

KING EDWARD'S HOSPITAL FUND FOR LONDON.

REPORT

OF

THE COMMITTEE

APPOINTED TO ENQUIRE INTO

THE FINANCIAL RELATIONS

BETWEEN

HOSPITALS AND MEDICAL SCHOOLS

IN LONDON,

WITH APPENDICES.

FEBRUARY, 1905.



LONDON:

PRINTED AND PUBLISHED FOR KING EDWARD'S HOSPITAL FUND FOR LONDON
BY GEO. BARBER, 23, FURNIVAL STREET, HOLBORN, E.C.,

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TO HIS ROYAL HIGHNESS

THE PRINCE OF WALES, K.G.,

PRESIDENT OF KING EDWARD'S HOSPITAL FUND FOR LONDON.

SIR,

1.—In October last, your Royal Highness, as President of King Edward's Hospital Fund, was pleased to request us to undertake the enquiries indicated in the following Terms of Reference and Instruction :—

“ To consider and report—

“ 1. Whether any, and if any how much, money given or
“ subscribed for the relief of the sick poor to the twelve
“ London hospitals having medical schools, is contributed,
“ directly or indirectly, by those hospitals, or any of them,
“ for the maintenance of medical education.

“ 2. Whether any direct or indirect return for such contribu-
“ tions (if any) is received by the hospitals from their
“ medical schools, and, if so, whether such return is
“ equivalent to the amount of the contributions.

“ 3. Whether, in the event of the Committee finding that any
“ hospital contributes to its medical school a sum in excess
“ of the return it receives from the medical school, there are
“ any special considerations advanced in justification of
“ such expenditure, or any general considerations which
“ would apply to all hospitals having medical schools.

“ It is an instruction to the Committee to deal with the subject on
“ the basis of the existing arrangements, and to accept from the
“ hospitals as existing arrangements any such as they may
“ advise the Committee will be in operation on January 1st,
“ 1905.”

2.—We have the honour respectfully to submit the following report of our proceedings and of the result of our enquiries under the foregoing reference.

3.—At our first meeting, on the 4th November, 1904, we settled a form of return, which we addressed to the twelve London hospitals which have schools in connection with them. A copy of this form will be found in the First Appendix to this our Report.

4.—On the 7th, 8th and 10th days of December, 1904, and on the 17th day of January, 1905, we heard the oral statements of witnesses, a shorthand note of whose evidence appears in the Second Appendix to this our Report. Furthermore, we have also met on the 9th December, 1904, and received and considered the replies of the twelve hospitals to the forms of return, a statement laid before us by the Hon. Stephen Coleridge, and a summary which has been prepared of the reports of the ordinary expenditure of the sixteen largest London general hospitals for the year 1903.

5.—The replies of the hospitals to the forms of return have undergone a close examination, and have been the subject of interviews between certain of the authorities of the hospitals and the Committee, and of correspondence between our Honorary Secretary and some of these authorities, and the original replies have in several cases been modified. The best results of this examination which we are able to supply will be found in the Third Appendix to this our Report.

6.—We find it impossible to answer the first head of enquiry in the terms in which it is addressed to us, for the following reasons: That in the case of several of the hospitals (as St. Mary's) the hospital and school were founded together, and the school as well as the hospital appears to have been an object of bounty in the minds of the founders; that in some cases (as University College Hospital) the hospital was founded as an aid to the school; that in some cases (as Charing Cross and Westminster Hospitals) the school buildings were provided, or partly provided, by money subscribed for the specific purpose, or for a joint purpose of which the provision of school buildings formed a part; that in other cases sums have been contributed to hospitals, subsequent to the foundation, of which, to the knowledge of the donors, a portion was applied to the school, as, e.g., in the case of the London Hospital where a contribution to the school has been made yearly under resolutions passed at meetings of the subscribers entitled to vote under the rules; and that where the hospital and school form a single conjoint institution (as in the case of the Middlesex Hospital) and contributions have been made to that institution, it is obviously impossible to say how much was given for the relief of the sick poor and how much for the promotion of medical education.

Appendix III.

Tweedy, q. 266.

Appendix III.
Burdett, q. 881.

Holland, q. 360.

Appendix III.

7.—In our investigation of the matters arising under the first enquiry we have, therefore, but of course merely for purposes of convenience, treated the question as if modified by the deletion of the words "for the relief of the sick poor," and as if all the moneys contributed to the hospitals were properly applicable to the hospital only, and not to any extent to the school.

8.—But, even after eliminating this difficulty, we have found that the very intimate and complex relations which have grown up between the hospitals and the schools present insuperable difficulties to the preparation of a statement showing the actual cash value of the balance between contributions in money or kind made by the hospitals to the schools and by the schools to the hospitals; and this altogether apart from considerations as to the value of the work done by the schools for the hospitals. Frequently the ground on which the school buildings stand is the property of the hospital, but the buildings have been erected by the school. In some cases parts of the buildings of the hospital are used conjointly for the purposes of hospital and school, especially in the case of pathological and bacteriological laboratories, and the apportionment of charges between two departments of the single institution would be a proper subject for the decision of experts. Another difficulty arises in connection with capital expenditure by the hospitals on account of the schools. In the case of St. Bartholomew's Hospital records of considerable debts, said to have been incurred by the school as far back as 1843, and still remaining undischarged, are extant; and it must be obvious that the yearly cost to the hospital of such debts, which appear to have borne no interest, could only be accurately estimated after an elaborate enquiry involving questions as to the constitution of the body it is sought to make liable, and the admission of any liability by such body, if it actually exists, whether legal or otherwise. The question of the value of land is also important and can only be satisfactorily dealt with by competent surveyors, as we find that the rateable value in the case of hospitals is an untrustworthy guide, even if the school buildings were capable of being separately rated, which in some instances is scarcely the case.

9.—We have, therefore, thought it better to confine ourselves to statements of fact in regard to each hospital, and these will be found in the Third Appendix, which we adopt as part of our report. We believe the facts fairly cover the ground of enquiry, but the assessments of the money values which should be set against considerations which do not take the form of money payments must be left to professional valuers, should it be thought desirable to further prosecute these enquiries.

10.—We have, however, no hesitation in reporting that, in the cases of

King's College Hospital and University College Hospital, it may fairly be said that no money given or subscribed to those hospitals was, in the year 1903 (the last year for which the accounts are complete), contributed directly or indirectly by the hospitals for the maintenance of medical education. Appendix III.

11.—In the cases of Guy's Hospital and the Royal Free Hospital, we doubt whether, on consideration of all the circumstances (and especially in the case of Guy's Hospital to the facts stated by the Dean of the Medical School, see Appendix III.), the schools can be considered as deriving any pecuniary benefit from the hospitals. Appendix III.

12.—In the case of all the other hospitals, namely: Charing Cross, the London, the Middlesex, St. Bartholomew's, St. George's, St. Mary's, St. Thomas's, and the Westminster, we report that, in our judgment, contributions, either direct or indirect or both, were made, in the year 1903, to the schools out of the funds of the hospitals. Appendix III.

13.—With reference to the first part of the second head of enquiry—viz., whether any direct or indirect return for the contributions made by the hospitals to the schools is received by the hospitals from the medical schools—we have come to the following conclusions:—

14.—(A) We find that, in some cases, the fact that a large body of students and of medical men are being, or have been, educated in a hospital diffuses a wide interest in that institution and thus tends to aid the finances of the hospital. Glenton-Kerr, q. 457.
Lockwood, q. 559.

15.—(B) We find that the presence of a body of eager young men watching the proceedings of their teacher has the tendency to keep the medical man on the alert and to counteract the effects of the daily routine of duties; and that the opportunity for teaching a large number of pupils attracts to hospitals with schools the gratuitous services of the most eminent men in the Profession. Church, q. 18, 51, 76.
Foster, q. 161.
Tweedy, q. 286-7.
Lockwood, q. 561-2.
Macready, q. 794.

16.—(C) We think that the publicity which attends the work of a hospital where there is a body of young men in attendance, also tends to maintain at a high level the whole work of the institution. Lockwood, q. 532, 542.
Butlin, q. 661.

17.—(D) It has been urged before us that the great amount of work done without payment, or with inadequate payment, by students, in the character of medical clerks and dressers, and in connection with the out-patients and the casualty cases, constitutes a pecuniary advantage received by the hospital from the school; but the evidence satisfies us that the expenses incurred in hospitals with schools are generally in excess of those in hospitals without schools, and we are of opinion that no saving of expense can be attributed to the presence of medical students. On the contrary, some of the evidence before us, together with a study of the accounts of the various hospitals, has brought to our attention remarkable variations in the expenses incurred by the several hospitals, and raises the important question whether, in the case of some of the hospitals to which schools are attached, there is not considerable extravagance and waste in the expenditure. Perry, q. 209, 230.
Glenton-Kerr, q. 491, 502-4.
Lockwood, q. 529, 543.
Butlin, q. 659.
Burdett, q. 841.

18.—(E) With regard to the welfare of the patients, this depends so largely on the character of the individual medical men and nurses concerned with each case that it is difficult to draw any line between the two classes of hospitals. Probably, in cases of great obscurity and difficulty, the presence of a large number of students may at times be useful; but on the other hand we think that the quiet of an hospital without students must often be a comfort to patients, and on the whole we do not think that the hospitals with schools can substantiate any superiority, in this respect, over other hospitals. Church, q. 76.
Tweedy, q. 284.
Macready, q. 778.

19.—(F) As regards the advancement of medical science and the consequent benefit to the public, the existence of a medical school is in our opinion of the highest value. London probably offers the greatest facilities of any city in the world for clinical teaching and for surgical and medical research, and we regard it as of the highest importance that the greatest use should be made of these facilities. In making this statement, however, we feel bound to call attention to what we have said in a subsequent paragraph of our report (paragraph 25). Ricker, q. 112.
Perry, q. 209.
Tweedy, q. 285, 289.

20.—We cannot doubt that the presence of a medical school has a tendency to give to the management of a hospital a progressive character, as well as an interest in experiments tending to the advancement of medical and surgical science. But it seems to follow, as a consequence in such cases, that the real administration of the hospital will be placed mainly under the control of the medical staff, and that the expenditure of the hospital will thereby tend to increase. On the other hand, though the absence of a school may have a tendency to give to the management of the hospital a stationary character, and to leave the administration mainly in the hands of a lay body of managers, the evidence before us shows that some hospitals without schools are excellently conducted and can compare favourably with some hospitals with schools.

Tweedy, q. 257-264.
Coleridge, q. 923-926.

21.—By the second part of the second head of reference we are asked to ascertain, in each case, whether the direct and indirect return received by the hospital from its medical school is equivalent to the amount of the contribution made by the hospital to the school. Inasmuch as the returns whether direct or indirect, are of a general kind and cannot be reduced to definite figures in money value, we find it impossible to give a categorical reply to this enquiry. But the general conclusion at which we have arrived is the following: The schools confer certain considerable benefits on the hospitals, and the hospitals, by opening their doors to the students, provide a clinical laboratory and allow the students of the school to work there; this confers on them a very great benefit, because without the admission to the hospital the students could obtain little or no clinical teaching. These mutual benefits may, we think, be fairly set off the one against the other.

22.—If that be done, as we think it fairly may be, it follows that, in the case of the schools which last year received benefits in money or money's worth from the hospitals over and above the benefits last alluded to, there is no return made by the schools to the hospitals which can be treated as recouping this expenditure of the hospitals, and that (subject always to the observation made in paragraph 7) the schools still remain debtors to the hospitals in respect of these pecuniary contributions made to them.

23.—We answer the third specific head of enquiry by saying that, beyond the matters to which we have already referred, we do not find that any special considerations have been advanced in justification of the expenditure by the hospitals on the schools, or any general considerations which would apply to all hospitals having medical schools.

24.—Such are our replies to the specific matters referred to us; but we desire to add that, in the course of our enquiries with a view to these replies, certain matters have come before us so closely connected with the subjects of the reference that we think it desirable to lay before your Royal Highness the impressions produced on our minds.

Foster, q. 172-4.
Perry, q. 214-215.
Tweedy, q. 319-339.
Headlam, q. 609-18.
Butlin, q. 679-682,
690-5.
Burnet, q. 706-10.
Rucker, q. 92-118.

25.—We have formed the opinion that a broad line of distinction ought to be drawn between the studies of the first three years of a medical student's curriculum and the studies of the last two years—or, in other words, between the preliminary and intermediate studies on the one hand and the final studies on the other; and that whilst the latter studies can only be pursued with advantage within the walls of a hospital, and nowhere in the world with more advantage than in London, the earlier studies have no real relation with a hospital, and are therefore more properly to be pursued in an institution of a university character; and further, that the attempt of many of the hospitals to associate with themselves schools teaching the preliminary and intermediate subjects is a great, if not the chief, source of the exhausted condition of the funds of many of the schools and the consequent demand of the schools on the funds of the hospital.

26.—It is therefore with great satisfaction that we find that the Statutes of the University of London (paragraph 80) direct the Senate to "use its best endeavours whenever practicable to secure such common courses of instruction for Internal Medical Students in the preliminary

and intermediate portion of their studies under Appointed or Recognised Teachers at one or more centres"; and if this object can be carried into effect we believe that it will free some of the schools from burthens which they find it difficult to bear.

27.—The great uncertainty which, in many or all cases, attends any attempt to ascertain the intentions of the original founders of the hospitals and medical schools, the impossibility of knowing what were, from time to time, the exact motives in the minds of the subsequent donors and subscribers, and the complexity of the relations which have existed between hospitals and schools, seem to render any attempt to open up the transactions in the past between the hospitals and schools very undesirable, even if it were possible. But for the future the matter is different; and we venture to submit that the distinction between the hospital and the school should in every case be drawn, not only definitely and exactly, but with such clearness that it may be understood by the general public, and so that no question may arise as to the destination and application of moneys contributed, whether by the King's Fund or from any other source.

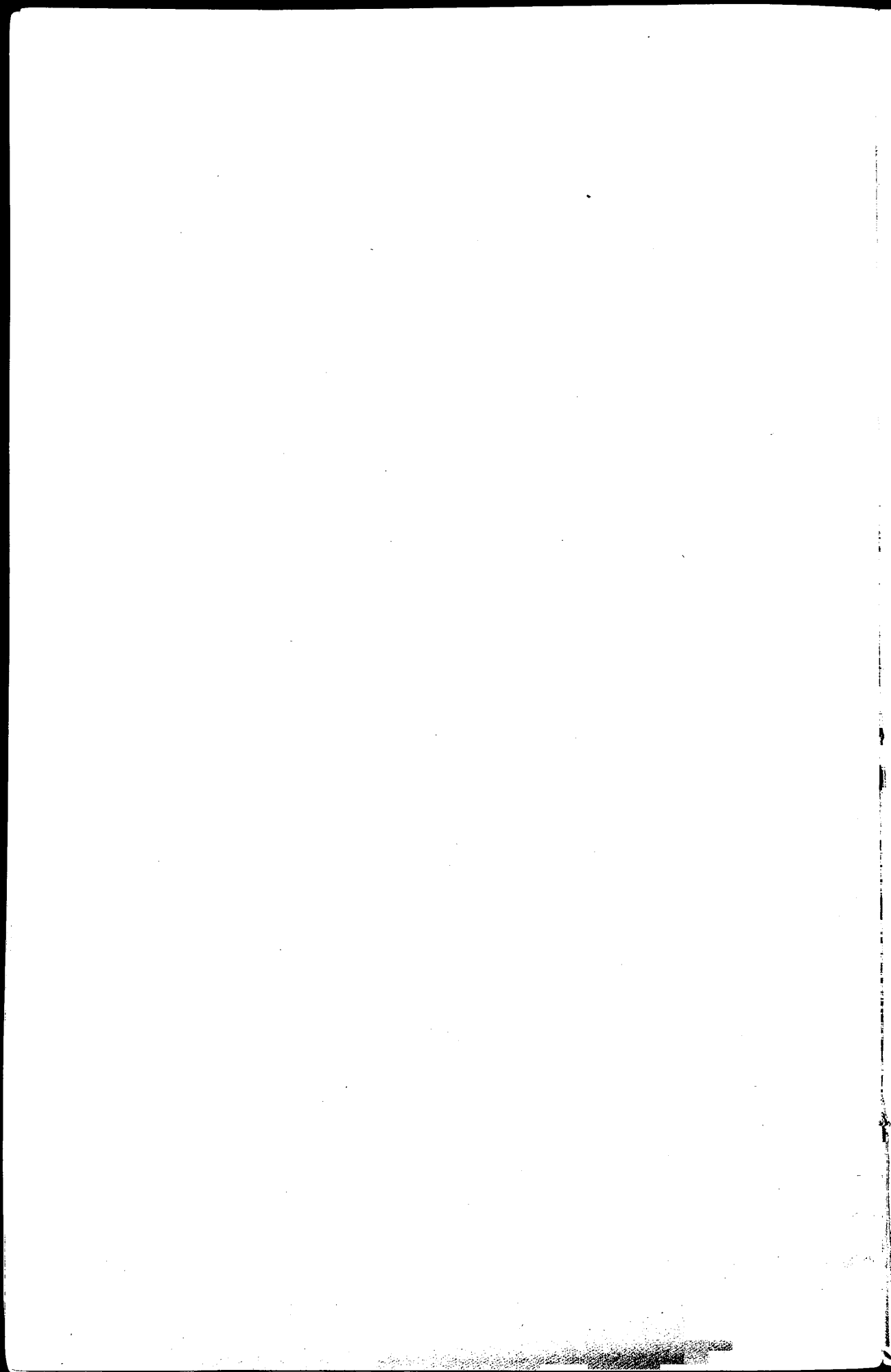
28.—Finally, we cannot conclude this Report without thanking our Honorary Secretary for the great aid which he has afforded us throughout the course of our enquiries.

We have the honour to be, Sir,

Your Royal Highness's most obedient Servants,

EDW. FRY,
C. G. STEPNEY
WELBY.

J. DANVERS POWER, *Hon. Secretary*,
8th February, 1905.



APPENDIX I.

FORM OF RETURN.

KING EDWARD'S HOSPITAL FUND FOR LONDON

(MEDICAL SCHOOLS COMMITTEE).

81 CHEAPSIDE, E.C. :

November 14, 1904.

DEAR SIR,

1. As you may be aware, King Edward's Hospital Fund for London has appointed a Committee, consisting of Lord Welby, Sir Edward Fry, and the Bishop of Stepney, who have been asked to report on the question dealt with in the reference, a copy of which you will find at foot hereof.

2. I am directed by this Committee to ask if you will kindly assist them by supplying the information asked for on the accompanying Returns.

3. As you will see, Return "A" is prepared with a view to showing, as far as possible, the actual value in money received into the accounts of the Hospital from the Medical School, or paid out of the accounts of the Hospital to the Medical School during the year 1903.

4. Schedules are provided on pages 4 and 5 dealing with those items of Return "A" in respect of which detailed particulars are desired.

5. It may be, however, that arrangements are in existence between the Hospital and the Medical School which cannot well be expressed in the form of a sum of money applicable to the year 1903. An instance of this would be where a building lease had been granted, the actual value of which to either party is uncertain. In such cases the Committee would be grateful if an explanatory statement could be supplied on a separate sheet.

6. Any detailed explanations of the figures in the Returns themselves, or any observations on the general question which may be sent to the Committee in writing, they will also be glad to receive.

7. On receipt of these papers, and any others which you may be good enough to send, the Committee will be enabled to consider whether it is necessary to trouble you for any further information, written or oral, which may be of assistance to them in their inquiry.

8. In the event of any difficulty being felt as to the filling-up of the accompanying forms, I shall have much pleasure in affording you any information or assistance.

9. I am to request that, if possible, the replies may not reach me later than the 1st of December next.

Yours faithfully,

(Signed) J. DANVERS POWER,

Hon. Secretary.

TERMS OF REFERENCE.

To consider and report—

1. Whether any, and if any how much, money given or subscribed for the relief of the sick poor to the twelve London Hospitals having Medical Schools, is contributed, directly or indirectly, by those Hospitals, or any of them, for the maintenance of medical education.
2. Whether any direct or indirect return for such contributions (if any) is received by the Hospitals from their Medical Schools, and, if so, whether such return is equivalent to the amount of the contributions.
3. Whether, in the event of the Committee finding that any Hospital contributes to its Medical School a sum in excess of the return it receives from the Medical School, there are any special considerations advanced in justification of such expenditure, or any general considerations which would apply to all Hospitals having Medical Schools.

It is an instruction to the Committee to deal with the subject on the basis of the existing arrangements, and to accept from the Hospitals as existing arrangements, any such as they may advise the Committee will be in operation on January 1st, 1905.

FORM OF RETURN.

RETURNS FROM

HOSPITAL.

RETURN

AMOUNTS PAID BY THE MEDICAL SCHOOL AND BY THE
RECEIPTS OR EXPENDITURE OF THE

CASH PAYMENTS BY MEDICAL SCHOOL.

