUTE EXAMINATIONS.

* *These Students received Local Prizes and Scholarships.*

NAME.	Success. Grade.	Class.	SUBJECT.
*Atherton, John	Ordinary	1st	Mechanical Engineering
Almond, James	,,	2nd	Cotton Spinning
*Bennett, Wm. P.	,,	1st	Mechanical Engineering
Brown, Thomas	,,	2nd	Carpentry and Joinery
Burns, James	,,	2nd	Brickwork and Masonry
*Baxendale, James	Honours	2nd	Cotton Spinning
*Burrow, Harry	,,	2nd	Cotton Spinning
Barton, Thomas	Ordinary	2nd	Cotton Spinning
Banister, Lewis	,,	2nd	Cotton Spinning
Bradshaw, Henry	,,	2nd	Weaving and Designing
Bradshaw, Thomas	,,	2nd	Weaving and Designing
Bamber, Samuel	,,	2nd	Weaving and Designing
Blinkhorn, Edward	,,	2nd	Weaving and Designing
Blackwell, Thomas	,,	2nd	Weaving and Designing
*Clarke, John	Honours	1st	Cotton Spinning
Corner, Wm. Henry	Ordinary	2nd	Mechanical Engineering
Clayton, James	,,	2nd	Mechanical Engineering
*Coward, Frederick	,,	1st	Carpentry and Joinery
*Crossthwaite, Wm. G.	,,	1st	Carpentry and Joinery
Cunliffe, Thomas	,,	2nd	Carpentry and Joinery
Croasdale, John H.	,,	2nd	Plumbers' Work
De Rome, William	,,	2nd	Cotton Spinning
Foster, Alexander	,,	2nd	Cotton Spinning
Garstang, Charles R.	,,	2nd	Weaving and Designing
*Garner, John	,,	1st	Weaving and Designing
(Bronze Medal, 3rd Prize, City and Guilds of London Institute)			
Grime, Robert	Ordinary	2nd	Mechanical Engineering
*Greenwood, Fred C.	,,	1st	Carpentry and Joinery
Hanna, John	,,	2nd	Carpentry and Joinery
Hull, Richard N.	,,	2nd	Brickwork and Masonry
*Haworth, John H.	Honours	1st	Cotton Spinning
Hayes, Levi	Ordinary	2nd	Cotton Spinning
Hayes, James	,,	2nd	Weaving and Designing
Johnson, William	,,	2nd	Mechanical Engineering
Kirkham, Peter	,,	2nd	Cotton Spinning
Lake, Wyvil H.	,,	2nd	Mechanical Engineering
Livesey, Henry	,,	2nd	Plumbers' Work
*Mather, John	,,	1st	Plumbers' Work
*Marsden, James	Honours	1st	Brickwork and Masonry

NAME.	Success. Grade.	Class.	SUBJECT.
*Mellor, William	Ordinary	1st	Weaving and Designing
Mitchell, Thomas	,,	2nd	Weaving and Designing
Mills, Richard	,,	2nd	Cotton Spinning
Nelson, James	,,	2nd	Weaving and Designing
Parkinson, Edmund	,,	2nd	Brickwork and Masonry
Porter, Joshua	,,	2nd	Cotton Spinning
*Rogerson, John	Honours	2nd	Cotton Spinning
Rigby, Alfred	Ordinary	2nd	Plumbers' Work
Steele, William	,,	2nd	Carpentry and Joinery
*Shaw, John	Honours	1st	Mechanical Engineering
*Smith, Arthur R.	Ordinary	1st	Weaving and Designing
Slater, John J.	,,	2nd	Weaving and Designing
*Walker, Roger	Honours	2nd	Carpentry and Joinery
Ward, Robert	Ordinary	2nd	Cotton Spinning
Welch, Thomas F.	,,	2nd	Cotton Spinning
*Whittam, William	Honours	1st	Cotton Spinning
*Yates, Richard B.	,,	1st	Cotton Spinning
*Yates, Joseph	,,	2nd	Weaving and Designing

MISCELLANEOUS.

**Scholarships and Local Prizes awarded.*
† Scholarships only awarded.

NAME.	Success.	SUBJECT.
		Society of Arts.
*Bourne, Harry	1st Class	Bookkeeping
Crerar, James	2nd ,,	,,
*Easterby, Wm. R.	1st ,,	,,
Fletcher, John J.	1st ,,	,,
*Hall, John	3rd ,,	,,
*Houghton, James	2nd ,,	,,
Harrison, Hubert	2nd ,,	,,
*Jump, Sidney B.	1st ,,	,,
*Kershaw, Charles	2nd ,,	,,
Lambert, Charles E.	3rd ,,	,,
*Lang, Simeon	2nd ,,	,,
Lewty, Alfred	3rd ,,	,,
*Livesey, Francis J.	1st ,,	,,
*Macdonald, Alexander	2nd ,,	,,
*Miles, Arthur	2nd ,,	,,
*Orrell, Ike	2nd ,,	,,
Pickup, William Hy.	3rd ,,	,,
Purves, John	3rd ,,	,,
*Rose, James	2nd ,,	,,
*Roseway, David	1st ,,	,,
Saul, Robert	3rd ,,	,,
Seed, Wm. L.	3rd ,,	,,
*Sharples, John F.	2nd ,,	,,
*Sharp, Wm. Hy.	2nd ,,	,,
*Smith, Wm. Hy.	1st ,,	,,
Sowerbutts, Henry	3rd ,,	,,
*Threlfall, Thomas C.	2nd ,,	,,
Threlfall, John	3rd ,,	,,
*Ward, Albert	2nd ,,	,,
*Westworth, Arthur	1st ,,	,,
*Wilding, Richard	2nd ,,	,,
		Society of Arts.
*Taylor, Henry J.	2nd Class	Commercial Geography
		Society of Arts.
Ainscow, Annie	3rd Class	Theory of Music
Griffay, William	3rd ,,	,,
Hall, May Lucy	3rd ,,	,,
Jones, John E.	3rd ,,	,,
Jones, Rachel	3rd ,,	,,
Kelton, Maud	3rd ,,	,,
Leeming, Mary	3rd ,,	,,
Markland, Robert	3rd ,,	,,
Murray, Thomas	3rd ,,	,,

NAME.	Success.	SUBJECT.
		Society of Arts.
Orrell, Frederick J.	3rd Class	Theory of Music
*Pritt, William	1st ,,	,,
*Riley, Samuel	2nd ,,	,,
		Society of Arts.
Rogerson, John	3rd Class	Arithmetic
Rose, Edward	3rd ,,	,,
		Society of Arts.
Barrett, Joseph H.	3rd Class	Shorthand
Bennett, John F.	3rd ,,	,,
Black, John	3rd ,,	,,
Bolsover, Walter	3rd ,,	,,
Bourne, Harry	3rd ,,	,,
*Burrow, Harry	2nd ,,	,,
Chadwick, Thomas	3rd ,,	,,
Holden, Anthony	3rd ,,	,,
Houghton, James	3rd ,,	,,
Jones, John E.	3rd ,,	,,
Limond, Walker, N.	3rd ,,	,,
Matthews, Hoghton S.	3rd ,,	,,
Merigold, Fred W.	3rd ,,	,,
*Morgan, Peter	2nd ,,	,,
Napthen, Samuel	3rd ,,	,,
*Orrell, Fred J.	2nd ,,	,,
Robinson, Alfred	3rd ,,	,,
Robinson, James	3rd ,,	,,
Taylor, Robert	3rd ,,	,,
Westworth, Arthur	3rd ,,	,,
Wilkinson, James	3rd ,,	,,
		Society of Arts.
*Birchall, Alice	2nd Class	English
*Breakell, Robert	2nd ,,	,,
*Chadwick, Thomas	2nd ,,	,,
Hartley, Charles Hy.	3rd ,,	,,
Hartley, John	3rd ,,	,,
Haydock, William	3rd ,,	,,
Lindley, Richard J.	3rd ,,	,,
*Napthen, Samuel	2nd ,,	,,
*Parker, George	2nd ,,	,,
Pendlebury, Nellie E.	3rd ,,	,,
*Raymer, Herbert J.	2nd ,,	,,
Sanderson, Ellen	3rd ,,	,,
Seed, Wm. L.	3rd ,,	,,
Sugden, Anna	3rd ,,	,,
*Taylor, Miriam	1st ,,	,,
Walker, Walter	3rd ,,	,,
Wood, James	3rd ,,	,,
		Union of Lancashire and Cheshire Institutes.
Chadwick, Thomas	Honours	English
Haydock, William	2nd Class	,,
Orrell, Ike	2nd ,,	,,
Raymer, Herbert J.	2nd ,,	,,

NAME.	Success.	SUBJECT.
		Union of Lancashire and Cheshire Institutes.
Toulmin, William	2nd Class	French
Pitchford, Joseph	2nd ,,	,,
		Union of Lancashire and Cheshire Institutes.
Black, John	Honours	Shorthand
Burrow, Harry	,,	,,
Matthews, Hoghton S.	,,	,,
Morgan, Peter	,,	,,
Orrell, Fred J.	,,	,,
Robinson, Alfred	,,	,,
Bourne, Harry	1st Class	,,
Barrett, Joseph H.	1st ,,	,,
Bolsover, Walter	1st ,,	,,
Briers, Frederick	1st ,,	,,
Chadwick, Thomas	1st ,,	,,
Houghton, James	1st ,,	,,
Holden, Anthony	1st ,,	,,
Limond, Walter	1st ,,	,,
Lambert, Robert F.	1st ,,	,,
Merigold, Fred W.	1st ,,	,,
Marginson, Harry	1st ,,	,,
Napthen, Samuel	1st ,,	,,
Rendell, Wm. T.	1st ,,	,,
Robinson, James	1st ,,	,,
Smith, Joseph	1st ,,	,,
Smith, William Hy.	1st ,,	,,
Westworth, Arthur	1st ,,	,,
Wilkinson, James	1st ,,	,,
Bennett, John F.	2nd ,,	,,
Bingant, Thomas K.	2nd ,,	,,
Harkness, David	2nd ,,	,,
Hartley, John	2nd ,,	,,
Hynes, Thomas	2nd ,,	,,
Jones, John E.	2nd ,,	,,
Jump, Sidney B.	2nd ,,	,,
Livesey, Francis J.	2nd ,,	,,
Mayor, Peter	2nd ,,	,,
Meehan, William	2nd ,,	,,
Pye, William H.	2nd ,,	,,
Roberts, Frank	2nd ,,	,,
Sanderson, John	2nd ,,	,,
Sanderson, Daniel	2nd ,,	,,
Saul, Robert	2nd ,,	,,
Sharp, Wm. Hy.	2nd ,,	,,
Starkie, Walter	2nd ,,	,,
Worthington, Henry	2nd ,,	,,
		Tonic Sol-fa Association.
*Ayres, Robert	Matriculation	*Certificate.*
*Ayres, Elizabeth	,,	,,
*Geldeard, Richard T.	,,	,,
*Haworth, Frank T.	,,	,,

NAME.	Success.	SUBJECT.
		Tonic Sol-fa Association.
*Kelly, Edward	Matriculation	*Certificate.*
*Worsley, John James	,,	,,
*Critchley, Ada E.	Intermediate	,,
*Clinning, Harry	,,	,,
*Cunningham, Eleanor	,,	,,
*Fenton, Mary A. O.	,,	,,
*Heywood, David	,,	,,
*Hussey, Edwin	,,	,,
*Hussey, Constance A	,,	,,
*Parkinson, Joseph	,,	,,
*Pomfret, Sarah J.	,,	,,
*Penny, Mary J.	,,	,,
*Richardson, Amelia	,,	,,
*Toulmin, James	,,	,,
*Weaver, Bertha	,,	,,
†Barrett, Elizabeth Ann	Elementary	,,
†Bannister, John	,,	,,
†Craig, John Walter	,,	,,
†Hussey, Edwin	,,	,,
†Hussey, Constance Ann	,,	,,
†Hall, Eleanor	,,	,,
†Lawson, Lillie	,,	,,
†Lawson, Minnie	,,	,,
†Lewty, Richard	,,	,,
†Morris, James	,,	,,
†Preston, Alice	,,	,,
†Pendlebury, Nellie E.	,,	,,
†Swarbrick, Margaret	,,	,,
†Stafford, Alice M. M.	,,	,,
†Simpson, Elizabeth	,,	,,
†Seed, John Thomas	,,	,,
†Weaver, Mary Edith	,,	,,
†Ward, Richard	,,	,,
†Willacy, Hannah	,,	,,
†Woolley, Leonora	,,	,,

Minnie Lawson, Robert Ayres, Elizabeth Ayres, and Eleanor Cunningham, were awarded Special Prizes given by Mr. Sam Lee.

NAME.	Success.	SUBJECT.
		St. John Ambulance Association.
Allen, Mary E. F.	Passed	First Aid
Allen, Alice	"	"
Bingham, Margaret	"	"
Brierley, Alice	"	"
Catterall, Jane	"	"
Halliday, Annie E.	"	"
Hargreaves, Mary	"	"
Longhurst, Elizabeth	"	"
Mears, Fanny	"	"
Oliver, Edith D.	"	"
Baxendale, Bella	"	Nursing
Eglin, Rachel	"	"
Hindle Jane	"	"
Napthen, Margaret	"	"
Riches, Annie	"	"
Riley, Emily	"	"
Robinson, Kate	"	"
Thistleton, Isabella	"	"
Walton, Edith	"	"
Wood, Susannah	"	"

HARRIS INSTITUTE.

LOCAL EXAMINATIONS.

** Local Prize and Scholarship awarded.*

NAME.	Success.	SUBJECT.
*Dickenson, William	1st Class	Advanced Latin
*Toulmin, William	1st ,,	,,
*Rawcliffe, Fred. A.	1st ,,	,,
Thornber, Layland G.	2nd ,,	,,
Rigby, Fred.	2nd ,,	,,
*Ayres, Zenas	1st ,,	Elementary Latin
*Woodall, Harry	1st ,,	,,
Turner, Mary	2nd ,,	,,
Howson, Robert	2nd ,,	,,
Kilner, William	2nd ,,	,,
*Bentham, George H.	1st ,,	Advanced French
*Toulmin, William	1st ,,	,,
*Ayres, Zenas	1st ,,	,,
*Orrell, Fred. J.	1st ,,	Elementary French
*Robinson, Alfred	1st ,,	,,
*Roseway, David	1st ,,	,,
*Dawson, David	1st ,,	,,
*Livesey, Emma	1st ,,	,,
Singleton, John S.	2nd ,,	,,
Rawlinson, Walter R.	2nd ,,	,,
Grime, Margaret	2nd ,,	,,
Dixon, Mary Annie	2nd ,,	,,
Gardner, Edward S.	2nd ,,	,,
Attwater, Margaret	2nd ,,	,,
*Bentham, George H.	1st ,,	German
*Lambert, Charles E.	1st ,,	Bookkeeping
Lang, Simeon	2nd ,,	,,
Wilding, Richard	2nd ,,	,,
Ward, Albert	3rd ,,	,,
Ketton, Frank	3rd ,,	,,
Sayer, Jane	3rd ,,	,,
Mills, Arthur J.	3rd ,,	,,
*Barker, William	1st ,,	Arithmetic
*Rigby, John J.	1st ,,	,,
*Whitehead, James	1st ,,	,,
*Welch, Thomas F.	1st ,,	,,
*Hull, William P.	1st ,,	,,
*Sugden, Anna	1st ,,	,,
*Whitham, Arthur	1st ,,	,,
Birchall, Alice	2nd ,,	,,
Kirkham, William	2nd ,,	,,
Taylor, Edward	2nd ,,	,,
Collins, Albert	2nd ,,	,,
Parish, C. P.	2nd ,,	,,

NAME.	Success.	SUBJECT.
Harmand, John W.	2nd Class	Arithmetic
Bomont, Amelia	2nd ,,	,,
Mc.Gavin, M.	2nd ,,	,,
Burton, Thomas	2nd ,,	,,
Hayes, James	3rd ,,	,,
Thornley, Albert E.	3rd ,,	,,
Capstick, James	3rd ,,	,,
Kinloch, Samuel	3rd ,,	,,
Williamson, Thomas	3rd ,,	,,
Harrison, Thomas Henry	3rd ,,	,,
Fishwick John	3rd ,,	,,
Parker, Ernest	3rd ,,	,,
Burns, Frank	3rd ,,	,,
Singleton, John S.	3rd ,,	,,
Kevin, Thomas	3rd ,,	,,
Salter, Charles	3rd ,,	,,
*Chadwick, Thomas	Honours	English
*Roberts, Frank	1st Class	,,
*Meehan, William	1st ,,	,,
*Wood, James	1st ,,	,,
*Shaw, Fred	1st ,,	,,
*Sugden, Anna	1st ,,	,,
Sanderson, Ellen	2nd ,,	,,
Seed, William L.	2nd ,,	,,
Wrigley, Lilly	3rd ,,	,,
Mc.Gavin, M.	3rd ,,	,,
Dean, Thomas E.	3rd ,,	,,
Dunn, John	3rd ,,	,,
Patten, Ann H.	3rd ,,	,,
Bowie, Mary	3rd ,,	,,
Howson, Robert	3rd ,,	,,
Crane, William	3rd ,,	,,
Harrison, Thomas Henry	3rd ,,	,,
Pomfret, Sarah	3rd ,,	,,
Archer, Frank S.	3rd ,,	,,
Chadwick, Thomas	1st ,,	Shorthand (Manual Class)
Worthington, Henry	1st ,,	,, ,,
Hynes, Thomas	1st ,,	,, ,,
Kirkham, William	1st ,,	,, ,,
Lang, J. H.	1st ,,	,, ,,
Parker, Charles	1st ,,	,, ,,
Laraway, John Henry	1st ,,	,, ,,
Lamb, George	2nd ,,	,, ,,
Dilworth, J. J.	2nd ,,	,, ,,
Crane, William	2nd ,,	,, ,,
*Dearden, William	1st ,,	Shorthand
*Burns, Thomas	1st ,,	,,
*Rawlinson, George E.	1st ,,	,,
Turner, Mary	1st ,,	,,
Hucknall, Joseph J.	1st ,,	,,
Wood, James	1st ,,	,,
Haworth, Ed. James	1st ,,	,,
Smith, Joseph Henry	1st ,,	,,
Napthen, Edward	2nd ,,	,,

NAME.	Success.	SUBJECT.
Whitehead, E. G.	2nd Class	Shorthand
Shaw, Fred.	2nd ,,	,,
Roberts, Ernest	2nd ,,	,,
Pomfret, Robert R.	2nd ,,	,,
Kent, Joseph G.	2nd ,,	,,
Brandreth, Ernest	2nd ,,	,,
Simpson, Gertrude E.	2nd ,,	,,
Busher, Edwin	2nd ,,	,,
Archer, Frank S.	2nd ,,	,,
Leach, Thomas	2nd ,,	,,
Rushton, Fred. C.	3rd ,,	,,
Greenwood, Henry J.	3rd ,,	,,
Roberts, Arthur	3rd ,,	,,
Wilding, Charles A.	3rd ,,	,,
Dean, Thomas E.	3rd ,,	,,
Pendlebury, Edward E.	3rd ,,	,,
Rawcliffe, Fred. A.	3rd ,,	,,
Bowker, John R.	3rd ,,	,,
Hughes, Peter	3rd ,,	,,
Higginson, Arnold	3rd ,,	,,
Wilkinson, John	3rd ,,	,,
Tomlinson, John	3rd ,,	,,
Holgate, Ernest J.	3rd ,,	,,

Students attending Elementary Schools who obtained Prizes and Certificates at the Local Examinations, in connection with the Institute Elementary Classes.

NAME.	Success.	SUBJECT.
Riches, Richard P.	1st Class	Mechanics
Bennett, Vincent	1st ,,	,,
Calvert, Richard	1st ,,	,,
Dixon, Herbert J.	1st ,,	,,
Leeming, John H.	1st ,,	,,
Copland, George W.	1st ,,	,,
Dixon, Fred.	1st ,,	,,
Cooper, William	1st ,,	,,
Nelson, Edward	1st ,,	,,
Farington, Isaac M.	1st ,,	,,
Southworth, Herbert T.	1st ,,	,,
Tipping, Richard	1st ,,	,,
Thompson, John A.	1st ,,	,,
Hindle, William	1st ,,	,,
Wilson, Henry	1st ,,	,,
Bullen, Henry	1st ,,	,,
Wadsworth, Lawrence	1st ,,	,,
Lutener, Charles E.	1st ,,	,,
Sharp, James	1st ,,	,,
Hindmarch, James	1st ,,	,,
Cooper, Edward	1st ,,	,,
Lockwood, Rd. H.	1st ,,	,,
Pearson, John	1st ,,	,,
Harrison, Richard	1st ,,	,,
Ward, James	1st ,,	,,
Williams, Ephraim	1st ,,	,,
Entwistle, Ernest J.	1st ,,	,,
Mather, James	1st ,,	,,
Nelson, Robert	1st ,,	,,
Bullen, William	1st ,,	,,
Blackburn, John T.	1st ,,	,,
Balshaw, Henry	1st ,,	,,
Buck, William	1st ,,	,,
Stirzaker, Henry	2nd ,,	,,
Donaldson, John H.	2nd ,,	,,
Dobson, Andrew	2nd ,,	,,
Simpson, Harry	2nd ,,	,,
Yates, Thomas	2nd ,,	,,
Davey, Thomas	2nd ,,	,,
Hodson, Thomas	2nd ,,	,,
Cranshaw, Thomas	2nd ,,	,,
Knowles, Fred. J.	2nd ,,	,,
Thew, Thomas	2nd ,,	,,
Hall, Richard	2nd ,,	,,
Livesey, Adam	2nd ,,	,,
Robinson, Fred. R.	2nd ,,	,,
Young, George	2nd ,,	,,
Richardson, Charles M.	2nd ,,	,,
Coates, William S.	2nd ,,	,,

NAME.	Success.	SUBJECT.
Flannery, Louis	2nd Class	Mechanics
Lowe, Joseph	2nd ,,	,,
Hennessey, Edward J.	1st ,,	Chemistry
Parkinson, William	1st ,,	,,
Robinson, Arthur	1st ,,	,,
Smalley, Robert	1st ,,	,,
Whalley, Albert	1st ,,	,,
Harwood, James	2nd ,,	,,
Robinson, Thomas	2nd ,,	,,
Clarke, George	1st ,,	Physics
Corner, John	1st ,,	,,
Beech, Edward J.	1st ,,	,,
Bradshaw, George W.	1st ,,	,,
Norris, William	1st ,,	,,
Napthen, Samuel	1st ,,	,,
Lucas, John	1st ,,	,,
Edge, Ernest	1st ,,	,,
Moore, James	1st ,,	,,
Fitchie, John W.	1st ,,	,,
Utton, John C.	1st ,,	,,
Dewhurst, Thos. H.	1st ,,	,,
Braithwaite, Robert	1st ,,	,,
Dilworth, Joseph	1st ,,	,,
Halewood, Harold	1st ,,	,,
Kay, Richard	1st ,,	,,
Allison, Alfred	1st ,,	,,
Naylor, Wm. R.	1st ,,	,,
Warburton, Thomas	1st ,,	,,
Neild, Joseph	1st ,,	,,
Barlow, Frank	1st ,,	,,
Hodson, William	1st ,,	,,
Lucas, James	1st ,,	,,
Tipping, John A.	1st ,,	,,
Gillett, John R.	1st ,,	,,
Banks, George A.	1st ,,	,,
Parker, Geoffrey	1st ,,	,,
Ratcliffe, John	1st ,,	,,
Cowell, Fred.	1st ,,	,,
Aspinall, William A.	1st ,,	,,
Dickenson, Thomas W.	1st ,,	,,
Norris, Thomas	1st ,,	,,
Bateson, Joseph	1st ,,	,,
Bateson, Joseph	1st ,,	,,
Wilkinson, Robert	1st ,,	,,
Heaton, Robert W.	1st ,,	,,
Johnstone, E.	1st ,,	,,
Smith, Joseph	1st ,,	,,
Pearson, George	1st ,,	,,
Turner, Charles	1st ,,	,,
Sylvester, Davies	1st ,,	,,
Rigby, James	1st ,,	,,
Proctor, H. R.	1st ,,	,,
Waterhouse, W.	1st ,,	,,
Hosker, R.	1st ,,	,,

Harris Institute, Preston. Abstract of Class Registers, 1888-9.

NAME OF CLASS.	TEACHER.	OCTOBER.		NOVEMBER.		DECEMBER.		JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		Number who sat for Examinat'n.	Number who obtained Cetificates.
		No. on Register	Average Attendance.	No. on Register	Average Attendance.	No. on Register	Average Attendance.	No. on Register	Average Attendance.	No. on Register	Average Attendance.	No. on Register	Average Attendance.	No. on Register	Average Attendance.	No. on Register	Average Attendance.		
SCIENCE.																			
Agriculture	Mr. J. Stacey	13	11	13	10	13	8	13	8	13	9	13	8	13	8	13	8	13	13
Animal Physiology	Mr. H. O. Pilkington, M.R.C.S.	19	16	19	16	19	16	19	15	19	15	19	14	19	13	19	18	11	5
Applied Mechanics	Mr. R. Pendlebury	35	28	35	27	35	27	35	26	35	26	35	26	35	25	35	25	19	14
Botany (Elementary)	Mr. S. J. Elliott, A.P.S.	24	18	24	19	24	16	24	16	24	17	24	16	24	16	24	16	14	9
Do. (Advanced)	Do.	5	4	5	4	5	4	5	4	5	4	5	3	5	3	5	3		
Building Construction (Elementary)	Mr. F. J. Pye	32	29	32	26	32	25	32	24	32	24	32	23	32	24	32	23	42	37
Do. (Advanced)	Do.	18	15	18	13	15	13	18	13	18	13	18	12	18	12	18	12		
Chemistry, Elements of	Mr. F. Atkinson	10	8	10	8	10	8	10	8	10	7	10	7	10	7	10	7	34	19
Do. Theoretical, Inorganic (Elementary)	Do.	31	25	32	24	32	24	32	21	32	22	32	22	32	21	32	21		
Do. do. (Advanced)	Do.	15	11	15	10	15	10	15	11	15	10	15	10	15	10	15	10		
Do. Practical (Elementary)	Do.	14	12	14	12	14	11	14	12	14	15	14	12	14	12	14	12	8	4
Do. do. (Advanced)	Do.	4	3	4	3	4	4	4	4	4	3	4	3	4	3	4	3		1
Do. Organic, Theoretical	Do.	9	6	9	6	9	7	9	6	9	6	9	6	9	6	9	6	5	5
Geology (Elementary)	Mr. F. C. King	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	9	7
Do. (Advanced)	Do.	3	2	3	2	4	4	4	4	4	3	4	3	4	3	4	3		
Hygiene	Mr. H. O. Pilkington, M.R.C.S.	15	13	15	12	15	12	15	12	15	11	15	11	15	11	15	11	11	5
Machine Construction	Mr. J. T. Buckley	45	22	45	24	45	23	45	22	45	23	45	24	45	24	45	24	24	20
Mathematics, Stage I.	Mr. F. B. Osborne	40	34	40	32	40	33	40	31	40	30	40	30	40	30	40	30	33	25
Do. Stage II.	Mr. A. J. Sainsbury, B.A.	19	15	19	14	19	14	19	14	19	13	19	13	19	13	19	13		
Magnetism and Electricity (Senior Elementary)	Mr. J. Gardner, F.R.G.S.	40	34	40	33	40	31	40	30	40	29	40	28	40	28	40	28	41	33
Do. (Advanced)	Do.	15	12	15	10	15	10	15	12	15	12	15	11	15	11	15	11		
Physiography (Elements)	Mr. J. Stacey	35	30	35	29	35	27	35	26	35	24	35	21	35	21	35	21	19	19
Do. (Elementary)	Mr. J. Gardner, F.R.G.S.	62	54	63	54	63	50	63	49	63	47	63	47	63	46	63	46	67	38
Do. (Advanced)	Do.	28	23	28	22	29	21	29	21	29	20	29	20	29	19	29	19		
Practical Plane and Solid Geometry	Mr. F. J. Pye	53	49	53	47	53	44	53	41	53	39	53	39	53	38	53	38	25	20
Sound, Light, and Heat (Senior Elementary)	Mr. J. Gardner, F.R.G.S.	28	23	29	23	29	19	29	19	29	19	29	19	29	18	29	18	23	18
Do. (Advanced)	Do.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Steam and Steam Engine	Mr. R. Pendlebury	28	21	28	21	28	22	28	20	28	19	28	19	28	18	28	18	20	17
Theoretical Mechanics	Mr. J. E. Southworth	10	7	10	8	10	8	10	7	10	6	10	7	10	7	10	6	7	6
Elements of Mechanics	Do.	105	92	105	89	105	89	105	85	105	79	105	73	105	73	105	73	51	51
Elements of Physics	Mr. G. Lynch, M.R.C.P.	105	95	105	87	105	88	105	78	105	77	105	69	105	69	105	69	45	45
Elements of Chemistry	Mr. C. E. Stacey, B.A.	25	19	27	20	27	20	27	16	27	13	27	12	27	12	27	12	7	7
ART.																			
Day Class	Mr. W. B. Barton	32	12	32	10	32	16	32	16	32	17	32	17	32	17	32	17	418	¶ 24
Evening Class	Do.	218	108	220	109	221	110	223	114	223	115	223	116	223	116	223	116		** 178
Modelling Class	Do.	3	3	3	3	3	3	5	3	5	3	5	3	5	3	5	3		
High School	Do.	70	68	66	66	66	64	66	64	66	64	66	64	66	64	66	64		
TECHNICAL.																			
Brickwork and Masonry	Mr. F. J. Pye	12	8	12	8	12	9	12	8	12	8	12	8	12	8	12	8	8	4
Carpentry and Joinery	Do.	29	25	29	23	29	22	29	23	29	22	29	22	29	22	29	22	18	8
Cotton Spinning	Mr. W. I. Hannen	32	29	44	36	44	34	44	32	44	31	44	31	44	31	44	31	30	19
Mechanical Engineering	Mr. R. Pendlebury	20	16	20	14	20	12	20	14	20	13	20	14	20	14	20	14	11	8
Plumbers' Work	Mr. F. Jolly	20	18	20	18	20	13	20	12	20	15	20	15	20	15	20	15	16	4
Weaving and Designing	Mr. J. T. Taylor	116	75	130	90	130	91	130	89	130	86	130	82	130	82	130	82	72	14
MISCELLANEOUS.																			
Music—Class Singing and Harmony (Elementary)	Mr. J. Tomlinson	30	28	30	24	30	24	30	23	30	22	30	21	30	21	30	21	§22	13
Do. do. (Advanced)	Do.	3	3	3	3	3	3	3	2	3	2	3	2	3	2	3	2		
Singing—Tonic Sol-Fa	Mr. W. H. Cowell	89	77	90	76	90	78	90	77	90	75	90	71	90	71	90	71	51	39
Do. Madrigals and Matriculation	Do.	9	7	10	7	10	7	10	8	10	8	10	8	10	8	10	8	9	6
Latin (Elementary)	Rev. W. S. Matthews, B.A.	11	10	11	9	11	9	11	8	11	8	11	7	11	7	11	7	*11	11
Do. (Advanced)	Do.	9	9	10	9	10	8	10	7	10	7	10	7	10	7	10	8		
French (Elementary)	Do.	45	45	46	35	46	36	46	36	46	34	46	33	46	33	46	33	†1	†1
Do. (Advanced)	Do.	20	18	20	15	20	14	20	13	20	12	20	12	20	12	20	12	*15	*14
Shorthand (Elementary)	Mr. H. Cartmell	125	114	128	110	132	112	132	110	132	108	132	108	132	108	132	108	§28 †46	§20 †42
Do. (Advanced	Do.	52	41	52	41	52	41	50	41	50	40	50	39	50	39	50	39	*56	*42
English (Elementary)	Do.	64	58	64	55	64	55	64	52	64	51	64	51	64	51	64	51	§25 †6	§17 †4
Do. (Advanced)	Do.	23	19	23	18	22	18	22	17	22	16	22	16	22	16	22	16	*27	*19
German	Mr. F. B. Osborne	20	18	20	17	20	16	20	14	20	14	20	13	20	13	20	13	§1 *1	*1
Arithmetic	Do.	109	87	112	89	112	88	112	89	112	89	112	86	112	86	112	86	§4 *38	§0 *28
Bookkeeping (Elementary)	Mr. J. C. Forrester	69	65	69	64	70	63	70	61	70	60	70	59	70	59	70	59	§38 †4	§36 †2
Do. (Advanced)	Do.	28	24	28	24	28	21	28	20	28	19	28	21	28	21	28	21	*25	*7
Ambulance Classes (FEMALES) Afternoon	Mr. H. O. Pilkington, M.R.C.S.	...	...	16	16	16	16	...	...	...	...	5	5	5	5	...	...	‡29	‡29
Do. do. Evening	Do.	...	...	10	10	10	10	...	...	...	...	7	7	7	7	...	...	‖22	‖17
Do. (MALES) do.	Do.	...	...	6	5	5	5	...	...	...	...	...	...	...	...	...	...	...	...
Commercial Geography	Mr. J. J. Cardwell	19	16	22	16	22	15	22	12	22	10	22	9	22	22	...	...	§2	§1
Logic	The Rev. Fr. Rickaby	...	...	...	...	...	...	...	...	...	...	93	93	93	93	...	...	...	...
	Total	2170	1739	2244	1742	2247	1703	2221	1626	2221	1609	2326	1655	2326	1661	2199	1438	1562	1026

¶ 3rd Grade. ** 2nd Grade. § Society of Arts. † Lancashire and Cheshire Institutes. * Local. ‡ First Aid. ‖ Nursing.

T. R. JOLLY, Secretary.

NAME.	Success.	SUBJECT.
Barlow, Percy	2nd Class	Physics
Schofield, Albert E.	2nd ,,	,,
Robinson, Arthur	2nd ,,	,,
Butler, John	2nd ,,	,,
Lever, Robert	2nd ,,	,,
Mullowney, Joseph	2nd ,,	,,
Sharples, Francis	2nd ,,	,,
Gorton, James	2nd ,,	,,
Hartley, James	2nd ,,	,,
Radcliffe, Thomas	2nd ,,	,,
Hodson, Richard	2nd ,,	,,
Higham, John H.	2nd ,,	,,
Lindsay, Jennette	1st ,,	Physiography
Higginson, Margaret	1st ,,	,,
Smalley, Annie	1st ,,	,,
Corless, Mary	1st ,,	,,
Jackson, Mary A.	1st ,,	,,
Brown, Maud G.	1st ,,	,,
Tullis, Mary S.	1st ,,	,,
Lees, Jane	1st ,,	,,
Chapman, Elizabeth	1st ,,	,,
Penny, Emily J.	1st ,,	,,
Wharton, E. A.	1st ,,	,,
Gardner, Maggie	1st ,,	,,
Hewlett, Amy	1st ,,	,,
Balmford, E. A.	1st ,,	,,
Balmford, E. H.	1st ,,	,,
Charnley, Margaret	2nd ,,	,,
Butler, E. C.	2nd ,,	,,
Lund, Margaret A.	2nd ,,	,,
Fish, Alice A.	2nd ,,	,,

INSTITUTE SCHOLARSHIPS

AWARDED TO DAY SCHOLARS ATTENDING ELEMENTARY SCHOOLS.

SCIENCE.

Mossman, Jane
Southworth, Ada
Rawcliffe, Ellen
Ewart, Mabel
Fenton, Mary A. O.
Worthington, Eliz. A.
Weaver, Bertha
Williamson, Florence
Westley, Catherine
Greenwood, Eleanor
Payne, Ellen
Moizer, Jane
Pritt, Ethel
Lenthall, Gertrude E.
Bancroft, Ada S.
Nelson, Sarah E.
Dryden, Eva
Green, Clara L.
Pritt, Amy
Petty, Margaret E.
Hindle, Ada G.
Mayor, Jane
Bowden, Sarah E.
Mc. Taggart, M. J.
Hartley, Minnie
Ormrod, Jane
Waterworth, Nellie

Dobson, Maggie
Pritt, Jane
Potter, Rhoda
Hall, Jane
Holgate, Elizabeth
Barlow, Clara A.
Gardner, Eliz. E.
Nightingale, Mary E.
Coward, Lucy
Green, Ellen
Fryer, Anne
Woodhouse, Jenny
Harrison, Rose H.
Wright, Priscilla
Bancroft, Jessie A.
Wilkinson, Sarah
Gregory, Ada
Birkbecke, Maud
Hewlett, Kate
Bell, Annie
Strickleton, Annie
Norcross, Emily
Watson, Isabella
Whalley, Mary E.
Bell, Clara
Dobson, Florence
Brown, Margaret A.

Waddington, Alice A.
Aspden, Mary E.
Dewhurst, Florence
Kay, Mary E.
Worsley, Martha A.
Howard, Beatrice
Johnston, Jane
Robinson, Lilly
Holmes, Mary
Heald, Maggie
Winder, Jane
Seed, Ellen
Singleton, Mary E.
Woodhouse, Jane M.
Eccles, Florence A.
Youds, Ada
Whitlock, Florence
Harrison, Mary E.
Leech, Sarah J.
Chance, Matilda
Cookson, Margaret A.
Nelson, Alice
Garstang, Alice A.
Rogerson, Margaret
Davidson, Mary

ART.

Wesley, James
Morris, Noah
Dewhurst, T. H.
Lindsay, Charles C.
Neild, Joseph
Higginson, William E.
Martin, Henry
Wilding, Charles A.
Burrow, Ernest
Jackson, Stewart
Wilkinson, James
Gardner, John
Hughes, Thomas
Payne, Christopher W.
Whitlock, Ernest
Barnes, John
Saunders, Jabez
Smalley, Robert

Alker, Ralph
Spencer, Harry
Saul, William
Thorp, Thomas
Blackburn, Chas. A.
Holgate, Elizabeth
Lenthall, Gertrude E.
Nelson, Margaret
Green, Clara L.
Ewart, Mabel
Parker, George Hy.
Cookson, Edward
Clinning, Harry
Harwood, James
Hadfield, Roland H.
Parker, Peter E.
Wallace, James
Robinson, Chas. E.

Riding, Walter
Cookson, Jabez
Coulson, William
Alston, George E.
Frame, William
Massey, John
Askew, Mary J.
Young, Joseph
Wesley, John
Whalley, Roger
Edwards, Joseph
Morris, James
Clark, Robert
Dennison, Edmund
Crossthwaite, John S.
Wagg, Arthur J.
Kendall, Edward Jas.

Table showing the number of Students who sat for Examination in connection with the Science and Art Department at the Harris Institute, May, 1889.

SUBJECT.	Harris Institute.	St. Paul's	R.C. Grammar School.	Winckley Square.	External.	Totals.
ART.						
Model Drawing	131	2	—	—	6	139
Freehand	174	1	—	—	6	181
Painting from Still Life	3	—	—	—	—	3
Geometry	32	—	—	—	—	32
Perspective	29	—	—	—	4	33
Perspective (Theory and Practice)	2	—	—	—	—	2
Drawing in Stage 5a	8	—	—	—	1	9
„ „ 5b	8	—	—	—	1	9
„ „ 3b	9	—	—	—	1	10
Anatomy	2	—	—	—	—	2
Elementary Architecture	3	—	—	—	—	3
Painting in Monochrome	1	—	—	—	—	1
Drawing from the Antique	2	—	—	—	—	2
Drawing the Antique from Memory	2	—	—	—	—	2
Painting (Technical Questions)	2	—	—	—	—	2
Drawing from Life	3	—	—	—	—	3
Plant Drawing in Outline, stage 10a	5	—	—	—	—	5
Historic Ornament	2	—	—	—	—	2
SCIENCE.						
Animal Physiology	11	—	—	—	1	12
Machine Construction	24	—	—	—	2	26
Building Construction	42	—	—	—	1	43
Mathematics, stages 1, 2, and 3	33	2	37	—	21	93
Sound, Light, and Heat	23	—	58	15	3	99
Magnetism and Electricity	41	—	48	15	9	113
Physiography	67	10	35	—	13	125
Principles of Agriculture	13	—	—	—	7	20
Practical Plane and Solid Geometry	25	2	—	—	2	29
Geology	9	—	—	—	—	9
Mathematics, stages 6 and 7	—	—	—	—	1	1
Hygiene	11	—	—	—	2	13
Theoretical Mechanics	7	—	—	—	3	10
Applied Mechanics	19	—	—	—	1	20
Inorganic Chemistry	34	7	—	—	8	49
Practical Inorganic Chemistry (E stage)	8	—	—	—	1	9
Botany	14	—	—	—	6	20
Organic Chemistry	5	—	—	—	—	5
Steam	20	—	—	—	3	23
Practical Inorganic Chemistry (A stage)	—	—	—	—	1	1
TOTALS	824	24	178	30	104	1160

In addition to the foregoing table, the following shows the number of Students of the Harris Institute examined at the Institute in connection with other Classes :—

City and Guilds of London Institute, viz.:—

Cotton Spinning	30	
Weaving and Designing	72	
Mechanical Engineering	11	
Carpentry and Joinery	18	
Plumbing	16	
Brickwork and Masonry	8	
	—	155

Society of Arts :—

Shorthand	28	
English	25	
German	1	
Music	22	
Arithmetic	4	
Bookkeeping	38	
Commercial Geography	2	
	—	120

Lancashire and Cheshire Union of Institutes :—

Shorthand	46	
English	6	
Bookkeeping	4	
French	1	
	—	57

Examined Locally :—

Arithmetic	38	
French	15	
Latin	11	
Tonic Sol-fa	60	
Shorthand	56	
German	1	
Ambulance	51	
Bookkeeping	25	
English	27	
Physiography	19	
Mechanics	51	
Physics	45	
Chemistry	7	
	—	406
		738

Students sitting for Science and Art (see page 46)	824
Total of the Harris Institute Students Examined	1562

HARRIS INSTITUTE.—TRUSTEES' ACCOUNT, 30th September, 1889.

	£	s.	d.	£	s.	d.
To Balance in hand, 30th Sept., 1888				66,196	16	9
,, Interest from Capital, viz.:—						
1st Nov., 1888, Corporation of Preston	274	4	5			
12th Dec., 1888, Savings Bank	38	17	5			
1st Jan., 1889, County of Lancaster	597	3	9			
1st Mar., 1889, Corporation of Preston	91	8	2			
Do.	170	12	6			
1st May, 1889 Do.	274	4	5			
1st July, 1889, County of Lancaster	571	11	11			
1st Sept., 1889, Corporation of Preston	91	8	2			
Do.	170	12	6			
				2,280	3	3
				£68,477	0	0

	£	s.	d.
By Amount transferred to General Account, as per Balance Sheet	2,280	3	3
,, Balance carried down	66,196	16	9
	£68,477	0	0

	£	s.	d.	£	s.	d.
By invested with						
County of Lancaster	35,000	0	0			
Corporation of Preston	30,000	0	0			
Savings Bank	1,196	16	9			
				£66,196	16	9

To Balance brought down £66,196 16 9

Audited and found correct,
W. F. MOORE, F.C.A.

January, 1890.—Exhibited,
C. R. JACSON.
D. IRVIN.
W. ASCROFT.

T. R. JOLLY,
Secretary.

To the President and Council of the Harris Institute.

GENTLEMEN,—I have examined the Accounts for the year ending 30th September, 1889, and have pleasure in certifying to their correctness, and to the neatness with which they are kept. I have seen vouchers for all payments, and have examined the securities for the capital investments.

Yours truly,
W. F. MOORE, F.C.A.

HARRIS INSTITUTE.—GENERAL ACCOUNT, 30th September, 1889.

	£	s.	d.	£	s.	d.
To Interest received from Capital ...	2,280	3	3			
Less:—Transferred to Scholarship Fund	285	0	5			
				1,995	2	10
„ FEES AND GRANTS:	£	s.	d.			
Science Fees	94	7	6			
„ Grants	363	0	0			
				457	7	6
Art Fees	133	0	6			
„ Grants..... ..	198	14	0			
				331	14	6
Technical Fees	27	11	6			
„ Grants ...	51	0	0			
				78	11	6
Miscellaneous Fees				174	12	6
				1,042	6	0
„ Rent High School				10	0	0
„ Subscriptions.....				18	18	0
„ Bank Interest				2	15	2
				£3,069	2	0

To Balance in hands of the Preston Banking Co....£232.

W. F. MOORE, F.C.A.

	£	s.	d.	£	s.	d.
By Balance overdrawn, Sep. 30, 1888				37	16	8
„ SALARIES, VIZ.:						
Science	566	10	0			
Art	496	0	10			
Technical	175	6	0			
Miscellaneous	254	10	4			
				1,492	7	2
„ Secretary, Custodian, and Examiners				187	1	0
„ Alterations and Improvements				364	14	9
„ Apparatus, Appliances, and Books				133	12	7
„ Printing and Stationery				77	11	8
„ Advertising				21	1	6
„ Lighting and Firing.....				149	14	3
„ Washing and Cleaning				55	11	3
„ Rates and Insurance				71	6	9
„ Expenses *re* Distribution of Prizes				52	12	8
„ Lancaster Road and Branch Schools				75	5	2
„ Examinations and Entrance Fees				62	6	3
„ Miscellaneous Expenses				51	1	5
„ Bank Commission				5	18	11
				2,837	2	0
Balance in hand.....				232	0	0
				£3,069	2	0

WILLIAM ASCROFT, *President.*

T. R. JOLLY, Secretary.

HARRIS INSTITUTE.—SCHOLARSHIP AND PRIZE FUND, 30th Sept., 1889.

	£	s.	d.
To Balance in hand, 30th Sept, 1888	322	16	8
,, Amount transferred from General Account, as per Balance Sheet	285	0	5
,, Bank Interest	1	19	0
	£609	16	1
To Balance brought down	£295	11	4

	£	s.	d.
By Paid F. Bentham, Scholarship (Art)	50	0	0
,, ,, J. C. Rhodes do. (Science)	45	0	0
,, ,, Free Scholarships to Institute Classes	119	2	6
,, ,, ,, Branch Classes	62	10	0
,, ,, for Prizes	37	3	0
,, ,, Bank Commission	0	9	3
	314	4	9
,, Balance carried down	295	11	4
	£609	16	1
By Balance in Preston Bank	£295	11	4

Audited and found correct,
W. F. MOORE, F.C.A.

WILLIAM ASCROFT, President.
T. R. JOLLY, Secretary.

LIST OF SUBSCRIBERS.

Ascroft, Mr. W.
Ascroft, Mr. A. E.
Atherton, Mr. John
Atherton, Mr. W.
Booth, Mr. Y. W.
Brown and Deighton, Messrs.
Dickson, Mr. E.
Easterby, Mr. R. F.
Eccles, Messrs. T. & Co.
Gibson, Mr. Henry
Healey, Mr. J.
Hibbert, Mr. Jas.
Jacson, Mr. C. R.
Lee, Mr. S.
Maynard, Mr. M. S.
Moore, Mr. F. A.
Oliver, Mr. J. S.
Steele, Rev. Geo.
Thorp, Mr. F.
Toulmin, Mr. Joseph
Wood, Rev. C. H.
Woods, Mr. W. H.

HARRIS INSTITUTE,

PRESTON.

EIGHTH

ANNUAL REPORT

AND

STATEMENT OF ACCOUNTS

FOR THE YEAR ENDING 30th SEPTEMBER, 1890,

AND

THE ADDRESS

GIVEN BY

Wm. Farrer Ecroyd, Esq.,

AT THE

DISTRIBUTION OF PRIZES,

ON

THURSDAY, DECEMBER 11, 1890

PRESTON:
PRINTED BY MATHER BROS., 17, CHAPEL WALKS.
1891.

Officers for the Year 1891.

Trustees:

Mr. C. R. JACSON, J.P., D.L.
Mr. D. IRVIN, J.P.
Rev. C. H. WOOD, B.C.L.
Mr. W. ASCROFT, J.P.
Mr. G. B. DALBY.
Col. OLIVER.

President:

Mr. WM. ASCROFT, J.P.

Vice-President:

The Rev. GEO. STEELE, M.A., H.M.I. Schools.

Council:

Mr. C. R. Jacson, J.P., D.L.
Mr. D. Irvin, J.P.
Rev. C. H. Wood, B.C.L.
Rev. George Steele, M.A.
Rev. Jon. Shortt, M.A.
Mr. J. Healey, J.P.
Dr. Hammond, J.P.
Mr. W. Ascroft, J.P.
Mr. W. Atherton.
Mr. S. A. Hermon, J.P.
Mr. R. W. Ascroft, B.C.L.
Mr. Y. W. Booth.
Mr. E. Dickson.
Mr. R. F. Easterby.
Mr. Hy. Calvert, J.P.
Mr. Jas. Hibbert.
Mr. M. S. Maynard, J.P.
Col. Oliver.
Mr. F. A. Moore.
Mr. E. Greenwood, J.P.
Mr. J. J. Sidgreaves, J.P.

Hon. Treasurer:

Col. OLIVER.

Secretary:

Mr. T. R. JOLLY.

Auditor:

Mr. W. L. MOORE, Chartered Accountant.

Bankers:

PRESTON BANKING COMPANY, Ld.