	£	s.	d.
1. Interest on moneys advanced by the Hospital to the Medical School			
See page 4 (a).			
2. Rent paid by the Medical School to the Hospital in respect of buildings or land			
See page 4 (c).			
3. Ordinary Expenses defrayed by the Medical School, but fairly chargeable, either in whole or in part, to the Hospital			
See page 5 (d).			
4. Any payments other than those enumerated above			
See covering letter, paragraph 5.			

“A.”

HOSPITAL FOR THE YEAR 1903 WHICH AFFECT THE CASH
HOSPITAL AS A SEPARATE INSTITUTION.

CASH PAYMENTS BY HOSPITAL.

	£	s.	d.
1. Amount contributed by the Hospital to the general funds of the Medical School... ..			
2. Amount contributed by the Hospital towards special purposes in connection with the Medical School			
See page 5 (e)			
3. Ordinary expenses defrayed by the Hospital, but fairly charge- able, either in whole or in part, to the Medical School ...			
See page 5 (f).			
4. Any payments other than those enumerated above			

FORM OF RETURN.

(a) Particulars of moneys advanced by the Hospital to the Medical School during the ten years ended December 31, 1903, and still outstanding.*

Date of Advance.	Object.	Amount of Advance			Annual Interest, if any, paid or unpaid.		
		£	s.	d.	£	s.	d.

All sums advanced should be entered, whether interest is payable or not.

(b) Particulars of any gifts in money or kind made by the Hospital to the Medical School during the nine years ended December 31, 1902.* (Any gifts made during the year 1903 will appear in the account on page 3.)

Description.	Amount.		
	£	s.	d.

(c) Particulars of Hospital land or buildings rented by or lent to the Medical School.*

Description.	Estimated Value.			Rent Payable.		
	£	s.	d.	£	s.	d.

All property occupied by the Medical School should be entered, whether rent is charged or not.

* NOTE.—In the event of any moneys having been lent, or gifts made, by the Medical School to the Hospital, or any land or buildings being or having been let or lent to the Hospital by the Medical School, particulars corresponding to Schedules (a), (b) and (c) should be given separate sheet.

FORM OF RETURN.

[Page 5 of Return. 7]

(d) Ordinary expenses defrayed by the Medical School, but fairly chargeable, either in whole or in part, to the Hospital.

Description.	Total Amount.	Amount fairly chargeable to Hospital.

(e) Particulars of amounts contributed by the Hospital towards special purposes in connection with the Medical School.

Special purpose.	Special Donation, 1903.			Annual Contribution.		
	£	s.	d.	£	s.	d.
Salaries of Lecturers, Demonstrators, &c.						
Prizes or Scholarships						
Museum						
Library						
Laboratory						
Sports						
Other special purpose to be specified.						

(f) Ordinary expenses defrayed by the Hospital in 1903, but fairly chargeable, either in whole or in part to the Medical School.

Particulars.	Total Amount.			Amount fairly chargeable to Medical School.		
	£	s.	d.	£	s.	d.
Fuel and Lighting						
Rates and Taxes						
Repairs						
Wages of Attendants						
Management						
Sundries						

RETURN "B."

Particulars of all House Physicians, House Surgeons, Clerks, Dressers, and others (not being members of the Visiting Staff, or Nurses, or Servants), who take part in treating the In and Out-Patients, or Lying-in Cases, stating in each case whether the services rendered are paid or unpaid for, either in money or by the provision of board and lodging; and also, in the case of every person not fully paid, whether such person is, or has been, a member of, or connected with, the Medical School of the Hospital.

LIST OF WITNESSES.

Name.	Date of Examination.	Pages in Minutes.
BURDETT, SIR HENRY CHARLES, K.C.B.	Dec. 10, 1904	99—112
BURNET, ROBERT WILLIAM, Esq., M.D., F.R.C.P., Senior Physician to the Great Northern Central Hospital	Dec. 8, 1904	91—96
BUTLIN, HENRY TRENTAM, Esq., F.R.C.S., D.C.L., late Dean of the Faculty of Medicine of the University of London, Consulting Surgeon to St. Bartholomew's Hospital	Dec. 8, 1904	87—91
CHURCH, SIR WILLIAM SELBY, Bart., K.C.B., M.D., President of the Royal College of Physicians	Dec. 7, 1904	10—20
COLERIDGE, THE HON. STEPHEN WILLIAM BUCHANAN	Jan. 17, 1905	113—120
FOSTER, THOMAS GREGORY, Esq., B.A., Ph.D., Principal of University College	Dec. 7, 1904	28—33
GLENTON-KERR, LEWIS HERBERT, Esq., Secretary of the Great Northern Central Hospital	Dec. 8, 1904	66—70
HEADLAM, THE REV. ARTHUR CAYLEY, D.D., Principal of King's College	Dec. 8, 1904	79—86
HOLLAND, THE HON. SYDNEY GEORGE, Chairman of the London Hospital and the Poplar Hospital for Accidents	Dec. 8, 1904	49—66, 78
LOCKWOOD, CHARLES BARRETT, Esq., F.R.C.S., Surgeon to St. Bartholomew's Hospital	Dec. 8, 1904	71—78
MACREADY, JONATHAN FORSTER CHRISTIAN, Esq., F.R.C.S., Senior Surgeon to the Great Northern Central Hospital	Dec. 8, 1904	96—98
PERRY, SIR EDWIN COOPER, M.D., F.R.C.P., Physician and Superintendent, Guy's Hospital	Dec. 7, 1904	34—38
RÜCKER, SIR ARTHUR WILLIAM, M.A., F.R.S., Principal of the University of London	Dec. 7, 1904	20—28
SCOTT, MUNRO, Esq., Warden of the London Hospital Medical College	Statement forwarded to Committee on Jan. 17, 1905	86
TWEEDY, JOHN, Esq., President of the Royal College of Surgeons	Dec. 7, 1904	39—48

APPENDIX II.

MINUTES OF EVIDENCE

TAKEN BEFORE THE
 MEDICAL SCHOOLS' COMMITTEE,
 AT THE
 WESTMINSTER PALACE HOTEL, LONDON, S.W.,
 ON
 WEDNESDAY, 7th DECEMBER, 1904.

PRESENT—
 SIR EDWARD FRY,
 THE BISHOP OF STEPNEY,
 LORD WELBY.

SIR EDWARD FRY, in the Chair.

*[Transcript of the Shorthand Notes of Mr. G. WALPOLE, 1, New Court
 Lincoln's Inn, W.C.]*

FIRST DAY.

Sir WILLIAM SELBY CHURCH, BART., K.C.B., M.D., President of
 the Royal College of Physicians, called in and examined.

1. The CHAIRMAN : You are doubtless acquainted with the terms
 of reference to this Committee ?—Yes.

2. On the first heading, which is a specific one with regard to how much
 money contributed to the London hospitals having medical schools goes
 towards the maintenance of medical education, I do not suppose you wish
 to say anything to us ?—No. I understand that you are going to have
 returns made to you of the exact sums contributed.

3. That probably is not a branch of our inquiry upon which you have
 very particular information ?—No.

4. Then we come to the second head. "Whether any direct or
 indirect returns for such contributions (if any) is received by the hospitals
 from their medical schools." I daresay you have something to say upon
 that ?—Yes.

5. May we first take it in this way. I suppose it is the indirect
 returns of which you wish to speak to us ?—Certain schools have to make
 payment to their hospitals. For instance, the one I am most intimately
 connected with, St. Bart's pays a considerable rental to the hospital for
 the building that it occupies for school purposes.

6. That, of course, we shall get from the returns ?—Yes, and that, I
 think, is done in the case also of some of the other medical schools.

7. Now, with regard to any indirect returns ; that raises a wider and
 larger question ?—Yes ; it is a very difficult question to answer, because
 the indirect returns vary greatly in their nature.

8. Take St. Bartholomew's. Will you tell us what the indirect returns are in your view ?—First of all the large amount of medical work which is done by the students in the course of their education.

9. That is to say attending to patients ?—Attending to patients.

10. In addition to attendance by the medical men ?—Yes.

11. Lord WELBY : Do I understand that that means that assistance would have to be obtained but for there being students at hand ; that their services are made use of for that purpose ?—I think I could make it plainer to you (if I should not be taking up too much of your time) if I just told you what the students do in connection with these medical schools of London. I can only answer positively for the hospital with the arrangements of which I am perfectly acquainted, but you may take it that what I say is more or less the case in all the London medical schools. Let me take the duties which are undertaken by the students in connection with the in-patients, and also in connection with the out-patients. If we take the in-patients, each physician has a certain number of clerks allotted to him. At St. Bartholomew's the maximum number allotted to each physician is eight, and occasionally the number falls below that. Those gentlemen hold office for three months at a time, and during those three months it is their duty to take the histories of all patients that are admitted to the wards of the physician under whom they are studying. They also take notes, as far as they are able, of the condition of the patients when admitted. The notes as to the history and as to the condition of the patients are taken under the general supervision of the House Physician. Then, when the physician arrives, these notes are read to him ; he corrects them and goes over them with his pupils, and those records are kept in the hospital for future reference. They are found to be of exceeding value from two points of view. First of all from the patient's point of view. Supposing a man has been admitted, several years even before, a record of his case exists, and it is looked up, and it is of great assistance to the medical officer in whose charge he is in considering the man's condition at that time. They are also of very great use to medical knowledge. These notes are used by those of the staff who happen to be investigating any particular disease.

12. The CHAIRMAN : I suppose they are all indexed ?—They are all indexed and bound up in volumes for the year.

13. Lord WELBY : You said that each physician had clerks who are on duty for a certain period ?—Yes.

14. Are these clerks medical students ?—Yes, they are men in their fourth year ; they are not allowed to do this work until they have passed certain examinations necessary for a medical man to pass before obtaining the diploma of the Conjoint Board, or his University degree. They are men in their fourth or fifth years—not men who have just entered the hospitals. As I say, these notes form a vast mass of information which is made use of by those who are studying any particular disease. They are enabled by going into the library where these cases are kept to turn out all the cases of any particular form of disease that had been admitted to the hospital for any number of years ; it has been going on for a great many years now, and the books are of great use in that way. Then, if I may turn to the surgical side, exactly similar work is done by the dressers. The dressers are allotted in the same way from fourth and fifth year students, so many to each surgeon. The dressers in addition to taking these notes, have the dressing of the patients. They put up all fractures or assist under the supervision of the house surgeon. Their duties are to go round with the house surgeon early in the morning, and the house surgeon points out all the cases which have to be re-bandaged or re-dressed, and they follow his instructions. Then on the visit of the surgeon, he expresses his opinion as to whether things have been properly done or not. In the same way the notes of the cases are read to him, and he makes such remarks as he thinks fit upon them. All these records also are kept.

Therefore, if a man comes in complaining of some disability to work due to a former injury, these notes are at hand; and there has always been a certain amount of good fellowship between the London hospitals, so that in a case which presents unusual difficulties or unusual interest it is the custom to write to the other hospital, and to get copies of the notes to help it in dealing with the case.

15. The CHAIRMAN: Suppose you take the case of a hospital without a medical school, who performs the duties of the clerks and dressers?—No one.

16. The BISHOP of STEPNEY: There are no records kept in those hospitals?—Only probably the physician's notes or the surgeon's notes, which are very short—little more perhaps than a diagnosis and possibly prognosis.

17. The CHAIRMAN: I suppose that throws a great deal more labour on the house surgeon and the house physician?—Yes, they have to do that themselves.

18. Now, looking at the case purely from the point of view of the patient. Is the patient better attended to in the matter of the diagnosis and prognosis in the case of a hospital with a medical school than in the case of a hospital without a medical school?—I will not say a word about the diagnosis and prognosis made by the students, but, of course, having these gentlemen there who have nothing else to do but to watch a certain number of cases and take notes—and many of them are much interested in their cases—anything that goes wrong is at once noticed by them and brought to the attention of the senior officer.

19. Then you think that a patient is better off in a hospital with a medical school than in a hospital without one?—Most decidedly.

20. Lord WELBY: You said that where there are no medical schools this work is not done. You mentioned that these medical students in surgical cases are told off by the house surgeon to attend to the dressings and renewing of bandages and so forth. If there were no medical students, that work would have to be done by somebody, would it not?—Certainly.

21. How would that be provided for in a hospital where there are no medical students?—It is done either by the house surgeon himself or by the nurses.

22. The CHAIRMAN: It is not so well done, speaking generally, would you say?—I will not say it is not so well done, but it certainly is not so methodically done. I am not very conversant now with the internal arrangements of provincial hospitals; years ago I knew some, but certainly there is no comparison between the way in which the patients are looked after in a hospital which has a medical school attached to it and the way they are looked after in a hospital in which there is not a medical school. A surgeon goes round, and unless the nurse calls his attention to some particular case, he will see that the patient looks all right, he does not perhaps examine him himself very frequently, and there is not nearly the same amount of supervision of patients that there is in a hospital with a medical school attached.

23. Do you know whether the statistics of recovery show any difference between hospitals with and those without a medical school attached?—No. Statistics are a very dangerous subject to go upon. As you have asked me that question, I do not want to say that in provincial hospitals there are not of course a great many severe cases, but you may take it as a rule that the cases in our metropolitan hospitals are more severe cases than the cases in ordinary provincial hospitals, both surgical and medical.

24. The BISHOP of STEPNEY: There is one question I should like to ask which bears on this, although it extends to a wider issue on which you may have something to say later on. The dressers and the clerks are as a rule in their fourth years?—Fourth or fifth years.

25. Therefore they would still be available for use in the hospitals if there was a general medical school in London and men attended the

hospitals for clinical instruction in their fourth and fifth years. My point is that it is not necessary, for hospitals containing dressers and clerks, that there should be a medical school undertaking the whole course of a student's instruction? I think I follow your meaning. That is, that it would be possible to have the preliminary work—what we call the preliminary science—taught elsewhere than in the hospitals.

26. Precisely.

Lord WELBY: At a central school, you mean?—Yes, that is the view that is held by all the medical schools of London—that what are called the preliminary sciences of chemistry, physics, and biology might be taught, and taught with great advantage, away from the hospitals. There is a difference of opinion rather as to whether physiology and anatomy should still be taught in immediate connection with the hospitals or whether they also might be taught in one or two centres disassociated from the clinical work of the hospitals.

27. The BISHOP of STEPNEY: Then I take it there would be a very considerable agreement of medical authority that at any rate for the first three or possibly four years of his career the student need not be in a medical school attached to a hospital; he might be advantageously instructed in a general central medical school?—Quite so, but at the same time the student does obtain a certain amount of benefit in my opinion at all events in his third year by being constantly in the hospital. He occupies his spare time by going through the wards at the time that they are visited; he is beginning to get an acquaintance with what we call the "*facies*" of disease, which is a very important thing, upon which sufficient stress to my mind is not now laid.

28. I can understand that from the point of view of the hospital it would be possible to obtain the dressers and the clerks from men towards the close of their curriculum which was begun in some general medical school?—Yes, but a man who began his work as a dresser, or as a clerk, who had never been round watching the work done at the time of the physician's or surgeon's visit, and who was quite unacquainted with disease or injury, would not be in nearly such a good position to hold the clerkship or the dressership as the man who had made use of such opportunities as he had of going round with the visiting physician and surgeon and becoming more or less superficially acquainted with disease and injury.

29. The CHAIRMAN: I suppose a student at a medical school—take for instance St. Bartholomew's—can visit the hospital in his first year, can he not?—Certainly.

30. And he does so as a matter of fact?—He is very little in the wards in his first year.

31. And in his second year?—Well, I must make an admission there. We rather try to keep them out of the wards, because they really have so much work to do that it is as much as they can do to get up the subjects in the allotted time; in fact a large number of them fail to get up their subjects in time.

32. Then they do not begin practically to see much of the hospitals until their third year?—No.

33. Suppose you were advising a student what course to take, would you advise him to spend the first two years outside the wards of the hospital?—No, I should advise him to devote his principal time to his examinations in these subjects—the three that I have mentioned, and also those of anatomy and physiology, but during the time that a man is working at his anatomy and physiology it is an exceedingly good thing for him to spend any time that he can in attending to the visits of the physicians and surgeons at the hospitals. The students are not allowed in the wards of most hospitals excepting during the visits of the senior officers, and the habit of the student is, at the time of the visit of the senior officer, if he has no lecture to attend or no other work on hand at the time, to follow the senior officer who, as I say, is dependent on his clerks and dressers for direct information, so that the students can hear

all the remarks that the senior officers think fit to make upon the cases as they visit them.

34. The BISHOP of STEPNEY : Two questions arise out of that bearing on the advantage to the hospitals. One is, supposing it were the case that the students for the first two years, possibly even the third year, received their general medical education outside the hospitals ; would not it diminish greatly the expense of medical schools if they were confined to the remainder of the men's time ?—I do not quite follow you.

35. My point is this, if the medical schools in the hospitals were confined to what we may call the clinical instruction of the students towards the end of their career, would that or would it not lighten the burden of expense which the medical schools have to bear ; would the schools be more expensive if they were schools of clinical instruction at the end of a man's curriculum, instead of being schools which undertake the whole of it ?—They would not require so many buildings ; as a matter of fact they would not require accommodation for chemistry, physics, and biology to be found at the hospitals. But so far as I know—at least at St. Bartholomew's—no portion further than the provision of room falls upon the hospital.

36. In some cases there are emoluments to lecturers ?—Not, I think, to the lecturers in those subjects.

37. Then the second question that arises upon that is this. If the medical schools attached to the hospitals confined themselves to clinical instruction towards the end of a man's curriculum might not, as it is the case in some hospitals, fees be paid to hospitals by the students for the opportunities given through visiting the wards and having the advantage of direct touch with disease ?—Do you mean in addition to the fees that they give to their teachers ?

38. Yes. In some hospitals the students apparently contribute fees for clinical instruction—in University College Hospital for instance ?—That arrangement might be made I suppose.

39. That would depend upon the general financial condition of the medical school ?—I do not quite follow you I am afraid. You can hardly expect that the senior officers of a hospital would do the teaching for nothing. It takes up an enormous amount of time. The visits of the senior officers at St. Bartholomew's last from two to three, and even sometimes more than three hours most days in the week, whereas their visit, if it was only for the sake of the patients might be got through perhaps in half-an-hour.

40. For instance, in University College Hospital I understand a certain sum is given from the medical school to the hospital which is returned as fees of students for chemical instruction. It is a source of income to the hospital ?—That, I think, has been voluntarily surrendered by the officers of the hospital who are the teachers there. It has been a contribution by the teachers to the hospital, not a contribution direct from the students, but by the teachers to the hospital. I should like, if I may, to add this. I have only mentioned at present what the students do with regard to the in-patients' work of the hospitals. As to the out-patients the students are of still greater assistance to the patients. Very much the same arrangements as to the work of the students exists in the out-patients' departments. In all the out-patients' departments there are what are called out-patient clerks and dressers, who do not take the same full note of the cases, but who keep a record of the patients they attend. They are apportioned out to the various officers who see the out-patients—I am speaking now of out-patients, not of casualty patients—and they do very much the same work which they do in the wards to the in-patients. If it were not for a number of students working in that way it is quite clear that the out-patients, where there are many, as at most of the metropolitan hospitals, would not be nearly so thoroughly seen. You have as many as eight or ten students examining the patients that come into the out-patients' rooms. They examine them to the best of their

ability, and come up with the patient to the officer who is responsible for seeing them, and tell him what they have made out of the case, which saves a great deal of time, and enables him to direct his attention to what are probably the leading features of the case, and so enables him to get his information, and to be able to treat the patient on a much more thorough basis than if he had to examine them all entirely himself.

41. The CHAIRMAN : Now take the case of hospitals having no medical schools ; they receive out-patients also ?—Yes, in many cases.

42. And I suppose the work in your opinion would be less thoroughly done in those cases where there are no medical schools ?—I would not like to say that it is less thoroughly done, but there is certainly greater chance of its being thoroughly done in a hospital with a medical school attached.

43. There is greater pressure where there is no medical school and no medical students ?—Greater pressure upon the staff.

44. And, therefore, it is a distinct advantage to the patient that there should be a medical school attached ?—Most distinct advantage, there can be no doubt about it.

45. Lord WELBY : I should like to understand the point that the Bishop of Stepney has put to you. I understand that what he put to you was that at present where there is a medical school attached to a hospital the students are attached to that medical school for five years ; and I gather his question to be, might not two years, or three years, of that period be spent by the students, not at the medical school attached to the hospital, but at some central school ?—But that is at present the case. For instance, the University students (I mean chiefly Oxford and Cambridge students) almost always spend the first two years of their medical course at the University, where they get through all the preliminary subjects and (what I can hardly call preliminary subjects) also their anatomy and physiology. The clinical work in the London schools is done by students who have passed their examinations in anatomy and physiology. Then they only have to pass what we call the final professional examination afterwards.

46. But still, where there are students attached to hospitals they are attached for five years ?—Yes.

47. I do not know whether the Bishop of Stepney intended to go so far as contemplating the creation of a new central school, where for the first two or three years the medical student would learn the elements, if I may so put it, of the great sciences—the elements of their profession.

The BISHOP of STEPNEY : Yes. It is a very wide question, but it bears on our inquiry, I think.