Eighth Annual Report

OF THE

HARRIS INSTITUTE,

PRESTON.

THE Council have to report a continued increase in the number of students. The following figures are the comparative statistics as to numbers for the Year ending September, 1889 and 1890.

	1889.		1890.
Students on Register	2,526	.....	2,701
Average Attendance	2,049	.....	2,097
Individual Students	1,994	.....	2,252
Certificates Awarded	1,026	.....	1,310
Prizes	184	.....	296

From the Elementary Class 82 students have passed as free scholars for the year into the higher classes of the Institute. In all cases these students have been required to take up the subject of Mathematics and a higher stage of the same subject in which they have received previous instruction. A branch class in art has been established at Ashton, and has been well attended. The Co-operative Society have encouraged the sons and daughters of their members to attend the classes of the Institute by, in most cases, paying one-half of the fees, and have awarded prizes to such of these students as have gained distinctions. This action on their part has added considerably to the members, and has been most welcome to the Council, who have been much gratified by the co-operation of this important body. A class in telegraphy has been formed, taught by Mr. Morris, of the telegraphic department of the Post Office, and has been well attended.

The Council have arranged for a course of Lectures on physiology by Mr. Edward Parkyn, M.A., in connection with the Cambridge Extension Movement, which will be given after Christmas.

The teaching in the technical subjects of cotton weaving and designing, and cotton spinning, has been mainly directed to the requirements of the local trades, and this teaching has, in addition to the Examinations of the City and Guilds of London Institute,

been tested by special local examinations conducted by Mr. Holmes, of Manchester, and Mr. Greenwood, a member of the Council, both of whom report in very favourable terms of the work. The Council desire to express their warm thanks to those gentlemen for their assistance.

The Council have, during the year, lost three valued members, namely, Mr. William Calvert, by death, and Mr. A. E. Ascroft and Mr. G. Buckston-Browne by resignation. The vacancies thus caused have been filled up by the election of Mr. Henry Calvert, Mr. R. W. Ascroft, and Mr. J. J. Sidgreaves.

Mr. Atkinson, the gentleman who from the first year of the formation of the Institute has taught the chemistry classes, was compelled, by ill health, to resign his position, which was filled up by the appointment of Mr. T. H. Greenhall. Mr. Atkinson has since died. The Council desire to record their estimation of the very efficient manner in which Mr. Atkinson fulfilled his duties in connection with the Institute.

In May last a deputation from the Council waited upon a committee of the Corporation to ask that the powers of the Corporation to provide a site for a Technical School might be put in force, and a subsequent written application to the same effect has been placed before them. It is understood that the Corporation have the matter under their consideration, but as yet no conclusion has been arrived at.

On the 11th December the prizes to the successful students were distributed by W. Farrer Ecroyd, Esq., and Miss Ecroyd, when a most excellent address on the subject of education was delivered by Mr. Ecroyd. The Council desire to draw attention to the letters (which are printed in this Report) referring to the practical results of the work of the Institute as affecting the prospects in life of the students.

The Council desire to express their acknowledgements to Mr. Atherton for his continued permission to the students of the class in cotton weaving and designing to visit a portion of his works weekly; to Messrs. Horrockses, Crewdson, & Co., Limited, for a show case placed in the Library; to Messrs. Hetherington and Sons, of Manchester, for diagrams of machinery; to Mr. G. Buckstone-Brown, for books for the Reference Library; and to Mr. John Whittle, of Chorley, for a physiological figure for the study of anatomy, &c.

WM. ASCROFT,

PRESIDENT.

23rd December, 1890.

HARRIS INSTITUTE.

Proceedings of the Annual Meeting.

Held December 23rd, 1890.

THE annual meeting of the Council of the Harris Institute was held on Tuesday, the 23rd day of December, 1890. Mr. W. Ascroft, J.P., the president, occupied the chair, and there were also present the Rev. G. Steele, H.M. Inspector of Schools; Rev. C. H. Wood, Mr. J. J. Sidgreaves, J.P., Mr. H. Calvert, J.P., Councillor Y. W. Booth, Councillor E. Greenwood, J.P., Dr. Hammond, J.P., Mr. W. Stuart, and Mr. T. R. Jolly (Secretary).

Mr. T. R. JOLLY, the Secretary, read the Annual Report, which will be found on page 3.

The PRESIDENT, in moving that the report and accounts be received, remarked that they were very favourable, and showed that the Institute was in a prosperous condition. He referred to the movement on the part of the head teachers of Preston, for providing better means of education for pupil teachers as an exceedingly important project, because it affected the education of a very large class, from whom the head masters and mistresses of the future would be chosen, and for that reason the best means should be provided for their training. He was very pleased to note that they intended to make use of the Institute for that purpose, and before long a proposal would probably be laid before the Council. It was certainly within the scope of their scheme, and he though he would not be saying too much in promising that if a well-considered scheme of that nature were put before the Council it would receive their favourable consideration.

Dr. HAMMOND seconded the reception of the report and balance sheet.

From the financial statement, which was read by the SECRETARY, it appears that the receipts during the past year amount to £2,808 14s. 2d., including a balance in hand at the commencement of £232; and the expenditure totalled £2,454 2s. leaving in hand at the present time the sum of £586 12s. 2d. The balance in hand on the scholarship and prize fund account amount to £273 7s. 4d.

THE PRESIDENT observed that the accounts disclosed a very healthy position of affairs.

Councillor Y. W. BOOTH said it was a matter of great congratulation that their students increased in number and successes also, and that their finances were in a favourable condition. The Council had always been in the habit of accommodating itself to the wants of the town and neighbourhood at large, and the complaint of certain parties that the Council did not go in for higher education, especially for mechanics, was not in consequence of any direct opposition on the part of the Council, who had always been most anxious to afford every facility for the instruction of mechanics in the highest education they could possibly have. They would like to see the opportunity they afforded for higher education more appreciated. The laboratory had been furnished at very great expense, but the public did not seem to want it.

The SECRETARY, in reply to a question from Mr. Stuart, said the classes for agriculture were not very largely attended. There had been a large per centage of passes in that department, but the students of agriculture must be engaged in that pursuit in order to obtain the grant.

The Rev. G. STEELE agreed with Councillor Booth that this Council had always been ready to meet the wants of those, who asked from them any additional or higher instruction. It was obvious that an Institution, such as this, must work its way by degrees, and that students must study in the elementary classes before passing to the higher stages; and they hoped they had now arrived at that part of their existence when a greater number of students would come forward to obtain higher instruction in various branches of knowledge. In another way, also, they were going to meet the wants of another body of persons. The movement referred to by the President had arisen from the head teachers of the elementary schools, and they desired very much to put themselves in union with the Institute, thinking that the Council could provide them with instruction in a more satisfactory manner than they themselves could do. And it would be obvious to anyone that pupil teachers could be better taught in a town like Preston in large classes, and that it would be a waste of labour for head teachers to train their pupil teachers in individual schools.

The scheme was entirely unsectarian in character, and it had the support of the three great religious bodies of the town—the Church of England, Roman Catholics, and Nonconformists were unanimous in recognising its desirability. He mentioned this to the Council in order that when the Teachers' Association made their application the Council might be prepared to meet their wishes in a more or less degree.

The PRESIDENT said he was glad to hear that the advanced classes were being more largely attended than before.

The resolution for the reception of the report and balance sheet were then unanimously passed.

The Rev. C. H. WOOD moved a vote of thanks to the president, and said it would require no eulogy of his to induce them to accord it heartily—(hear, hear)—for when they looked at the results of the Institute for the past year there were sufficient evidence of the successful manner in which it was carried out, and that mainly resulted from the good rule of their president—(hear, hear).

Councillor GREENWOOD seconded, and said that if anyone in this neighbourhood deserved thanks for his exertions in the cause of popular education it was their president—(hear, hear).

The motion was carried, and

The PRESIDENT, in returning thanks, spoke of the excellent services rendered by Mr. Jolly, their Secretary, and other officers of the Institution.

The proceedings then terminated.

Distribution of Prizes to the Students

BY

W. F. ECROYD, Esq.,

ON

THURSDAY, DECEMBER 11th, 1890.

THE annual distribution of prizes to the successful students attending the Harris Institute and affiliated classes took place on Thursday, December 11th, and proved one of the most numerously-attended, well arranged, and successful gatherings that have been held in Preston for some time past. The vast hall was crowded, and many were standing in the gallery promenades and at the rear of the body of the hall. The arrangements had been mapped out by Mr. Jolly, the secretary, and were carried out with that perfection of detail which have always been striking features at these annual functions. Among those who assisted in the arrangements, were the Rev. George Steele, H.M.I.S.; Councillor Atherton, Councillor Y. W. Booth, and Mr. Easterby.

The rear part of the platform was occupied by the Harris Choir, numbering 250 voices. They were conducted by Mr. W. H. Cowell, and Mr. Jas. Tomlinson presided at the organ. During the evening the Choir rendered with great credit to themselves and satisfaction to the large audience the following selections:—"As the heart pants," "All men, all things" (Mendelssohn), "In this hour of softened splendour" (Pinsuti), "Hail to Thee" (Smart), "Love and Summer" (West), "Eldorado" (Pinsuti), "The owl and the pussy cat" (Selby), "Silvery Christmas bells" (Randegger), "When the spring comes round" (Smart).

At 7-30 prompt, the President of the Institute, Mr. W. Ascroft, escorted Miss Ecroyd on to the platform, Mr. Ecroyd, the former member for the borough, leading on Miss Ascroft. There was a hearty demonstration of welcome. Mr. Ascroft, J.P., presided, and in addition to the ladies named and Mr. Ecroyd, who had kindly undertaken to perform the ceremony which the Marquis of Ripon had been unable to undertake owing to indisposition, there were on the platform—Mr. C. R. Jacson, J.P., D.L.,

Rev. Geo. Steele, M.A., Rev. C. H. Wood, B.C.L., Dr. Hammond, J.P., Messrs. M. S. Maynard, J.P., Henry Calvert, J.P., E. Greenwood, J.P., J. J. Sidgreaves, J.P., R. F. Easterby, W. Atherton, Edmund Dickson, Y. W. Booth, and R. W. Ascroft, B.C.L., members of the Harris Institute Council; and amongst other gentlemen present were the Very Rev. Dean Pyke, Rev. C. O. L. Riley, Rev. Canon Duport, Rev. Father Clare, S.J., Rev. Father H. Harford, S.J., Mr. W. E. M. Tomlinson, M.P., Mr. W. P. Park, J.P., Mr. W. Bibby, J.P., Mr. John Mercer, J.P., Councillor Turner, Councillor Badger, Dr. Hodgson, Mr. A. E. Ascroft, Mr. D. W. Allsup; Messrs. W. B. Barton and J. W. Elliott, art masters; and Messrs. Stacey, Gardner, Forrester, Cartmell, Pendlebury, and Buckley, teachers. A letter was read from Mr. Hanbury, M.P., expressing his deep regret that the indisposition of Mrs. Hanbury had prevented himself and herself from realising the pleasure which they anticipated in being present that evening.

The CHAIRMAN, who was received with applause, said: It is not necessary for me to say any word of introduction of Mr. Ecroyd. The respect entertained towards him by Preston people is as fresh to-day as when he was more amongst us—(applause). We are greatly indebted to him for coming to us to-night. I can imagine that it must be a pleasure to him to renew his association, for however short a time, especially on an occasion devoted to education—a cause which he has so much at heart, and to which he has rendered so great service—(Hear, hear.) Mr. Ecroyd has the rare good fortune to have left behind him, in the town which he represented, no enemies, but countless numbers of friends—(applause.) Mr. Ecroyd is accompanied by his daughter, Miss Adelaide J. Ecroyd, and I am pleased to be able to say that she has very graciously consented to take a part in the distribution of the prizes—(applause.) With reference to the work of the Institute, the progress, which I was enabled to announce last year, has been continued, and now we have more students than before—(Hear, hear.) This year the large and influential body—the Co-operative Society—have taken a very important part in aiding our classes. We value this assistance very much, affording, as it does, an additional proof that the work of the Institute meets with general approval, and supplies a great want in our educational arrangements. Our work reaches into almost every grade of the town. The elementary classes, which pick up the boys and girls as they leave the elementary schools, now meet in four schoolrooms in different parts of the town, generously lent to us by the managers. We cannot, I think, overrate their importance. They constitute almost the only attempt in the direction of continuation schools. The scheme is at present very crude, but it is producing satisfactory results. It is capable of almost indefinite expansion, and we shall try next session to

the make classes much larger than they are. We are greatly indebted to the managers and teachers of the elementary schools for their assistance. In addition to availing ourselves of their help, as at present, we shall probably throw the classes absolutely open, by admitting to them all children of good character who have passed the fourth standard, and present themselves for admission. The only test will be a desire to learn, and an appreciation of instruction, shown by good conduct and attention --(Hear, hear.) It must be borne in mind that attendance at these classes, opens the door for free admission to the higher classes of the Institute. I have on many occasions pointed out the arrangements by which our classes are framed, with the object of meeting the requirements of all ranks, and of improving the tastes and knowledge of those who attend them, and that one purpose which we have largely in view, is to impart a knowledge of the principles which underlie the several trades of the district, to improve the knowledge and status of the workers, to provide instruction in matters useful in commercial pursuits, and to place within the reach of our students the means of qualifying themselves for bettering their position in life—(Hear, hear.) There are results, possibly of a higher kind, in the way of improved taste, mental cultivation, and refined character, which spring from studies pursued at our Institution, but to those I will not refer to-night. The importance of the work of such schools as ours is illustrated by a report which this year has been issued by the Department of Public Instruction and Fine Arts in France, and which is of great interest, as showing what, in the opinion of a competent French observer, has been the progress made in English taste and skill, as applied to manufactures, especially of an artistic character. M. Vachon was commissioned to study our schools and museums of industrial art, and the established system of technical instruction. After a careful and thorough investigation, he has reported to his Government the results of his observations. He refers to the period of the great exhibition of 1851, when the obvious inferiority of English art, as applied to manufactures, opened the eyes of statesmen, men of business, and others. He traces step by step the efforts which, from time to time, have been made to remedy our defects—efforts mainly inspired and guided, in the first stages, by the foresight and wisdom of the late Prince Consort. He recognises the great value of the influence of the museums and schools and organisation of the Department of Science and Art at South Kensington—an influence actively spread throughout the kingdom by means of the Schools of Science and Art—and the result thus produced of perfecting our industries, of developing taste, and of substituting for foreign English designers. M. Vachon visited and describes many of the art and science and

technical schools in the kingdom, and appears to think, I believe correctly, that the trade schools in England, more than those abroad, are formed for the purpose of giving theoretical instruction with practical demonstration, the ruling idea being—theory in the school, and practice in the workshop. The report is most encouraging for an Englishman to read, showing as it does the wonderful improvement which has taken place in English Art manufacture, the growing taste displayed, and the eager desire which exists for instruction. He speaks of himself as deeply impressed by the movement of ideas which he saw manifested in favour of the development of industrial and artistic instruction, and by the great energy expended in realising its practical application—a movement which he says exists on all sides, in the provinces, as in London, amidst the workers, the traders, and the aristocracy, and that it is evidenced by the great influx of pupils into the technical schools, and of visitors into the museums, as well as by the support given to it by the leaders of manufactures and commerce. England, he says, is bent on recovering at all cost the industrial and commercial supremacy which others now dispute with her. He adds a word of warning to his countrymen that this determination concerns them. How much this concern is felt by Continental nations, and what preparations they on their part are making to take their place in this struggle, are detailed in the latter part of this and in others of his reports. This report, coming from a trained and skilled observer, prepared for the information of his own government, approving so strongly our methods of instruction, and speaking so undoubtingly of their effects in improving the standard of our taste and the extent of our commerce, displaying the watchfulness with which our efforts are regarded by foreign rivals, and detailing the great efforts made by them in the same direction, proves to us that if we are alert and true to our own interests we are able to hold our own ; but at the same time it warns us that if we relax our efforts and neglect the great duty of cultivating our people, so surely we shall fall behind, and suffer the loss of some serious part of our trade and influence to wiser and more enterprising nations—(Applause.) I have sometimes been asked what practical consequences result from our work. With your permission I will make a short statement of the results of the recent examinations, and in the course of that statement I shall, I think, show the efficiency of our schools and give a satisfactory answer to that question. The quality of the work done by the students in the art schools continues to improve. During the past session there was a remarkable increase in the number of Government prizes gained, both in the elementary and advanced grades. The total number of these prizes was greater than that in any previous year, the aggregate being 43. In the preceding session the

number was 18. Four of these works were selected for exhibition in the show of national competition works at South Kensington, three of them gaining awards in that competition—namely, a design for a crystal claret cup, a design for a set of wrought-iron entrance gates, and a study of drapery arranged on an antique figure. The fourth drawing was a study of an antique figure, made in the Government time examination. This drawing was selected for exhibition as an illustration of the style of certificate work which the examiners were prepared to accept. In the exhibition preceding the last one, the Harris Institute was represented by only one such drawing. In the session preceding the last one a remarkable number of the drawings submitted to the Government art examiners, for the purpose of obtaining teachers' certificates, were accepted as satisfactory. This success has even been surpassed in the last session, 23 such works having been accepted out of a total of 25 submitted (third grade prizes being awarded in eight instances). In some of the Government Art Examinations the percentage of passes gained by students of our school was unusually high. The following subjects may be cited as instances :—In geometrical drawing the average of passes obtained by the entire kingdom was 65 per cent. In this subject our own average was over 92 per cent. In perspective the general average of first-class passes was under 22 per cent., whilst our own was over 74 per cent. In modelling in clay we obtained 40 per cent. of first-class passes, though the general average was only 27 per cent. Finally, in the third grade examination in drawing the figure from the antique, the average of the kingdom as a whole was for first-class passes 11 per cent., whilst we succeeded in getting 60 per cent.—(Applause.) A new feature has marked the instruction during the past session, namely, a preparatory class for the Government examination in modelling in clay. More than half of those attending it gained the certificate granted for efficiency in this subject by the Art Department—a result which has encouraged us to continue the class this session on a larger scale. Since the last annual meeting an ex-student of the institute—Mr. Moyle—has received an appointment as a draughtsman in the Patent Office at South Kensington, for which he is directly indebted to his having gained a National Scholarship at our school, which made him known to the authorities, by whom he was recommended for the post in the Patent Office. A leading London dealer in art, Mr. Myres, of Bond-street, has expressed a wish to purchase a design for a crystal and silver claret cup made by one of our students, Miss B. H. Smith, and seen by him in the National Competition Examination. His object in buying it is to send it to Vienna, in order that the cup may there be made in accordance with the design. Considering the knowledge

and experience of Mr. Myres, this is a significant tribute both to the artistic character of the drawing, and to its merits as a practicable design. In this connection I may allude to the growing extent, in which sketches and diagrams are demanded in various examinations in science, as being a better test of knowledge than verbal or written answers. The growing utility of drawing to their pupils in this respect is attracting the attention of teachers generally. Harry Bourne passed first in the United Kingdom in the subject of cotton spinning, and obtained a medal, and in the examinations of the Lancashire and Cheshire Institutes open to all students in those counties, Wyvil Lake passed first in machine construction, Alec Jolly passed first in the subject of building construction, and R. W. Riches passed first in the third stage of mathematics. In the new code it is provided that marks will be given, at the examination for entrance into training colleges, to any candidate at that examination, who, at one of the examinations held in May of each year by the Department of Science and Art, has taken a first-class in the elementary stage, or a second-class in the advanced stage, of several subjects of science. It may be stated generally, that all pupil teachers from this neighbourhood, who have taken exceptionally high places in the important examination for admission to the training colleges, have been students in the Institute. We are gratified from time to time by receiving recognition from old students of the good they have derived from attending the Institute, some of them showing that their position in life has been materially improved as a result of their studies. Employers, too, have assured us of the good that has been done, in increasing the efficiency of their employés. I will read a letter from Mr. Taylor, the principal teacher of the classes in cotton weaving and designing :—

Dear Sir,—In reply to your letter, the number of students on the register in weaving classes is about 160. The number has gradually increased from about 40 students five years ago, when I first undertook the classes. The class of people we get consists of a considerable number of designers, managers, salesmen, tacklers, weavers, clerks, &c., including sons of mill owners. The students are drawn from almost every weaving mill in Preston and district. We have regularly students from Chorley, Kirkham, Leyland, &c., and have had students from so far off as Rishton and Blackburn. One from the former place attended for two years, and is now manager and salesman for the firm he represents. It would be impossible to enumerate all the cases of advancement due more or less to attending the weaving classes. Almost all students who attend for two or more sessions improve their position. In one large mill in Preston there are several of our most promising students; one who was a warehouseman is now head designer at a very good salary, and several others in the employ of the same firm have materially improved their position. A considerable number of our students are now managers of mills in Preston and elsewhere. Since last session three of our students have been appointed managers of Blackburn mills. One of these especially has attended the

class four or five years, and was formerly a weaver, and has now been appointed manager of one of the largest mills in Blackburn. Another old student has recently been over on a visit from America, where he is designer and manager for a large firm. These are a few instances out of many. The facts are known to the students, which is the cause of their coming yearly in increased numbers. The success is also partly due to our giving instruction which is of everyday use to the students, and not paying too much attention to the syllabus of the City and Guilds of London Institute. We are also very grateful to Mr. Atherton for his generously allowing us to visit his works every week.

(Applause.) It will be remembered that when Professor Tyndall did us the honour of distributing our prizes, a young man named David Wilkinson attracted his attention by the number of his successes. Wilkinson—probably somewhat stimulated by the Professor's notice—continued his studies, obtained one of our £45 scholarships, which took him to South Kensington, and obtained fresh distinctions, which enabled him to take full advantage of the great opportunities there. This Preston working lad has now obtained the position of lecturer on metallurgy at the Dunedin University, New Zealand, with prospective emoluments exceeding, I believe, £400 a year—(Applause.) The ship which takes him out to his new charge sails to-day, or he would have been with us to-night. You will, I am sure, join me in wishing him a good voyage, and success in his new career. I have a letter from him detailing these particulars, and expressing his grateful obligations to this Institute. I have before me these and other letters, which it would occupy too much time to read, but I will hand them to the press. In the last examination of the Society of Arts, our Institute has taken the second place in the United Kingdom, being beaten only by the Gordon College, of Aberdeen, with 88 certificates against our 86. In the examinations of the City and Guilds of London Institute, Preston has taken the third place in Lancashire, the first place being taken by Manchester. The town which has taken the second place, however, falls short of our results in both art and science. Last year we obtained in science 296 certificates, of which 80 were first-class. This year we have obtained 303 certificates, of which 127 were first-class, the increased proportion showing a great improvement in number and quality. Last year we had 1,994 individual students. This year we have 2,252 individual students —(Applause.) In view of these results, and of the fact that our buildings are too small for our present requirements, increased space and accommodation are absolutely necessary to enable us to meet the eager desire for instruction which exists. This desire ought to be most warmly encouraged. It is a most hopeful sign of the future, for at no long distance the town will depend upon the skill, intelligence, and enterprise of those who are now in the student time of life. I trust that the Corporation, in response to

the appeal which we have made to them, will, by grants of land and money, assist us in carrying out the trust which is imposed upon us, a trust of which we greatly feel the importance and responsibility, but which we cannot adequately fulfil without their co-operation and help—(Loud applause.)

At the conclusion of the Chairman's address Mr. Ecroyd and Miss A. Ecroyd distributed the large and valuable array of prizes to the successful students, after which

Mr. Ecroyd, who was heartily received, delivered an address worthy of the occasion. He said he did not know what reason had determined their President to confer upon him the kindness and the honour of an invitation to discharge that very pleasant task, but if he (Mr. Ecroyd) had no other motive for yielding a ready acquiescence, the regard that he had for their President and for his very excellent and noble work in connection with that Institute would certainly have been a sufficient one—(Hear, hear.) When he looked upon the list of those who had discharged that function before him he felt how very little claim he had to occupy that position. Some of those who had gone before him were distinguished in the world of science, and others were distinguished as statesmen of great experience and high standing in this country; but he began to suspect that their President—as he thought was hinted by Mr. Tomlinson last year—had a sneaking preference for Lancashire men—(laughter, and hear, hear)—and that if he could not have one of the highest qualifications he was rather willing to accept one from the second rank—("No, no!") However, he was well pleased in any case to be there, and he thought it was impossible to perform that very simple duty of handing the prizes to the successful students without being extremely struck with the marks of sterling character and intelligence, and the traces of earnestness and of industry which had been revealed in their faces as they passed by the chair. He could not help thinking what a large amount of real and earnest work was represented in the proceedings of that evening, and he hoped not less there had been exhibited the promise of a prosperous and honourable future for many of those who should be the citizens in the next generation of their town—(Hear, hear.) It was very pleasing in looking over the papers in connection with the work of that Institute for the past year to observe that the successes had not been limited to any one department. There was an increase of the work and an increase of its success in every single department so far as he could observe. He could not but think that the Harris Institute must have been singularly fortunate in hitting upon a great and legitimate opening for its educational work here in Preston.