Lord WELBY : The only point is that that would involve expenditure. The hospital would save, if I may say so, two or three years, but on the other hand, from some source or other, the money must be supplied to this central place.

The BISHOP of STEPNEY : The point I put was simply whether or not what certain people contemplate as a re-arrangement of medical education in London would affect the expensiveness of some medical schools which seem to require grants from the hospitals to maintain them in efficiency.

The WITNESS : It will remain for you I suppose to elicit whether any hospitals do give grants to these preliminary sciences. My impression is that, excepting, as I say, the provision of a place for teaching them, they do not. Anything which would assist the medical schools in arriving at a combination, whether it be (as we hope) in connection with the University of London, or even some other arrangement by which these preliminary sciences could be taught at common centres, would be felt as a very great advantage by the medical schools. I think they are unanimous upon that point.

48. But when this general knowledge has been acquired, still there

would be room for the student—say in the last two years of his studentship to be attached to a medical school attached to a hospital?—He must be attached to a hospital.

49. The CHAIRMAN : In fact that would come to this, would it not, that a medical student would be in the position of an Oxford student who passes his first two years at Oxford, and then comes to St. Bartholomew's or Guys?—Quite so, the only difference being as I have mentioned, that I think there is an advantage for men who have passed their examinations in the first three subjects, chemistry, physics and biology, to be able to go into the wards during the time they are studying physiology and anatomy. For the patient, the indirect benefit is that the student who does so is better prepared for his duties as clinical clerk and dresser than a man who has never been into the wards during that period.

50. Lord WELBY : But if that is carried out would the fact that this medical student would only be for a comparatively short time attached to the medical school of the hospital, mean a diminution of the expenditure on the part of the medical school. I suppose it would. If at present a number of medical students are attached to the medical school for five years, it means buildings and rooms of a considerable size, because there would be a great number of students; if they were only there for the last two years of their studentship I suppose there would not be such an expenditure on the part of the medical school attached to the hospital?—Certainly not. The medical school would get rid of the whole of this teaching. Another point is this: One of the great advantages of the presence of students at the hospitals is in connection with the casualty work. In those hospitals which have a large casualty department, it would be impossible for those patients to be seen in the way they are seen now, unless you had students, without a very large force of more or less skilled people; the students sort the patients, look over them, and are trusted with the dressing of their injuries in surgical cases; they inquire into the nature of their disease in medical cases, in very much the same way that I have described in connection with in-patients and out-patients. The severe cases are taken out and are either admitted or placed on the list of out-patients, and the rest are treated there and then. At St. Bartholomew's—not at all hospitals—each patient is always seen by a House Surgeon or House Physician, or a Casualty Surgeon or a Casualty Physician. There is a very elaborate system there for taking care that every casualty patient is seen by a duly qualified and experienced man. That would be only possible by their being passed through the sieve, as it were, of a number of students who examine them all; they would say:—"This seems a very serious case"; "This man has only a cut on his arm or finger." Then after their first visit they are almost entirely looked after by the students—I mean the trivial cases. If a man has to come in to be dressed the next day, the dresser who saw him on the first day attends to him, and if things are going on well he need not refer him to the House Surgeon or to the Casualty Surgeon, so that the amount of work that these students do on behalf of the patients is very great in the casualty and in the out-patients' department. The amount of work in the in-patients' department is perhaps of more value to medical knowledge and science than to the patients themselves, but it is of enormous value to the student.

51. The CHAIRMAN : I suppose even in the case of the patients you would say that the presence of these clerks and dressers leads to a more thorough investigation of the case than if they are left to the care of the physician or surgeon?—Oh, yes.

52. Lord WELBY : You have been rather careful in answering the questions put to you to avoid using any words which might seem to say that the work was not well done in the hospitals where there was not this assistance, but I think it was obvious to all of us that the fact of this record being kept and this watchfulness being had over the patients which would hardly be exercised where there was not such a staff must be of

very considerable benefit to the patients themselves?—I have no doubt of it whatever.

53. The BISHOP of STEPNEY: Are any payments made to the clerks or dressers?—None whatever. There is one general remark I may make. The presence of a medical school in connection with hospitals is of enormous indirect benefit to the patients. To begin with, you have a vast number of young and enquiring minds going round the hospital, and a hospital with a medical school cannot have any very great abuses connected with it, or it would get known generally. I mean by that, if there was laxity I will not say slight but great laxity—in the management of a hospital, or if there were great irregularity in the visits of the medical staff, that would all get public in the case of a hospital with a medical school attached. That is a very great safeguard for any abuses coming into the hospitals. Then again, medical officers who are not teachers naturally are not so much in advance with medical knowledge as those whose duty it is to be teachers, also they get into the way of following a routine. The very fact of each medical officer of a medical school having a number of pupils, who are always asking questions and always trying to catch him out in a mistake, is of enormous advantage. It prevents a man from getting slovenly or careless in his work. At present we have only regarded patients while they are alive, but part of the duty of these students is to follow their cases as far as they can after death, and to go to the post mortem examinations. In the same way a certain number of these students, are told off to do the clerical work in connection with post mortems. Of every post mortem made in the hospitals a most full and perfect record is made under the supervision of the Demonstrator, as he is generally called, of Morbid Anatomy. Those records are most valuable not of course from the patient's point of view, but from the point of view of other patients, because it is a means by which great advances are made in medical treatment and medical knowledge.

54. The CHAIRMAN: I suppose the fact that a school is attached to a hospital makes it more attractive to high medical ability than if there is no such school, I mean, a physician or a surgeon would prefer being appointed to a hospital where there is a medical school rather than to one where there is not?—Yes; that I am afraid might be due not only to his desire of greater opportunities of increasing his own knowledge, but also to the material benefit he derives.

55. Still, that hospital would have a better chance in competition for medical assistance than a hospital that had no medical school?—Certainly. Thoroughly equipped laboratories with fully equipped teachers are really of great need for the advancement of our medical knowledge. As I think I have mentioned to you a man who is a teacher is sure to be more interested in his work than a man who is not a teacher, and you must have attached to these hospitals thoroughly equipped laboratories; I mean laboratories for clinical work; a need which is only the growth of comparatively speaking few years. It is absolutely necessary for the treatment of your patients that you should have thoroughly equipped laboratories—for the treatment I mean of the patients still in the wards.

56. You want, I suppose, laboratories where electrical appliances, the X rays and so on, are employed?—Oh, much more than that. Every case almost that comes in, you have to have an examination made of a great number of secretions, and of the blood, and bacteriological examinations. Those are absolutely necessary now for the proper treatment of diseases.

57. The BISHOP of STEPNEY: That anticipates a question I was going to ask. Is it not the case that practically every hospital now, whether it has a medical school attached to it or not, is obliged to have some sort of pathological laboratory (if that is the right term) for the

assistance of the patients actually in the hospital?—Every hospital should have, it has not as yet.

58. At any rate it should have, whether or no it has a medical school attached to it?—Quite so.

59. Your point is that the medical school being attached to the hospital ensures the efficiency of a sort of laboratory which is increasingly necessary to all patients in hospitals?—Yes.

60. The CHAIRMAN: How are these laboratories maintained in the other hospitals?—In many cases they have not got them at all. In other cases they pay for them; a laboratory is put up for the use of the hospital, and the hospital has to pay.

61. The BISHOP of STEPNEY: How far does one hospital use the laboratory of another for the investigation of a specific case within its own walls?—I cannot answer that question. What I think you mean is that a great many of the medical officers of many of the provincial hospitals either have to go to other hospitals or themselves belong to the Association for Clinical Research, and send their specimens to that Association to be examined. It is work that a man in practice cannot do altogether for himself; he can do some parts of it but he cannot undertake the whole of it.

62. The CHAIRMAN: That is a very important element?—Very important.

63. Now you were going to add something?—I should like to quote if I may, the words of Professor Osler, who has just been made Professor of Medicine at Oxford. He said: "The work of an institution in which there is no teaching is rarely first class." That of course is drawn more from American experience than from English.

64. In America, I suppose they have much more difficulty in obtaining clinical instruction than in England?—No; I do not know that they have. We have got no medical schools equipped like the McGill institution.

65. However, I will not go into that, because it is foreign to our purpose. Now, there is a question put before us with regard to "general considerations." I do not know whether your attention has been drawn to that. One of the terms of reference is "Whether in the event of the Committee finding that any hospital contributes to its medical school a sum in excess of the return it receives from the medical school, there are any special considerations advanced in justification of such expenditure, or any general considerations which would apply to all hospitals having medical schools." I think probably you have given us all you have to say about that?—Yes.

66. Then do you wish to add anything upon the general question?—It might be stated that a great deal of the work which is done by medical students in the hospitals, such as dressing wounds, and bandaging, and keeping records of the secretions in medical cases, and that sort of thing, might be done by nurses. I think that is taking a very mistaken view of the duties of the nurses. I think that at the present moment, if I might say so, the tendency is rather to give nurses instruction which is, comparatively speaking, of little value to them; it is due perhaps to one's own profession that the nurses have a sort of elementary course given to them in physiology and other subjects which are really, I think, outside of nursing, and should be kept distinct from nursing.

67. Perhaps you think a little knowledge is a dangerous thing?—I think it is very.

68. The BISHOP of STEPNEY: There is one question of detail with regard to advantages conferred on the students by hospital work. Is it the case in other hospitals beside the London Hospital that students take part in midwifery work among out-patients?—I think so in connection with some of the large towns—in Manchester and Liverpool and Leeds, I think.

69. But in London is there any other hospital that you know of which does that?—A great many students get that information in

connection with the special lying-in hospitals. All the lying-in hospitals that I know of take students; many students do their midwifery in connection with these lying-in hospitals.

70. I am speaking simply from the point of view of the patients. In East London a large number of poor women receive the services of the students in those matters; you do not know whether that is at all general in London?—Oh, yes. Every medical school undertakes that work, I think: it forms a very large department indeed in St. Bartholomew's. When I say it is undertaken by the students, I mean it is undertaken by them under very close supervision.

71. The CHAIRMAN: Does St. Bartholomew's take in midwifery cases?—No, they do not take them in, but there is a very large department for attending to them at their own homes, and the great advantage of that is this. It is generally at the last period of his education that the student undertakes this work. There are at St. Bartholomew's two qualified officers to supervise the students, in addition to the physician and assistant physician in that particular branch of medicine. So that if the student meets with any difficulty he at once applies to the midwifery assistant, and if he meets with a difficulty he sends for still further advice. Therefore there can be no doubt that these women who are attended at their own homes really have an opportunity if their cases present difficulty of getting advice such as they could hardly get elsewhere.

72. Lord WELBY: If I may put what I have gathered from your evidence, it comes, I think, very much to this. You consider that a hospital to be thoroughly well equipped requires really to have a medical school attached to it. You do not consider a hospital without a medical school attached to it is what I may call a thoroughly equipped hospital?—No. I would not go so far as to say that.

73. I know you did not say so, but that is the impression left on my mind after listening to what you have been so good as to tell us?—I have no doubt whatever that a hospital that has a medical school attached to it is very much better equipped than one that has not. But I could not say that a hospital that has not a medical school is not a thoroughly well equipped hospital. The amount of work that they get through is not great. I mean if they did not have students doing this work in the out-patients' rooms and in the wards you would have to have an enormous increase of staff.

74. Does that not come to very nearly to what I said; perhaps it is going one short step further than you were willing to press upon us, but the impression rather left on my mind is that a hospital with a medical school attached is a perfectly equipped hospital, and, therefore, hospitals that have not medical schools attached are not so perfectly equipped.

The BISHOP of STEPNEY: It is a question of degree.

The WITNESS: Yes, and they do different work; I mean, you cannot compare the work done in the large metropolitan hospitals with the work done by a provincial hospital, however it may do its work.

75. The CHAIRMAN: Take St. Bartholomew's; it could not do the work it is doing now, if it gave up its medical school, without an enormous increase of its medical staff?—No.

76. Lord WELBY: And, carried forward, that really means that the medical school is of advantage to the sick poor?—An enormous advantage. I feel that I am on perfectly safe ground in saying that the advantages to the patients of a medical school—the indirect advantages—are hardly to be exaggerated; partly from the greater amount of advantage that the patients themselves get, and still more so from the fact that the existence of a medical school prevents a hospital getting into a routine and slovenly ways. If I might emphasise that, I would say that no one has a higher regard for the great State infirmaries than I have; they are admirably managed in many cases; but you must remember that the cases taken to the infirmaries, as a rule, are not nearly such dangerous and acute cases as those which are admitted into our voluntary hospitals. They are mostly

chronic cases. Many infirmaries are extremely well managed, but they would be all the better if they had pupils going about them.

77. What do you call the infirmaries?—The workhouse infirmaries. And, in regard to that, people often speak as if the workhouse infirmary did not exist. They are the proper place for the pauper poor. I consider that the voluntary hospitals are places for a different class of people; most of the hospitals in fact use a certain amount of discretion as to what cases they should take in, and they also discharge out of their wards those who are hopelessly infirm and ill.

78. The CHAIRMAN: We have had some suggestion that the expense per bed is greater in the case of hospitals with than in the case of hospitals without schools. Have you anything to say to us on that subject?—I am afraid not, except what I have just said, that as a rule the cases are more severe in the voluntary hospitals which have medical schools attached to them than they are in the workhouse infirmaries.

79. I was not speaking of the workhouse infirmaries, but of some of the hospitals in London which have no medical schools?—I cannot say anything on that point.

80. I think it has been suggested that the expense per bed is less in one class than in the other. Do you know anything about that?—No.

81. Is there anything you would like to add?—I think not.

[The Witness withdrew.]

Sir ARTHUR WILLIAM RÜCKER, M.A., F.R.S., Principal of the University of London, called in and examined.

82. The CHAIRMAN: You are Principal of the University of London?—Yes.

83. I have no doubt you are familiar with the terms of reference to us?—I know generally the object of the Committee.

84. Perhaps I had better call your attention to them a little in detail. The first is: "Whether any, and if any, how much money given or subscribed for the relief of the sick poor to the 12 London hospitals having medical schools is contributed, directly or indirectly, by those hospitals, or any of them, for the maintenance of medical education." That is a question on which, I presume, you would not have much to say to us?—No, I have nothing to say on that.

85. Then the second question is: "Whether any direct or indirect return for such contributions (if any) is received by the hospitals from their medical schools." That is a question of course of a much more general character, and it is upon that you may have some observations to offer us from your position as Principal of the University of London, which has so many schools connected with it?—I have tried to think over what you would be likely to wish to hear from me, and I am prepared to give you an account of the relations between the medical schools and the University of London, and the teaching that is done there under our general superintendence. That will of course bear very directly on the point.

86. You mean on the point whether there is any indirect return?—Certainly.

87. Then will you tell us whatever you think bears on that question?—With regard to this question I have no personal knowledge of what the amount of contributions from the hospitals to the medical school is, and therefore I am in a difficulty in stating whether or no the return made is equivalent to the amount of the contributions.

88. We should not expect you, I think, to speak as to whether the return is equivalent. What we should like you to do is to point out to

us any direct or indirect return to the hospital from the school?—I think the best way to answer that would be to tell you what are the relations of the medical schools to the London University, and then you will be able to put any questions which will raise the point as to whether there is an adequate return. Before describing those relations in detail it is necessary to say a word or two about the system which connects the University of London with the medical schools. Certain institutions in London connected with the University are called "Schools of the University." The definition in Statute No. 70 is "(1) The Public educational institutions named in the statute as the first schools of the University; (2) Such Public educational institutions situate within the administrative County of London including the County of the City of London as the Senate from time to time admit either in whole or in part as schools of the University." That is the formal definition. The relation of a school to the University is, with considerable differences, somewhat similar to that of a college at Oxford or Cambridge to the University of Oxford or Cambridge. It is an institution with an independent Governing Body of its own, and entirely responsible for its own finances, but the University exercises a certain control over it in educational matters. By Statute No. 76 a school may be visited by the University, which may obtain reports as to its efficiency. If the reports be unsatisfactory the Senate (under Statute No. 77) may, subject to an appeal to the Privy Council, remove any Institution in whole or in part from being a school of the University. Teachers in the schools do not become teachers of the University unless they are individually recognised by the Senate. The courses of study adopted by them do not lead to the internal degree unless they are approved by the University. The medical schools which are schools of the University and with regard to which alone I shall be able to speak are, University College, King's College, St. Bartholomew's, the London Hospital Medical School, Guy's, St. Thomas's, St. George's, the Middlesex Medical School, St. Mary's, Charing Cross, Westminster Hospital, and the Royal Free Hospital for Women.

89. How many are they?—Twelve.

90. Those are all the schools in London then?—Yes, they are the only schools.

91. Lord WELBY: We may look upon them as colleges of the University?—As colleges of the University of London in very much the same sense as the colleges of Oxford and Cambridge are colleges of those Universities. The total number of internal students of the University of London in these schools is 1,094. I took that from our last calendar. In case you care to have it, I have here a list of the number of students in the different medical schools. (Handing in document.) As you are aware, instruction is given in these schools by teachers in physics, chemistry, and other sciences ancillary to medicine which are included in the Preliminary Scientific Examination of the University of London. The question has for a long time been mooted as to whether it would be desirable that such teaching should be given not by the medical schools but by the University in separate institutions. The Commissioners appointed to consider the draft charter for the proposed Gresham University in London, dealt with this subject in their Report issued in 1894. Perhaps I may read what they said: "It is very desirable that with regard, at least, to the smaller medical schools the teaching of physics, chemistry, biology, anatomy, physiology, pharmacology and materia medica, pathology, hygiene and public health, and forensic medicine, should be concentrated into one or two institutions. At some of the medical schools the number of students attending these several classes is very small, and there is often great difficulty in obtaining teachers properly qualified for the work, as a rule the best men are not anxious to accept these appointments. There is little or no remuneration or encouragement to exertion. But if the several classes in these subjects could be fused together, the individual classes so resulting would be of

sufficient magnitude and importance to secure the services of the best teachers. It can hardly be doubted that considerable improvement in medical education would result from this arrangement, while by the saving of time and expense and concentration of force the several schools would be set free from what must be now a burdensome weight, and would be enabled to devote all their energies to the teaching of the clinical subjects of medicine and surgery, which in all their various branches have largely developed of late years. If such a plan as this were adopted the further question would be considered whether each of the several subjects should not be entrusted to more than a single teacher. The classes would probably be large enough and the remuneration sufficient to admit of this division of labour." The Commissioners appointed under the University of London of 1898 adopted this view, and, after quoting the above passage, set forth at length the arguments for and against the proposed course. I may add that their arguments have also been set forth by the Faculty of Medicine as giving the best summary of the case that has yet been put forward, and it is given in our Calendar at length, I need not read it now, but I will hand in the Calendar. It is on page 88.

92. You were going to say what the conclusion of the Commissioners was?—Yes, I will give you that; their arguments I think I need not give you in detail. In their concluding remarks they referred to several groups of sciences ancillary to medicine, of which the first two are (1) Physics, Chemistry and General Biology, and (2) Anatomy and Physiology, and they desired to give emphasis to their opinion that concentration in these groups ought to be effected without delay. They therefore recognised teachers in these subjects at the various medical schools only provisionally in the desire to facilitate the work of the Senate in carrying out a scheme of concentration. This plan of recognising only provisionally the teachers referred to is continued at present. So that the University is looking forward to the time when there will be concentration of these different educational groups, and we believe that such a concentration will effect a great saving.

93. The CHAIRMAN: A saving of expense in the medical schools?—Yes; I think there would be a saving in the expenses. I ought to explain that probably if any such great institute were established, there would be a desire to do the work better than it is being done at present, and in that way there might be an immediate larger outlay than there is at present; but putting the two things together the efficiency and actual financial economy, the result would be an improvement.

94. The question of finance is one which it is extremely difficult to deal with until you know a great deal more about it. I mean the establishment of a large central institution for the purpose of teaching preliminary subjects might be a very expensive matter?—Would be a very expensive matter—must be a very expensive matter.

95. Lord WELBY: One's general experience of public affairs is that, where there is the substitution of a central building for scattered buildings, there is no doubt increased efficiency, but very rarely is that accompanied by an immediate saving of expense?—Certainly not an immediate saving. In addition of this expression of their opinion the Commissioners in Statute No. 80, which you will find in that volume, laid down this "The Senate shall use its best endeavours whenever practicable to secure such common courses of instruction for Internal Medical Students in the preliminary and intermediate portion of their studies under appointed or recognised teachers at one or more centres." So that we are under orders to do what we can to bring that about. In accordance with this instruction the Senate, at a meeting held in February 27th, 1901, passed the following resolution: "That it be referred to the Faculty of Medicine to consider and report to the Senate as to the manner in which it may best carry out the duty stated in the following paragraph of Section 80 of the Statutes of the University, viz.:—The Senate shall use its best endeavours, whenever practicable, to secure common courses of instruction for internal

medical students in the preliminary and intermediate portion of their studies under appointed and recognised teachers at one or more centres." I may just say (and this is connected with the general question) that the Faculty of Medicine consists of representatives of all the medical schools, not as such, but of teachers of medicine whom we have recognised or who were recognised by the Commissioners. They number 350, and therefore their view may be taken to represent the general view of the teachers in the medical schools. The Faculty reported on the 22nd January, 1902, giving an elaborate account of enquiries made at the medical schools and at other universities. This is a very important matter. In the report there is a long statement as to what ought to be done. I will hand that in. The Faculty pointed out that the number of students in our London medical schools was steadily falling off, and steadily falling off as compared with the Provinces. For instance, the total falling off in the two periods of five years that they compared was 878, which means an average falling off of 175 entries, that is from 1881 to 1898.