Now what were the great purposes of all that machinery of education, advancing from less to more, from the elementary to

the higher, from the general to the particular? They must all surely be directed to some intelligible end. That night they had seen many instances of the way in which their students had perceived that there was something to be had there which was likely to promote their interests in life, to make them more efficient in their sphere of daily labour, more efficient in their position, and more prosperous in their circumstances. That was a very substantial—and he would go further and say a creditable and worthy aim, for he did hot know that there were many ambitions in life more creditable and more honourable than those which led them to perform successfully the plain and simple work which came before them in their daily life. It was perfectly evident that many of their students had found there the means of laying the foundation of a more prosperous life, and probably of easier circumstances, in the future than they would otherwise have attained.

The Chairman, in his address of last year, spoke of their purpose being to increase the knowledge and capacity of workers and to add to their efficiency in the occupation in which they must be employed. That was admirably true, but if he might be allowed to do so, he should wish to carry the minds of those students a little further—a little beyond the mere question of their daily labour and of the prosperous fortunes of their immediate work in life. There were other great ends equally legitimate, and, as they would come to see in after-life, equally necessary for their happiness and well being; and he hoped that whatever their success in science, in art, in technological subjects, they would feel that those were not only instruments, it might be, of a more successful life, but instruments directed to a still higher purpose, to make a larger and more completely rounded and happier life; and therefore he would not have them limit their estimate of these advantages to their usefulness in the direct business of life. This industrious study and persevering work should be, above all, directed to making better and more capable men and women—(Hear, hear.) It was intended to enlarge their interests in life in every way, and he would even believe that the material advantages that might flow from it might be found to be the smallest advantages after all—(Applause.) In the first place, the disciplinary training, the moral training which was involved in the pursuit of studies of this kind, was in itself most valuable. It could not but train the mind to a greater power of concentration, to greater and more real command over itself, and in that way increase the probability of an intellectual life devoted to definite and noble purposes—(Applause). Now obedience, alacrity, cheerfulness, and teachableness, were themselves qualities essential to the success of their work in life, whether it be public or private, and these were to be found, and could not but be found, in the

course of studies such as those of which they had been speaking. These Institutions were regarded, and very properly regarded, as a means amongst others of maintaining and perhaps, in some cases, regaining our industrial supremacy, and in that view special importance was attached to a work which he believed they were going to prosecute in Preston—the work of technical instruction in the strictest sense of the word. Now, he had no doubt that there was a large field open for that kind of work, and he was sure it was altogether good in its effect on the individual, as well as in providing a more qualified population for the successful working of our great industries; but he wanted his friends in Preston and elsewhere not to form an exaggerated opinion as to the influence which the spread of technichal education could have upon the actual prosperity and volume of our industries. He should regret very much if that consideration were to be put too much in the forefront. He believed that knowledge was best worth having for itself, and then they might rest assured that whatever in the way of technical instruction could minister to the success of our great industrial populations in their struggle with world-wide competition would not fail to be at their command and on their side in the days to come—(Applause.) But after all let them not forget that their success in the great game of international competition must always mainly depend on economical forces and economical considerations, and that it was not always the best instructed who won in that game. Unfortunately, those willing to do the largest amount of work for the least money, and those willing to live more meanly and sordidly than others, obtained the lion's share of the demand in our great industries. This was an unfortunate condition of affairs, and from it we could not be delivered by any advance in technical education. He said these words in order that they might avoid forming an exaggerated view of what was possible to be done in that field of action—(Hear, hear.) Take, for example, the case of their great leading textile manufactures. Of course, there were, as they knew, very able men connected with the management and direction of all the various departments of textile industry; but take the great bulk of our population, and in Lancashire most of them must always be spinners and weavers. Now, for these two great branches of industry they all knew quite well the material reward was for those who could be successful in turning out the largest amount of work during 56 hours per week. That was an element which would always, in his opinion, remain the dominant one in such industries as those which were followed in the county of Lancaster; but there were no doubt important branches of manufacture in regard to which scientific education, instruction in the principles and practice of art, and technical instruction following upon that and applying it to the various

industries were the very life blood. Such were the manufactures of ornamental metal work, of pottery, of glass, of decorative articles, and in this field there was very large scope indeed for the development of that noble work which was first set on foot in this country by the patriotic intelligence of the late Prince Consort—(Cheers.) He had perhaps said enough to prove he was far from undervaluing artistic, scientific, and technical education. If in the rest of the time at his disposal he did not further deal with that phase of the question, he hoped nobody would attribute it to any want of appreciation on his part of those great branches of knowledge and study.

It might, however, be interesting to think for one moment about the direct and the reflex influences of scientific and technical education. They easily understood that the spread of scientific and technical instruction amongst handicraftsmen produced, in many instances, a direct and beneficial effect upon their workmanship, clearly manifest in the articles with which they supplied the public. They knew how very important it was, for instance, that those who performed the work of plumbers should be properly and scientifically educated for that work. But let them look at the reflex action of that kind of education. Suppose that scientific knowledge, and to some extent technical knowledge based upon it, should be diffused amongst the great bulk of the population. Suppose that in the next generation almost all the inhabitants of Preston were practically acquainted with the influence of good and scientific appliances upon the public health. Could they not see what a great force would thus be brought into play,—how such increased knowledge, co-operating with the increased skill, might help to improve the health of the town? If they would have the best result from scientific and technical education, it must to a certain extent be made universal. The whole population must understand, as well as those engaged in the work, the importance of plumbers' work being kept scientifically in order to safeguard the health of the population. It was the same thing with regard to the work of architects and builders. The increase of scientific and technical education amongst workmen was of great importance; but the knowledge of those principles by the people for whom houses were built was scarcely of less importance. So again, with regard to art. The direct influence was upon designers, constructors, and manufacturers; but what was wanted was a general spread of refined and artistic tastes amongst consumers—in other words, the public at large. At present they found that though they put the most perfect and beautiful works of art in textile fabrics before the public, they might fail to meet a demand, and in many cases might be absolutely rejected, simply because the public taste was governed, not by the sense of

intrinsic beauty, but by the mere dictates of fashion. It was only by the diffusion of art, which would cultivate a true sense of beauty in the minds of the great bulk of the population, that they could create that demand for artistic manufactures which would be the reward of the artistic workman. They might even go higher in that view of education. Let them take the highest example of all—the question of public affairs. In a country like this, with vast and complicated interests, and with a great and world-wide empire, it would never be enough that they should have statesmen and a few local leaders in the various ranks of life acquainted with history. An educated, well-informed, and intelligent public was needed, if right conclusions were to be reached, and if the true interests of the kingdom and the empire were to be maintained—(Applause.)

He thought that, of all the work which might be done by that noble institution, none was probably more important than the spread of continuation schools—the carrying on of the education of their young people from the time when they left the ordinary elementary school until they reached the commencement of adult life. They knew quite well in how many cases a good elementary education given up to 13 years of age had fallen back, and eventually, to a large extent, been wasted, because it had not been carried forward in those perilous years between 13 and 17 or 18. He believed that in the increased efficiency of that secondary education would be found the very greatest and most blessed work that had yet to be accomplished in the realm of education in this country. He would like to lay down, if he might venture to do so, the lines upon which that education ought to go. He was no believer in specialism in education until they came to the period when it had to be taken up by the individual to equip him for his particular occupation in life. He wanted a soundly educated people—people at 17 years of age able to read so as to make reading enjoyable; able to write and to compose so as to be capable of expressing their ideas well and clearly; possessing a plain useful knowledge of geography, a pretty thorough knowledge of English history and of the outlines of general history, and of the elements of all the practically useful sciences. Moreover, he wanted our young people not to grow up any longer (and there was no need in the present condition of circumstances that they should) without that elementary knowledge of Latin which was the great foundation of literary tastes, and the effect of which in the Scotch parochial schools, had been to put so many Scotchmen at the head of great commercial houses and great public works in all parts of the world. In addition he would ask for a sound acquaintance with some of the best English literature. That was not too much to ask of young people situated as the population of Lancashire were now, as regarded

means and leisure, at the age of 18. It was a reasonable demand, and a demand which he believed could and would be answered to the infinite blessing of society, by helping to fill up the gulf which separated classes. A population thus started in life would not fail to seek and to acquire the special knowledge, whether of art, science, mechanics, literature, or commercial affairs, needed by them in their various callings and pursuits.

Some people thought, and he was afraid it had become a prevalent opinion in Lancashire, that they ought to give great prominence in this county to such subjects as mathematics, mechanics, science, book-keeping, and all those matters which were supposed to contribute to success in commercial pursuits. He had said, in his own neighbourhood at least 20 times within the last 25 years, that he had seen more failures of business men from want of a cultivated imagination than from all other causes put together. The human mind was so constructed that its various faculties might be roughly assigned to two different poles of the intellect and being—the analytic and logical, on one hand; the imaginative and poetic on the other. And unless a sound balance was kept between the two sets of faculties there would be a tendency to lose power, even with regard to the one which was over-wrought. In populations like those of Lancashire and the West Riding, where the study of things material was so predominant, there was great danger that this part of the man's nature and intellect should be over-wrought to the infinite disadvantage of his physical and mental health, and therefore of his cheerfulness and his power to enjoy life. He believed there was no other part of the kingdom where it was more important that the study of history, poetry, literature, natural history, and what was capable of giving so great a solace to the mind, the beauty of nature and creation, should be made predominant, in order to redress the balance by a wise regard to the claims of the other set of faculties.

Going back to the starting point, he would say that the object of all those studies, many-sided as they were, might be stated in four words—health, wealth, delight, and solace,—and man could not dispense with any one of those ends. He might think at the beginning of life, when his work was to be accomplished, and its immediate rewards lay yet before him for attainment, that whatever contributed to his advancement and prosperity in life was all in all; but he would not think in the same way when that position had been attained. Then, if the foundation of that which could bring larger happiness had not been early laid, the man would find that he had suffered an irreparable loss. He wanted their young friends who were pursuing those studies to remember that there would come a time, if they were succesful in the attainment of their material

aims, when another class of needs and desires would rise before them, not less, but more real and important. When they had attained the wealth, they would still need to maintain the health; and there would come a time when the whole man would want unbending; when delight, that reasonable delight which had been provided by God for the benefit and cheering and strengthening of his creatures, would become in its turn as legitimate an aim as any which had been before him in the earlier years of his life. Thus, to use that significant line of the poet, no man was an entirely reasonable man who did not "see life steadily and see it whole." There was not only youth and the purpose of youth, early manhood and its purpose, middle life and its purpose, but the period of age when the summit had been reached and the powers were beginning to fail; and who would not think it part of a reasonable scheme of life to set out by making some provision for that period as for all other periods? What was required for that period was solace, that solace to be found in a mind cultivated in various directions—in the habit of a happy observation of nature, in the habit of escaping from itself and its own daily pursuits, and of getting out of the deep rut of toil and over-wrought anxiety. There was no more reasonable line of study for any young man to set before him and to make a part of his daily life—he was speaking now of people engaged in factories,—there was no more reasonable pursuit than that of the noble literature of his own country, beginning with our fine ballad poetry, and going through the whole course of that glorious English poetry which was the admiration of all nations. He would be contented if their young people would make themselves acquainted, in that line of literature, with the works of only two authors; for no man would set out badly equipped who had a really good acquaintance with the works of the immortal William Shakspere and the scarcely less immortal Walter Scott. If his mind should be filled with the lofty and glorious historical images, the pictures of manners, and, above all, the invariable tendency to exalt what was noble and righteous and unselfish over that which was base and mean, which he would find in those two great writers; if his mind were once imbued with such sentiments, he had no fear he would ever afterwards go far wrong in the realm of imaginative literature. What was the effect of that kind of study upon a business life? Some people would say that a business life had no advantage from, what they would term, high-flown ideas of honour and chivalry; but to his mind no business life was complete which was not full of a sentiment of honour and chivalry. That business was a mere taskwork which was not accompanied by a thrill of delight and exultation every day—and that was a blessing that could be had. Nor did it depend upon the nature of the work, but upon the spirit of the

man; and he said there was no kind of work so apparently common or mean, or of so little account, that might not every day be a source of the deepest satisfaction—and of self-improvement, moral and spiritual, to a man whose mind had been cultivated and turned in that direction. Of course, they knew that everything in the world must be soberly looked at in the light of reason, and had a matter-of-fact aspect which nobody could afford to put aside or neglect. But there was also another aspect of human affairs, under the light thrown upon them by the enthusiasm of the human spirit, full of high and noble purposes—a light which could gild everything and turn it to the best account. That was what produced a happy old age, and gave enjoyment to a life wearied and jaded with toil. If a man had not found out at 20, he would find out at 50 or 60 that, so far from wasting the time spent in enlarging and refining his mind, he had been turning it to the most profitable and useful account.

In the present advance of science and of general knowledge, and in the honour which was rightly paid to it, they were beset by a very special danger—the danger of over-estimating the mere knowledge of facts, and of under-estimating the power and cultivation of character. Let them avoid, above all, conceit, and the danger of thinking themselves supreme, nationally or in their own personal sphere. Let them take care that their superiority over their predecessors 50 years ago was real at all points, and not superficial. He remembered (when as a youth he first came in contact with business) the fine, free-hearted Lancashire weaver lad—the hand-loom weaver as he then was, who knew his learning was small, but who reverenced the experience and knowledge of those who taught him his daily work; whose active figure, light and joyous step, and merry eye told of a simple and healthful life. What if he knew little of all that was now taught in the Harris Institute? He did his own part well in building up the strong fabric of Lancashire character and Lancashire industries. What if he spoke what some would call the rude dialect of his ancestors? Perhaps it was nearer the tongue of Chaucer and the author of Piers Plowman than our modern English. Let them try, by all means, to speak our own English—noblest of living languages—pure and undefiled. But for himself he should also keep a warm corner in his heart for the ancient Lancashire dialect, the downright outspoken speech of a shrewd and manly people, and would say with George MacDonald, in his translation from the Platt Deutsch poet,—

> My mother-speech! how sweet thy tone,
> How near to good allied!
> Were even my heart of steel or stone
> Thou would'st cast out the pride.

(Applause.) He could not frame a better wish for their young

people who came fresh from school into the factories to-day, than that they should come empty of conceit and headiness, and full of that dutiful conscientious interest in their work which was among the most important conditions of success, and an ornament of any life.

There was yet one word more which ought not to be left unsaid. Religion, in its broadest and truest sense, under whatever precise definition of creed or form of observance, must inspire and co-ordinate the whole work of education and training, or that work would fail of its purpose—(Applause.) Those great guides, conscience and duty, how they blessed and made efficient the life begun, lived, and completed in obedience to them. He remembered the remark of a much-valued friend, one of the ablest men in his own department of knowledge, experienced through a long lifetime as a large employer of labour in an industry which required great scientific knowledge, honoured himself, and who had enjoyed a large acquaintance with the most honoured men of his generation;—who told him, some 40 years ago, this fact, which he had never forgotten—"I have had many workmen in my employ, and much opportunity of examining their workmanship and observing their lives. I have noticed that, wherever a man in my employment has come under the influence of religion, there has been a large increase of the power of his intellect and of his efficiency as a workman." He thought that the subject of religion, treated in that manner, was entirely apposite to the considerations which were before them that evening.

Preston had great privileges: it had been fortunate in the character and public spirit of many of its citizens, amongst whom the founder of that Institute would always hold a distinguished place; fortunate in the ability and worth of many of its great employers of skill and labour; perhaps most fortunate of all in its early and liberal provision for education—always based on the solid foundation of religious and moral training—(Applause.) In such work as that which they were that evening assembled to honour and to encourage, they rejoiced to see the ever-growing and ripening fruits of the good seed thus sown in the past. He could frame no better desire for the future of that great town, its inhabitants, and its industries, than that that work should still grow and flourish; and that there should rise up in each generation a body of young people like those they had had the pleasure of seeing that evening, who should not only be qualified by their scientific and general knowledge to sustain the reputation and to increase and promote the material prosperity of the community, but who should also help to carry forward the good work, so that Preston, as it had been in the past, should be in the future distinguished for its devotion to those great principles which were the only safe and true guides of human life—(Loud applause.)

The Rev. C. O. L. RILEY proposed a vote of thanks to Mr. and Miss Ecroyd, for their kindness in distributing the prizes, and to Mr. Ecroyd for his valuable address. They had had a graceful and intellectual treat—a speech abounding in sound Lancashire common-sense. He expressed his gratification at the lofty tone of the address. Referring to the Harris Institute, he asked what Preston would be without that Institute. He ventured to say that without it most of the education given in the Elementary Schools of the borough would be lost, for it served the invaluable purpose of a continuation school for our working population—(Applause.) He thought that the time had come for the sytematization of the education of Preston—(Hear, hear.) There should be an Elementary School where all boys and girls could go, and a second School which should be a step to the Universities. Without the Harris institute he should despair for education in Preston—(Hear, hear.) It was asked what was the use of giving secondary education to the person who worked in a mill. Now if anybody required the refining influence of education, it was the hard-working operative and artisan—(Hear, hear.) Without knowledge life was miserable to them. He thanked the Harris Institute for bringing life, intelligence, and brightness into the homes of the Preston people—(Cheers.) He expressed his admiration at the lofty tone of Mr. Ecroyd's address, and observed that if they could not all be clever they could, at any rate, be good and do noble things—(Loud applause.)

Dr. HAMMOND seconded the motion, and referred in high terms to the address of Mr. Ecroyd, and to their indebtedness to the graceful presence of Miss Ecroyd. He thought that all had reason to be gratified with the progress of technical education in Preston and in the country generally—(Applause.)

The Very Rev. Dean PYKE supported the motion, and observed that he felt certain the address of Mr. Ecroyd would be read with the widest and deepest interest.

The motion being carried,

Mr. ECROYD responded on behalf of himself and his daughter, and expressed the hope that those present had had as much pleasure in what had passed as he and Miss Ecroyd had received in being present. In pursuit of his argument for a well-balanced education, he made the following striking quotation from the *Spectator*, which had been accidentally omitted from his address:—"Many eminent naturalists, knowing the injurious effects of the exclusive study of the experimental sciences, have exercised their minds in other subjects. Cuvier studied the classics; Werner, the geologist, comparative philology; Ampère, the electrician, knew the 'Imitation of Christ' by heart. Darwin deplored most bitterly the atrophy of the higher powers of his brain, and the gradual loss of æsthetic tastes. 'My mind' he wrote, 'seems to

have become a kind of machine for general laws out of large collections of facts; but why this should have caused the atrophy of that part of the brain alone on which the higher tastes depend, I cannot conceive. . . . If I had to live my life again, I would have made a rule to read some poetry and listen to some music at least every week, for perhaps the part of my brain now atrophied would have been kept alive through use. The loss of these tastes is a loss to happiness, and may possibly be injurious to the intellect, and more probably to the moral character, by enfeebling the emotional part of our nature.'"

Mr. TOMLINSON, M.P., received with applause, moved a vote of thanks to Mr. Ascroft, the President of the Institute, for his services in the chair. It had happened to him (the speaker) to be present on several of those interesting occasions when Mr. Ascroft had occupied the chair, and he thought they would agree with him that there was no one who could approach him by many degrees in his fitness to occupy the chair—(hear, hear.) On those several occasions Mr. Ascroft had travelled over the same ground, but he had never heard an address from him which had not seemed to him to be entirely fresh and thoroughly interesting. The address they had had that night was certainly no exception to the rule—(Hear, hear.) And why was this? It was because Mr. Ascroft had the interests of the Institute thoroughly at heart, because he was always occupied with it, always thinking how he could best serve its interests, and how success could be brought about. He was sure the large meeting that evening must have been exceedingly gratifying to Mr. Ascroft, who had watched over the Institute for years. Mr. Ascroft saw that an institution of this kind was a necessity in the town if they were to keep pace with the requirements of the times, and he had applied himself arduously to the task of making the Institute what it ought to be. It must have been gratifying, therefore, to him, as it was to all of them, that it had made such advances during the past year. In every case where they looked for excellence, its efforts had surpassed those of previous years; and having served Preston, it was now beginning to serve the country by showing what results could be obtained by an Institution of that kind—(Hear, hear.) It had obtained a position which might well afford encouragement to everyone who looked forward to the future of Preston. He trusted the Institute would go on and prosper; the more it prospered the more would those elements on which Preston depended prosper, and the more would Preston people be able to maintain the best interests of the town and those who belonged to it—(Applause.)

Mr. PARK seconded the resolution, and said he remembered the time when Preston did not possess the Harris Institute. At that time Mr. Ascroft was President of the then Mechanics'

Institute, and he said, without fear of contradiction, that it was, in a great measure, through Mr. Ascroft that the Harris Institute was first thought of and conceived. Therefore, he felt sure the people of Preston were deeply grateful to him for what he had done in extending the higher points of education—(Hear, hear.) Mr. Ascroft's address seemed to show that the present Institute building was totally inadequate for the work in progress there, and he hoped that the Corporation of Preston might see their way to come forward handsomely and present a site adapted to the purpose and give a handsome grant towards its erection—(Hear, hear.) He was sure the ratepayers of Preston would rejoice if the Corporation were to put their hands into their pockets in aid of such a noble and grand object—(Applause.)

Mr. JACSON said that before putting the resolution he should like to say a few words as a Harris Trustee; as one of the survivors of the small band to whom the late Mr. Harris confided the execution of his wishes in regard to the charitable institutions of Preston, of which this formed one. He wished to say, on behalf of himself and colleagues, how thoroughly gratified they had been with the work that had been done by the Institute—(hear, hear)—at the wonderful success that had attended its work, and the noble quality of the work that had been done there—(Applause.) He willingly bore testimony, as a Harris Trustee, to the merit that had been assigned to Mr. Ascroft, the President of the Institute, he having been the one who originated the idea which they, as Trustees, were enabled by the will of the testator to give effect to, and, happily, in a manner that had produced the results they had been so proud of—(Hear, hear.) He was extremely pleased to hear from Mr. Ascroft that there was only one other Institute in the kingdom that in one respect was superior to theirs, and that that one lay further north. He thought such Institute had been rather too far north for the Harris Institute so far, but he trusted in a very short time they would overtake it, and prove themselves the better one of the two. Of the tasks which the Harris Trustees undertook, two had been successfully performed—that Institution, than which nothing could have been more successful, thanks to the excellent guidance of Mr. Ascroft and his colleagues—and the Harris Orphanage. But there still remained one, and perhaps the most difficult task of all, to complete, and that was the Free Library and Museum. He mentioned that in order to express the great gratification that the survivors of the original Trustees felt in having induced Mr. Ascroft to become their colleague, and to give them the invaluable assistance which he could and did give them in working on to the happy conclusion of that building—(Hear, hear.) As regarded the present building, if they wanted any proof of the interest Mr.

Ascroft took in it, and his fitness to be its President, he could only point to the administrative skill and judgment he had shown in inducing Mr. and Miss Ecroyd to come over and perform the part they had performed that evening with such signal ability and grace, and to the satisfaction of everyone—(Applause).

Mr. ASCROFT, in replying to the warmly accorded vote of thanks, said that praise was due to Mr. Jacson for the origination of the Institute, and thanks ought to be accorded to the other members of the Council, and their excellent Secretary, Mr. Jolly (who most ably superintended all the arrangements of the evening), for the work they had done in furthering the progress of the Institute. He could assure his hearers that it was a pleasure to work with the Harris Trustees. In conclusion, Mr. Ascroft asked the company to show their approval of the efforts of the choir, the conductor, and organist—(Applause).

This was done, and the proceedings soon afterwards terminated.

THE ADVANTAGES OF TECHNICAL EDUCATION.

Extract from "Preston Guardian," 13th December, 1890.

INTERESTING LETTERS.

"Knowledge is power." This is a maxim which yearly grows in force. Mere manual skill is good, but the knowledge of the principles upon which workmanship is based gives to the workman a higher commercial value and makes him altogether a better man. The position this country has of late years assumed in connection with technical and art education is very strikingly indicated by the reports which delegates of the French Government and American Commissioners have presented to their Governments. Mr. Ascroft, on Thursday Evening, quoted from a most interesting report presented by M. Vachon to the French Government, and this accurateiy proves that we have not been slow as a nation to rid ourselves of the taunt that we are behind the Continental workmen in technical information. Not only the Government and the great educational institutions, but the municipalities have gone into the question, and in agricultural and industrial centres alike, we find schools have been formed to teach boys and girls the scientific and technical basis of their employments. Preston has not yet got her Technical Institute, but a magnificent educational work is being performed in connection with the Harris Institute, and the fruits are already being seen in the substantial benefits which are accruing to young men who have won success in various departments of study. With the view of ascertaining something of the benefits which the Institute in its re-organised form are conferring, the President has just received some important statements which are worth recording, by way of stimulus to those who are now undergoing instruction at the Institution, and information to the public.

Perhaps one of the best letters is the following:—

FERN BANK, KIRKHAM,

27th NOVEMBER, 1890.

DEAR SIR,

I understand from Mr. Gardner that you wish to get to know instances in which the Harris Institute has been useful. This I will give you (as far as I am able) with great pleasure. (1) My daughter, Mary Lynex, attended the Institute for drawing, science, French, and tonic-sol-fa. In her case the benefit was so great that in the Queen's Scholarship Examination she was the *sixth* in all England. She entered *second* in her college (Whitelands), and at the certificate examination was at the *top* of her college. The authorities of the college retained her on the college staff, and she is now

a governess at Whitelands. Last midsummer she passed the matriculation of the London University in the 1st class. (2) My son, Edwin George Lynex, attended the Institute for the same subjects. His success at the Queen's Scholarship Examination was even more conspicuous than his sister's, for he was *fourth* in all England and *top* student of St. Mark's College. He, also, was retained by the college authorities, and is a very successful teacher in St. Mark's College Schools. He matriculated at London University, and was 21*st in honours*. (3) A pupil teacher of mine, James Fairnie, attended the Institute for the same subjects. He was 50th in the 1st class (second in Mr. Steele's district) of the Queen's Scholarship Examination. He was in the 1st class at the certificate examination last Christmas, and matriculated at the London University in the 1st class. I could multiply instances in which the Harris Institute has helped on deserving students. It is a noble Institution, and is doing splended service. It places sound instruction within the reach of the very poorest.

Believe me, yours truly,

G. LYNEX.

Other letters of interest bearing upon the classes for operatives and artisans are the following :—

7, CLARENDON ROAD,

WHALLEY RANGE, MANCHESTER,

NOVEMBER 19TH, 1890.

DEAR SIR,

In replying to your letter, the number of students on the register in weaving classes is about 160. The number has gradually increased from about 40 students, five years ago, when I first undertook the classes. The class of people we get consists of a considerable number of designers, managers, salesmen, tacklers, weavers, clerks, &c.,—including sons of mill-owners. The students are drawn from almost every weaving mill in Preston and district. We have regularly students from Chorley, Kirkham, Leyland, &c., and have had students from so far off as Rishton and Blackburn. One from the former place attended for two years, and is now manager and salesmen for the firm he represents. It would be impossible to enumerate all the cases of advancement due more or less to attending the weaving classes. Almost all students who attend for two or more seasons improve their position. In one large mill in the town, viz., Messrs. Wilding's, there are several of our most promising students ; one, who was a warehouseman, is now head designer, at a very good salary, and several others in the employ of the same firm have materially improved ther position. A considerable number of our students are now managers of mills in Preston and elsewhere. Since last session three of our students have been appointed managers of Blackburn mills. One of these especially (Samuel Smith) has attended the class four or five years, and was formerly a weaver, has been appointed manager of one of the largest mills in Blackburn, and I should think his salary is not less than £5 a week. Another old student has recently been over from America, where he is designer and manager for a large firm. His name is H. Bradshaw. These are only a few instances out of many. The facts are known to the students, which is the cause of their coming yearly in increased numbers. The success is also partly due to our growing instruction, which is of every-day use to the students, and not paying too much attention to the syllabus of the City and Guilds of London Institute. We are also very grateful to Mr. Atherton for his generously allowing us to visit his works every week. I append a few names which occur to me of students who have improved their position

through attending the classes, but these are only a few out of a large number.—J. Taylor, Rishton, manager and salesman; Samuel Smith, manager; J. Turner, designer; John Nelson, assistant designer; J. Green, manager; J. Yates, manager; Whittam, manager; H. Bradshaw, designer; John Smith, manager; C. Sharples, Blackburn, manufacturer; H. Tattersall, Chorley, manager; Jas. Adamson, W. Mellor, A. R. Smith, salesmen; J. B. Garner, &c.

Yours faithfully,

JOHN T. TAYLOR.

34, Camp Street, Ashton,

20th November, 1890.

Dear Mr. Ascroft,

I have pleasure in complying with your wishes. There are 56 names on our cotton spinning register this session. and it is the largest number I have had for a period of six years. As regards the occupations, there are a few clerks; also some carding and spinning masters, or overlookers as they may be styled. But the great majority are young men who rank as spinners or minders, and the rest are either piecers or creelers. The persons referred to above are mostly confined to one department in a mill, or they are conversant with the practical working of the particuar machine they superintend; but the preparation of the material before they get it and the stages it goes through after they have done with it, do not seem to be of interest to them further. Joining our class means widening their scope of inquiry into details, and causes them to take an interest in the whole of the processes through which the material is put, and this gives an interest in the industry and commerce of the trade. Among our past students some are occupying important positions. One is a manager in Oldham, one in Blackburn, and the third is an assistant to a manager in the Oldham district, and one of our students is assistant demonstrator in weaving at our Harris Institute. The newly-arranged system of holding local examinations analogous to the Preston industry is likely to work important results and to stimulate those who are anxious to improve themselves. Too much praise cannot be given to Councillor Greenwood for the interest he took in formulating the questions to suit the trade, and the Council may be complimented on the interest they have shown in this matter. We are indebted to those who have allowed our class to visit their works during the last session, and I also think Mr. Harry Bourne is worthy of special mention for the prize medal he has gained, as it were, for the town. I have nothing more to add, but I am much obliged to you for allowing me to give my opinion on these matters.

Yours, &c.,

WILLIAM J. HANNAN.

Harris Institute, Preston,

December 1st. 1890.

Numbers in Machine Construction Classes keep up well. General improvement in position, abilities, and tone of students each year. Importance of advantages derived from attending these classes is demonstrated by the fact that several local firms of machinists pay entrance fees for their apprentices as well as providing books and instruments, other firms *compelling* to attend. Many parents are sending schoolboys for a course of training preparatory to placing them to their trade or profession; students voluntarily joining after seeing superior positions of our earnest students.

Advantages in mechanical trade are the thorough groundwork given to students, which is invaluable throughout after-life—expanding his mind; creating a desire for further knowledge; brings out his inventive qualities. Training fits him for higher position in his calling; is really the alphabet to his profession. This groundwork is indispensable to a student who, in after-years, is required to take a post of command. Attendance at these classes assists the "home" student over the difficult passages in his studies; creates a competitive spirit and a desire to excel; brings him in contact with fellow students, inducing a mutual and beneficial exchange of ideas; gives him self-reliance and confidence in his abilities; he is able to lay down his schemes and ideas in the form of clear and comprehensive drawing; is enabled to read and grasp the intricate working drawings of machines and their details that are laid before him for construction; he can take and retain exact sketches and dimensions of any object desired; have proofs of preference shown to successful students over their fellow-workmen, of their receiving superior appointments, &c. Two last session students, Dobson and Dawson, on completing their apprenticeship in Preston, successfully passed competitive examination at Portsmouth for naval engineers, both being immediately appointed to ships; Dobson to the commodore ship Camperdown. In this class we have this year obtained three Queen's Prizes, one Lancashire and Cheshire, four Scholarships, five Institute Prizes.

Yours respectfully,

J. T. BUCKLEY.

The following letter is a grateful acknowledgement of the great benefits the Institute has conferred upon an individual student, to whom we have before referred:—

15, St. Paul's Square, Preston,

December 1st, 1890.

Dear Sir,

With regard to the question, "Is the Institute doing a good work in the town?" there can be no doubt about it. The principle and most important work which it performs is, without doubt, the spread of sound ideas on scientific, artistic, and literary subjects among the rising generation. This must ever be its chief aim; but besides this it also gives to the young men of the town, and especially those who have abilities and the energy to use these gifts, a grand opportunity of improving themselves in every respect, and of ultimately being of great service to their fellow-men. With regard to the advantages which I have derived from attendance at the Institute, I cannot speak of them without seeming to egotise myself. Nevertheless, I will briefly indicate what I have done, and how I have been aided, hoping you will make public only the little that is absolutely necessary for your purpose. I came to Preston December 3rd, 1880. I was without employment, and literally without a friend in the town. I attended the Institute first in the session 1881-1882. I was at that time almost devoid of scientific education, and had the barest rudiments of a general education. You know my work up to June, 1886. I then went to the N.S.S. and R.S.M., South Kensington, holding the Harris Scholarship. At the end of the first session I obtained a National Scholarship, entitling me to three years' tuition. This scholarship was completed last June, when, as you are aware, I obtained the first place in metallurgy, being awarded the Bessemer medal. After a few weeks' work as a miner in Cornwall, I obtained my present appointment, which is Lecturer on Metallurgy, School of Mines, Itago University,

Dunedin, N.Z. This will be sufficient to show that, personally, I owe more than I can say to the Harris Institute. Inspiration and guidance in study, so necessary at the beginning of a scientific or any other education, are the chief benefits that young men derive from such institutions as the Harris Institute, and this was especially true in my case. Believe me I shall look back with pleasure and gratitude always upon the evenings I spent at the Harris Institute.

I am, dear sir, yours very sincerely,

DAVID WILKINSON.

W. Ascroft, Esq., President Harris Institute.

Other letters have been received, which we have not space to give, showing how the classes of the Institute have been the means of helping on students in the examinations for the various professions, businesses, and trades into which they are entering.

List of Prizes and Certificates.

AWARDED TO STUDENTS ATTENDING THE CLASSES AT THE HARRIS INSTITUTE, SESSION 1889-90.

SCIENCE.

† *These Students have obtained Queen's Prizes and Local Scholarships.*

* *These Students have obtained Local Prizes and Scholarships.*

A *signifies Advanced.* E *Elementary.* I. *First Stage.* II. *Second Stage.*

NAME.	Success. Stage.	Class.	SUBJECT.
Atkinson, Robt.	E	2nd	Machine Construction
Attwater, Richard	E	2nd	Practical Plane and Solid Geometry
*Anderton, George	E	1st	Practical Plane and Solid Geometry
* " "	E	1st	Building Construction
*Aspinwall, Fred	E	1st	Machine Construction
*Ayres, Robert	E	1st	Sound, Light, and Heat
* " "	E	1st	Physiography
*Alston, John T.	E	1st	Inorganic Chemistry
*Alsten, Elizabeth	E	1st	Physiography
*Brierley, Richard	E	1st	Practical Plane and Solid Geometry
*Brown, Fred W.	E	1st	Building Construction
*Bretherton, James	E	1st	Steam and Steam Engine
" "	E	2nd	Applied Mechanics
Blair, Walter	A	2nd	Building Construction
Burrows, F. J.	II.	2nd	Mathematics
†*Beaven, Coningsby R.	II.	1st	Mathematics
" " "	E	2nd	Theoretical Mechanics
Bentham, George H.	E	2nd	Theoretical Mechanics
* " "	E	1st	Magnetism and Electricity
Bowker, John R.	E	2nd	Applied Mechanics
" "	E	2nd	Sound, Light, and Heat
* " "	E	1st	Magnetism and Electricity
* " "	E	1st	Physiography
Bowker, William R.	E	2nd	Applied Mechanics
* " "	E	1st	Sound, Light, and Heat
* " "	E	1st	Magnetism and Electricity
" "	E	2nd	Physiography
Burrow, Harry	E	2nd	Applied Mechanics
* " "	E	1st	Physiography
*Billington, Richard	E	1st	Sound, Light, and Heat
" "	E	2nd	Physiography
Bostock, Daniel	A	2nd	Magnetism and Electricity
" "	E	2nd	Chemistry
Busby, Henry	E	2nd	Animal Physiology
" "	E	2nd	Physiography
*Balshaw, Emma J.	E	1nd	Physiography
Barlow, Edith	E	2nd	Physiography
Barlow, Emily	E	2nd	Physiography

NAME.	Science. Stage.	Class.	SUBJECT.
Crossthwaite, William	E	2nd	Practical Plain and Solid Geometry
* ,, ,,	E	1st	Building Construction
*Corner, William H.	E	1st	Practical Plane and Solid Geometry
3rd Grade	Prize for		Machine Construction
Corner, John	E	2nd	Practical Plane and Solid Geometry
Cooke, James	A	2nd	Building Construction
†*Coward, Fred	A	1st	Building Construction
Cowell, Clarence	E	2nd	Applied Mechanics
*Coupe, Alfred C.	E	1st	Building Construction
Coward, Edith F.	E	2nd	Sound, Light, and Heat
* ,, ,,	E	1st	Physiography
*Coates, Ellen M.	E	1st	Sound, Light, and Heat
* ,, ,,	E	1st	Physiography
Clarkson, Richard	E	2nd	Magnetism and Electricity
Clarke, Thomas A.	A	2nd	Geology
*Chew, John	E	1st	Animal Physiology
* ,, ,,	E	1st	Hygiene
Cooper, Reginald H.	E	2nd	Animal Physiology
Cockshutt, John	E	2nd	Physiography
Coulthard, Rebecca	E	2nd	Physiography
Carroll, James	E	2nd	Physiography
*Crowther, Amy	E	1st	Principles of Agriculture
*De Rome, James	E	1st	Sound, Light, and Heat
* ,, ,,	E	1st	Physiography
Dryden, William	E	2nd	Practical Plane and Solid Geometry
Dobson, Enoch	E	2nd	Machine Construction
Dillon, John	E	2nd	Building Construction
*Dewhurst, Joseph	E	1st	Magnetism and Electricity
Dewhurst, Alberta	E	2nd	Physiography
Davenport, Margaret A.	E	2nd	Physiography
Eddleston, John	E	2nd	Sound, Light, and Heat
,, ,,	E	2nd	Magnetism and Electricity
,, ,,	E	2nd	Physiography
Ellison, Joseph	E	2nd	Botany
Ellis, Effie	A	2nd	Physiography
Fisher, Joseph	A	2nd	Practical Plane and Solid Geometry
*Fillmore, Frederick	E	1st	Practical Plane and Solid Geometry
* ,, ,,	I.	1st	Mathematics
Foster, John	E	2nd	Machine Construction
Fielding, Joseph	E	2nd	Machine Construction
*Fawcett, Ada	E	1st	Sound, Light, and Heat
* ,, ,,	E	1st	Physiography
Freeman, Henry S.	A	2nd	Inorganic Chemistry
* ,, ,,	E	1st	Practical Chemistry
* ,, ,,	E	1st	Botany
Fawcett, Richard	E	2nd	Animal Physiology
Frame, Elsie	A	2nd	Physiography
,, ,,	E	2nd	Agriculture
Garfitt, Robert	E	2nd	Building Construction
*Gardner, John	E	1st	Building Construction
*Gregory, William	I.	1st	Mathematics
Garstang, Henry	I.	2nd	Mathematics
Gardner, Harry M.	I.	2nd	Mathematics
* ,, ,,	E	1st	Physiography
Gray, Charles E.	E	2nd	Theoretical Mechanics
Gardner, Rachel C.	E	2nd	Sound, Light, and Heat
,, ,,	E	2nd	Physiography
†*Gardner, John L.	A	1st	Physiography
†* ,, ,,	A	1st	Sound, Light, and Heat
†* ,, ,,	A	1st	Botany

NAME.	Success. Stage.	Class.	SUBJECT.
*Gardner, Gertrude	E	1st	Sound, Light, and Heat
* " "	E	1st	Physiography
Greenwood, Robert B.	A	2nd	Geology
Greenwood, F. C.	E	2nd	Physiography
Herd, Robert	E	2nd	Machine Construction
*Haycroft, Arthur H.	E	1st	Building Construction
*Haworth, James	I.	1st	Mathematics
*Harrison, James	I.	1st	Mathematics
Hindle, Maud	E	2nd	Sound, Light, and Heat
" "	E	2nd	Physiography
*Hall, Joseph W.	E	1st	Sound, Light, and Heat
" "	E	2nd	Magnetism and Electricity
*Haworth, John H.	E	1st	Sound, Light, and Heat
" "	A	2nd	Magnetism and Electricity
Hall, Harry	E	2nd	Sound, Light, and Heat
Hodson, Robert C.	E	2nd	Sound, Light, and Heat
" "	E	2nd	Magnetism and Electricity
" "	E	2nd	Physiography
*Hardman, John K.	E	1st	Magnetism and Electricity
" "	E	2nd	Physiography
*Hyne, Frederick	E	1st	Magnetism and Electricity
" "	E	1st	Inorganic Chemistry
*Horsefield, Wm. J.	E	1st	Machine Construction
Hilling, Henry	E	2nd	Magnetism and Electricity
*Holliday, Albert V.	E	1st	Inorganic Chemistry
Higginson, Edward	E	2nd	Physiography
*Isaacs, Sarah	E	1st	Botany
*Irving, George	E	1st	Building Construction
Irvin, George	A	2nd	Physiography
Jones, David	E	2nd	Machine Construction
*Jolly, Alec	E	1st	Building Construction. Awarded 1st Prize by the Union of Lancashire and Cheshire Institutes.
Jackson, William	E	2nd	Building Construction
Jury, Eliza A.	I.	2nd	Mathematics
Jones, John	A	2nd	Practical Chemistry
†*Jones, John	A	1st	Botany
Johnson, Frederick	A	2nd	Physiography
Kellbrick, Edward E.	E	2nd	Building Construction
Killbride, Robert J.	A	2nd	Building Construction
Kilroe, Patrick	Alt.	2nd	Physics
* " "	E	1st	Hygiene
Lang, Edward	E	2nd	Agriculture
Lynex, George	Hons.	2nd	Agriculture
*Ley, Ernest	E	1st	Practical Plane and Solid Geometry
†*Lake, Wyvil H.	A	1st	Machine Construction
Ladyman, Harry	A	2nd	Building Construction
*Ladyman, Frank	E	1st	Theoretical Mechanics
* " "	E	1st	Inorganic Chemistry
Lindsay, Janet	E	2nd	Sound, Light, and Heat
* " "	E	1st	Physiography
*Lomax, Ada G.	E	1st	Sound, Light, and Heat
* " "	E	1st	Physiography
*Lynex, Annie B.	E	1st	Physiography
Martin, John	I.	2nd	Mathematics
Merigold, Albert E.	E	2nd	Practical Plane and Solid Geometry
Mitchell, James	E	2nd	Machine Construction
Mitchell, Arthur	E	2nd	Machine Construction
Morley, John W.	A	2nd	Building Construction
Marsh, John W.	E	2nd	Magnetism and Electricity
" "	E	2nd	Physiography
Makin, Samuel	A	2nd	Inorganic Chemistry

NAME.	Success. Stage.	Class.	SUBJECT.
†*Magerison, Kate	A	1st	Physiography
*McGavin, Annie	E	1st	Physiography
Montgomery, William	E	2nd	Physiography
*Nowell, James	E	1st	Building Construction
Norcross, William H.	E	2nd	Geology
*Newton, Agnes L.	E	1st	Physiography
Nevett, Francis W.	E	2nd	Agriculture
†*Parker, Thomas R. G.	A	1st	Practical Plane and Solid Geometry
†* ,, ,,	A	1st	Machine Construction
* ,, ,,	E	1st	Applied Mechanics
* ,, ,,	E	1st	Steam and Steam Engine
Parish, John	A	2nd	Machine Construction
* ,, ,,	E	1st	Applied Mechanics
* ,, ,,	E	1st	Steam and SteamEngine
*Price, William	E	1st	Machine Construction
Parker, John	E	2nd	Building Construction
Purves, Elizabeth A.	E	2nd	Sound, Light, and Heat
†* ,, ,,	E	1st	Physiography
Powell, Thomas A.	E	2nd	Sound, Light, and Heat
* ,, ,,	E	1st	Physiography
*Proctor, William E.	E	1st	Magnetism and Electricity
Parker, John	E	2nd	Animal Physiology
Parkinson, Thomas	E	2nd	Steam and Steam Engine
Penny, John	A	2nd	Physiography
Payne, Frances M.	E	2nd	Physiography
Peat, Edward F.	E	2nd	Agriculture
Pendlebury, Edward E.	E	2nd	Applied Mechanics
Rawsthorn, Milton	E	2nd	Practical Plane and Solid Geometry
* ,, ,,	E	1st	Building Construction
Richardson, Joseph	E	2nd	Machine Construction
Rigby, R. M.	E	2nd	Building Construction
Rowbotham, George	A	2nd	Building Construction
†*Riches, Henry W	III.	1st	Mathematics. Awarded 1st Prize by the Union of Lancashire and Cheshire Institutes.
†* ,, ,,	A	1st	Magnetism and Electricity
,, ,,	A	2nd	Inorganic Chemistry
,, ,,	E	2nd	Practical Inorganic Chemistry
* ,, ,,	E	1st	Botany
Rawcliffe, Frederick W.	II.	2nd	Mathematics
Riches, Richard P.	I.	2nd	Mathematics
,, ,,	E	2nd	Theoretical Mechanics
Rushton, Frederick C.	I.	2nd	Mathematics
,, ,,	E	2nd	Physiography
Raby, John F.	E	2nd	Applied Mechanics
*Robinson, James A.	E	1st	Magnetism and Electricity
*Reeder, Clara	E	1st	Physiography
Reeder, Sarah	E	2nd	Physiography
*Robertshaw, Elizabeth	E	1st	Physiography
Salisbury John	E	2nd	Machine Construction
Sugden, Anna	E	2nd	Theoretical Mechanics
*Smith, Florence	E	1st	Geology
,, ,,	A	2nd	Botany
Stephen, Janet	E	2nd	Sound, Light, and Heat
,, ,,	A	2nd	Physiography
* ,, ,,	E	1st	Agriculture
Spiby, Thomas	A	2nd	Practical Plane and Solid Geometry
,, ,,	E	2nd	Applied Mechanics
* ,, ,,	E	1st	Geology
* ,, ,,	E	1st	Botany
* ,, ,,	E	1st	Hygiene
Strickland, Edward	E	2nd	Practical Plane and Solid Geometry

NAME.	Success. Stage.	Class.	SUBJECT.
*Strickland, Edward	E	1st	Building Construction
Slater, Charles	E	2nd	Practical Plane and Solid Geometry
" "	I.	2nd	Mathematics
" "	A	2nd	Steam
Stevenson, James W.	E	2nd	Machine Construction
" "	E	2nd	Steam
Slater, Thomas	E	2nd	Machine Construction
*Sergeant, William A.	E	1st	Building Construction
Stevenson, John	E	2nd	Building Construction
†*Sumner, Richard	II.	1st	Mathematics
*Stubbs, William J	I.	1st	Mathematics
* " "	Alt.	1st	Physics
Smith, William	E	2nd	Theoretical Mechanics
*Seed, Henry	E	1st	Applied Mechanics
Smith, Annie J.	E	2nd	Sound, Light, and Heat
* " "	E	2nd	Agriculture
" "	E	1st	Physiography
*Smith, John J.	E	1st	Sound, Light, and Heat
" "	A	2nd	Physiography
Starkie, Gilbert	E	2nd	Magnetism and Electricity
*Snape, Thomas	E	1st	Magnetism and Electricity
"	E	2nd	Physiography
*Smith, W. H.	Alt.	1st	Physics
Stevenson, John K.	E	2nd	Magnetism and Electricity
Southworth, William	E	2nd	Magnetism and Electricity
" "	E	2nd	Inorganic Chemistry
†* " "	A	1st	Botany
Sumner, Frederick W.	A	2nd	Inorganic Chemistry
*Smith, Edith A.	E	1st	Geology
* " "	E	1st	Botany
Southworth, Ellen	E	2nd	Geology
* " "	E	1st	Physiography
Sharples, William	E	2nd	Animal Physiology
*Seed, Mary F.	E	1st	Physiography
Southworth, Dora	E	2nd	Physiography
Smith, Sarah	E	2nd	Agriculture
Swarbrick, Henry	E	2nd	Applied Mechanics
Turner, William	E	2nd	Building Construction
Tomlinson, John	A	2nd	Building Construction
Taylor, Sarah A.	II.	2nd	Mathematics
" "	A	2nd	Inorganic Chemistry
Taylor, Charles F.	E	2nd	Applied Mechanics
" "	E	2nd	Steam
Trotter, Alice	E	2nd	Botany
*Thormber, Layland G.	E	1st	Sound, Light, and Heat
†* " "	A	1st	Physiography
*Taylor, Miriam	E	1st	Magnetism and Electricity
*Thompson, Henry	E	1st	Magnetism and Electricity
* " "	E	1st	Physiography
*Toulmin, George	E	1st	Geology
* " "	E	2nd	Animal Physiology
* " "	E	1st	Physiography
*Walsh, Alfred	E	Ist	Geology
* " "	E	1st	Physiography
Walker, Mary F. D.	E	2nd	Physiography
Woodhouse, Jannie M.	E	2nd	Physiography
*Walker, Robert J. H.	E	1st	Hygiene
*Warburton, Winifred A.	I.	2nd	Mathematics
Worthington, Joseph	E	1st	Practical Plane and Solid Geometry
" "	A	2nd	Machine Construction

NAME.	Success. Stage.	Class.	SUBJECT.
*Worthington, Joseph	E	1st	Steam
Walker, Roger	A	2nd	Building Construction
Whitewell, William	E	2nd	Machine Construction
,, ,,	E	2nd	Applied Mechanics
Waddington, Thomas A.	E	2nd	Building Construction
Walsh, Margt.	E	2nd	Geology
Woods, Robert	E	2nd	Building Construction
*Wilson, Robert	E	1st	Building Construction
*Wrigley, Frederick	E	1st	Physiography
*Wrigley, Frank	I.	1st	Mathematics
*Wilkinson John	E	1st	Physiography
,, ,,	I.	2nd	Mathematics
* ,, ,,	E	1st	Sound, Light, and Heat
* ,, ,,	A	2nd	Magnetism and Electricity
* ,, ,,	E	1st	Inorganic Chemistry
Wilson, Edward	II.	2nd	Mathematics
Wignall, Robert	E	2nd	Sound, Light, and Heat
* ,, ,,	E	1st	Magnetism and Electricity
Woods Esther	E	2nd	Sound, Light, and Heat
*Willmoth, Florence A.	E	1st	Sound, Light, and Heat
,, ,,	A	2nd	Physiography
*Wilkinson, Margaret A.	Alt.	1st	Physics
* ,, ,,	E	1st	Physiography
*Wright, George	E	1st	Magnetism and Electricity
,, ,,	E	2nd	Physiography
Webster, William	E	2nd	Inorganic Chemistry
,, ,,	E	2nd	Practical Inorganic Chemistry
*Yates, Thomas	E	1st	Practical Plane and Solid Geometry

5
103

SCHOOL OF ART.