96. A yearly falling off, you say, of over 100?—175. Meanwhile there was a total increase in the provincial entries of 896, which was an annual average increase of 120 entries.

97. The CHAIRMAN: Does that mean that the provincial hospitals have been improving so much?—I think from what they themselves say, it shows that some material alteration in the conditions of medical education in London is necessary, but speaking from my general knowledge, I should say that it is largely due to the great impetus given by the establishment of provincial colleges and universities, and that is largely due not only to the improvement of medical schools as such, but to the improvement in the teaching given in ancillary subjects.

98. Lord WELBY: That is to say the London school training is not now resorted to for the provinces so much as it used to be?—Just so.

99. The CHAIRMAN: And that is due largely to the establishment of these provincial universities?—I think that is so.

100. Lord WELBY: I do not know that I quite caught the full meaning of the average falling off of 175. Can you tell what was the number of students in 1879 and what it is now?—What I have given you is the total number who come in in the five-year periods.

101. That is to say those who at a given time are in the schools?—Yes. Now I will give you the annual entries. In the London schools in 1879 there was an entry of 731 students; in 1900 there was an entry of only 465. In the provincial schools there was an entry in 1879 of 257 students, and in 1900 an entry of 353. That is on the whole a falling off, taking both the London schools and the provincial schools together. In 1879 the total entry of English schools was 988, in 1900 it was 918.

102. The CHAIRMAN: That is the number entering the profession altogether?—The number entering the profession altogether has fallen off.

103. Does it include Scotland?—No, it is England alone.

104. Lord WELBY: That represents really a falling off of half?—About one-third between 1879 and 1900.

105. Does the statement of a yearly average of 175 quite correctly represent that?—I have not worked it out myself, but the figures are given for every year.

[NOTE.—The Witness desires to add that the statement quoted from the report of the Faculty requires explanation. The falling off between the average entry of London students in the years 1879-1883 and the average entry in the years 1896-1900 was 175, so that the average falling off between the two periods was 175. This statement must not be confused with the average falling off in each year between the two periods. As they were 17 years apart, the average falling off in each year in London was a little over 10. In the same period there was an average increase of 7 in each year in the provinces. The result of this is that the annual average entry in London was 175 less between 1896-1900 than it was between 1879-1883, while in the provinces it had increased by 120.]

106. It does not seem to me to quite correctly work out, just listening to the figures that you have given us. It seems to be much clearer in the comparison that you have last given. According to that, the entries have fallen off about half?—Yes, it is something like that. Then they further state “That the opinion in favour of concentration is gaining ground and it is believed that decisive action on the part of the university authorities in the direction recommended will remove so much of the remaining opposition as is due to the not unnatural fear of some of the schools lest a method of concentration should be adopted which should benefit one or more institutions to the detriment of others.” And they finally recommend “that the Senate should take steps to secure funds to enable it to establish in the near neighbourhood of the university a school of preliminary and intermediate medical studies.” That is the report of the Faculty. This was referred to one of our big Committees, called the Academical Council. They reported on October 22nd, 1902, and as the result of their report these resolutions were passed: “That, subject to the liberty to be left, as recommended by the Faculty, to those Schools which desire to retain in their own hands the teaching of the Preliminary and Intermediate Subjects, the First Scheme for an Institute of Medical Sciences, as set forth in the Report” (I need not trouble you with that) “be generally approved.” “That steps be taken accordingly to secure a site and funds to enable the Senate to establish such an Institute in the near neighbourhood of the University.” “That in any public appeal issued by the University for endowment a prominent place be given to this scheme, and that facilities be afforded to donors to devote their contributions either wholly or in part towards its realisation.” “That the Institute of Medical Sciences Committee be empowered to confer further with the Committee of the Faculty, and in consultation with them to draft the reference to the Institute to be included in the University appeal for endowment.” That is the appeal which I also hand in. That is the position of matters at the present time.

107. The CHAIRMAN: Then practically the University is committed to a central scheme if it can get the funds?—It is committed to a central scheme if it can be carried out.

108. Lord WELBY: That central scheme—going back to your analogy of the colleges of the Universities of Oxford and Cambridge—would mean that three years out of the five the University would teach, and then the students would be drafted off into separate colleges?—Yes; the analogy would be this: As at Oxford the University museums are the property of the University, and as at Cambridge the FitzWilliam Museum is the property of the University, so this institution would be directly under the University of London, and the teachers would be paid by it. Therefore, for the first two or three years the student would go to a University institution; he would then pass on for his purely medical teaching, which must be done in the neighbourhood of the bedside, to one of the hospitals.

109. The CHAIRMAN: He would be very much in the position of an Oxford student, who takes his M.B. at the University, and then comes up to Guy's or St. Thomas's?—Yes, that is an exact analogy, except that these hospitals are not colleges of Oxford or Cambridge, but are “schools” of the University of London. Nevertheless, the Senate has no compulsory powers whatever; any scheme it carries out can only be carried out by the consent of the different bodies concerned.

110. What about the position of any of the existing medical schools who would not assent to this proposed concentration?—I should not like to say formally that I know there are several, but I have reason to believe that some of the larger ones might probably not come into such a scheme at first. With regard to that I should say that it is not contemplated that this institution will provide for the whole of the medical students of London at first. To do that would require a very large sum of money, as it is we require a large sum, but that would require a still larger sum.

It would be best to begin the thing tentatively, taking in those that are willing to join, and then, if the scheme proved a success, as I believe it would, the others would follow.

111. Then for some years, at any rate, there will be place, if not necessity, for some of the large independent hospital medical schools?—As a practical matter I think there will.

112. Lord WELBY: If the scheme contemplated by the University is carried out, would not the result be this—I am looking rather at the financial side—: Supposing the public subscribe sufficiently to enable you to carry out the scheme, the expenditure necessary for the maintenance for two or three years, say, would be provided by the public, and to something like that extent the hospitals would be relieved from the corresponding charge for their medical schools?—That is so. Then if I may try to connect this with the main object of your inquiry, what I should say would be this. In the first place the scheme is that of the Faculty of Medicine, and I think it would be rather desirable that you should hear some representatives of the Faculty rather than myself. I am not speaking for the Faculty of Medicine, but only as Principal of the University. I think the return the public get from the Medical Schools may be summarised somewhat as follows: They gain absolutely unique opportunities for the study of disease. To compare the Medical Faculty of the University of London with the Medical Faculty of any other University whatever is really to compare two things which are in different orders of magnitude. Few, if any, provincial towns have more than one great hospital, and possibly a good dispensary in another part of the town. Here we have 12 great medical schools, of which the principal ones are superior I suppose—at least equal—to those in any of the provincial towns. Therefore the enormous opportunity there is in London of studying disease is a matter of the very greatest importance to the public and to the poor. It is perfectly true that the direct help to an individual sick person obtained in this way may be difficult to trace, but the help given to the sick poor altogether, owing to the proper study of disease, is a matter about which there can be no two opinions. Therefore, although I express no opinion as to the particular way in which the funds should be raised, it is an integral part of the mechanism for helping the poor, and for helping the sick poor, that there should be opportunities for the improvement of the education of persons who are helping them to combat disease. That can only be done by having medical schools in connection with hospitals. I think, therefore, that it may be said at once that there is a certain return given. I believe it is the fact that the actual money saving to the hospital by the presence of the students who act as dressers and so on is very considerable. Further, the help of the great physicians and surgeons is more easily obtained in hospitals if they are at the same time connected with a large number of students in medical schools. On those points I speak with no authority, but merely to show that I am aware that there is that side of the question. I speak rather with regard to benefits which I admit are indirect, and those I have tried to put before you. Of course, if those indirect benefits are admitted, then it becomes a matter of the first importance as to how they can be best attained. That they can be attained to a certain extent by means of the existing arrangements is no doubt true, but the arguments of the Commissioners which I have handed in led them to the conclusion that on the whole, though it might be at a greater additional cost immediately, help will be in the long run be better given if the teaching can be made of a somewhat higher order on the average than it is at present. I say nothing at all against the existing teachers, but it stands to reason that if you are able to concentrate the teaching in a few great institutions, if you are able further to get large fees which will enable you to pay the professors relatively higher, you will get a higher standard of teaching than you otherwise would.

113. The CHAIRMAN: I suppose in many cases in the smaller

schools collateral subjects, if I may so call them, are taught by persons who do not devote their whole time to the study in any way?—In some cases that may be so, but the University exercises a certain pressure there, because we recognise teachers and refuse recognition unless we are satisfied as to the conditions under which the teaching is given.

114. How many professors do you recognise, for instance, in the science of zoology?—I think you will find that information in the second volume of the Calendar which I hand in. There is a list of all the recognised teachers in all the subjects that the University deal with. Then a word or two about the best way of obtaining this improvement I have referred to. One suggestion might be made, whether the students should be sent to the existing schools of the University, such as King's College, and University College, where teaching is given in these ancillary subjects—whether it would be possible largely to use the existing appliances. On that point I may say that the number of students entering London, though reduced, is still so large that those institutions would not contain them. Some steps are, I believe, being taken in that direction by King's College.

115. It was suggested at one time that something like the inter-collegiate lectures at Oxford might be instituted amongst the different medical schools in London?—The difficulty with regard to that is that London is so large, that the time lost in running about from laboratory to laboratory would be very serious. If it could be arranged—I do not think it can—that the whole of one subject was taught consecutively and then dropped and another subject taken up; it might be done, but I doubt whether that would be a feasible scheme in medicine. The existing schools, therefore, are not large enough, and something would have to be added. I may also point out that (I think not unreasonably) the existing schools would object to anyone of them being picked out by the University as a special University School. That is not an unreasonable objection. We have understood, with regard to this scheme, that the Institute ought to be started on what I may call neutral ground, so as not to have too obvious connection with any medical school. We are about to incorporate University College; it is handing itself over entirely to the University. One of the preliminaries which had to be arranged for, that was the entire separation of the medical school from the University College, so that it should not be a school directly under the control of the University. With regard to the site, the best site which has been suggested is some of the vacant ground at South Kensington.

116. I think we need hardly go into that. The great point is that there is such a scheme which has received the sanction of the University; how it is to be carried out we can hardly go into?—I believe that such a scheme, though more expensive at first, would immensely conduce to the improvement of medical education in London, and, therefore, would tend to check the falling off in the number of students attending London schools, and, therefore, as I believe, tend to improve medical education generally. That is the connecting link between what I have said and the main object of your inquiry. I shall now be glad to answer any questions you may wish to put to me.

117. The BISHOP of STEPNEY: You say that no doubt the Institute would be at first more expensive. You do not mean by that that it would mean more expense to the existing medical schools?—Oh, no, I am assuming that it was done with public money.

118. Perhaps you will hardly be able to answer this: Do you think that it would in any way lessen the financial burden on the existing medical schools?—I feel sure it would, for two reasons. In the first place it would relieve the medical schools from having to pay a certain number of teachers whom they now pay directly or indirectly, and secondly (what I believe is more important) it would set free space. As you are aware it is necessary to have laboratories for many subjects of a direct medical

character, and the space which is now occupied by the physical and chemical laboratories would be set free for other subjects.

119. Lord WELBY: Would it be possible to add to that return that you have put in, the number of students in each hospital in 1879?—No, because the new system of the University of London was only started in 1900, and these are merely those among the students who are what we call internal students, that is, students who are pursuing the course of studies under teachers approved by the University and are going up for their degree. That does not give the whole number of students at the hospitals.

120. You speak of internal students, would you point out to us the distinction between what you recognise as internal students and what the medical schools would recognise as a school student?—In this respect the University of London is more analogous to some of the German Universities. In the different colleges or schools there are persons taught who are not necessarily studying for their University degree, and have no intention of taking up the degree. Such students would be persons taught by teachers approved by the University, but not internal students. The internal students would be only those who are going in for the degree of the University in a specified way. We have both internal and external students; the old system is still maintained; and it is conceivable that there may be in the hospital a certain number of persons who for some reason or other prefer to be external rather than internal students. In medicine the examination is the same, but the internal degree carries with it the proof that the man has gone through a course of study approved by the University as well as passed his examination.

121. The BISHOP of STEPNEY: Then, with regard to the return that you have put in, in many cases it would always be a minority of the actual students of the schools who are internal students of the University --the London Hospital school, for instance?—Probably, but I do not know what the precise relation is.

122. The CHAIRMAN: I suppose in many cases the students are only intending to get the diploma of the Royal Colleges or a Scotch University degree?—That is so.

123. Lord WELBY: Therefore you would not be guided by that return as to the total number of students?—No.

124. Looking at the return as you put it, and what you have told us about the discrepancy in the number of entries, what do you think is going to be the future of these medical schools, are they going to die out; because it is perfectly clear, if that rate of diminution goes on, in time there will be no students at all?

125. The CHAIRMAN: Two of the hospitals, I see, have only 17 students. -- I am afraid I did not make myself quite clear. I was speaking of the internal students only.

126. The BISHOP of STEPNEY: Perhaps you would rather not answer this, but it bears upon our Inquiry. Would you say that where a medical school had a large percentage of internal students of the University, that is some evidence of there being a very high standard of teaching and study?—*Primâ facie*, I think one would say so. The degree of the University of London in medicine, has always held very high place indeed, and I think we are maintaining that position. Therefore a student aiming at the degree of the University would, *primâ facie*, be a far better student as a rule than a man who is merely aiming at a qualification.

127. The CHAIRMAN: The distinction between internal and external students seems to raise this difficulty:—What you have spoken of with regard to the establishment of a central institution would only apply to internal students, and would leave the medical schools still saddled with the external students?—No, I think we should make no difficulty about admitting persons who were not directly aiming at a degree. Any properly qualified person would be admitted, and although we should be

inclined to give a preference, I suppose to those who were taking the degree we should not lay down a rule that nobody except those going up for the degree should be admitted. I may also add to that that as far as the University is concerned this preliminary teaching may in some cases be obtained in other recognized institutions; it is not necessary for the whole of that to be given in London; it might be at Oxford or Cambridge or Owen's College—Manchester University.

128. Lord WELBY: If your central scheme were carried out (I am only putting this hypothetically) and you had 1,000 students, something like 600 students on a five years' course would be drafted off to the central school, leaving something like 400 still attached to the medical schools?—I believe the scheme contemplated an annual number of 250 (I do not know the total number) medical students in London. I am merely taking the internal students.

129. That would be proportionately, of course, if you admitted the others?—It would be something like that.

130. That would make a very considerable diminution in the expenditure of the medical schools?—Very considerably indeed.

131. The BISHOP of STEPNEY: How far is there any difference of opinion as to whether anatomy and physiology should be included in the preliminary course?—There is some difference of opinion on that point. I believe, roughly speaking, there is no difference of opinion as to the desirability (with the exception, perhaps, of a few) of physics and chemistry and biology being separate, but there is some difference as to whether physiology and anatomy should be separated; they are more closely in touch with medicine; they would come between the two.

132. Lord WELBY: Would they remove all laboratories and scientific apparatus from the different hospitals to the central school, or would the hospitals still retain the laboratories?—Not laboratories for these subjects, or, if the hospital handed over its laboratories for anatomy and physiology, not the laboratories for those subjects.

[The Witness withdrew.]

Dr. THOMAS GREGORY FOSTER, B.A., Ph.D., Principal of University College, London, called in and examined.

133. The CHAIRMAN: You have been good enough to come to us in your capacity as Principal of University College?—Yes.

134. I do not know whether you are a medical man yourself?—No, I am not.

135. I observe that you are a Doctor of Philosophy?—Yes, I am not a medical man.

136. You know, I have no doubt, the terms of the reference to us, and the matters we have to investigate?—I do not think I have seen the exact terms.

137. The first head you will see is a matter of detail—that is to say, it is a matter of account. Probably, on that head you would not have much to say to us?—On the first matter? With regard to our own medical school, the funds of the medical school and the funds of the hospital are entirely distinct; there is no contribution from one to the other.

138. Not at all?—Not at all. There never has been any contribution from hospital funds to the medical school of University College.

139. The BISHOP of STEPNEY: Is it not the case that in some form the hospital gains from the school in University College?—The hospital gains from the school in this sense—

140. I mean directly, financially?—No, there is no actual financial contribution.

141. Is there not a contribution from the school to the hospital in the case of the fees for clinical instruction?—Yes; those are paid to those who give the instruction. The fees do not go into the hospital treasury.

142. The CHAIRMAN: They do not go into the college funds?—They do not go into the hospital treasury.

143. Lord WELBY: They do not benefit the hospital?—They do not benefit the hospital, except in the indirect way that thereby you are able to attract a stronger and better staff to the hospital than you would otherwise.

The CHAIRMAN: Then when the University College Hospital returns receipts from the medical school in 1903 of only £35, that £35 goes to the professors who have given the instruction.

144. The BISHOP of STEPNEY: This is a return that has been submitted to us, it is not official, but it contains the entry of receipts from the medical school from 1893 to 1899 of sums varying from £685 or £700 to £430, as fees from students for clinical instruction, and from 1900 to 1903, sums varying from £47 down to £29—the last year it was £35—returned as pharmacy fees of students; the scheme being that in University College, so far from the hospital giving money to the school, the school actually contributes money to the hospital?—I think I can explain that. Previous to 1899, the hospital did benefit financially from the clinical fees. The hospital actually received for hospital funds a third of those fees. Two-thirds were distributed among the clinical teachers. In 1899, when the financial relations of the college and the hospital were overhauled and considerable changes were made, that contribution of a third of the clinical fees to the hospital funds ceased, and that one-third now goes into the college funds, the two-thirds being, as before, distributed among the clinical teachers.

145. The CHAIRMAN: I see in this return (which I have not seen before) under the head of cash payments by the medical school to the hospital, the sum entered is £70 7s., that is for last year. The secretary, Mr. Nixon, writes in these terms: "The only amount paid by the medical school to the hospital in 1903 was £70 7s., pharmacy fees of students, and this amount was divided equally between the hospital and the pharmacist who instructs the students in the hospital." Therefore, £35 did actually go into the pockets of the hospital from that school?—Yes, in that sense. Of course, practically, those would be the expenses of the hospital for carrying on that course of pharmacy. Pharmacy is in rather a different position to any other department of instruction; it is a hospital department strictly and entirely, and therefore instruction in pharmacy being carried on in the hospital buildings the fees of the pharmacy class are handed over entire to the hospital committee for distribution, and they distribute them in that way.

146. The BISHOP of STEPNEY: It is important to remember that in the case of University College, we are dealing with the college, the school and the hospital, which are all distinct things, the school being a department of the college?—They are distinct and yet one. The hospital is the property of the college corporation.

147. But when you speak to us in your evidence of the college, we may take it that to mean in your case the medical school to which the hospital is attached?—Yes.

148. The CHAIRMAN: If I understand it rightly, you consider that the £35 is fairly contributed to the expenses of teaching pharmacy?—Yes.

149. And therefore the hospital gains a certain benefit; if you dropped the pharmacy school, the hospital would be that much the worse off?—I should think the hospital gets very little if any monetary profit out of it.

150. Perhaps it loses something?—It may. I have before me the clinical fees. In the session of 1903-4, the total clinical fees came to £1,197. £798 of that was distributed among the clinical teachers, and £399 was the college share.

151. The BISHOP of STEPNEY : Then I understand that that £399 was what was paid to those who were teaching what we may call the preliminary subjects ?—No. The £399 would go into the general pool of the funds of the Faculty of Medicine, and £798 was the amount paid to the clinical teachers. The funds paid for the preliminary medical studies, are not included in that total at all.

152. The CHAIRMAN : I do not know whether I quite follow that. These are sums paid by students ?—Yes, for clinical instruction. The students pay composition fees, but those composition fees are analysed and allotted, so much to preliminary studies, so much to earlier medical studies; they would be re-allotted again to each department; so much would be allotted to advanced medical studies, and under that head we have a heading "clinical studies." This total that I have given you of £1,197 was the total paid in the last session for clinical studies alone.

153. That goes to expenses as to great part of it ?—That goes as to one-third to pay the expenses of the Faculty of Medicine in providing for those studies, and as to two-thirds to pay the teachers who give the instruction.

154. That is really a payment to the school ?—Yes.

155. There is no relation in that payment between the hospital and the school at all, one way or the other ?—No. The figures that you were referring to before 1894 refer to a state of things that no longer exists.

156. The BISHOP of STEPNEY : I gather that before 1899 the hospital did receive directly a certain share of these fees for the students ?—Yes; it received the one-third that is at present allotted to the funds of the Faculty of Medicine.

157. The CHAIRMAN : Then there is no other contribution direct or indirect, is there, by the hospital to the school or by the school to the hospital ?—No.