GOVERNMENT SECOND GRADE EXAMINATIONS.

E *Signifies Excellent and also winner of a Government Prize.*
* *Scholarship and Local Prize awarded.*

NAME.	Freehand. Class.	Geometry. Class.	Perspective. Class.	Model. Class.	Modelling.
Archer, Walter	..	Pass	1st	..	..
*Anderton, George	1st Ex.	..	..	..	..
*Alker, Ralph	2nd	..	..	1 Ex	..
*Barlow, Percy	1st	..	..	2nd	..
Billington, Richard	..	..	..	..	1st
*Birchall, William	2nd	..	..	2nd	..
*Brierley, Henry	2nd	Pass	1st	2nd	..
*Bee, Richard C.	2nd	Pass	..	2nd	..
Bramley, J. J.	..	..	..	2nd	..
Barnes, John	2nd	..	..	..	..
Buck, William	2nd	..	..	..	..
*Barton, Cooper	1st Ex.	..	..	2nd	..
Burrow, Ernest C.	1st	..	..	..	..
Bostock, Mabel	1st	..	..	1st	..
Banks, George A.	2nd	..	..	..	..
Brown, Maude G.	2nd	..	..	..	..
Bennett, Vincent	2nd	..	..	..	..
Billing, Walter	2nd	..	..	..	..
Beech, Edward J.	2nd	..	..	..	..
Bilsborough, Elizabeth	..	Pass	..	..	..
Chaloner, Richard	..	..	..	2nd	..
Coulthard, A.	2nd	..	..	..	..
Carr, Zep	1st	..	..	2nd	..
Crosswhite, T. E	2nd	..	..	..	..
Clarkson, William	2nd	Pass	..	..	2nd
*Corbishley, William	2nd	Pass	1st	1 Ex	..
*Crowther, Amy	1st	2nd	..	..	..
Coupland, G. W.	2nd	..	..	..	..
Cottam, Maud	2nd	..	..	2nd	..
*Clarke, George E.	1 Ex	..	..	2nd	..
Charters, Benjamin	2nd	..	..	..	..
*Dennison, Minna	1st	..	..	2nd	..
Dewhurst, Alberta	2nd	..	..	..	..
*Entwistle, Ernest J.	2nd	..	..	2nd	..
*Ewart, Mabel	1 Ex.	..	..	2nd	..
Fairbrother, J. H.	..	..	..	2nd	..
Fisher, Joseph	..	..	..	..	1st
Farrington, Isaac M.	2nd	..	..	..	..
Fisher, Edward	2nd	..	..	..	..
Fallowfield, Edith	2nd	..	..	..	..
Gibson, Winifred	2nd	..	..	..	..
Goulden, F. M.	1st	..	..	..	..
*Gaunt, George E.	..	Pass	1 Ex.	2nd	..
Grime, Margaret	..	..	..	2nd	..
*Garner, Charles Henry	1 Ex.	..	1 Ex.	..	..

NAME.	Freehand. Class.	Class. Geometry.	Perspective. Class.	Model. Class.	Modelling.
*Greenhalgh, John E.	2nd	Pass	..	2nd	1st
Gardner, John	..	..	..	2nd	..
*Hughes, Thomas A.	2nd	..	..	2nd	..
*Heathcote, Frederick A.	1st	..	..	2nd	..
Harrison, J. W.	1st	..	..	..	..
*Higginson, Edward	1st	..	..	2nd	..
*Houghton, Reuben	2nd	..	...	2nd	2nd
*Hull, Richard N.	2nd	..	1 Ex.	2nd	..
Holmes, E. H.	2nd	..	..	..	..
*Hothersall, Thomas	2nd	..	..	2nd	..
*Haworth, F. T.	2nd	..	..	2nd	..
Hoyle, Joshua	..	..	..	2nd	..
*Harkness, Alfred	1st	..	..	2nd	..
Howard, E. E.	2nd	..	..	..	..
*Higginson, W. E.	2nd	..	..	2nd	..
Hindle, Maude	2nd	Pass	..	..	..
Horsefield, Wm. J.	..	Pass	..	..	..
*Halsall, Kate R.	1st	..	..	2nd	..
*Jury, Eliza A.	..	..	1 Ex.	..	..
*Jones, Prudence	2nd	..	1 Ex.	..	..
Knowling, Eliza J.	1st	..	..	..	..
Lang, James E.	2nd	..	..	..	..
Lawson, Minnie	2nd	..	..	...	..
Ley, Percy	..	Pass	..	..	..
Lindsay, Charles C	2nd	..	..	.	..
*Martin, John	2nd	Pass	..	..	..
*Merigold, John J.	2nd	Pass	..	..	..
McGavin Annie	2nd	..	..	..	..
Mangan, James	1st	..	.	..	..
†*Morley, William	2nd	..	1 Ex.	2nd	..
†*Mayor, Martha	1st	..	1 Ex.	..	..
*Nelson Maggie	1st	..	..	2nd	..
Norris, Thomas	..	..	..	2nd	..
Napthen, Samuel	1st	..	..	..	..
Oldfield, Ada J.	2nd	..	..	..	..
Parkinson, Emma	2nd	..	..	..	..
Paul Eliza	2nd	..	..	2nd	..
*Pratt, Edith	..	Pass	1 Ex.	1 Ex.	..
Procter, F. E.	2nd	..	..	2nd	..
Penny, John	..	..	..	2nd	..
Pearson, John	2nd	..	..	..	..
Parker, R. G.	2nd	..	..	..	..
Robertson, Marion	2nd	..	..	..	..
*Robinson, Thomas	2nd	..	..	2nd	..
Rigby, Florence	2nd	..	..	..	..
Ratcliffe, John	..	..	..	2nd	..
Royle, William Henry	2nd	..	..	..	..
Richardson, William	2nd	..	..	..	..
*Raymer, Maude	..	..	1 Ex.	2nd	..
*Stewart, Jackson	1st	..	..	2nd	..
*Smith, Florence	2nd	..	1 Ex.	2nd	..
*Smith, Edward H.	2nd	..	1 Ex.	..	..
*Smith, Edith A.	2nd	..	1 Ex.	2nd	..
*Smith, Samuel	1 Ex.	..	..	2nd	..
*Spencer, H. H.	1st	..	..	2nd	..
Snowden, May	..	..	..	2nd	..
Southworth, Dora	1st	..	..	..	..
Simpson, Mary H.	..	..	1 Ex.	..	..
*Turner, Henry	2nd	..	..	2nd	..
Topping, H. H.	2nd	..	..	..	..

NAME.	Freehand. Class.	Geometry. Class.	Perspective. Class.	Class. Model.	Modelling.
Tipping, Jno. A.	..	..	..	2nd	..
*Toulmin, James	2nd	..	..	2nd	..
Turner, J. J.	2nd	..	..	..	..
Tullis, David	2nd	..	..	..	..
*Webb, J. W.	1 Ex.	Pass	..	1 Ex.	1st
*Walkden, Frank	..	Pass	2nd	1st	..
Wade, Albert	..	..	..	2nd	..
*Walmsley, Benjamin	2nd	..	..	1st	..
*Yates, F. J.	1st	..	..	2nd	...
*Whittaker, Thomas	1 Ex.	..	..	2nd	..

GOVERNMENT CERTIFICATES OF THE THIRD GRADE.

Time Examinations in Miscellaneous Subjects.

Name of Prize Winner.	Subject of Certificate.	Class of Certificate
Bentham, Francis M.	Drawing from the Antique	1st
Fairclough, Robert	Drawing from the Antique	1 Ex.
Poole, Florence	Drawing from the Antique	1 Ex.
Parker, James N.	Drawing from the Antique	2nd
Fairclough, Robert	Drawing from the Life	2nd
Elliott, John W.	Plant Drawing in Outline from Nature	1st
Fairclough, Robert	Painting in Monochrome	1st
Jury, Alberta E.	Technical questions on Painting	1st
Poole, Lizzie	Historic Ornament	1 Ex.
Parker, James N.	Elementary Architecture	2nd
Billsborough, Elizabeth	Outline of Ornament from Cast	Pass
Horrocks, Annie	Outline of Ornament from Cast	..
Owens, Albert R.	Outline of Ornament from Cast	..
Fisher, Joseph	Shading from Models	..
Owens, Albert R.	Shading from Models	..
Pratt, Edith	Shading from Models	..
Snowden, May	Shading from Models	..
Whiteside, Agnes	Shading from Models	..
Fisher, Joseph	Shading from the Cast	..
Halsall, Kate R.	Shading from the Cast	..
Jury, Alberta E.	Shading from the Cast	..
Owens, Albert R.	Shading from the Cast	..

STUDENTS FROM WHOM PREPARATION WORKS HAVE BEEN ACCEPTED.

NAME.	SUBJECT.	Certificate to which it relates.
Bentham, Frances M.....	Sheet of Geometrical Problems	Art Class Teachers' Certificate
,, ,, ...	Outline drawing of Ornament, from Cast	.. ..
,, ,, ...	Shaded drawing of a Group of Models	.. ..
,, ,, ...	Shaded drawing from Cast of Fruit	.. ..
Bilsborough, Elizabeth ..	Sheet of Geometrical Problems	.. ..
,, ,, ..	Outline drawing of Ornament, from Cast	.. ..
Billington, Richard	Do. do.	.. ..
Elliott, John W.	Outline drawing of a Plant, from Nature	Group I.
,, ,, ...	Advanced Perspective Problems	.. I.
,, ,, ...	Plant, in Water Colour, together with three designs based on it	.. I.
,, ,, ...	Shaded drawing, from the Antique	.. II.
Fisher, Joseph	Shaded drawing from Cast of Fruit	Art Class Teachers' Certificate
Horrocks, Annie	Do. do.	
Jury, Eliza Alberta.....	Sheet of Geometrical Problems	.. ..
,, ,, ...	Outline drawing of Ornament, from Cast	.. ..
Owens, Albert R.	Shaded drawing from Cast of Fruit	.. ..
Parker, James N.	Outline of Figure, from Cast	Group I.
Poole, Lizzie.....	Do. do.	.. I.
Poole Florence	Painting Ornament in Monochrome, from Photograph	.. II.
,, ,, ...	Study of Drapery arranged on an Antique Figure	.. II.
Pratt, Edith	Shaded drawing of a Group of Models	Art Class Teachers' Certificate
Snowden, May	Do. do.	.. ..
Smith, Edmund H.....	Shaded drawing from Cast of Fruit	.. ..

GOVERNMENT PRIZES OF THE THIRD GRADE.

Bentham, Frances M., for Geometry Sheet.
Elliott, John W., for Plant Drawing from Nature.
,, ,, Advanced Perspective Sheet.
,, ,, Shaded figure from the Antique.
,, ,, Painting in Water Colour of Flower from Nature, and design to fill given space with Ornament.
Fairclough, Robert, for Painting in Oil of a Still Life Group.
,, for Time Examination in Antique Drawing.
Jury, Alberta Eliza, for Geometry Sheet.
Poole, Lizzie, for Outline Drawing of Antique Figure.
,, for Examination in Knowledge of Historic Ornament.
Poole, Florence, for Time Drawing of Antique Figure (in examination).
,, for Painting of Ornament in Monochrome.
Snowden, May, for Shaded Drawing of Group of Models.

NATIONAL COMPETITION AWARDS.

Hull, Richard N., Book Prize, for Original Design for set of Iron Gates.

Poole, Florence, Book Prize, Study of Drapery arranged on an Antique Figure.

Smith, Barbara H., Original Design for Crystal Claret Cup.

SPECIAL ART PRIZES.

NAME.	Success.	SUBJECT.
Billington, Richard	1st Prize	Outline from the Cast
Fisher, Joseph	1st ,,	Shaded Drawing from the Cast
Horrocks, Annie	1st ,,	Shaded drawing of Egg plant
Hull, Richard A.	1st ,,	Design for Iron Gates
Murray, J.	1st ,,	Design for Damask Weaving
Poole, Clara	1st ,,	Design for Carpet
Poole, Florence	1st ,,	Painting in Monochrome
,, ,,	1st ,,	Study of Drapery
Pratt, Edith	1st ,,	Shaded Group of Models
Snowden, May	1st ,,	Shaded Group of Models
Whiteside, Agnes	1st ,,	Head in Chalk, from Cast
Jury, A. E.	1st ,,	Sheet of Geometrical Problems

ELEMENTARY DESIGN PRIZES.

Barton, Cooper; Haworth, Frank; Ley, Percy.

SKETCHING CLUB PRIZES.

NAME.	SUBJECT.
Section *A.*	
Bentham, Frances M.	Still Life, in Oil Colour
,, ,,	Outline Drawing of Plant
Horrocks, Annie	Landscape in Light and Shade
Poole, Florence	Landscape Foreground, in Water Colour
,, ,,	Extra Prize, for Study of a Plant, in Water Colour
Poole, Lizzie	Study of Flowers in, Water Colour
Poole, Lizzie	Study of an Interior
Royle, Herbert	Landscape Foreground, in Water Colour
Section *B.*	
Pratt, Edith	Still Life
,, ,,	Set of Studies in Outline
Richardson, M.	Flowers, in Water Colour
Snowden, May	Landscape Foreground, in Water Colour

TECHNICAL.

CITY AND GUILDS OF LONDON INSTITUTE EXAMINATIONS.

* *These Students have Received Local Prizes and Scholarships.*

NAME.	Success. Grade. Class.	SUBJECT.
†*Adamson, John E.....	Ordinary 1st	Cotton Weaving
Adamson, James	,, 2nd	Cotton Weaving
Almond, Henry	,, 2nd	Cotton Spinning
*Bourne, Harry.....	,, 1st	Cotton Spinning
The Clothworkers'	Prize of £2 and	the Institute's Bronze Medal.
*Baxendale, James	Honours 2nd	Cotton Spinning
*Barton, Thomas	,, 2nd	Cotton Spinning
Blackwell, Thomas	Ordinary 2nd	Cotton Weaving
Blinkhorn, Edward....	,, 2nd	Cotton Weaving
*Bamber, Samuel	,, 1st	Cotton Weaving
Brierley, Jun. Rd.	,, 2nd	Carpentry and Joinery
Bilsborough, Thomas..	,, 2nd	Principles of Plumbers Work
*Brindle, Thomas.....	,, 1st	Brickwork and Masonry
Crewe, Joseph	,, 2nd	Cotton Weaving
Cottam, Benjamin	,, 2nd	Cotton Weaving
Crosschwaite, T. E.....	,, 2nd	Cotton Spinning
Cooke, James	,, 2nd	Brickwork and Masonry
Coward, Frederick	,, 2nd	Brickwork and Masonry
Duckworth, T. C.....	,, 2nd	Cotton Weaving
Deasy, Martin	,, 2nd	Cotton Spinning
Greenwood, F. C.	,, 2nd	Principles of Plumbers Work
Gildert, Joseph	,, 2nd	Cotton Weaving
Gregory, William	,, 2nd	Cotton Weaving
Garstang, C. R.	,, 2nd	Cotton Weaving
,, ,, ...	,, 2nd	Cotton Spinning
*Gardner, John B.....	Honours 1st	Cotton Weaving
Hoyle, Walter L.....	Ordinary 2nd	Carpentry and Joinery
Hodson, James.....	Passed	Practice of Plumbing
Halsall, Thomas	Ordinary 2nd	Cotton Spinning
*Johnson, Thomas	,, 1st	Cotton Weaving
Kenyon, John W.....	,, 2nd	Cotton Weaving
Lever, James	,, 2nd	Cotton Weaving
Langton, James	,, 2nd	Cotton Weaving
Mitchell, Thomas	Ordinary 2nd	Cotton Weaving
*Mellor, William	Honours 2nd	Cotton Weaving
Mackley, F. W.....	Ordinary 2nd	Principles of Plumbers Work
Mawdsley, Zacharias ..	,, 2nd	Cotton Spinning
* ,, ,, ..	Honours 2nd	Cotton Weaving
Mills, Richard.....	Ordinary 2nd	Cotton Spinning
Nelson, Thomas	,, 2nd	Cotton Weaving
*Nelson, James	,, 1st	Cotton Weaving
*Nightingale, Robert ..	,, 1st	Cotton Spinning

NAME.	Success. Grade.	Class.	SUBJECT.
Nowell, Thomas	,,	2nd	Carpentry and Joinery
Nowell, James.....	,,	2nd	Carpentry and Joinery
Ogden, Andrew	,,	2nd	Cotton Weaving
Parker, John	,,	2nd	Carpentry and Joinery
*Pilkington, H. W.....	,,	1st	Cotton Weaving
*Pearson, William	,,	1st	Cotton Spinning
*Rawsthorn, Milton	,,	1st	Carpentry and Joinery
*Ratcliffe, Silvester	,,	1st	Cotton Weaving
Raynor, W. H.....	Ordinary	2nd	Cotton Weaving
*Riley, John	Honours	1st	Cotton Spinning
Rogerson, John	Ordinary	2nd	Cotton Weaving
Rigby, Robert M.....	,,	2nd	Carpentry and Joinery
Rigby, Alfred	,,	2nd	Principles of Plumbers Work
Stirrup, John W.....	,,	2nd	Cotton Spinning
Sergeant, W. A.....	,,	2nd	Brickwork and Masonry
Stubbs, William J.....	,,	2nd	Telegraphy
*Southworth, William..	,,	1st	Cotton Weaving
*Sutton, Matthew.....	,,	2nd	Cotton Weaving
*Turner, James.....	Honours	1st	Cotton Weaving
Taylor, Charles	Ordinary	2nd	Cotton Weaving
Woods, Edward	,,	2nd	Cotton Weaving
Whalley, Thomas W..	,,	2nd	Cotton Weaving
*Welch, Thomas F.....	Honours	2nd	Cotton Spinning
Welch, Robert.....	Ordinary	2nd	Cotton Spinning
*Walker, Roger.....	Honours	2nd	Carpentry and Joinery
Wilson, Robert.....	Ordinary	2nd	Carpentry and Joinery
*Yates, Joseph	Honours	2nd	Cotton Weaving

MISCELLANEOUS.

* *Scholarship and Local Prize awarded.*
† *Scholarship only awarded.*

NAME.	Success.	SUBJECT.
		Society of Arts.
Pritt, William.	1st Class	Theory of Music
Arnoux, Margaret	2nd ,,	,,
*Hides, George P.	2nd ,,	,,
*Jones, Rachel	2nd ,,	,,
*Markland, Robert	2nd ,,	,,
Riley, Samuel	2nd ,,	,,
Bennett, Samuel P.	3rd ,,	,,
Caunce, Ada P.	3rd ,,	,,
Dewhurst, Annie L.	3rd ,,	,,
Finn, Patrick	3rd ,,	,,
Lee, Albert	3rd ,,	,,
Parkinson, Gert. M.	3rd ,,	,,
Price, Ray. B.	3rd ,,	,,
Staveley, Walter H.	3rd ,,	,,
Yates, Fred S.	3rd ,,	,,
Yates, John J.	3rd ,,	,,
*Miller, Paul J.	1st ,,	English
*Beckett, George	2nd ,,	,,
Birchall, Alice	2nd ,,	,,
*Gillow, R. A.	2nd ,,	,,
*Napthen, Mary C	2nd ,,	,,
Napthen, Samuel	2nd ,,	,,
*Parker, George	2nd ,,	,,
*Sanderson, Ellen	2nd ,,	,,
*Thomson, William	2nd ,,	,,
*Ward, Annie	2nd ,,	,,
Chadwick, Thomas	3rd ,,	,,
Garlick, John R.	3rd ,,	,,
Meehan, William	3rd ,,	,,
Raynor, Maude	3rd ,,	,,
Roberts, Frank	3rd ,,	,,
Shaw, Frederick	3rd ,,	,,
Singleton, George	3rd ,,	,,
Struthers, C. H. N. H.	3rd ,,	,,
Sugden, Anna	3rd ,,	,,
Thomson, John	3rd ,,	,,
Wood, James	3rd ,,	,,
Orrell, J. W. S.	3rd ,,	,,
*Black, John	2nd ,,	Shorthand
*Burrow, Harry	2nd ,,	,,
*Chadwick, Thomas	2nd ,,	,,
*Houghton, James	2nd ,,	,,
*Kent, Samuel J.	2nd ,,	,,
*Limond, Walter N.	2nd ,,	,,
*Robinson, Alfred	2nd ,,	,,
Bennett, John F.	3rd ,,	,,

NAME.	Success.	SUBJECT.
		Society of Arts.
Harkness, David	3rd Class	Shorthand
Mayor, Peter	3rd ,,	..
Merigold, F. W.	3rd ,,	..
Roberts, Frank	3rd ,,	..
Sharp, William H.	3rd ,,	..
Smith, Joseph	3rd ,,	..
Whiteside, T. L.	3rd ,,	..
Wood, Charles R.	3rd ,,	..
Napthen, Samuel	3rd ,,	..
Newsham, F. S.	3rd ,,	German
*Hitchen, John	1st ,,	Book-keeping
*Houghton, James	1st ,,	..
*Orrell, J. W. S.	1st ,,	..
*Sharp, W. H.	1st ,,	..
Sowerbutts, H.	1st ,,	..
Foster, Joseph	2nd ,,	..
*Harkness, David	2nd ,,	..
Harrison, Frank	2nd ,,	..
Haslam, Thomas	2nd ,,	..
Kershaw, Charles	2nd ,,	..
Lang, Simeon	2nd ,,	..
*Lewty, Alfred	2nd ,,	..
Macdonald, A. R. D.	2nd ,,	..
Miles, Arthur J.	2nd ,,	..
*Napthen, Samuel	2nd ,,	..
*Pickup, William H.	2nd ,,	..
*Roberts, Frank	2nd ,,	..
*Sayer, Jane	2nd ,,	..
*Seed, John T	2nd ,,	..
Taylor, James	2nd ,,	..
Thompson, Samuel	2nd ,,	..
Threlfall, Thomas C.	2nd ,,	..
Toulmin, George F.	2nd ,,	..
Toulmin, James	2nd ,,	..
Ward, Albert	2nd ,,	..
Wilding, Richard	2nd ,,	..
Baldwin, James	3rd ,,	..
Bennett, John F.	3rd ,,	..
Edge, Squire	3rd ,,	..
Hall, John E.	3rd ,,	..
Hibbert, Joseph	3rd ,,	..
Hodgkinson, Thomas	3rd ,,	..
Hulley, F. W. W.	3rd ,,	..
Huxley, Job	3rd ,,	..
De Rome, Percy	3rd ,,	..
Saul, Robert	3rd ,,	..
Smails, Samuel	3rd ,,	..
Starkie, Gilbert	3rd ,,	..
Toulmin, John	3rd ,,	..
Toulmin, W. H.	3rd ,,	..
Gillow, Robert A.	3rd ,,	Arithmetic
Miller, Paul J.	3rd ,,	..
Sayer, Jane	3rd ,,	..
Thompson, William	3rd ,,	..
Threlfall, Thomas C.	3rd ,,	..
		Union of Lancashire and Cheshire Institutes.
Houghton, James	2nd Class	Book-keeping