158. They are quite independent ?—The hospital funds are entirely independent.

159. Lord WELBY : There is no supplement given from the hospital fund to the school ?—Not at all.

160. The CHAIRMAN : Then the second head of our inquiries is this : "Whether any direct or indirect return for such contributions (if any) is received by the hospitals from their medical schools." Strictly speaking that question does not arise in your case as there is no contribution by the hospital to the school, but is there any direct or indirect advantage derived by the hospital from the medical school ?—I think there is no doubt that there is. The hospital staff would certainly not be as eminent and distinguished as it is but for the existence of the medical school.

161. It is an attraction for a medical man to compete for a position in a hospital ?—Yes, because there is a medical school attached to it—because thereby he makes his practice.

162. We have heard from previous witnesses a good deal about the advantages which the hospitals derive from the assistance of medical students. That would apply also to you ?—Oh yes. They have the advantage of clerks and dressers, the resident medical officer, and the house surgeons and physicians.

163. They are paid, are they not ?—They get their board, that is all. The resident medical officer has a small salary.

164. Lord WELBY : The medical officers get their board ?—The house surgeons and the physicians.

165. But not the students ?—No, not the ordinary students—not the clerks and dressers.

166. We have had pointed out to us the great advantage from the use of the advanced medical students, both on the side of the physicians and on the side of the surgeons, in assisting in the treatment of cases—I mean as far as surgery goes—for instance, in going round, and, under direction, bandaging and so forth—a service that does not appear to be so

adequately provided for in those hospitals which have not medical schools attached to them?—I think it would be extremely difficult to conduct a large hospital satisfactorily if there were no medical school attached to it.

167. The CHAIRMAN: In fact, you would have to have a much larger number of professional assistants than you have now?—Exactly.

168. Lord WELBY: Do you attach much importance to the record which we are told that students have to keep of the cases—the record which is kept for reference?—That is, I think, a most valuable part of their training.

169. That, of course, is not available in cases where there are no advanced students to give the assistance?—No.

170. The BISHOP of STEPNEY: Are there any circumstances connected with University College as a collegiate institution which in your opinion would make it easier for the school to go on its way without the assistance of the hospital? University College is in a very different position to an institution that is merely and solely a medical school attached to a hospital. University College has several faculties; it has its Faculty of Arts and Laws, and its Faculty of Pure Science, and its Faculty of Medicine.

171. My point is this. Do students of medicine at University College get their preliminary instruction, because they are members of University College, in a way which they could not get it if they were members of an ordinary medical school attached to a hospital?—Certainly.

172. Then in your opinion is the fact that at University College the medical school is able to get on without any grants from the hospitals partly due to the fact that the students receive a large part of their training because University College is a collegiate institution and affords opportunity for their getting that training?—Yes, because University College has larger means of supporting those departments of medical education which are the most expensive, and for which medical schools, which are merely medical schools, have great difficulty in finding money.

173. For instance, would you be able to express an opinion as to whether, if the students of other medical schools received their preliminary instruction apart from the schools themselves, these schools would be able to get on as your school does without grants from the hospitals to which they are attached?—I think a change of that sort would relieve them at all events of the necessity of making such large grants as they do from hospital funds.

174. The CHAIRMAN: Your Medical Faculty pays its way itself entirely, as I understand. Is that supported really by other Faculties of the College, or does that Faculty pay its way independently; perhaps you are not in a position to answer that question?—It is a little difficult for me to answer that, because in our organisation the departments of chemistry, physics, botany and zoology are departments of the Faculty of Science as well as that of medicine, and all the departmental accounts of those departments would appear in the Faculty of Science; but those four departments are the most expensive and costly departments in the Faculty of Science. Even though we have got endowments, in spite of that, and with the students' fees, it is extremely difficult to make those departments pay their way.

175. You cannot say, then, whether the medical school pays its way independently?—No. Our Chair of Physiology is an endowed Chair, but we have to supplement that endowment very largely indeed in order to make that department effective.

176. Therefore it is very doubtful, I suppose, if your medical school stood alone, without the science students, who are not medical students, whether the school would pay its way?—Without the science students and endowments, certainly. Of course there are a great many other

considerations that apply to this question in regard to medical schools where funds are transferred from the hospital to the medical school. There is the question of fees, for instance. The competition between the schools has led to a variation in the fees for the purpose of attracting students to a school that has less attractive conditions, and in proportion as these are lowered the need for a subsidy of course becomes greater. Then there is another question that comes in: the number of exhibitions or scholarships, as they are called, which are really offers of free education. A small school that has not, perhaps, a very strong tradition, uses that sort of attraction very largely, and that means, of course, that the hospital has to supply that money.

177. The CHAIRMAN: Those studentships are often given by the hospital itself?—Yes.

178. They are not endowments?—There are some endowments, but the majority of them are not endowments. We ourselves give two or three exhibitions yearly that are paid out of the funds of the Faculty of Medicine for the purpose of attracting the stronger students, and we have endowments for our other exhibitions.

179. The BISHOP of STEPNEY: Could you tell us at all what the comparison is in fees between University College Hospital, or medical school, and other fees; are they on the whole smaller or larger than yours?—Our fees, I think, are as high as any. Our fees for a complete Conjoint Board course are 150 guineas; for a complete University course 160 guineas.

180. The CHAIRMAN: Most of your students go up for University degrees, I presume?—The larger proportion of our approved medical students take the University course. I think you will find on reference to the fees of some other medical schools that their fees are very much lower. I believe in some cases they run as low as 100 guineas.

181. The BISHOP of STEPNEY: If you lowered your fees you would be obliged to make some subsidy, probably, towards the expenses of your Medical Faculty?—No doubt.

182. Then, in your opinion, if steps were taken to remove from the medical schools a considerable proportion of the preliminary training, would that result in a saving to the medical schools?—I think so, undoubtedly. It would not only result in a saving, but it would enable them to do the advanced medical studies in a much more efficient way. For instance, it would enable them probably to equip and develop their departments of pathology, and to develop clinical laboratories that are almost unknown in the medical schools at the present time.

183. The CHAIRMAN: University College gives instruction in all preliminary subjects as well as in other subjects?—Certainly.

184. I suppose it would be possible for them to receive a great many more students than they do in all those subjects?—Our medical school has been somewhat low in numbers during the last few years, owing, I think, mainly to the rebuilding of the hospital; the hospital is not yet finished. There has been a decline in the entries of medical schools in London generally; we have felt the decline, and I think we have felt it, perhaps, rather more acutely than Guy's or St. Thomas's. There is every indication that we shall rise to our old numbers when the hospital is completed.

185. Lord WELBY: We have been told that there has been a diminution in the number of entries in medical schools in England between 1879 and 1900 of very nearly half the entries. That, of course, looks as if, for some reason or other (because it applies all over London) there was less demand for medical instruction in London than in the provinces. If this goes on at anything like the present rate, would not that be a matter to be regarded in considering the future of the medical schools?—I think the general decline in the number of medical students in London is due, in a very large measure, to the development of these provincial schools. For instance, Manchester used, some years ago, to send a very

considerable proportion of their students, after they had done the preliminary work, to us. That supply is practically stopped. In the same way, we used to have a large supply from Wales; now Cardiff is making an effort to supply the whole curriculum: if the effort is successful, it will stop the supply to us.

186. But I suppose you will arrive at a knowledge, one of these days, of what the normal supply required for London is; London, with its large and increasing population, must always have a very large demand of its own?—No doubt.

187. Would you anticipate that this decentralisation, if I may so call it, will continue much further, or do you suppose that the entries, as they stand now, are about what you would expect to go on?—I should think that the necessities of the country cannot reduce the entries very much lower, but whether the entries in London go lower or not seems to me to depend very largely upon the extent to which the medical schools can make themselves efficient and bring themselves up to date. At the present time a very large number of them are not efficient and are not up to date.

188. The CHAIRMAN: I suppose the students come up from these provincial universities a good deal as external candidates for the University of London, do they not?—Yes, to some extent they do, but the question of the difference between external and internal is very difficult to come to any decision upon at present, because the University has only been reconstituted since 1900, and we are in a purely transitional state of things with regard to that.

189. Is there any other question upon which it occurs to you it would be useful to give us your views. You know the general scope of our Inquiry?—I do not know whether the Committee is aware of the negotiations which have been going on between the University and University College.

190. We have heard something of them from Sir Arthur Rücker—you mean negotiations for the consolidation of University College with the University of London?—Yes.

191. But omitting, as we understand, the hospital entirely?—Yes. I think for that very reason it is germane to the inquiry that you are making, because it does suggest the delimitation of the direct University sphere and the direct medical schools sphere. The University under the incorporation scheme will take over the preliminary medical departments and the early medical departments, including anatomy, physiology, and pharmacology, but what are known now as advanced medical studies, such as pathology and all the clinical departments, will form the School of Advanced Medical Studies attached to University College Hospital.

192. That rather indicates the future?—Yes.

193. And the future will take the form of some central institution or system for teaching all the preliminary subjects, leaving the clinical and pathological subjects for the separate hospital?—I think that is the indication, and the movement in connection with King's College Hospital indicates the same thing. King's College Hospital is to be removed to Camberwell, and, just as in our case, King's College Hospital will have under that scheme a separate Governing Body of its own and will deal only with the advanced medical studies; the preliminary and early medical studies being left to the College under the original government. So that when those two schemes are carried out there will be these two centres, and if the University scheme with its third centre is carried out these three centres ought to provide all that is wanted in those subjects for London, and enable the medical schools to give up their preliminary and early medical departments.

[The Witness withdrew.]

Sir EDWIN COOPER PERRY, M.D., F.R.C.P., Physician and Superintendent, Guy's Hospital, called in and examined.

194. The CHAIRMAN: I think you are connected with Guy's Hospital?—Yes.

195. And have been for some years?—Since 1887.

196. You have a large medical school attached to the hospital?—Yes.

197. You are aware that one of the subjects of our Inquiry is with regard to the direct or indirect contributions from one of these bodies to the other. Take, first of all, the question does the hospital contribute anything to the medical school direct. For what general purposes are grants made from the hospital to the medical school?—There are no direct contributions from the hospital to the medical school.

198. It has been stated by others that there are grants made, and considerable grants, chiefly for buildings and rates and repairs?—Whatever is done is set out in the return submitted. For example, it is set out there that the hospital pays rates on the whole of the buildings.

199. And the same would be true of repairs?—The external repairs.

200. Then the second question is: "Whether any direct or indirect return for such contributions (if any) is received by the hospitals from their medical schools." Upon that you probably have something you would like to say to us?—That raises the whole question of the value of the services of a medical school to a hospital. I do not know from what point of view you wish me to speak to it.

201. We should like to hear anything you have to say on that point that occurs to you as important. I may tell you at once that we have heard Sir William Church this morning, and he has given us a very full exposition of the duties of the dressers and of the medical clerks, and the services rendered both to the in, the out, and the casualty patients in the great hospitals. Is there any point upon that that you would like to emphasise?—Obviously there are the services of the students qualified and unqualified, and the services of the staff. The argument is maintainable that the patients are better attended to by reason of the presence of a medical school. That is a matter no doubt that Sir William Church has spoken to you about.

202. Your opinion supports that view?—Undoubtedly.

203. You do not doubt that a person is better off—although he is poked about, I suppose, a good deal more?—It is true that he is "poked about" more; I accept your word, but of course only in a good sense.

204. Do you think from your experience that it is an advantage to the patient to be in a hospital where there is a medical school?—I think there is no doubt of it, and the way in which the poor crowd to the hospitals is proof of that. We have patients, who have no sort of connection with Guy's, constantly coming to us from all parts of the country, even where local assistance is available. For instance, to-day I had a letter from a person at a distance who wishes to come up to Guy's in the hope that he will get better treatment even though there is a good hospital in his own town.

205. The presence of a young body of medical students is also a great help to the medical man?—There is no doubt about that. If you had to go round as I have to do followed by students you would know what it means. The students not unnaturally like to discover something that the physician has not discovered.

206. The BISHOP of STEPNEY: If you had no body of students at Guy's, would you have to spend a large sum for the purpose of dressing and keeping records, and so on?—I should not like to say that you would have to pay a good deal more for dressing, because it is the fact, that in provincial hospitals the dressing can be done by nurses, and is done.

207. The CHAIRMAN: As well done?—That I would not say. There are certain cases, no doubt, where the dressing would be less well

done by a nurse than by a student; on the other hand it is fair to say that there are many cases in which it is quite as well done by a nurse as by a student.

208. The BISHOP of STEPNEY : But you will have to pay them ? —You will have to pay your nurse. I question however whether if in the case of Guy's you would have very greatly to increase your nursing staff. I want to be perfectly fair; I do not want to make out a case. I think with a slight increase of the nursing staff you could probably get the ordinary dressing done, but undoubtedly without the medical school you would have to pay your house surgeons who supervise the dressing.

209. The CHAIRMAN : It has been suggested that the average cost of a bed in a hospital without a school in London is somewhat less than the cost per bed in the hospitals with schools ?—I quite believe it. I think that almost certain to be true, partly for the reason that in a medical school you are dealing with a fleeting population. A student holds his appointment as a dresser for three months, possibly extended to six months. During that time he is giving attention to the professional side of his duties; he is very little interested in the cost. He may read the advertisement in a medical journal of a dressing or drug; he does not inquire whether that costs a shilling a pound or an ounce. If you take a hospital with a more permanent staff there is no question it would be conducted more cheaply. In the case of a hospital with a large medical school it is right and proper to investigate new remedies. There is, you will understand, a legitimate use of a hospital for the purpose of testing statements made and advertised about drugs. What makes the expense chiefly is the short time that men are on, the various ideas that different men have, and the testing and investigating of new remedies. I think you may fairly say that no medical school is cheap in that sense.

210. Lord WELBY : I suppose at the same time the advocates of the medical school would say ?—I am an advocate of medical schools.

211. Would you say that in the one you have progressive treatment and in the other you have stationary treatment ?—Precisely.

212. The CHAIRMAN : Therefore you say that although they are costly it is money well spent ?—Yes, both as regards the patients in the hospitals and as regards the public who contribute to them. Of course money has to be spent on these things. In the case of a medical school you have a constant succession of young men who quite legitimately desire to try new things, and, in reason, should be allowed by the visiting staff to try them.

213. Such trials are not inconsistent with the interests of the patients themselves ?—Oh, no, not at all.

214. The BISHOP of STEPNEY : Is there any portion of the expenditure on the medical schools which you think might be saved by a readjustment of medical education in London generally ?—I should like to see the preliminary and intermediate subjects removed from the hospital altogether.

215. Would that save expenditure ?—I think so undoubtedly.

216. Lord WELBY : To the hospital ?—To the hospital, yes, that is to say where a hospital is paying the medical school. At Guy's, as a matter of fact, whatever we do is regarded as quite inappreciable. The payment of the teachers comes out of the students' fees.

217. The BISHOP of STEPNEY : At Guy's, are your fees fairly high in comparison with other medical schools ?—They are first grade fees. At some other hospitals, the fees are fixed lower, under the impression that, either from position or other reasons, it is only by lower fees that students can be attracted.

218. Then you say that at Guy's, if you lowered your fees, you would be obliged to subsidise your medical school ?—That does not follow. You might have such entries that you would not need to do so.

219. But unless there were a strong influx of students that would be so ?—Yes.

220. Other medical schools compete?—Of course, entirely justifiably.

221. Have you a large number of free exhibitions and studentships?
—No.

222. The CHAIRMAN: We have been told that a great advantage is also derived from the presence of medical schools in the work done in the pathological and clinical laboratories?—Yes; that is true.

223. The BISHOP of STEPNEY: Would you say that, even if a hospital had no medical school attached to it, in order to be efficient it would be bound to have some sort of pathological laboratory, if possible, attached to it?—Oh, it must have. May I say this. I stated to you, as regards dressers, that I could not urge that there was any great economy in the employment of dressers when much of the work could be done by the nurses. I did not say anything from the medical side. Undoubtedly you would want certain men, as you now have—clerks—to write up and get out the history of the cases. It is only in that way that the physician is able to do the work that he does, and there is no doubt that they are necessary. It is either a case of having students to do it or it is a case of increasing the staff of medical and surgical registrars.

224. Lord WELBY: That is a point to which Sir William Church called our attention and he appeared to me to lay considerable stress upon it. I mean the value of the record which the advanced students take of the different cases?—There is no doubt about its value.

225. But I rather gathered from him that in hospitals where there are no schools attached there is practically no record kept; I think he went so far as that; I mean, not the individual record which these advanced students keep?—It depends on the hospital.

226. That is a very great advantage, is it not?—Undoubtedly, but I should not adopt that absolutely. I should imagine that at some hospitals adequate records are kept by the registrar, but they are not likely to be kept so fully.

227. The CHAIRMAN: I think Sir William Church said they were kept with less care and were more abbreviated notes?—No doubt more abbreviated. In our own case these records are very carefully indexed at the end of the year, and are available for reference, and are of the greatest service when the patient comes in again. The poor people who live round about Guy's come in from time to time until they die, and it is of great advantage to have a man's history for perhaps 30 or 40 years back on the records of the hospital.

228. Lord WELBY: It is rather an important point is it not?—I quite agree.

229. The CHAIRMAN: I was going back to the question of the comparative expenditure of hospitals with and without schools. You have indicated that the experiments tried with regard to drugs and so on increase the cost; do you attribute the difference solely to that?—Oh dear no.

230.—What other heads would you attribute it to?—There is extreme difficulty in infusing a spirit of economy into most young men; you recognise that, of course, in other places besides medical schools. As I say, a young fellow's mind is not on the subject of economy. I have had occasion to say to a man, "What do you use for that case?" He said, "So and so." Then I have said, "Have you any idea how much it costs?" and I have explained to him that when he came to be in practice for himself he would have to consider expense. In the same way with regard to bandages. A man when he first begins will be apt to use a dressing whereas probably half the quantity is sufficient. The visiting surgeons cannot, of course, be attending to these points the whole time. Much depends on the sister, if you have a tactful sister, but naturally you cannot put a sister in a position to say that a man must not do such and such a thing.

231. The difference in the dressing and drugs and matters of that kind is a consideration?—As far as those items go.

232. But there is no other heading that you would refer to except that?—I might indicate diet. Young resident physicians sometimes act almost as if they were under the impression that the more expensive the diet the better the patient gets on. Then it must be remembered that the young lady probationer in the ward is apt to be extravagant also; when she might use a bit of old linen for mopping up a mess, she gets a new bit of lint, regardless of cost.

233. You do not get training for nurses except where you have medical schools?—Every hospital is a school for nursing in a sense, but the biggest are places where there are medical schools.

234. Hospitals without medical schools might also have schools for nursing?—They do have schools for nursing, but they do not pass so many out as those with schools; they work with a more permanent staff on the whole.

235. Now if you look at the third heading of our Inquiry we are required to consider whether there are any "General Considerations" which would apply to all hospitals having medical schools; is there anything else you would like to say to us upon that?—I do not think that would apply to Guy's; at least I hope that you will not find it so. In the event of the Committee finding that any hospital contributes to its medical school a sum in excess of the return it received from the medical school—I think it might yet be justifiable to continue the expenditure for a time, pending the adoption of some central scheme for education. Rather than let the medical schools be dissipated in the next five years, it would be well to keep the students together, so that when the central scheme was complete the hospitals might fall in with it.

236. I suppose you look upon that central scheme as highly probable to take effect, in one way or another?—Yes, but of course, as we are all aware, education generally is expensive, and it can only come about by a number of very wealthy men helping with the capital outlay.

237. The BISHOP of STEPNEY: Then in your opinion I take it there are, or may well be, some medical schools which are subsidised by the hospitals in a way which you think would not be necessary if there was this system of centralisation?—It is possible, but you must understand that I have not any more knowledge than you—perhaps I have less than you have—about what goes on in other medical schools.

238. But your impression naturally would be that?—I think if I were in your position I should enquire into it.

239. Lord WELBY: Do you know anything with regard to the operation of your audit?—In what way.

240. What I would like to ask you is this. Hospitals generally appoint some chartered accountant?—Yes. Our accountants are Messrs. Turquand, Young and Company.

241. My experience of that order of auditor—I do not know whether I am correct or not—but such experience as I have is that there is a tendency to confine himself completely to what I call the accountant side of it?—I think he does that entirely.

242. There is one great distinction, as it seems to me, between the Government auditor and the ordinary official, namely, that certainly with regard to Government accounts very considerable encouragement—I will not say latitude, but encouragement—is given to the auditor to draw attention to matters which strike him as pointing to anything like lax management, although the payments may be vouched and authorised by the management. Is there any such criticism put forward, or encouraged to be put forward, by your auditor?—As far as I know, no hospital invites or expects any criticism of that kind from its auditor, feeling that the firm of accountants, whoever it may be, is incompetent to criticise; but I entirely agree with what you say, that such criticism would be most valuable. I do not think you would get it from the auditor. It ought to be from the Managing Committee of the Hospital. They ought to have the accounts before them every week or month, and it should be their

business to inquire, "How is it that this item is going up?" and so on.

243. It is a very difficult matter. From my experience, the latitude given in Government audits has been of a most valuable character, because it has called attention to matters which would otherwise have been passed. At the same time, I think it is rather difficult. The auditor, I presume, has no power of disallowance at all?—No. Another point that requires investigation is as to the authority by which the goods are ordered. That is a thing that no auditor, of course, touches.

244. He dare not go behind the authority?—No; he sees the bill and sees that it is vouched, and that is sufficient for him.

245. It is a purely technical audit, which ensures that the accounts are properly kept, and receipts regularly taken, and so on?—Exactly.

The CHAIRMAN: In the case of a great many Government audits the auditor is given, is he not, by Statute, power to decide whether certain payments are *ultra vires* or not?

Lord WELBY: The question whether payments are *ultra vires* would not arise in any hospital audit, but sometimes auditors are given power to call attention to matters, even when they are *ultra vires*. For instance, the poor law auditors may remark upon various items in the account. Only recently, I remember a case where the auditor drew attention to a heavy item for a champagne luncheon.

The WITNESS: An auditor would know what the consumption of champagne by a healthy person would be; but he would not be in a position to judge whether or no a charge in the hospital accounts for champagne for dieting patients was excessive or not.

246. I should like to refer to this table, shewing the expenditure on salaries and wages per bed occupied. One would have thought that in those hospitals that are marked as hospitals with no schools attached, but which have a large number of patients, the cost would be moderate as compared with other hospitals. Yours, I see, is comparatively low in the list but if you take St. George's it is £47?—I do not know about St. George's. There are hospitals where there is nothing like the proportion of surgical work that there is in those with medical schools attached. Cases come to teaching hospitals from all parts of the country. A return was made some years ago of the persons coming in from the country to London hospitals with medical schools attached. About a third of the cases came from the London area, another third from the area immediately around the hospital, and another third from the country. A very large number of those are surgical cases. When you consider the cost of dressings and various appliances required in surgical cases, you will appreciate that it must mean more expense.

247. These figures relate to salaries, they do not include appliances?—I thought it was the total expenses on the beds.

248. I should have thought you would have seen that where there were a large number of beds the expenditure according to the ordinary rule would be something less than where there are a small number, because one knows that a small establishment is always more expensive in proportion than a larger establishment?—Probably your question should be put to a representative of some hospital other than Guy's. I see at Guy's the salaries come to £27 per bed, which is under the average.

249. I was going to say, yours is very moderate, and I do not know whether you can suggest a reason?—I can, for example—

250. St. George's is the highest of all, £47 10s.?—On consideration, I should not like any opinion of mine to be published, because I really do not know.

251. The BISHOP of STEPNEY: At any rate, the point is that these returns give no indication of the average cost per bed; they differ extraordinarily in certain cases, so that one cannot take an average?—I think that is so.

[The Witness withdrew.]

Mr. JOHN TWEEDY, President of the Royal College of Surgeons, called in and examined.

252. The CHAIRMAN : I daresay you are aware of the terms of the reference to us ?—Yes.

253. The first one of the terms of reference relates to the particular sums contributed directly or indirectly by the hospitals to the schools. I suppose that is not a subject on which you wish to address us ?—No, I may say that, until I was a member of the Distribution Committee, I was not aware that any such sums were being contributed at all. It came to me as an astonishment to find that there were such sums contributed.

254. You were for many years connected with the University College Hospital ?—Yes.

255. Of late years you have not been ?—No. Nominally I retired last March, but practically I have not done much work there for the last two years.

256. So that you would not have very much on that particular subject to say to us ?—No.

257. Then we come to a much more important matter—the direct or indirect returns received by the hospitals from the schools for contributions. Probably if I were to direct your attention particularly to the indirect returns, that would raise the question upon which you can speak to us with some authority ?—Of course, it is a complicated and large question. The direct returns would be any special services rendered, I presume, by the medical school to the hospital as a charity. Then the indirect return, I suppose, is the amount of service, we will say, that would be rendered by students in the dressing and attending to patients, which would otherwise, in the absence of such a staff, have to be paid for. I presume it will be admitted that the hospitals do derive both direct and indirect benefit from the staff and students of a medical school, but on the other hand you could not have a clinical school unless you had a hospital, and therefore, just as in the other large centres of education, where physical and chemical laboratories have to be provided by somebody at some expense, in a clinical medical school you must provide a clinical laboratory, which is practically a hospital. My attitude on this question is—the public supplies us with a clinical laboratory and allows us to work there, and we, as medical students and medical men, get the benefit from that hospital which the public provides for us. For myself, I feel that there is no need for direct or indirect compensation to the medical school. I mean the work rendered by a medical school does not require any pecuniary compensation from the fund supplied by the Charity for the purposes of the relief of the sick poor.

258. The hospital funds are supplied for the sick poor ?—Yes, not for medical education. It is a question whether the public should also contribute towards the cost of medical education. That is another question.

259. That should be kept separate ?—It should be raised as a separate issue, not as a side issue as it has been as far as I understand this question. At University College no contribution is made by the College or even the hospital to the medical school itself. It is rather the other way. A part of the fees were taken from the teaching staff to support the College and hospital.

260. Dr. Gregory Foster has given us some information about that.

261. The BISHOP of STEPNEY : I take it that what you mean is that the services which the hospital as such renders to medical education are so great that the medical education ought not to expect from the hospital in return any contribution ?—That is most strongly my opinion.

262. The privilege is conferred rather by the hospital to the medical school than by the medical school to the hospital ?—Yes, it is exactly analogous to teaching chemistry or physics. Suppose there was one

medical school in London only, it would have to have a hospital; it would have either to provide the hospital itself and keep it going, or it would have to do as we have done, that is, to get the public to provide that hospital.

263. The CHAIRMAN: I suppose if medical students could not get clinical instruction without paying for it, they would pay for it?—They would have to pay for it.

264. Just as a young man going to the Bar pays 100 guineas to a barrister to allow him to go into his chambers?—Just so.

265. The BISHOP of STEPNEY: In many cases the medical schools have expected or asked for assistance from the hospitals; what would be in your opinion the main reasons for that?—There are a few hospitals that have had medical schools almost from time immemorial, that is, have had a medical school attached to them—St. Bartholomew's for instance—but for the most part medical schools have grown up around the hospitals, the surgeons and physicians attracting students; or, as in many hospitals in former times, the surgeon had apprentices; there were paying apprentices and many of these apprentices not only paid for the instruction which the surgeon gave, but they bought the right of succession to the staff. A man paid Abernethy or Sir Astley Cooper so many hundred guineas to become his pupil, and this gave him the right of succession on the hospital staff. Then, University College came and smashed all that up. University College was founded, as you know, in order to give an education of a University rank and character, and the best men were appointed without any prior claims or any consideration whatever beyond their merits, and it was the establishment of University College that practically put a stop to that apprenticeship system and the system of buying the right of succession to the staff of the hospital.

266. The CHAIRMAN: Then all the other hospitals followed in the steps of University College?—Yes, they could not continue this right of pre-emption, as it were, in the succession to the College staff. University College at first had no hospital, but its medical students wanted clinical instruction, and a little dispensary was started. The hospital itself was established as an absolute necessity to form a clinical laboratory for the medical students.

267. The original intention of the London University, as it was then called, was to give instruction in all scientific subjects, hoping that all the medical schools in London would send their pupils there, on very much the same scheme that is now being revived?—That is so.

268. Then that failed, and University College established its own hospital, and the hospitals established their own schools?—Yes. That all went on without any very serious disturbance of the affairs of the hospitals as long as the chief part of a medical student's education was clinical, medicine, surgery and midwifery, and things of that kind. Until 38 or 40 years ago there were still large numbers of men entering the medical profession by way of apprenticeship—not to hospital surgeons but country surgeons. They were apprenticed to a country surgeon, and they attended the surgery. Then they came on to London for 12 months, 18 months or two years to the medical hospitals.

269. That was what was called walking the hospitals?—Yes, having learned what small amount of preliminary science knowledge was required from the country doctor, who was supposed to have taught him pharmacy, chemistry, botany and things of the kind. Then arose this new *régime*, where we get this very great extension of these early medical studies, physics, biology, chemistry and so on. Then the hospitals which were all right as clinical schools, said, "Well, we must teach physics, because it is necessary, and University College or this or that place teaches them." I believe all this difficulty and all this hampering of the hospitals with medical schools is the endeavour of these institutions, which should be only clinical schools, to teach these preliminary science subjects. I believe that is the explanation of the whole thing.

270. Then to go back to the question of whether there are direct or indirect returns on either side. If I gather rightly what you say, it is, I think, this: A hospital confers a benefit upon the students of the school by allowing them to come and see the clinical cases?—Yes, I should say so.

271. On the other hand, the school confers a benefit on the hospital by the service which its students render?—Yes, certainly. It is a mutual and advantageous arrangement, which certainly does not require any passage of money, in my opinion, from one side to the other.

272. You say one may be set off against the other?—Yes.

273. Leaving no balance due on either side?—That is my view.

274. The BISHOP of STEPNEY: The proper expression of the relationship between the school and the hospital is when neither appears on the other's balance-sheet at all?—Just so.

275. It is a mutual advantage?—Exactly.

276. The CHAIRMAN: There is one point with regard to the services rendered by the students to the hospitals to which I should like to draw your attention. We have been told that in some cases hospitals which have no schools attached cost less per bed than hospitals where schools are attached. That result seems to show that the presence of the medical student is a source of expense to the hospital?—Yes. I am quite prepared to accept that as being quite correct; I have no doubt it is correct. I think one explanation of it is a very simple one. Wherever there is a medical school, if the school teachers are at all up to the mark the class of case which is attracted is perhaps a more important one and requires more attention in many ways—the very essence of medical education, and all this involves a certain amount of expense. Then, again, take the surgical cases. The number of cases that are operated on at a medical school in proportion to the number of beds is, I think it would be found, enormously greater than the major operations done at a hospital where there is no medical school. The fame and reputation of a surgeon at a medical school attracts cases, and he must have cases for teaching, and all that means in every case additional expense, and the more serious the case the more costly it is to treat. Take an operation, say, an abdominal section. The expense attending that is very considerable: there is the apparatus now-a-days for sterilising everything; you must have machinery and boilers and sterilisers, all involving a capital outlay of a very considerable sum; you must have a large number of special dressings, towels, and all kinds of things. As to the expense, it would rather turn upon what is the turnover of patients per year—not the actual number of beds, but the turnover—the number of patients per bed in a year. That would make a good deal of difference.

277. You mean, the more cases that are taken in the more expense is incurred?—Yes. In a medical school naturally, unless it is a very large hospital, proportionately more cases are brought in; naturally a surgeon wants what we call clinical material, he must have material for teaching, he cannot keep in a number of chronic cases which simply want rest and so on, those cases have to give way to more urgent ones.

278. I do not know whether you have seen these tables?—I have.

279. In Table 1, we have the average number of days in which a patient was resident; that will give what you call the turnover?—Yes.

280. The Charing Cross Hospital is very high, the Seamen's "Dreadnought" is very high. I suppose those are very simple cases; I do not know?—I have not gone into this, but I should say generally the larger the hospital, probably in some respects the shorter the sojourn; for this reason: the larger the number of beds, the more unimportant cases, minor cases, can you take in. If you have a large school and a comparatively small number of beds, the beds must be reserved for serious cases, whereas if you have a large hospital you can take in, for instance, a person who wants a week in bed with an ulcerated leg; that could not be taken into a small hospital where there is rather a

large medical school, they would say: "We cannot take this case in; we must give preference to more urgent and more acute cases." That is a consideration. The London Hospital you will see, comes rather low, but then the London Hospital takes large numbers of minor, smaller cases; it takes them in properly—they ought to be taken in somewhere—but having such a large number of beds, it has the accommodation for these comparatively minor cases which a smaller hospital could not possibly accommodate. That is a factor in the expense.

281. If you turn to page 19 of that same book, which gives us the average expense, salaries and wages, you will find that the hospitals which have not medical schools attached to them are in several cases a good deal lower than those that have schools attached to them?—Yes, but you must consider the kind of work in these hospitals without a medical school. I do not want to say that the patients are not taken proper care of, but in all medical schools the process of teaching and observation is going on all day long, and the type of case is, as I say, generally of a more serious character.

282. Therefore you would say that, taking it as a whole, the hospitals without schools get a less serious class of cases than hospitals with schools?—I certainly say that, and the amount of work that is done in the treatment of these cases is necessarily greater.

283. But what strikes me is this; that, if the absence of the students relieves the hospital from expenditure on salaries, you would expect to find the salaries of the Great Northern, for instance, and the West London high, whereas they are low?—I cannot offer any direct explanation of that, but I think you would see for yourselves if you paid a visit any morning to a hospital where there is a big medical school, and paid a visit to a hospital where there is no medical school; you would see the work and activity going on in the wards—dressing, using the thermometer, taking urine tests and so on, all of which is not strictly necessary from the patient's point of view, but is necessary for purposes of medical education.

284. Is that done really for educational purposes or for the benefit of the patient?—For both, we hope. After all, everything which develops and increases knowledge must benefit, not necessarily the particular patient, but makes for the good of the community. It comes back not necessarily to that patient; I do not mean to say that patients are over-examined. Take a case that very often occurs, where hourly observations have to be taken of the temperature, or of the urine that is passed, and other excreta. That means a staff of students really to do it. Things are not so bad now as in my student days. When I was a student I have sat up night after night taking my turn in watching cases; there were relays of students told off to look after the patient, every hour his life depending upon your presence, probably, either to control hemorrhage, or avert some other catastrophe.

285. Then you would say that this perpetual dressing and so forth does tend to the benefit of the individual patient?—I should certainly say it tended to the benefit of the individual patient, and certainly to the benefit of the sick community. That is where all progress must come from—from the clinical observations that are made by teachers in a medical school. Directly a man has duties to perform in a medical school, he takes a scientific as well as a clinical view of a case. Where he has to teach, where he has to demonstrate, where he has a number of subtle and acute critics around him—and students are very good critics, ready to "spot" him and pick out his mistakes—a man's mind and faculties are all naturally alert.

286. Then you say that the presence of the medical students keeps the medical men up to a higher standard, and in that sense it is a benefit to the patients in the hospitals at any given time?—Certainly.

287. To say nothing of humanity in general?—Certainly. The difference between one's attitude when one has to teach and when one has not is very great; you do your duty, of course, in one sense, to

every patient, but knowledge comes from experience, and the difference between having to demonstrate a case before a class and having simply to satisfy your own mind is enormous.

288. Does this demonstration before a lot of students worry the patients?—Not necessarily. The patient would not necessarily be examined by all concerned, but, of course, the essence of acquiring knowledge is examination, and that means examining the patient. In a medical ward, for instance, a case comes in. It is the duty of what we call the clinical clerk to go to that patient, take the name, age, surroundings, mode of life, and so on, to enquire into the history, and make a note of the symptoms, and record the appearance of face, eyes, lips, pupils, hearing, sight, to take the temperature, to test the urine, probably even to examine the other excreta, and to give as complete a synopsis of the physical state of the patient as possible—to examine the lungs, to record the respirations and pulsations, and examine the heart, and what not. That is the clerk's duty. There is a record which is kept. Then, probably, what is called the house physician, who is a qualified student, goes over it, too, and verifies or checks these observations.

289. Does he submit the patient to a re-examination on all those points?—Probably, or he goes over the case independently; I mean, listening to the patient's chest and heart, and so on. It is no more than one of you gentlemen would undergo if you went to a consulting physician in private. Then comes the physician, and he will say: "Now let us see what the case is," and he looks over these notes; very often he verifies them, very often he corrects, very often he says: "It is wrong, there is not so and so there." All this is a process of unfolding the case; finding out, first of all, what is the matter. Then the physician takes the case and demonstrates it; he says this is a case of so-and-so; he may say, "Such and such points are still obscure, we must have the blood tested; we must make a microscopic examination of the blood or the secretions," and various other investigations. All these are conducted, more or less, by the students, either actually qualified students, or, it may be in some cases, a bacteriological expert. All that makes for exact knowledge; it makes the student exact, it makes the student take care; it makes the teacher exact, and in the end it must be better for the patient to have his case thoroughly unravelled as completely as knowledge and science can unfold the symptoms. And all the knowledge thereby acquired comes back manifold to the community.

290. Is there anything in the way of statistical returns as to the number of patients who recover in the two classes of hospitals which would throw any light upon that matter?—I do not know any.

291. Mr. Danvers Power suggests to me that the registrar of each hospital does make a return of that kind, but you have not it before you?—No; the registrar is as it were the expert reporter. His records are by a person of superior standing altogether, and he keeps the record not only of the case—his own special records, which are different as a rule from the clinical records kept by the dresser or clerk, but he follows out the case if possible to the end.

292. I suppose it gives the statistical results?—Yes, the records, deaths, and results.

293. You do not mean that there is no means of doing it, only that you have not done it?—I have not done it.

294. It can be done?—Oh, yes, these records of the surgical and medical registrars are very complete.

295. They would give anybody who investigated the subject the means of ascertaining the percentage of deaths in the two classes of hospitals?—Yes.

296. Whether they are of any value is another question?—I think very likely they would not be, because statistics can never compare classes of cases. I may say I was for many years concurrently connected with the Moorfields Hospital and the University College Hospital. Moorfields

Hospital is as you know entirely and exclusively for persons suffering from eye diseases. I was attached to the ophthalmic department of University College Hospital. The number of patients that we got at University College Hospital was not anything like the same as at Moorfields. We used to get, I think, about 1,200 or 1,300 new patients per annum in the University College Hospital; my share at Moorfields would be over 3,000 in a year. Yet the proportion of serious cases at University College Hospital was enormously greater. That was a constant observation of all my assistants who worked with me at both places. They always used to say that at the medical school the interesting and important class of cases came. To Moorfields, where of course most excellent work was done, every kind of eye case went.

297. I do not quite follow. A man would not come to University College Hospital because his eyes were very bad?—No, but the serious class of cases and the interesting class of cases would be drawn there. Being connected with a medical school, you have got all kinds of pathological cases—cases arising from cerebral tumours, spinal troubles, malaria, gout, Bright's disease, and all that kind of thing, partly, perhaps, because they came to the hospital for other purposes. At any rate it is my experience in two kinds of hospitals, that the serious kinds of cases go to a hospital with a medical school, even in a special department, where the proportion of them is much greater than at Moorfields. There were certain cases at Moorfields that I felt I simply could not treat satisfactorily at Moorfields. I used to take them into University College Hospital because the University College Hospital is a large general hospital with means and apparatus for treating all the patients in a way that a purely special hospital could not treat them.

298. The BISHOP of STEPNEY: When you say cases "come," that means that they were sent to the hospital I suppose. They were either sent or came, or were attracted to the hospital as a clinical school.

299. The CHAIRMAN: Poor persons living near Moorfields would go to you at Moorfields, I suppose?—Yes.

300. They would get just as much of your skill and attention there as if they had gone to you at University College Hospital?—Yes.

301. Then why should they go to University College Hospital and not to Moorfields?—We are now speaking of patients who only go of their own initiative, but at a medical school a large number of patients are sent by old students, practitioners scattered throughout the country.

302. The BISHOP of STEPNEY: That was the point of my question. When you said that they went there, you ought really to say that they were taken there or sent there.—They are sent.

303. The CHAIRMAN: They are received?—Received. A man practising in any part of the country says: I have got an interesting or a serious case here, and he sends it to his old school. The patient of his own initiative probably goes to the nearest hospital.

304. The Moorfields cases would largely be cases of people who went on their own initiative?—Just so.

305. But your cases would be sent to you by a body of men over the country, as presenting some difficulty which they think would be best dealt with at the school?—Yes.

306. The BISHOP of STEPNEY: In other words, these are exceptional cases rather than sick poor cases?—Just so. There is the greatest difference between those people who come themselves for help to a special hospital like Moorfields Hospital and other special hospitals, and the cases that are sent either on the strength of the reputation of the hospital or of a particular surgeon at the hospital, or sent by some former student to his old hospital. Then look at the difference of managing and treating those cases.

307. Before you leave that, the majority of the cases that are sent from different parts of the country to University College Hospital would not be cases of the sick poor then?—Yes, they are cases which the

surgeons who attended to them thought were suitable patients to be treated at the University College Hospital, otherwise they would not send them there.