NAME.	Success.	SUBJECT.
		Union of Lancashire and Cheshire Institute.
Hitchen, Jno.	2nd Class	Book-keeping
Lang, Thomas	2nd ,,	,,
Parker, George	2nd ,,	,,
Smails, Samuel	2nd ,,	,,
Sayer, Jane	2nd ,,	,,
Seed, Jno. Thomas	2nd ,,	,,
De Rome, Percy	3rd ,,	,,
Frost, Martin	3rd ,,	,,
Hulley, Frederick W. W.	3rd ,,	,,
Lindley, Richard J.	3rd ,,	,,
Orrell, Isaac W	3rd ,,	,,
Parker, Charles	3rd ,,	,,
Pye, William Henry	3rd ,,	,,
Sharp, William Henry	3rd ,,	,,
Townley, James	3rd ,,	,,
Threlfall, Thomas C.	3rd ,,	,,
Wood, Charles R.	3rd ,,	,,
		Union of Lancashire and Cheshire Institutes.
Fallowfield, John E.	3rd Class	Commercial French
Hindle, Maud	3rd ,,	,,
		Union of Lancashire and Cheshire Institutes.
Sayer, Jane	3rd Class	Arithmetic
		Union of Lancashire and Cheshire Institutes.
Harkness, Ada	1st Class	English Literature
Obtained 1st Prize Union of Lancashire and Cheshire Institutes.		*Union of Lancashire and Cheshire Institutes.*
Burrow, Henry	1st Class	Shorthand
Black, John	1st ,,	,,
Houghton, James	1st ,,	,,
Limond, Walter N.	1st ,,	,,
Bennett, John F.	1st ,,	,,
Chadwick, Thomas	2nd ,,	,,
Harkness, David	2nd ,,	,,
Hynes, Thomas	2nd ,,	,,
Jones, Jno. E.	2nd ,,	,,
Kent, Samuel H.	2nd ,,	,,
Merigold, F. W.	2nd ,,	,,
Meehan, William	2nd ,,	,,
Marginson, Henry	2nd ,,	,,
Mayor, Peter	2nd ,,	,,
Moss, Robert H.	2nd with distinction	,,
Napthen, Samuel	2nd ,,	,,
Pye, William Henry	2nd ,,	,,
Roberts, Frank	2nd ,,	,,
Sanderson, Daniel	2nd ,,	,,
Smith Joseph	2nd ,,	,,
Sharpe, William Henry	2nd ,,	,,
Saul, Robert	2nd ,,	,,
Whiteside, T. L.	2nd ,,	,,
Wilkinson, James	2nd ,,	,,
Wood, James	2nd ,,	,,
Wood, Charles Robert	2nd ,,	,,
Bingant, L. K.	3rd ,,	,,
Crane, William Henry	3rd ,,	,,
Cowell, Frederick	3rd ,,	,,

NAME.	Success.	SUBJECT.
		Union of Lancashire and Cheshire Institutes.
Crozier, James	3rd ,,	Shorthand
Gardner, Charles	3rd ,,	,,
Kirkham, William	3rd ,,	,,
Lewis, Alfred	3rd ,,	,,
Rawlinson, George	3rd ,,	,,
Rawcliffe, Frederick A.	3rd ,,	,,
Smith, James E.	3rd ,,	,
Shaw, Robert	3rd ,,	,,
Swarbrick, Frederick	3rd ,,	,,
Worthington, Henry	3rd ,,	,,
Healin, William Henry	3rd ,,	,,
*Cunningham, Eleanor	Matriculation	*Tonic Sol-fa Association. Certificate.*
*Hussey, Constance A.	,,	,,
*Purves, John	,,	,,
*Penny, Emily	,,	,,
*Cunningham, Eleanor	Staff Notation	,,
*Hussey, Constance A.	,,	,,
*Purves, John	,,	,,
*Pomfret, Sarah Jane	,,	,,
*Richardson, Amelia	,,	,,
*Barrett, Elizabeth	Intermediate	,,
*Bannister, John	,,	,,
*Craig, Elizabeth	,,	,,
*Craig, Walter	,,	,,
*Cunningham, Andrew	,,	,,
*Ellis, Effie	,,	,,
*Harkness, Ada	,,	,,
*Lawson, Minnie	,,	,,
*Lawson, Lillie	,,	,,
*Morris, James	,,	,,
*Purves, John	,,	,,
*Preston, Alice	,,	,,
*Riches, Susan	,,	,,
*Weaver, Mary E	,,	,,
†Bomont, Amelia	Elementary	,,
†Cunningham, Mary	,,	,,
†Clinning, Mary Ann	,,	,,
†Casson, Mary Agnes	,,	,,
†Carruthers, Jane	,,	,,
†Craig Christina	,,	,,
†Craig, Elizabeth	,,	,,
†Ellis, Effie	,,	,,
†Frame, Elizabeth	,,	,,
†Gregson, Cecily	,,	,,
†Gardner, Florence	,,	,,
†Harkness, Ada	,,	,,
†Hussey, Flora	,,	,,
†Jackson, Lavina F.	,,	,,
†Lawson, Frank	,,	,,
†Mansley, James L.	,,	,,
†Proctor, Henry R.	,,	,,
†Purves, Jones	,,	,,
†Purves, Ethel	,,	,,
†Riches, Susan	,,	,,
†Rimmer, Lilly	,,	,,
†Richardson, Maggie	,,	,,
†Stephen, Janet	,,	,,
†Southworth, Ada	,,	,,
†Treasure, Frederick	,,	,,

HARRIS INSTITUTE.

LOCAL EXAMINATIONS.

* *Local Prize awarded.* † *Scholarship awarded.*

NAME.	Success.	SUBJECT.
+Ayres, Zenas	1st Class	Advanced Latin
Warburton, Winifred A.	2nd ..	..
Woodall, Harry	2nd ..	Elementary Latin
†Winder, George	1st ..	Advanced French
Oldfield, William	2nd ..	..
Cooper, Albert W.	2nd ..	..
†Baldwin, James	1st ..	Elementary French
†Willmoth, Walter J	1st ..	..
Foster, Alexander	2nd ..	..
Raymer, A. H.	2nd ..	..
Woodall, Harry	2nd ..	..
England, James	2nd ..	..
Attwater, Mary	2nd ..	..
Bamber William	2nd ..	..
Rawcliffe, F. A.	2nd ..	..
Stirzaker, Thomas E.	2nd ..	..
Wilkinson, John	2nd ..	..
†Harkness, Ada	1st ..	German
Moss, Robert	2nd ..	..
†Atherton, Frederick	1st ..	Arithmetic
†Cherry, C. F.	1st ..	..
†Beesley, Mary	1st ..	..
†Fielding, F. C.	1st ..	..
Lawson, Lillie	2nd ..	..
Bomont, Amelia	2nd ..	..
Irvin, James	2nd ..	..
Gould, John W.	2nd ..	..
Dawson, James Fraser	2nd ..	..
Almond, John W.	2nd ..	..
Hindle, Edmund	2nd ..	..
Ogden, Andrew	2nd ..	..
Plumb, F.	2nd ..	..
Sharples, William	2nd ..	..
Lucas, J.	2nd ..	..
Slater, J. J.	2nd ..	..
Laraway, Samuel	2nd ..	..
Roberts, Ernest	2nd ..	..
Dall, Jessie E.	2nd ..	..
Stirrup, J. W.	2nd ..	..
Kirkham, Edward	2nd ..	..
Goodwin, W.	2nd ..	..

NAME.	Success.	SUBJECT.
Mills, Richard	3rd Class	Arithmetic
Fielding, Joseph	3rd ..	..
Dimmock, W.	3rd ..	..
McFarlane, Charles	3rd ..	..
Rigby, Walter	3rd ..	..
Fishwick, John R.	3rd ..	..
Bomont, Lucia	3rd ..	..
Walsh, John	3rd ..	..
Foster, Charles J.	3rd ..	..
Cartmell, John	3rd ..	..
Scragg, John	3rd ..	..
Rigby, F.	3rd ..	..
Swarbrick, J. W.	3rd ..	..
Wesley, John	3rd ..	..
Woodall, Harry	3rd ..	..
*†Thompson, John J.	1st ..	English
*Bamford, John W.	2nd ..	..
*Pomfret, Sarah	2nd ..	..
Weaver, Bertha	2nd ..	..
Masheter, Lillie	3rd ..	..
Pearson, Harriet B.	3rd ..	..
Hodgson, Thomas	3rd ..	..
Tomlinson, D.	3rd ..	..
Gregson, Mary	3rd ..	..
Southworth, Lillie	3rd ..	..
Lang, T.	1 Ex ..	Book-keeping
Townley, James	1st ..	..
Lindley, R. T.	2nd ..	..
Frost, H. H.	2nd ..	..
Wood, C. R.	2nd ..	..
Pye, W. H.	2nd ..	..
De Rome, P	2nd ..	..
Eccles, J.	2nd ..	..
Exton, W.	2nd ..	..
Parker, C.	2nd ..	..
*Gardner, C. F.	1st Class	Shorthand *(Manual Class)*.
Rawlinson, G. E.	1st ..	..
Shaw, Robert	1st ..	..
Roberts, Ernest	1st ..	..
Cowell, Fred	2nd ..	..
Crozier, James	2nd ..	..
Farmer, H. J.	2nd ..	..
Napthen, E.	2nd ..	..
Rawcliffe, F. A	2nd ..	..
Roberts, Arthur	2nd ..	..
Smith, J. H.	2nd ..	..
Swan, A. E.	2nd ..	..
Wilding, C. A.	2nd ..	..
Busher, E.	3rd ..	..
Greenwood, J.	3rd ..	..
Whitlock, E.	3rd ..	..
*Parker, Clince	1st ..	Shorthand *(Elementary)*.
*Lang, Thomas	1st ..	..
*Park, Robert J.	1st ..	..
Willmoth, W. J.	1st ..	..
Lucas, John	1st ..	..
Newsholme, J. H.	1st ..	..
Tomlinson, D.	1st ..	..
Leeming, W. J.	1st ..	..

NAME.	Success.	SUBJECT.
Singleton, James	1st Class	Shorthand *(Elementary)*
Pomfret, J. W.	1st ..	..
Curwen, Robert	1st ..	..
Higginson, A.	1st ..	..
Nield, Joseph	1st ..	..
Robinson, Charles	1st ..	..
Parker, C. H.	1st ..	..
Townley, James	1st ..	..
Gardner, William	2nd ..	..
Eccles, Jno.	2nd ..	..
Smith, E. H.	2nd ..	..
Robinson, W.	2nd ..	..
Hayes, Jno.	2nd ..	..
Benson, T. S.	2nd ..	..
Toulmin, W.	2nd ..	..
Hodgson, T.	2nd ..	..
Parker, Jno.	2nd ..	..
Wilkinson, John J.	2nd ..	..
Whittle, William	2nd ..	..
Pomfret, R. R.	2nd ..	..
Lucas, James	2nd ..	..
Threlfall, John	3rd ..	..
Winder, George	3rd ..	..
Cameron, D.	3rd ..	..
Napthen, A. Miss	3rd ..	..
Anderton, George	3rd ..	..
Westray, C. G.	3rd ..	..
Seed, W. L.	3rd ..	..
Seed, James	3rd ..	..
Curling, Thomas	3rd ..	..
Rushton, F. C.	3rd ..	..
Pickup, W. H.	3rd ..	..
Toulmin, G.	3rd ..	..
Foster, A.	3rd ..	..
Dawson, James Fraser	3rd ..	..
Morgan, A.	3rd ..	..
Gardner, John	3rd ..	..
Singleton, George	3rd ..	..
Harrison, W.	3rd ..	..
Holden, James	3rd ..	..
Hazard, W. J.	3rd ..	..
Hazard, E. G.	3rd ..	..
Cross, F.	3rd ..	..
Crerar, Robert	3rd ..	..
Holden, E.	3rd ..	..
Smedley, J. J.	3rd ..	..
Hughes, T. A.	3rd ..	..
Hodgson, George	3rd ..	..
Heathcote, F. A.	3rd ..	..
Croft, Thomas	3rd ..	..
*Bourne, Harry	Honours 1st	Cotton Spinning
*Welch, T. F.	.. 2nd	..
*Baxendale, James	.. 2nd	..
*Riley, J.	.. 2nd	..
*Barton, T.	.. 2nd	..
*Mawdsley, Z.	Ordinary 1st	..
*Nightingale, R.	.. Ex 2nd	..
*Porter, Joshua	.. Ex 2nd	..
*Halsall, Thomas	.. Ex 2nd	..

NAME.	Success.	SUBJECT.
*Mills, Richard	.. Ex 2nd	Cotton Spinning
Deasey, M.	.. 2nd	..
Collis, A.	.. 2nd	..
Aspden, A. R.	.. 2nd	..
Kirkham, William	.. 2nd	..
Parkinson, James	.. 2nd	..
Crosswhite, T. E.	.. 2nd	..
Hayes, Levi	.. 2nd	..
Garstang, E.	.. 2nd	..
Almond, J. H.	.. 2nd	..
Turner, J. R.	.. 2nd	..
Welsh, Robert	.. 2nd	..
Pearson, William	Passed	..
Hodgkinson,	..	..
Brown, J. H.	..	..
Heaton, John	..	..
Firth, William	..	..
*Turner, James	Honours 1st	Cotton Weaving
*Mellor, William	.. 1st	..
*Gardner, J. B.	.. 1st	..
*Mawdsley, Zacharias	.. 2nd	..
*Blinkhorn, E.	.. 2nd	..
*Yates, Joseph	.. 2nd	..
*Garstang, Charles R.	.. 2nd	..
*Bamber, Samuel	Ordinary 1st	..
*Raymer, William Henry	.. 1st	..
*Pilkington, H. H.	.. 1st	..
*Ogden, Andrew	.. 1st	..
*Whalley, F. W.	.. 1st	..
*Crewe, Joseph	.. 2nd	..
*Ratcliffe, Silvester	.. 2nd	..
*Southworth, William	.. 2nd	..
*Woods, Edward	.. 2nd	..
*Bomont, A.	.. 2nd	..
*Kenyon, J. W.	.. 2nd	..
*Nelson, Thomas	.. 2nd	..
*Sutton, Matthew	.. 2nd	..
*Woods, Richard	.. 2nd	..
*Mitchell, Thomas	.. 2nd	..
*Whailey, James Henry	.. 2nd	..
*Gregory, William	.. 2nd	..
*Rogerson, John	.. 2nd	..
*Adamson, James	.. 2nd	..
*Nelson, James	.. 2nd	..
*Adamson, J. E.	.. 2nd	..
*Lever, James	.. 2nd	..
*Whalley, W. R.	.. 2nd	..
*Sefton, William	.. 2nd	..
*Blackwell, T.	.. 2nd	..
*Heaps, Thomas	.. 2nd	..
*Cottam, Benjamin	.. 2nd	..
*Wilding, Edward George	.. 2nd	..
*Taylor, C.	.. 2nd	..
*Hayes, James	.. 2nd	..
*Baron, D.	.. 2nd	..
*Taylor, Edward	.. 2nd	..
*Nelson, William	.. 2nd	..
*Yates, R. B.	.. 2nd	..
*Dover, John	.. 2nd	..

NAME.	Success.	SUBJECT.
*Johnson, Thomas	Ordinary 2nd	Cotton Weaving
Hayes, Levi	Passed	..
Gregson, R. H.	..	..
Curwen, J.	..	..
Green, Aaron	..	..
Miller, Henry	..	..
Gildert, Joseph	..	..
Duckworth, T. C.	..	..
Marsden, G. D.	..	..
Taylor, T.	..	..

ELEMENTARY PHYSICS.

EXAMINATION RESULTS, 1890.

* Scholarship, Harris Institute.

Students attending Elementary Schools who obtained Prizes and certificates at the Local Examinations in connection with the Institute Elementary Classes.

NAME.	Success.	SUBJECT.
*Napthen, Samuel	1st Class	Physics
*Allison, Alfred	1st ..	..
*Heaton, Robert W.	1st ..	..
*Lucas, John	1st ..	..
Burton, Thomas	1st ..	..
*Clarke, George Edward	1st ..	..
Kinlock, Samuel	1st ..	..
*Parker, Robert G.	1st ..	..
Kent, George	1st ..	..
Almond, Sydney	1st ..	..
*Norris, Thomas	1st ..	..
Palmer, Henry W.	1st ..	..
*Nield, Joseph	1st ..	..
*Bateson, Joseph	1st ..	..
*Fitchie, John W.	1st ..	..
*Lucas, James	1st ..	..
*Lever, Robert	1st ..	..
Fawcett, Edward	1st ..	..
*Bradshaw, George W	1st ..	..
McDermott, James	1st ..	..
Dunn, Joseph	2nd ..	..
Parkinson, Joseph	2nd ..	..
Bleasdale, Frederick	2nd ..	..
Twist, Henry	2nd ..	..
Norris, Hester	2nd ..	..
Coates, William	2nd ..	..
Naylor, Albert, E.	2nd ..	..
*Kay, Richard	2nd ..	..
*Dickinson, F. W.	2nd ..	..
*Aspinall, William	2nd ..	..
Powell, Herbert	2nd ..	..
*Hodgson, William	2nd ..	..
*Barlow, Percy	2nd ..	..
Knopp, William	2nd ..	..
*Warburton, Thomas E.	2nd ..	..
Roberts, Arthur	2nd ..	..
Corker, E. C.	2nd ..	..
Hargreaves, Harry	2nd ..	..
McDermott, J. C.	2nd ..	..

NAME.	Success.	SUBJECT.
*Bateson, Joseph	2nd Class	Physics
*Cowell, Frederick	2nd ..	..
*Tipping, John A.	2nd ..	..
Parkinson, Joseph	2nd ..	..
Pearson, William	2nd ..	..
*Edge, Ernest	2nd ..	..
*Ratcliffe, John	2nd ..	..
Cunningham, J. N.	2nd ..	..
*Wadsworth, L.	2nd ..	..
*Banks, G. A	2nd ..	..
*Johnston, E. W.	2nd ..	..
*Beech, E. J.	2nd ..	..
*Braithwaite, R.	2nd ..	..
Robinson, J. T.	2nd ..	..
Hewitt, J. H	2nd ..	..
*Mullowney, Joseph	2nd ..	..
Dunn, Joseph	2nd ..	..
Parker, Henry	2nd ..	..
Pye, Henry C.	2nd ..	..
Wareing, Paul	2nd ..	..
*Moss, James	2nd ..	..
Robinson, John	2nd ..	..
*Naylor, William R.	2nd ..	..
Atherton, Edmund	2nd ..	..
*Hodson, Richard	2nd ..	..
Brooks, H.	2nd ..	..
Joyce, J. E.	2nd ..	..
Barton, John A.	2nd ..	..
Clark, Robert	2nd ..	..
Gregson, John	2nd ..	..
Clark, Thomas	2nd ..	..
Gorton, James	2nd ..	..
*Utton, J. C.	2nd	..
Nelson, William	2nd ..	..
Hartley, Robert	2nd ..	..
Brewer, George E.	2nd ..	..

ELEMENTS OF MECHANICS.

EXAMINATION RESULTS, 1890.

* Scholarship, Harris Institute.

NAME.	Success.	SUBJECT.
*Coopland, George	1st Class	Mechanics
*Law, Joseph	1st ..	..
*Wilson, Henry	1st ..	..
Cockshott, James	1st ..	..
Holden, John	1st ..	..
Gardner, John	1st ..	..
Bradley, John W.	1st ..	..
Higginson, W. E	1st ..	..
*Bullen, William	1st ..	..
*Bullen, Henry	1st ..	..
Booth, Arthur	1st ..	..
Wilkinson, E. T.	1st ..	..
Burton, Thomas	1st ..	..
Banks, William	1st ..	..
*Entwistle, E. J.	1st ..	..
Heald, F. W.	1st ..	..
*Lutener, C. E.	1st ..	..
*Nelson, E.	1st ..	..
Booth, Alfred	1st ..	..
Pendlebury, R. J.	1st ..	..
Wilkinson, W. J.	2nd ..	..
Robinson, W. J.	2nd ..	..
Flannery, Louis	2nd ..	..
Swift, Frederick	2nd ..	..
Farington, W.	2nd ..	..
*Dixon, H. J.	2nd ..	..
Webb, Charles F.	2nd ..	..
Meek, Richard	2nd ..	..
*Mather, James	2nd ..	..
Whittle, Joseph	2nd ..	..
*Southworth, H. T.	2nd ..	..
*Hindmarch, J.	2nd ..	..
*Farrington, J. M.	2nd ..	..
Whittle, J. T.	2nd ..	..
Stalker, R.	2nd ..	..
Ainsworth, A.	2nd ..	..
Entwistle, W. A.	2nd ..	..
*Hindle, W.	2nd ..	..
*Leeming, J. H.	2nd ..	..
*Sharp, James	2nd ..	..
Steel, Daniel	2nd ..	..

NAME.	Success.	SUBJECT.
*Knowles, F. J.	2nd Class	..
Brown, R. E.	2nd ..	..
Hindson, J. E.	2nd ..	..
*Calvert, R.	2nd ..	..
Ainsworth, J.	2nd ..	..
*Lockwood, R. H.	2nd ..	..
Whitehead, A.	2nd ..	..
Threlfall, J.	2nd ..	..
Poole, George A.	2nd ..	..
*Cranshaw, T.	2nd ..	..
*Hodson, T.	2nd ..	..
Robinson, A.	2nd ..	..
Kinlock, Samuel	2nd ..	..
Atherton, P.	2nd ..	..
Hargreaves, W. E.	2nd ..	..
Hayes, R.	Passes	..
*Cooper, W	..	..
Robinson, J.	..	..
Thew, Samuel	..	..
Martin, H.	..	..
*Robinson, F. R.	..	..
*Coates, W. S.	..	..
Thompson, James	..	..
Parkinson, J. A.	..	..
Banks, T. J.	..	..
*Stirzaker, George	..	..
*Donaldson, J. H.	..	..
*Richardson, C.	..	..
*Ward, James	..	..
Cummings Thomas	..	..
Brown, H. F.	..	..
*Simpson, H.	..	..
†Harrison, Richard	..	..
*Blackburn, J. T.	..	..
*Cooper, Edward	..	..
Coopland, Alfred	..	..
Gardner, E. A.	..	..
Hall, Edward	..	..
*Thew Thomas	..	..
Hardman, G.	..	..
*Thompson, John	..	..
Clark, John	..	..

ELEMENTS OF PHYSIOGRAPHY.

EXAMINATION RESULTS, 1890.

* Free Scholarship to Institute.

NAME.	Success.	SUBJECT.
*Tullis, M. S.	1st Class	Physiography
*Balmford, Emily A.	1st ..	..
*Corless, Mary E.	1st ..	..
Lenshall, Gertrude E.	1st ..	..
Ewart, Mabel	1st ..	..
Worthington, Elizabeth A.	1st ..	..
*Smalley, Annie	1st ..	..
*Wharton, Elizabeth Alice	1st ..	..
Weaver, Bertha	1st ..	..
Payne, Nellie	1st ..	..
Nelson, Sarah E.	1st ..	..
Singleton, Margaret E.	1st ..	..
Williamson, Florence	1st ..	..
Bancroft, Alice S.	2nd ..	..
Balmford, E. H.	2nd ..	..
Greenwood, E.	2nd ..	..
McTaggart, M. J.	2nd ..	..
Bancroft, Jessie	2nd ..	..
Dryden, Eva	2nd ..	..
Garstang, Alice A.	2nd ..	..
Hanson, Rosa	2nd ..	..
Mayor, Jane	2nd ..	..
Petty, Emily	2nd ..	..
*Higginson, Margaret	2nd ..	..
Southworth, Ada	2nd ..	..
Pritt, Amy	2nd ..	..
Norcross, Emily	2nd ..	..
Woodhouse, Jane, M.	2nd ..	..
Youds, Ada	2nd ..	..
Howard, Beatrice	2nd ..	..
*Charnley, Margaret	2nd ..	..
Seed, Nellie	Passed	..
Holmes, Mary	..	..
Whitlock, Florence	..	..
Hewlett, Kate	..	..
*Hewlett, Amy	..	..
Wilkinson, Sarah	..	..
Potter, Rhoda E.	..	..
Kay, Mary E.	..	..
Johnston, Jane	..	..

ELEMENTS OF CHEMISTRY.

EXAMINATION RESULTS, 1890.

* Free Scholarship to Institute.