308. The CHAIRMAN: They are poor people?—Certainly.

309. A very large number of poor people come for the benefit of the hospital?—A great many, as I understand, are sent by medical men. When I was at Moorfields there was a certain type of case which, if the patients wanted anything more than just the kind of treatment that they could get as an out-patient or by a short stay in the wards, I could not treat at Moorfields; I had to take them to University and University had to bear the cost of treating a patient that could not be treated so efficiently at Moorfields. It is rather a medical question, but for instance there is one very common case that occurs with young people: it is a form of inflammation of the cornea—the front of the eye—nearly always the result of congenital syphilis. These cases are not perhaps so frequent as they used to be, but they require more or less continuous, assiduous treatment from six to twelve months. I could never treat those cases satisfactorily in Moorfields. First of all there was not the complete apparatus for treating them, and the pressure on the beds at Moorfields for cases which, perhaps, may have seemed to others more urgent and more acute cases, was so great that these patients could not be kept in; they could not be kept in long enough. I used to take them to University College Hospital, and keep them there for two or three or four months and many of these patients had their sight restored where I am quite sure in the ordinary way they used to go blind, or make a very incomplete recovery. Now, how could we treat them better at University—I do not want to speak of University alone; it is only because I was there; but it could have been done at any other general hospital. We had baths there which were an essential part of the treatment—I mean mercurial baths. We had a system of baths, we had skilled attendants to give the baths, and these cases got well, and got well very often in half the time, and less than that often—thoroughly well—whereas they could simply have made a very imperfect recovery, at the best, treated as out-patients as the majority of them had to be treated. Now, consider the cost of treating a patient of that kind at Moorfields. He comes and has drops and medicine and comes again; this is repeated month after month. Take him to a general hospital and he has proper baths every day, and other special and general treatment involving expenditure. Yet that is an expenditure which is amply rewarded by the preservation of that person from blindness. There are hundreds of cases of that kind in London.

[NOTE.—Mr. Tweedy desires to say that his observations are not intended in any way to disparage the great and good work done at the Moorfields Hospital. They merely record his own experience and practice in the treatment of a certain class of cases, in which the eye-inflammation was an expression of a grave constitutional malady. This treatment he found, was much more efficiently carried out in a general hospital, but at a greater cost.]

310. Your observation comes to this, that the treatment in hospitals which have medical schools attached is of a higher kind than in hospitals which have not medical schools attached?—Altogether.

311. The BISHOP of STEPNEY: How far would you put down all you describe, the baths and continuous treatment and so on, to the fact that there was a medical school there?—I believe it was entirely due to that; because at Moorfields, the most eminent hospital in the world for diseases of the eye, there were not the special appliances and apparatus which a general hospital affords, and which are equally available for other patients in a general hospital.

312. The CHAIRMAN: There are no special mercurial baths?—None at all. To sum it all up, where you have active work going on, and a scientific spirit, it must mean cost, you cannot get knowledge except at cost.

313. And the cost is not countervailed by the economy of the assistance of the students?—Apparently not, it is not countervailed certainly, and I have no doubt that this work would not be done if you had no students.

314. You say it ought to be done?—It ought to be done.

315. And to that extent the students render a benefit to the hospital?—Yes, and to the community.

316. The BISHOP of STEPNEY: But I take it that what you say is governed by what you said at the beginning, namely, that in spite of that it ought not to be necessary to the medical school to ask for some expression of that advantage which it confers on the hospital by receiving any money from the hospital?—Not considering the way things are being done at present and have been done hitherto. The question as to whether the community should contribute to the cost of medical schools is a question that may be fairly raised some day, but not in this way.

317. The CHAIRMAN: You put it at the beginning that the two benefits, the benefit of the hospital to the school, and the benefit of the school to the hospital, might be treated as equivalents?—I would put it even more strongly than that. Without the hospital there could be no medical school. Unless those who constitute the medical school had the advantage of attending a hospital there could be no medical school—not even a clinical school.

318. And, *per contra*, without medical schools there would be no hospitals?—Well, there would be hospitals, but if there was no medical school there would not be anything like the same staff and the same amount of scientific and educational work.

319. The BISHOP of STEPNEY: Can you think of, or do you know in your experience, any special reasons which have made it, or might make it, legitimate, from your point of view, for a hospital to pay something towards its medical school?—No, not legitimate if matters were properly organised. I think the whole trouble into which some hospitals have got now, is, as I said before, the attempt of the hospitals to teach preliminary science. They ought never to have attempted it; it ought never to have been allowed; and there is now an opportunity for getting rid of this. The whole scheme of the University of London is to get rid of this. If these medical schools that are now trying to teach physics and chemistry and biology would give that up, it does not seem to me that they would require any help from the funds of the hospitals. I think it would be found that the cost of the purely clinical side of medical teaching would be comparatively small compared with the cost of teaching these preliminary sciences. Personally, I should welcome any pressure, from any source, that got rid of these preliminary sciences out of the hospitals. It is not the place for them to be taught, and there are places where they can be taught, and, if these places are not sufficient now, they soon would be sufficient with proper organisation. The great desideratum of medical education at this time is to get rid of the so-called earlier medical studies out of the hospitals.

320. The CHAIRMAN: Those earlier medical studies have greatly increased in importance in the last few years?—Oh, yes, and these schools have been competing one against the other and trying to attract the students for instruction in the earlier studies, because getting students for the earlier studies secures them for the clinical studies later on. That is where the competition has been going on. I had no idea that it was being subsidised in this way. I really, in my innocence, thought that the staff paid for it out of their own pocket.

321. The BISHOP of STEPNEY: You would be prepared to include physiology and anatomy in what you call the preliminary studies?—Yes, I do.

322. You would not think it necessary that they should be taught in the hospitals?—No. I think these hospitals that are provided for and supported by the public should be purely clinical hospitals. The other

part is an essential part, of course, of medical education, but it is something that the public has nothing to do with, unless it deliberately and willingly undertakes to deal with it.

323. Then with regard to the point that was brought before us to-day in reply to that, namely, this : If your fourth and fifth year men—your clinical students—have not been accustomed to hospitals during their anatomy and physiology time, they would be less valuable immediately as dressers and clerks. What have you to say upon that?—I should say this ; that no man who is being taught anatomy should be allowed to go into the hospitals. It is quite wrong. Here we are building costly hospitals, with impervious flooring and impervious walls, and so on to secure, as far as possible, aseptic conditions ; no man should ever be allowed to go from a dissecting room to a ward of a hospital. While a man is taught these preliminary sciences, anatomy and physiology, he ought not to be allowed to go into the clinical wards of a hospital. The whole struggle of surgeons has been to make wards as aseptic as they can possibly be ; they cannot be kept aseptic if the students from the dissecting rooms are allowed to go into the wards. That is my answer to that.

324. The CHAIRMAN : You would not allow them to come in till they had finished their preliminary sciences?—Not till they had done their anatomy and physiology.

325. They are not allowed, I understand, now to occupy the place of clerks and dressers till they have passed their examination?—But they would be men who understood that work. No man is allowed to clerk or dress until he has done his earlier examinations. He ought not to be allowed to do so.

326. You say it is not necessary or desirable that they should come into the hospital before that?—Certainly not. No man ought to be allowed to come into the hospital until he has finished all his preliminary studies, and even anatomy and physiology.

327. The BISHOP of STEPNEY : You state --and I think that this is a matter of great importance--that probably, so far as you could estimate it, the cost of what we may call the preliminary medical education was greater than the cost of the purely clinical education?—I should say so certainly, I should say that it is in that direction that these subsidies have gone chiefly.

328. There is one point on which I should like your opinion, though I can anticipate what it will be. Would you say that no hospital now should consider itself as adequately equipped which had not attached to it some sort of pathological laboratory?—Yes, I should say so, certainly—after all, pathology is a part of disease, it is an essential part of disease. That is not an early medical study.

329. The CHAIRMAN : That goes as part of the clinical study?—Yes.

330. And I suppose, if you said clinical and pathological, you would embrace everything that was necessary?—Yes.

331. I suppose a pathologist deals with the cases of patients during their lifetime?—There are two sides of pathology, there is what you may call the principles of pathology—where a person may teach the processes of disease quite irrespective of any case, he may treat of the doctrines of inflammation, changes that take place in the blood vessels and tissues, the nature of tumours and so on quite irrespective of any particular case. Then, of course, there is the pathological investigation of a case, that is very often also bacteriological ; you need to test the fluids of the body and see what bacteria there may be, that is microscopic pathology, or, a chemical investigation may be necessary, the so-called chemical pathology. Then there is morbid anatomy. When a person dies you want to know what has happened, what are the changes and so on, partly for the purpose of education, and partly, of course, for the elucidation of the complete history of the case. Pathological anatomy, morbid anatomy as it is called, is an essential part of a medical education.

332. The BISHOP of STEPNEY : But besides that, my point is this : Would you say that some place in which to pursue investigations in chemical pathology or bacteriology and morbid anatomy is part of the proper equipment of a hospital, quite apart from medical education ? --Yes, it is an essential part of the hospital, though there is another question involved in that, and that is whether you might not have what one might call the principles of pathology taught quite apart from the purely morbid anatomy part of it. You could have two or three centres say in London for the teaching of chemistry, physiology and anatomy, and the principles of pathology, quite apart from the clinical study of disease.

333. The CHAIRMAN : At any rate, your view is that a pathological laboratory is an essential part of the instruction to be given in the hospital ?—And a clinical medical school.

334. It is that part which ought to be given in the hospital ?—Yes ; it is an essential part of a clinical medical school.

335. The BISHOP of STEPNEY : And also of a hospital, even if there is no medical school attached to it ?—Well, every hospital ought to have a pathologist attached to it.

336. And if a medical school were attached to the hospital, presumably that department of its work would be more efficiently done ? —Yes.

337. The CHAIRMAN : If you take the cases of hospitals which have no schools, in every case there is a pathologist ?—Not necessarily an expert pathologist, but probably the house surgeon, or the house physician would regard himself as sufficiently a pathologist to make a *post-mortem* examination, and say what has happened ; some of these men are good pathologists, especially in the workhouse asylums ; some of them have done very good pathological work, though they may not be what you would call pure pathologists.

338. Still, you think that the work is better done at hospitals that have medical schools attached ?—Yes. All work is better done by experts, I think.

339. You know the general scope of our Inquiry ; is there anything else that you would like to add ?—The general feeling I have is that in my opinion these subsidies are not necessary for the proper equipment and efficient management of a medical school in the proper sense of the word ; that if the question of the public contributing to the medical education is to be raised at all it ought to be raised as quite an independent issue, and not raised in this subsidiary manner ; and, moreover, my feeling is, as far as I can judge, that these subsidies have been required chiefly to keep the schools going as preliminary science schools ; and, in the interests of education, in the interests of medicine itself, the sooner that is stopped the better ; the sooner these preliminary sciences are got out of the hospitals and taught in a proper manner, in properly established institutions, the better. We hope some day that the University of London itself will have an institution with laboratories and museums for the teaching of these early medical studies. I would like to say, Sir, as I presume I have been invited here as President of the College of Surgeons, that the subject of your inquiry is not one on which the College of Surgeons, as a body, would express any opinion.

340. The CHAIRMAN : We invited you because we thought we would like to have the view of a gentleman in an eminent position such as yourself, but, of course, we understand that you do not speak in any way as a representative of the Royal College of Surgeons ?—No ; this is not a question that we should consider as a body. I have simply spoken to you from my experience as a medical man and a teacher.

[The Witness withdrew.]

(Adjourned.)

MINUTES OF EVIDENCE
TAKEN BEFORE THE
MEDICAL SCHOOLS' COMMITTEE,
AT THE
WESTMINSTER PALACE HOTEL, LONDON, S.W.,
ON
THURSDAY, 8th DECEMBER, 1904.

PRESENT—

SIR EDWARD FRY.
THE BISHOP OF STEPNEY.
LORD WELBY.

SIR EDWARD FRY in the Chair.

*[Transcript of the Shorthand Notes of Mr. G. WALPOLE, 1, New Court,
Lincoln's Inn, W.C.]*

SECOND DAY.

The Honourable SYDNEY GEORGE HOLLAND, called in and
examined.

[Mr. MUNRO SCOTT, Warden of the London Hospital Medical College, and
Mr. E. W. MORRIS, Secretary of the London Hospital, were also in
attendance.]

341. The CHAIRMAN: You are acquainted, no doubt, with the
terms of reference to this Committee?—Yes, I think so.

342. You have been invited to give us some particulars bearing on
our Inquiry with special reference to the London Hospital?—Yes.

343. You have been Chairman of the London Hospital for some
years?—Since 1896.

344. I think you are also connected with another hospital at Poplar?
—Yes, I am Chairman of the Poplar and the Tilbury Hospitals.

345. Therefore you have had experience in Hospitals with and with-
out medical Schools attached?—Yes.

346. You probably would like to say something to us with
regard to the general advantages received by the hospital from the
assistance rendered to it by the medical school?—I should like
to refer first to the amount spent on the sports ground; that is
supposed to be an improper application of charitable funds, and it is
charged against us as one of the most serious crimes we have committed
that we bought a cricket ground for our students. I justify that by saying,
in the first instance, that it is good policy for the hospital and that it is
a very good investment.

347. Do you get a good rent for it?—I get a rent of four per cent.

on the purchase and outlay. We have bought a freehold property just outside London with two railways running right up to the cricket ground.

348. It is a property improving year by year?—Certainly.

349.—The BISHOP of STEPNEY: In addition to the sum put down here for the sporting ground, was not there a previous sum paid in 1900?—Oh no.

350. Lord WELBY: You put it in this way that your critics have spoken of this as an unwise use of your money?—As an unjustifiable breach of trust.

351. You justify it as a very fair investment?—Yes, as a good investment.

352. That has nothing whatever to do with the relation between the school and the hospital?—Well, in the sense that it is a very essential thing for a hospital with a lot of young men like those we have that we should have a recreation ground.

353. You had that in view when you made that investment?—Yes.

354. The CHAIRMAN: We have some information to the effect that in 1900 there is an item appearing for sports ground of £3,200?—That is probably the date of the purchase.

355. But there is an item previous to that?—That is for laying out and re-levelling and building a pavilion. The whole thing comes to £6,000 altogether, bought and finished at different dates.

The BISHOP of STEPNEY: What was the original cost price of the land?

Mr. SCOTT: £400 an acre.

356. Then there is the expense of levelling, and building the pavilion, and so on; that is scarcely an investment in land, that is a contribution to the students.

The WITNESS: No; it is making a complete thing, which I could sell to-morrow at a large profit. You must know that the demand for cricket grounds just outside London is such that that is one of the most profitable investments that we could possibly make.

357. The CHAIRMAN: What was the cost of the land?—£400 an acre; it is exactly eight acres; so that it was £3,200. That is the whole purchase-money for the land.

358. The difference between £3,200 and £6,170 is money laid out on the land?

Mr. SCOTT: And in building the pavilion.

The WITNESS: At a 4 per cent. rent from the people who hire the ground from us.

The CHAIRMAN: If you sold that for building land you would get nothing for that pavilion, I suppose?

Mr. SCOTT: There is a great demand for it as a sports ground.

The WITNESS: I know that we could get our money back to-morrow, it is not disputable for a moment. I have noted down what I have to say, and perhaps you will allow me to state it in my own order. In the first place, I would like to emphasise this very strongly; that the increase of the grant to our medical school which took place in 1897 had nothing whatever to do with the grant we got from the King's Hospital Fund. That is an important point, because it is always suggested that the fact of the grant by the King's Hospital Fund of money to us synchronised in time with the increase of the grant to the medical school, and that the consequence of that was that we immediately spent money on our school. On the face of it that is a perfectly fair criticism, but now I should like to give you the absolute facts. When I was first made Chairman in 1896, before I had been Chairman ten days the staff came to me and said, "We cannot go on with the school as it is now, the number of students is falling off, we have no bacteriological department, we have no pathological department, we have no clinical laboratory of any proper size." In January, 1897, we had a formal deputation of the Medical and Surgical Staff to the House Committee really demanding that

something must be done at once if the teaching was to go on, and if the work of the hospital was to go on. We saw them and at once set to work—this is before the King's Hospital Fund was started—and in March we presented our report recommending an extra grant of £1,800 to the school; that made the grant up to £2,150. It was not till February that the King's Fund was started. Therefore, although the actual meeting was in March, we had settled to give the grant, and everything had been arranged before the King's Hospital Fund came out at all. More than that. When the King's Hospital Fund was first started, the idea was that it should give support to hospitals in order to enable them to pay off their debts. We had no debts at the London Hospital. I do not know that I am justified in saying this by the letter that the King wrote, but I recollect saying to my colleagues at the time, "We shall not get any of this money because it is simply to pay off debts, and we have got no debts." There was no idea then that it was to be a permanent fund. When the King's Hospital Fund was announced in February, 1897, a different policy appeared. Later on we were asked to send in our application for money from the King's Hospital Fund. If our idea had been to get money for the school, we should have said, "The expenses of this hospital have far exceeded our income; will you help us to run it." We did not do that. We asked the King to help us to rebuild the hospital. We said we had found that the Hospital wanted a very large sum of money spent upon it (it has come out to something like £440,000 that has been spent upon it), and we had not the pluck to start this unless we got some very large help. We wrote to the King's Hospital Fund, and said: "If you will give us a grant to enable us to sell out from our £200,000 worth of capital, we will rebuild," and we have a definite letter from the King's Hospital Fund, saying: "We will grant you £5,000 a year, on condition that you spend out of your capital £100,000 on the rebuilding of the hospital."

359. Have you got that letter here?—It is in your own records.

360. Not in our records, I think.—I mean, Mr. Danvers Power, as Honorary Secretary of the Fund, will have the letter. Every year the King's Hospital Fund ask us as to whether we have spent the £100,000. We have spent four times the amount. It gave the Committee just the necessary spur to induce them to spend that capital on the building, and not to be losers of income thereby. That is the reason we got the grant, and the reason we applied for the grant. It had nothing whatever to do with the school. Then on June 2nd we had a special meeting of our subscribers, and asked them to allow us to make this increased grant to the school. After all, the hospital does belong to the subscribers. Proper advertisements of this special meeting to consider a rearrangement of the financial arrangements between the Hospital and College appeared in *The Times* and other papers. There was a fairly largely-attended meeting, and our proposition was unanimously carried. Our subscribers ever since have known that we subscribe to the school. It appears in all our accounts every year, and we have never had from one single subscriber the smallest protest of any sort or description. When I beg, as I do now and then, of the public, I occasionally get a letter saying that someone does not care to send us money unless I will say that none of it will go to the school. That, of course, I expect if there is an agitation going on; but not one single person who has ever subscribed to the London Hospital has ever raised the objection. I have had very large sums from men who would only give it on condition that there should be progress in the school.

361. The result of the subscription by the King's Hospital Fund has been to enable you to rebuild the hospital entirely?—Yes, and it was definitely given for that, and we are obliged to show the auditors that we have spent it on that.

362. That has been a vast benefit to the patients?—Enormous.

363. The BISHOP of STEPNEY: Is that independent of the special

grant of £3,000?—That was a little windfall that the fund gave us one year. That went “into the pot,” so to speak. We asked for money for re-building, and they gave us £8,000 instead of £5,000 to help the hospital.

364. Lord WELBY : What would have been your financial position at the end of the year supposing you had made your grant to the school and the King's Hospital Fund had given nothing. Had you a surplus on your ordinary income and expenditure that enabled you to make the grant of £1,800, or would there have been a deficit?—The policy of our hospital has been that we cannot possibly restrict our expenditure to our income in any one year. We must do the best work that can be done, and we must trust to the public to support us. If in any year we are in a deficit we sell out stock to repay it. We had £247,000 worth of stock at that moment, and if we had not made up the deficit that year we should have had to sell.

365. As a general rule are you regularly in a deficit. I am not putting it as a criticism, but as part of your policy are you regularly in a deficit?—Not as part of our policy. Some years we get big legacies, and we are on the right side. At this moment when we are spending these large sums on rebuilding we are in “Queer Street” rather, but I am certain myself that it will come right.

366. In the year you are talking of would there have been a deficit?—You are referring to the year 1897. It is rather difficult to tell, for this reason:—We beg very largely every five years; we get about £50,000 or £60,000; last year we got £100,000; that is spread over five years; but I should think we should have been in a small deficit.

367. The CHAIRMAN : Are you still building?—Yes, we shall finish in about a year and a half.

368. Lord WELBY : Might I put your financial position in this way. Taking your general policy, you do not confine yourself to your expenditure being within your income. The grant that was made, so far, assisted you in reducing the deficit that it enabled you without any undue burden to make this grant to the Medical School?—May I reply in this way, that whether we got anything from the King's Hospital Fund or not we should have made that grant.

369. I follow that. Then the next question that occurs to my mind, accepting that, is how you were arranging to meet it. You answer me by saying that you do not confine yourselves to a strict equilibrium between income and expenditure, but this is no doubt, with all your other calls upon you, something of a heavy drain upon you?—It is not very heavy.

370. However, it is a drain upon you?—No doubt.

371. It came as, what we may call, a stroke of luck that you got this £5,000 a year from the King's Hospital Fund. That no doubt enabled you with great ease to make this payment to the school?—Not a bit.

372. It must have put the hospital in a much better financial position. Let me put it in this way. Although your income does not equal your expenditure, you make an extra grant for the medical schools, and after that time, and quite unconnected with it, you get a grant of £5,000 a year from the King's Hospital Fund. Surely that enabled you to make this grant with greater ease?—No, because it was hypothecated to the building, and if we had not got this grant we should not have built. The £5,000 goes to supplement the loss on selling capital to enable us to build.

373. That is to say, you sell out every year?—Yes, we sold out £200,000 to spend on the building, and the King's Hospital Fund enabled us to be no very great losers of income. When I wrote a letter of thanks to the King's Hospital Fund I said, “you have enabled us to make this hospital what it should be, otherwise it could not have been done.”