NAME.	Success.	SUBJECT.
*Smalley, Robert	1st ..	Chemistry
Hewitson, James	1st ..	..
*Parkinson William	1st ..	..
Stewart, Jackson	1st ..	..
Forrest, Archibald	1st ..	..
Parker, Peter E	1st ..	..
*Robinson, Arthur	1st ..	..
*Harwood, James	1st ..	..
Morris, James	1st ..	..
Harpley, Thomas	1st ..	..
Brabbin, Samuel	1st ..	..
Dixon, William	1st ..	..
Barnes, John	1st ..	..
*Halewood, Harold	1st ..	..
Blackburn, Charles A	1st ..	..
Lewty, Alfred E.	2nd ..	..
*Robinson, Thomas	2nd ..	..
Pearson, John	2nd ..	..
Stothert, James	2nd ..	..
Jackson, William P	2nd ..	..
Wallace, James	2nd ..	..
Steele, Samuel	2nd ..	..
Robinson, Thomas	2nd ..	..
Dewhurst, Thomas	2nd ..	..
Chapman, James	2nd ..	..
*Hennessey, Edmund	2nd ..	..
Gabbatt, Jno. P	Passed	..
Toune, Alfred	..	..
Duckworth, Henry	..	..
Pearson, Alfred	..	..
Carter, William A	..	..
Irving, Albert	..	..
Clitheroe, Thomas	..	..
Turner, Jesse	..	..

Harris Institute, Preston. Abstract of Class Registers, 1889-90.

NAME OF CLASS.	TEACHER.	Oct., 1889.		Nov., 1889.		Dec., 1889.		Jan., 1890.		Feb., 1890.		March, 1890.		April, 1890.		May, 1890.		Number who sat for Examination	Number who Passed.
		No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.	No. on Reg.	Av'r'ge attend-ance.		
SCIENCE.																			
Agriculture	Mr. J. Stacey	13	10	13	10	13	11	13	12	13	12	13	12	13	12	13	11	14	10
Animal Physiology	Mr. H. O. Pilkington, M.R.C.S.	17	14	17	13	17	13	17	12	17	12	17	12	17	11	17	11	12	8
Applied Mechanics	Mr. R. Pendlebury	26	24	26	24	26	23	26	24	26	23	26	23	26	22	26	21	14	14
Botany (Elementary)	Mr. T. H Greenall	23	21	23	21	23	20	23	21	23	19	23	18	23	17	23	17	13	11
Do. (Advanced)	Do.	6	5	6	5	6	5	6	4	6	4	6	4	6	4	6	4		
Building Construction (Elementary)	Mr. F. J. Pye	37	30	37	30	37	29	37	30	37	29	37	29	37	28	37	27	35	33
Do. (Advanced)	Do.	14	12	14	12	14	12	14	11	14	10	14	10	14	9	14	9		
Chemistry, Elements of	Mr. A. F. Atkinson	13	11	13	11	13	10	13	10	13	11	13	10	13	10	13	10		
Do. Theoretical, Inorganic (Elementary)	Do.	34	29	34	25	34	25	34	24	34	22	34	21	34	21	34	21	26	16
Do. do. (Advanced)	Do.	7	5	7	5	7	5	7	5	7	4	7	4	7	4	7	4		
Do. Practical (Elementary)	Do.	7	6	7	5	7	5	7	6	7	6	7	6	7	6	7	6		
Do. do. (Advanced)	Do.	5	5	5	4	5	4	5	4	5	4	5	4	5	4	5	4	9	6
Geology (Elementary)	Mr. F. C. King	9	8	9	8	9	8	9	9	9	9	9	9	9	9	9	8		
Do. (Advanced)	Do.	6	6	6	4	6	5	6	6	6	6	6	6	6	6	6	6	9	9
Hygiene	Mr. H. O. Pilkington, M.R.C.S.	9	8	9	7	9	7	9	7	9	7	9	6	9	6	9	6	6	4
Machine Construction	Mr. J. T. Buckley	57	34	57	33	57	33	57	33	57	34	57	34	57	33	57	32	30	23
Mathematics, Stage I. & II.	Mr. H. Howarth	72	52	72	52	72	51	72	49	72	50	72	48	72	48	72	47	31	25
Do. Stage III. & IV.	Mr. F. Rosenberg, B.A.	7	6	7	5	7	5	7	5	7	5	7	5	7	5	7	5		
Magnetism and Electricity (Senior Elementary)	Mr. J. Gardner, F.R.G.S.	43	35	43	36	43	36	43	34	43	32	43	32	43	32	43	32	36	29
Do. (Advanced)	Do.	9	5	9	6	9	5	9	5	9	6	9	6	9	6	9	6		
Physiography (Elements)	Mr. J. Stacey	79	70	79	69	79	66	79	64	79	63	79	60	79	60	79	60	53	40
Do. (Elementary)	Mr. J. Gardner, F.R.G.S.	79	54	79	54	79	55	79	53	79	52	79	52	79	52	79	51	73	69
Do. (Advanced)	Do.	17	11	17	10	17	10	17	11	17	12	17	12	17	12	17	11		
Practical, Plane and Solid Geometry	Mr. F. J. Pye	56	50	56	50	56	49	56	48	56	46	56	46	56	46	56	45	24	17
Sound, Light, and Heat (Senior Elementary)	Mr. J. Gardner, F.R.G.S.	59	44	59	43	59	41	59	40	59	41	59	41	59	40	59	40	39	30
Do. (Advanced)	Do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Steam and Steam Engine	Mr. R. Pendlebury	26	24	27	23	27	23	27	22	27	21	27	21	27	21	27	20	9	9
Theoretical Mechanics	Mr. F. Rosenberg, B.A.	14	12	14	10	14	10	14	9	14	9	14	9	14	9	14	9	9	9
Elements of Mechanics	Mr. R. Pendlebury	140	127	140	119	140	116	140	112	140	113	140	109	140	109	140	103	90	86
Elements of Physics	Mr. G. Lynch, M.R.C.P	153	134	153	128	153	119	153	119	153	115	153	114	153	114	153	113	75	75
Elements of Chemistry	Mr. Wm. Clitheroe	43	38	49	39	49	38	49	36	49	35	49	35	49	35	49	34	35	34
ART.																			
Day Class	Mr. W. B. Barton	33	24	33	21	33	21	33	21	33	21	33	20	33	20	33	19		
Evening Class	Do.	129	73	132	74	132	74	132	73	132	72	132	72	132	71	132	68		
,, (Elementary)	Do.	65	58	73	59	73	59	73	57	73	58	73	58	73	58	73	58	432	225
Fulwood Class	Do.	52	41	52	43	52	42	52	40	52	40	52	40	52	40	52	40	10 Mod.	6
High School	Do.	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	26 Geo.	24
TECHNICAL.																			
Brickwork and Masonry	Mr. F. J. Pye	12	10	12	9	12	9	12	9	12	8	12	8	12	8	12	8	8	4
Carpentry and Joinery	Do.	26	20	26	21	26	21	26	20	26	20	26	20	26	19	26	18	20	9
Cotton Spinning	Mr. W. I. Hannen	36	28	36	27	36	27	36	27	36	28	36	29	36	29	36	27	†26 26	†26 16
Plumbers Work	Mr. F. W. Mackley, R.P.C.	29	24	29	23	29	24	29	24	29	23	29	23	29	23	29	22	18 ‡6	4 ‡1
Weaving and Designing	Mr. J. T. Taylor	140	130	142	116	142	112	142	109	142	104	142	104	142	103	142	100	†67 63	†53 33
MISCELLANEOUS.																			
Music—Class Singing & Harmony (Elementary)	Mr. J. Tomlinson	27	23	27	20	27	19	27	17	27	18	27	18	27	18	27	18	*18	*16
Do. do. (Advanced)	Do.	8	6	8	6	8	6	8	5	8	6	8	6	8	6	8	6		
Singing—Tonic Sol-Fa	Mr. W. H. Cowell	73	65	76	63	75	64	75	63	75	61	75	61	75	61	75	59	56	48
Do. Madrigals and Matriculation	Do.	39	36	39	31	39	27	39	26	39	25	39	25	39	24	39	23	7	
Latin (Elementary)	Rev. W. S. Matthews, B.A.	10	8	10	7	10	6	10	7	10	7	10	7	10	7	10	7	†6	†6
Do. (Advanced)	Do.	7	6	7	5	7	4	7	4	7	3	7	3	7	3	7	3		
French (Elementary)	Do.	32	26	33	24	33	24	33	22	33	22	33	22	33	22	33	21	†24 *2	†14 *0
Do. (Advanced)	Do.	12	9	12	8	12	7	12	7	12	7	12	7	12	7	12	7	§3	§2
Shorthand (Elementary)	Mr. H. Cartmell	178	142	179	145	179	136	179	125	179	125	179	125	179	123	179	118	†76 *20	†58 *17
Do. (Advanced)	Do.	86	64	86	66	86	64	86	59	86	60	86	60	86	60	86	60	§48	§40
English (Elementary)	Do.	56	47	56	43	56	39	56	35	56	35	56	35	56	35	56	35		
Do. (Advanced)	Do.	29	25	29	22	29	22	29	21	29	22	29	22	29	22	29	21	*26 †15	*19 †10
German	Mr. F. Rosenberg, B.A.	13	12	13	12	13	11	13	10	13	10	13	10	13	9	13	9	+4 *1 §1	†3 *1
Arithmetic	Mr. T. Renwick	126	101	127	100	127	98	127	94	127	92	127	92	127	92	127	92	†63 *12 §3	†46 *5 §1
Book-keeping (Elementary)	Mr. J. C. Forrester, C.A.	65	58	65	55	65	54	65	53	65	53	65	53	65	53	65	53	†16 *47	†10 *38 §18
Do. (Advanced)	Do.	31	27	31	25	31	24	31	24	31	23	31	23	31	23	31	21	§22	
Commercial Geography	Mr. J. J. Cardwell	7	5	7	5	7	4	7	4	7	4	7	4	7	4	7	4	*1	..
Lectures—English Literature	Mr. J. Hebblethwaite	..	..	..	..	26	26	26	24	26	22	26	22	26	22	26	21	§	
,, English History	Rev. J. Short, B.A.	30	26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
,, Evolutionary Theories	Rev. Fr. J. Gerrard, S.J.	..	..	34	34	34	34	..	..	..	..	..	..	..	..	..	..	..	..
	Total	2496	2049	2526	1992	2551	1963	2517	1876	2517	1846	2517	1834	2517	1776	2517	1822	1815	1310

* Society of Arts. § Lancashire and Cheshire Institutes. † Local. ‡ Practical.

T. R. JOLLY, Secretary.

INSTITUTE SCHOLARSHIPS.

AWARDED TO DAY SCHOLARS ATTENDING ELEMENTARY SCHOOLS.

SCIENCE.

Nelson, E.
Dewhurst, Florence
Wiseman, Maggie
Clarke, Nellie
Teale, C. J.
Hindle, Ada J.
Bibby, M. J.
Cameron, M.
Ewart, Mabel
Westley, Catherine
McCourty, Catherine
McCourty, C. E.
Brade, R.
McCourty, M. D.
Sellers, C. G.
Smith, F.
Knowles, L.
Nelson, A.
Wallbank, M. A.
Hall, C.
Singleton, M. E.
Hunter, E. M.
Topping, J.
Wilkins, A. J.
Chapman, E.
Green, A.
Sowerbutts, E.

Bradshaw, E. J.
Bancroft, A. S.
Armstead, N.
Thompson, G.
Cliffe, M.
Grantham, M.
Seed, E.
Milne, M.
Barton, C.
Winterbottom, W.
Clinning, L.
Sumner, C.
Holmes, M. E.
Hargreaves, J. A.
Elliott, E.
Ward, M.
Johnson, E.
O'Kell, H. L.
Hague, A.
Pomfret, E. A.
Jolly, H. S.
Norcross, E.
Hart, E. W.
Thompson, E.
Smith, E. E.
Robinson, L.
Barlow, C. W.

Gudgeon, M.
Lindsay, H. M.
White, M.
Woodhouse, J. M.
Mayor, M. J.
Hudson, E.
Hodgkinson, D.
Heald, M.
Howarth, E.
Holmes, M.
Warner, M. A.
Kay, M. E.
McTaggart, M. J.
Slinger, E. E.
Kay, M. E.
Davy, M.
Bancroft, J. A.
Holding, M. E.
Goodwin, M. E.
Whittingham, E.
Ellison, A.
Freeman, M. A.
Armstrong, B. M.
Wharton, R.
Cottam, F.
Carter, M.
Threapleton, E.

ART.

AWARDED TO DAY SCHOLARS ATTENDING ELEMENTARY SCHOOLS.

Parker, Alfred
Norris, Thomas
Heskett, Samuel
Birchall, William
Ayres, Thomas
Jolly, W. S.
Turner, Henry
Tullis, David
Wallace, William
Nelson, G. H.
Edwards, Joseph
Ward, Charles
Ewart, Ethel
Carlisle, Thomas
Whitehead, Albert
McTaggart, W. J.
Marshall, Albert
Roscoe, A. S.
Clitheroe, R. M.
White, Mary

Yates, Sarah
Grundey, Robert
Brabbin, Samuel
McLaughlin, R.
Battle, William
Coopland, Alfred
Fairclough, J. G.
Wilkinson, John C.
Southworth, Hugh
Dewhurst, Florence
Hadfield, S. H.
Thormber, Norman
Jackson, T. H.
Barton, Herbert
Croasdale, Albert
Brindle, James
Kenyon, Thomas
Johnson, Robert
Pearson, Jno.
McCarthy, C. E.

Holmes, Alice
Foster, F.
Oddie, John
Parker, John A.
Nield, Joseph
Mowbray, F. G.
Wiseman, Maggie
Hindle, Ada G.
Clarke, Nellie
Wilkinson, John J.
Kirkham, A.
Southworth, Ada
Mayor, Annie
Cookson, Jabez
Whitlock, Florence
Hindson, Eliza
Hoyle, Walter
Renwick, Walter
Nelson, Emily
Sumner, Clara

ART.

AWARDED TO DAY SCHOLARS ATTENDING ELEMENTARY SCHOOLS.—*Continued.*

Edwards, Thomas D.
Moorcroft, Isabella
Shepherd, Arthur J.
Baines, Harold
Southworth, William
Napthen, Edwin
Beckerlegge, Richard
Worthington, E. A.
Forrest, F.
Hadfield, R. H.
Beswick, W. J.
Hall, F.
Smith, James E.
Higginson, Arnold
Thornley, J. H.
Ward, Francis A.
Margerison, Albert
Bailey, T. H.
Hogarth, John
Entwistle, W. A.
Wiggans, W.
Wright, Charles
Thompson, Agnes
Catterall, Jane
Cochrane, T. J.
Knowles, Louise
Bamber, J. T.
Hoyle, Albert J.
Knowling, James
McCourty, Monica
Boardman, Edwin
Topping, Jane
Clarkson, Joseph
Critchley, J. T.
Pye, Esther E.
Edwards, John

ART.

AWARDED TO SCHOLARS ATTENDING ELEMENTARY SCIENCE CLASSES.

Pearson, Alfred
Southworth, Ada
Smalley, Annie
Bradley, John W.
Gorton, James
Westley, Catherine
Clarke, John
Entwistle, Ernest J.
Barnes, J.
Whitlock Florence
Burton, Thomas
Lenthall, G. E.
Entwistle, W. A.
Norris, Nector
Wilkinson, E. T.
Payne, Constance C.
Hewitson, James
Pearson, J.
Harwood, J.
Pendlebury, R. J.
Higginson, W. E.
Almond, R. S.
Stewart, Jackson
Gardner, John
Robinson, W. J.
Potter, Rhoda
Coates, William
Kent, George
Brewer, George E.
Hargreaves, Harry
Dryden, Eva
Gabbatt, John P.
Bancroft, Alice F.
Pritt, Amy
Williamson, Flora
Mayor, Jane
McFaggart, Martha
Wallace, James
Cockshott, James
Weaver, Bertha
Swift, Frederick
Knopp, William
Whitehead, Albert
Brabbin, Samuel
Lewty, Alfred E.
Wareing, Paul
Wilkinson, W. J.
Heald, F. W.
Atherton, Peter
Blackburn, Charles A.
Gardner, Edward A.
Coopland, Alfred
Robinson, John
Powell, Herbert
Naylor, A. E.
Clark, Robert
Dixon, William
Nelson, William
Hargreaves, W. C.
Morris, James

Table showing the number of Students who sat for Examination in connection with the Science and Art Department at the Harris Institute, May, 1890.

SUBJECT.	Harris Institute.	St. Peter's.	R. C. Grammer School.	Winckley Square.	External.	Totals.
ART.						
Model Drawing	154	7	..	..	4	165
Freehand	193	10	..	..	39	242
Painting from Still Life	4	..	..	..	..	4
Geometry	24	..	..	..	..	24
Perspective	22	..	..	..	5	27
Perspective (Theory and Practice)	1	..	..	..	..	1
Drawing in Stage 5a	13	..	..	..	..	13
,, ,, 5b	12	..	..	..	..	12
,, ,, 5b	10	..	..	..	..	10
Anatomy	1	..	..	..	..	1
Elementary Architecture	4	..	..	..	..	4
Painting in Monochrome	3	..	..	..	..	3
Drawing from the Antique	5	..	..	..	..	5
Painting (Technical Questions)	1	..	..	..	..	1
Drawing from Life	3	..	..	..	..	3
Plant Drawing in Outline, stage 10a	5	..	..	..	..	5
Historic Ornament	1	..	..	..	..	1
Modelling	10	..	..	..	..	10
SCIENCE.						
Animal Physiology	12	..	..	..	4	16
Machine Construction	30	..	..	..	1	31
Building Construction	35	..	..	..	2	37
Mathematics, stages 1, 2, and 3	31	..	34	..	52	117
Sound, Light, and Heat	39	..	58	21	3	121
Magnetism and Electricity	36	..	50	..	2	88
Physiography	73	..	40	..	11	124
Principles of Agriculture	14	..	..	..	7	21
Practical Plane and Solid Geometry	26	..	..	..	5	31
Geology	9	..	..	..	1	10
Mathematics, stages 4 and 5	..	..	..	..	1	1
Hygiene	6	..	..	..	2	8
Theoretical Mechanics	9	..	..	...	5	14
Applied Mechanics	14	..	..	..	1	15
Inorganic Chemistry	26	..	..	..	9	35
Practical Inorganic Chemistry (E Stage)	6	..	..	..	12	18
Botany	13	..	..	..	..	13
Organic Chemistry	..	..	..	..	2	2
Steam	9	..	..	..	..	9
Practical Inorganic Chemistry (A stage)	3	..	..	..	1	4
TOTALS	857	17	182	21	169	1246

In addition to the foregoing table, the following shows the number of Students of the Harris Institute examined at the Institute in connection with other Classes :—

City and Guilds of London Institute, viz :—

Cotton Spinning	26	
Weaving and Designing	63	
Carpentry and Joinery	20	
Plumbing	24	
Brickwork and Masonry	7	
		— 141

Society of Arts :—

Shorthand	20	
English	26	
German	1	
Music	18	
Arithmetic	12	
Book-keeping	47	
Commercial Geography	1	
French	2	
		— 127

Lancashire and Cheshire Union of Institutes :—

Shorthand	48	
Book-keeping	22	
French	3	
German	1	
Arithmetic	3	
		— 77

Examined Locally :—

Spinning	26	
Weaving	67	
Arithmetic	63	
French	24	
Latin	6	
Tonic-sol-fa	63	
Shorthand	76	
German	4	
Book-keeping	16	
English	15	
Physiography	53	
Mechanics	90	
Physics	75	
Chemistry	35	
		— 613
		958

Students sitting for Science and Art	857
Total of the Harris Institute Students examined	1815

HARRIS INSTITUTE.—GENERAL ACCOUNT, 30th September, 1890.

	£ s. d.	£ s. d.	£ s. d.
To Balance from least year's account			232 0 0
„ Interest from Capital	2186 18 11		
Less:—To Scholarship and Prize Fund	273 7 4	1913 11 7	
„ Fees and Grants:			
Science Fees	108 5 0		
Grants	273 0 0	381 5 0	
Art Fees	119 13 0		
Grants	130 16 0	250 9 0	
Technical Fees	25 0 0		
Grants	49 0 0	74 0 0	
Miscellaneous Fees	150 13 3	856 7 3	
„ Rent High School		10 0 0	
„ Subscriptions		24 3 0	
„ Bank Interest		4 12 4	
			2808 14 2
			£3040 14 2
To Balance in Preston Bank			£586 12 2

	£ s. d.	£ s. d.
By Salaries, viz:		
Science	456 6 0	
Art	599 5 10	
Technical	176 6 0	
Miscellaneous	286 4 0	1518 1 10
„ Secretary, Custodian, and Examiners		157 0 6
„ Alterations and Improvements		86 1 6
„ Apparatus, Appliances, and Books		93 2 10
„ Printing and Stationery		75 7 6
„ Advertising		27 13 0
„ Lighting and Firing		141 9 11
„ Washing and Cleaning		66 11 6
„ Rates and Insurance		63 3 0
„ Expenses *re* Distribution of Prizes		39 17 0
„ Lancaster Road and Branch Schools		77 15 0
„ Examinations and Entrance Fees		56 10 2
„ Miscellaneous Expenses		46 5 3
„ Bank Commission		5 3 0
		2454 2 0
Balance in hand		586 12 2
		£3040 14 2

Examined and found correct,
W. F. MOORE, F.C.A.
3rd December, 1890.

W. ASCROFT, President.
T. R. JOLLY, Secretary.

HARRIS INSTITUTE.—SCHOLARSHIP ACCOUNT, 30th September, 1890.

	£	s.	d.
To Balance in hand, 30th September, 1889	295	11	4
„ Amount transferred from general Account, as per Balance Sheet	273	7	4
„ Bank Interest	2	9	4
	£571	8	0
To Balance brought down	£292	2	5

	£	s.	d.
By J. L. Gardner, Science Scholarship	45	0	0
„ Free Scholarship to Institute Classes	106	11	6
„ „ Branch Classes	85	0	0
„ Paid for Prizes	42	4	1
„ Bank Commission	0	10	0
	279	5	7
„ Balance carried down	292	2	5
	£571	8	0
By Balance in Preston Bank	£292	2	5

Examined and found correct,
W. F. MOORE, F.C.A.
3rd December, 1890.

W. ASCROFT, President.
T. R. JOLLY, Secretary.

HARRIS INSTITUTE.—TRUSTEES' ACCOUNT, 30th September, 1890.

	£ s. d.	£. s. d.
To Balance in hand, 30th Sept., 1889		66,196 16 9
„ Interest from Capital, viz :—		
1st Nov., 1889, Corporation of Preston	274 4 5	
12th Dec., 1889, Savings Bank	34 16 7	
1st Jan., 1890, County of Lancaster	554 10 8	
1st March, 1890, Corporation of Preston	86 6 7	
Do. do.	170 12 6	
1st May, 1890 Do.	255 18 9	
1st July, 1890, County, of Lancaster	554 10 8	
1st Sept., 1890, Corporation of Preston	85 6 3	
Do. do.	170 12 6	
		2186 18 11
		£68,383 15 8
To balance brought down		£66,196 16 9

Audited and found correct
W. F. MOORE, F.C.A.

	£ s. d.	£ s. d.
By Amount transferred to General Account, as per Balance Sheet		2186 18 11
„ Balance carried down		66,196 16 9
		£68,383 15 8
By invested with		
County of Lancaster	35,000 0 0	
Corporation of Preston	30,000 0 0	
Savings Bank	1,196 16 9	
		£66,196 16 9

January, 1891.—Exhibited,
C. R. JACSON.
W. ASCROFT.
J. S. OLIVER.

T. R. JOLLY,
Secretary.

To the President and Council of the Harris Institute.

GENTLEMEN,—I have examined the Accounts for the year ending 30th September, 1890, and have pleasure in certifying to their correctness, and to the neatness with which they are kept. I have seen vouchers for all payments, and have examined the securities for the capital investments.

Yours truly,
W. F. MOORE, F.C.A.

LIST OF SUBSCRIBERS.

Ascroft, Mr. W.

Ascroft, Mr. A. E.

Atherton, Mr. John

Atherton, Mr. W.

Booth, Mr. Y. W.

Brown & Deighton, Messrs.

Dickson, Mr. E.

Easterby, Mr. R. F.

Eccles, Messrs. T. & Co.

Gibson, Mr. Henry

Healey, Mr. J.

Hibbert, Mr. Jas.

Jacson, Mr. C. R.

Lee, Mr. S.

Maynard, Mr. M. S.

Moore, Mr. F. A.

Oliver, Colonel

Steele, Rev. Geo.

Thorp, Mr. F.

Toulmin, Mr. Joseph

Wood, Rev. C. H.

Woods, Mr. W. H.

Stuart, Mr. W.