374. You might make out your building account as outside your ordinary income and expenditure?—Certainly, and we always do.

375. In that account it would appear—take the year 1896 or

whatever it may be—that you were getting £8,000 a year from your investments. The following year you sold out £100,000. That would reduce your income by £4,000. You put £5,000 from the King's Hospital Fund into that particular fund, that being entirely separate and distinct from the ordinary income and expenditure out of which you gave that grant of £5,000?—Quite right, it is the way to put it.

376. The BISHOP of STEPNEY: Is not it the case that in 1902 the grant from the King's Hospital Fund went up from £5,000 to £8,500?—Yes.

377. What was that additional grant in respect of? It now stands, I think, at £7,000?

Mr. SCOTT: It was £7,000 last year; I think we had something extra at the quinquennial period.

The WITNESS: At any rate, whatever we get from the King's Hospital Fund is considered by the Committee as going against money that we have spent in building. We have spent a great deal more in building than the £100,000 that was contemplated when we asked the King's Hospital Fund to help us.

378. Do you remember whether in 1902 there was some special application made for that increase from £5,000 to £8,000?—What I reply to you is this: The King's Hospital Fund is not helping the London Hospital to live. The grant of £5,000 a year is simply to put us in the same position as we should have been in if we had not spent that money on building. Therefore I am always urging them to give us something towards the income of the hospital, as they do to other hospitals.

379. Then anything over the £5,000 you regard as simply to enable you to meet your ordinary current expenditure?—It comes into the pot.

380. You say there is £5,000 a year which you have told Lord Welby you regard as ear-marked for recouping the loss made by selling out your stock?—That is so.

381. But in 1902 there is an additional grant of £3,500, and apparently now an additional grant of £2,000?—If I am arguing with my House Committee and begging them to do some more building, I should say, "Look here, you are getting £7,000 a year from the King's Hospital Fund; that enables you to spend £150,000 on building." We have not ear-marked the other money, but the £5,000 that we got in 1897 is absolutely ear-marked for building, and it was given on that condition.

382. But you said that you have always to satisfy the King's Hospital Fund that you are spending the money on building?—Yes.

383. That applies only to the £5,000?—Only to the £5,000.

384. Therefore anything over and above that is a grant from the King's Hospital Fund to your ordinary income?—I think I may say that.

385. Lord WELBY: This other grant came in the subsequent year?—Yes; there was a special donation for that year.

386. The CHAIRMAN: On two or three occasions you have had an increased vote of £5,000?—Yes; my chief point is this. If we have done wrong in spending our money on the school, the King's Hospital Fund has nothing whatever to do with that crime. That should be known at any rate.

387. The BISHOP of STEPNEY: I think that is quite clear, from your point of view, as regards the £5,000?—We had settled to spend this money before we got any money from the King's Hospital Fund, and before we thought of getting any money from the King's Hospital Fund. When we applied to the King's Hospital Fund for money it was on the ground that we had to spend £5,000.

388. That applies to the £5,000, but there still remains the increase of £3,500, and later on, £2,000?—That is not what is in my mind. I am now dealing with why we spend this money. I am meeting the suggestion that we spent this money on our school with a light heart because the King's Hospital Fund was going to give us money. I say the two things have nothing to do with each other at all.

389. The CHAIRMAN: I do not think you quite appreciate the point the Bishop of Stepney is putting to you. It is this. The £5,000, he says, goes merely to make up income which you lost by building. Objections are made to the mode in which you apply some portion of your income. That does not apply to the £5,000, because it is specifically hypothecated to meet the loss by sales of Stock, but anything above the £5,000 is part of your general fund, and, if that is applied to improper purposes, some of the fund granted by the King's Hospital Fund goes to an improper purpose?—I follow that, but I was not dealing with how the money was spent, but with the motives in our minds when we settled to give this grant to the school. I want to answer the accusation that we squandered money on the medical school because we were getting that money from the King's Hospital Fund.

390. Lord WELBY: May I just follow up what the Bishop of Stepney has put to you. The hospital gave the £1,800 as part of its ordinary expenditure, at that time not knowing that it was going to have this money from the King's Hospital Fund. Now, for the moment, put aside the £5,000 as going to a different account. Four or five years afterwards you got an extra grant from the King's Hospital Fund towards your ordinary income. That, of course, makes it easier for them to proceed with the building, but there was no connection between those two sums?—Just so.

391. It may have been an improvident use of the money to give the £1,800, or it may have been objectionable for other reasons, but the two things have no connection?—That is what I mean. Now, Sir, if it is necessary, I am prepared to justify our grant to the school on three grounds. First, that we get a *quid pro quo*; secondly, that it is for the benefit of the patients, and thirdly that is for the benefit of the country. First of all I say that we get a *quid pro quo* in money. It rather works out in a circle. If I have a good school I am able to attract a good staff to the hospital. Without a good staff our patients would not get the advantage of the services of men like Sir Frederick Treves and others. The only way for me to attract a good staff is to have a good school, good in its teaching, good in its professors, and good in numbers. You will well understand why. If you have a good surgeon working in a hospital with a lot of men working under him, they all see him at work, they go out to different parts of the world, and, having seen that man's work, when they are in practice at Walthamstow or Leyton, or anywhere else, they send for that man. All his position and connection comes to him from his work, and that work could only be done in a hospital with a big and good school. Therefore a good school means a good staff. The only way to get a good school is to have the very best teachers you can get—men who are not seeking personal profit for themselves, but whose bent of mind is a scientific one, and who are content with a small income for the love of science; and, thank Heaven, there are such men in England. If a hospital is not endowed, it must pay these men. The Scotch and Irish Universities get help from the Government; Edinburgh gets a grant of £25,800 a year; but there is nothing done for medical education in London at all. Similarly at Cambridge, there is a professor of Physiology, at a small salary I am told, but then he is a Fellow of his College, and therefore he is enabled to live up there as professor of Physiology, because he receives other emoluments. And a man in this position may hope eventually to be a Tutor of his College. The only way we can get good teachers at a small salary is by having a large number of students around them who pay them fees and so supplement that salary. As I have said it is really arguing in a circle; a good school means a good staff; the only way to get good professors is to have a good number of men, and the only way to get a good number of men is to have good professors. Therefore any school that is not endowed must be helped somehow.

Then is it fair to help your school from the hospital funds? It would

be absolutely impossible to work a hospital with over 900 beds, as we have, without a school. As the result of having all these students about, we get a mass of work done for nothing, which, if we had no school, we should have to pay for. At the Poplar Hospital we have no school. We have three residents. We have to pay the first one £150, the next £100, and the next £80; and I do not think there is an example in the country of a hospital without a school that has not got to pay its residential officials.

392. The CHAIRMAN: How do the costs per bed of the London Hospital and the Poplar Hospital compare?—I will deal with that later on. They would not compare at all, but I will deal with that later. At the present moment we have at the London Hospital every year 13,500 in-patients, and very nearly 200,000 out-patients. To deal with the patients we have five house physicians, five house surgeons—I do not know that I need go through the list, but in all there are 33—not all residents, but 33 men, to whom we should have to pay an income of £100 or £150 a year each. I put the cost of those officials at £4,000 a year if we had not got a school.

393. That is in-patients and out-patients too?—Those are all for in-patients—every one of those. The obstetric men may be said to be outside, because they do outside work, but the in-patient resident staff would cost, say, £4,000 a year. Then in addition to that, we have got to pay 32 dressers and 36 clerks—men who investigate the state of the blood, the urine and the feces, out-patient dressers and out-patient clerks, *post mortem* and maternity assistants; there are 98 of those; they are not quite in the position of the others, but I put them down at £5,000. Therefore in actual work we are getting £9,000 from young qualified men as a *quid pro quo* for the £2,500 which we give to the College. In addition to that, we get a bacteriological department for £677. I need not elaborate that point, it would cost me very much more if I had no school, as I have already pointed out. I have a clinical laboratory worked for nothing; the clinical laboratory being as you know where the urine, and so on, is investigated. I get all that work for nothing. I get my pathological department worked for a very very small sum. All that is helping enormously to the investigation of disease. We had 900 specimens sent across to the bacteriological department last year, and we get a report on these specimens in, say, half a day. If we had to send them up to the Brown Institute we should not get the work done anything like as well, and we should have to keep a horse and carriage to take them up every day, and it would be impossible to get the work done.

394. Before we part from the question of expenses that would be incurred if you had not the school, is it not true that where you have medical students of this sort taking up the administration of the hospital, very considerable waste occurs—very considerable expenditure is incurred in consequence of these students being young men and not thinking much about the expense. We are told that in many cases the expense per bed is greater where there are these students than where there are not, and that has been attributed to the fact that young men are expensive and do not think about the money; they waste money in medicines and plasters and poultices and so on, in every direction. What is your experience with regard to that?—I should think it is quite true that very likely a young man is more wasteful in bandages, but that is the only way in which he can be more wasteful. He does not prescribe medicines; the medicines are all under superior men to him; there is no medicine prescribed except by a house-surgeon or house-physician, and that is all under the Staff. A young man might certainly cut to waste a lot of bandages, but young women might do that too. Every week we have a return of the bandages used in each ward. That is, after all, a very trivial thing, and they have no other means of wasting anything.

395. Then how would you account for the fact spoken to, that in many cases the expenditure per bed is higher where you have these unpaid men than where you have paid people?—I will answer that at once.

Your question is: "How is it, if all this work is done for nothing, hospitals without schools are said to be cheaper?" I do not know how the statistics were got out, but I will admit it to be true if you like. Compare the case of a hospital like Poplar, where everything is in the palm of your hand, or go to the Great Northern Central. We at the London Hospital have a huge place covering eight acres. We have to move patients about from place to place; we have dinners to send about over eight acres; we have an out-patients department which costs us £400 a year to clean at least; we have grounds and gardens to keep up. Think of the number of attendants it takes to do all that; think of the number of porters we have to employ, of the lifts and the telephones. I am only comparing a big place with a place where you have not a school. Think of the correspondence and interviews. Sometimes we have as many as 200 people coming down from all parts of the world—from America and Germany, and so on. We have to employ sisters to attend to them. Very often the Secretary will not get his work through because he is showing people round from different parts of the world.

396. But in a general way a wholesale business costs less per item than a retail business?—You cannot deal with it like that. If you take our buying, you will find that we buy cheaper in drugs, and so on; but you cannot treat a hospital as a wholesale business at all. In a few details of expenditure, your remark would apply. For instance, take the matron. Her salary is spread over more patients, and if you took the amount that the matron costs per bed, it would be less in a big place. The necessary cost of carrying on a big hospital is infinitely greater in many ways. But I would prefer to put it in this way. Cheapness is not the only merit, or at any rate it is not the chief desideratum. It is the progress that is made at the London Hospital that is the expensive thing. For instance, take Poplar. I take that because I know all about it. We are practically content if a person comes in with any disease to cure that man and send him out, but the London Hospital cannot stop there. We must see whether the experience gained there cannot be registered and used for the benefit of the next person who comes with the same disease, and for that purpose we keep records. We can trace back illnesses for 20 years that people have had. Only yesterday I happened to come across one of our doctors who was sending up to the Registrar's to ask for the history of a certain complaint. We sent him 20 years' experience of that disease, and, of course, that helped him enormously in dealing with the case. Such a thing as that cannot be done in a small hospital. Then, again, the Röntgen Rays come in; we have not got that at Poplar. It could not afford it. Whether anything is a success or not we must try it. The hospitals with schools are the leaders in the country; we cannot sit down and wait to know whether they have succeeded in Germany, or some other country. Again, take the Finsen light; there again, Poplar has not got that. Poplar waits till the London has done it. All those things enormously increase the expense. You may take it that we, at the big hospitals, are practically the trustees of knowledge, and we have got to use our responsibility in this way. There is no power of generalising on disease in small hospitals at all. All the advance, all the progress is made at hospitals with schools.

397. Is there not a good deal of pathological observation and advance even in hospitals which have no schools?—None.

398. We had other evidence than that put before us yesterday?—You may have had some enthusiast saying that there was, but it is the fact that there is none. Let anyone come and tell me a single physician or surgeon of first rate eminence who is not on the staff of a hospital with a school. When His Majesty is ill he does not send to Poplar for a physician, he sends to London to get Sir Frederick Treves. There is no progress, and there cannot be progress, in a small hospital without a

school. If you knew, as I know, the positions of men who hold what they call pathological or bacteriological positions at these schools, you would know that they are not to be mentioned in the same category. We have none at Poplar—no bacteriologist and no pathologist; we just cure the people of the day, and so it is at all the hospitals without schools. There is no clinical laboratory at Poplar. If a person dies at Poplar we enquire what he died of, if necessary make a *post mortem*, and find he died of cancer and there is an end of it. That is not enough at the London. We should take cultures of the different parts of the body and see whether the deceased had any relative disorder in any other part of the body. As one of our staff said to me last night, we are not only content at our *post-mortems* (and we have 1,300 every year) with simply knowing the cause of death, but we want to know the cause of the cause of death.

399. Do you cure more people at the London than at Poplar in proportion to the number of patients?—Oh, yes. We do not care much about time at Poplar; I have had a man with a broken spine there for two years. We could not afford to keep him at the London for that time. I do not know that the work is better done at the London than at the Poplar; I would not say that; the work for the sick poor, no doubt, is done equally well at both; but Poplar cannot command the services of the men that we have. In fact, all the hospitals without schools are parasitical on hospitals that have schools. We give them their staffs. All the men who go to those hospitals go there with a view to getting on to the big hospitals afterwards, or because they have failed to get on to them. All our work is used at these smaller hospitals.

400. Lord WELBY: Have you not rather lightly passed over that question of a large establishment. Almost throughout the world, I think it is recognised that the cost ought to be less in a large than in a small establishment. You have given us some reasons, but I venture to think that you have put it rather boldly, for the contention that a large establishment in the case of hospitals may justify a bigger relative cost per bed than a smaller establishment. That is so contrary to general experience that I think it demands some proof. For instance, take this. Your argument about the improvement may be perfectly true, but then the question that comes naturally to us is, is the expenditure justified. Let me take this question of the salaries and wages that are paid; I think it is one of the best cases you can put as testing this matter. The average of these hospitals that we have before us here is £32. 19s. 6d. I take your hospital, the London, and there it is £41. 10s. 10d. You and St. George's are the highest. It occurs to one as a critic that there must be some limit to that. It seems to me that what you say is there is so much out of it that you do not need to look at the cost?—No, I do not take that view.

401. I do not say that you have said that, but when the Chairman put to you the relative expenditure of a large establishment as compared with that of a small one your line was "Well, the expenses are much more liberal in a large establishment because we attend to all sorts of things"?—I thought you meant liberal in policy; you mean liberal in work.

402. Yes?—No doubt.

403. Where you have a limited income, there is a certain moderation to be observed. Now, in this case, in yours, and at St. George's, the expenditure, as tested by salaries and wages, seems very high. I only put it to you, taking what I call your view of liberal policy, that there is a limit to that?—I quite agree.

404. And on those figures it seems to me that some justification is required?—I appreciate your point. I did not know that we were going to enquire whether we were spending our money properly or not. I think that would be rather a different enquiry; but I am quite prepared to answer you. As compared with St. George's, we have $2\frac{1}{2}$ times the number of beds. It looks to me as if the larger the hospital the more you

had to spend in salaries and wages. All the big hospitals I see are over the average.

405. The CHAIRMAN: What strikes me so much about that is this: you have dealt with the great amount of work done without salary by all these young men; yet when one comes to find the salaries paid by your hospital, they are very much in excess of the salaries paid by any of the four hospitals which have over 100 beds and no medical schools?—Yes; and fancy if, in addition to that, we had to pay all these men; we should have to pay them, and these hospitals all pay them. It will not help me to spend £9,000 more, which I should have to do if I had no school.

406. The BISHOP of STEPNEY: You consider that suppose you had no medical school, you would be bound, for the efficiency of the ordinary hospital, to employ all these 33 dressers, and so on?—Yes, and a great many more.

407. But we have been assured more than once that, though it is of great value to the hospital to have a large number of dressers and clerks, yet their number is largely due to the amount of extra work which all the precision and care involved in a teaching establishment make necessary?—But when I mention that £9,000 a year, none of it goes in that. These men who would have to be paid are not being taught; they are actually doing the work of the hospital. I might get my dressers a little cheaper—I have only put them down at £50—but there is no teaching in connection with them.

408. It would not be possible in your view for the nurses to do the work which at present is done by these 98 people?—Certainly not; the nurses could not possibly do the clerking work. There is no clerking work done at all at hospitals without schools. They could do the dressing work. A nurse costs about £50 a year; £27 wages, and I suppose about £27 in keep, the outside certainly £50 a year. The nurses could not do maternity work; they could not do the *post mortem* clerks' work; but they could do the dressing, and that you may take it is represented by £50 a year each.

409. But the same nurses that are there now could do the dressing?—No, we do not have any of them dressing in our male out-patient department.

410. You do not, but you might?—But we should have to pay for it.

411. Extra?—Of course, extra.

412. The Chairman said that one reason, possibly, of the extra cost is that a number of young men will not be over-careful, and there will be a certain amount of waste in the way of drugs and other materials?—They do not touch the drugs.

413. I notice that the cost of surgical appliances in London is small compared with the cost in a great many hospitals.

The CHAIRMAN: I only put it from the evidence that has been put before us.

414. The BISHOP of STEPNEY: All the increase apparently is in the way of salaries?—How can these young men waste, they have not the opportunity to waste. I should like to add this. I spoke of the extra cost arising from the size of the hospital. The small hospital without a school has not got to do many duties which a big one has to do; it has not got to show people round, it has not got a large garden to keep up, it has not got to move patients over a large area, it has not got to take dinners distances of a quarter of a mile, it has not got to have a clinical laboratory, it has not got to have a bacteriological department, it has not got to pay gardeners and all sorts of people. That is where salaries and wages come in; I do not know whether the payments of the staff come into the salary and wages—do they?

Mr. SCOTT: Yes.

The WITNESS: The staff of a big hospital has to be paid; they get very small payments, but they are paid. If you want an inquiry into the

comparison, I am afraid I am not prepared to answer it straight off; but I am sure I can give you sufficient information. I spend the greater part of my life at the hospital, and I have very able men under me. We have to pay the expenses of the place and we could not cut them down.

415. The CHAIRMAN: Now, you say £9,000 would be required if you had not these unpaid assistants?—Yes.

416. If you divide that by 676, that gives £13 10s. or thereabouts per annum per bed more, which added to your £41 10s. brings it up to £55 per bed for mere salaries. Is not that very large?—It may be. I know I cannot do it cheaper; I know I cannot work without a school. If such a thing is contemplated I cannot do it cheaper. Nobody knows better than your Honorary Secretary the care that is exercised at the London Hospital to ensure cheapness.

417. You must understand that we do not impeach your management in any way, but it does startle one a little to see one hospital doing it for £14 a bed and you requiring (assuming you had to pay these people) £55?—At Poplar I pay £250 to the secretary, whereas the secretary at the London gets between £500 and £600. The last gentleman who was there for 20 years was getting £900 I think at the time he left. After all it is not those expenses we have to consider; it is the duties we have to do which small hospitals could not do, and many of which they have not got to do.

Mr. MORRIS: To compare the total cost of beds may be of some use, but to compare the particular items of expenditure such as salaries and wages may be harmful, in that it is simply a matter of book-keeping. At our hospital we do our own painting and a very great deal of our own plumbing and our own cleaning, and so on. Those men's wages may be included in salary and wages. Another hospital may contract out for that work, and that expenditure may appear in some other item.

The CHAIRMAN: I thought that the King's Hospital Fund had introduced a uniform system of keeping accounts.

Mr. MORRIS: There is a uniform system of keeping accounts, but a great deal is left to the accountant, as to whether for instance the salary of a porter working in the dispensary should be put down in the salary and wages account or in some other account.

The CHAIRMAN: I think we must take it as it appears in the account of the hospital.

418. The BISHOP of STEPNEY: There is one other question bearing upon that. You plead, with great force, that you would be obliged if you had no medical school to have clinical, bacteriological and pathological laboratories, and that those would cost a great deal. Then you would admit that the scale of your present laboratories even in these departments is very much larger than conceivably would be necessary for doing well the ordinary hospital work?—No, I would not admit that at all.

419. Supposing there was no medical school at the London Hospital, you would feel bound to have bacteriological, clinical and pathological laboratories?—Certainly.

420. On the same scale as you have now?—I think so certainly if the work was to be done equally well—unless we are simply going to drift down to be a Poor Law Infirmary. If knowledge is to be advanced we must certainly have laboratories as big as those we have now. The Pathological Department cost £20,000 to build. By giving a salary of £150 to a professor I have attracted men from Germany and other places to work in the laboratory. I must do it if I had no school; it would be just the same, only more expensive.

421. Another question that raises a wider point, on which you may have something to say later on, is this. A considerable portion of the buildings and equipment of the medical school at the London is taken up with lecture rooms, laboratories, museums, and the like that do not belong strictly to hospital work; I mean the preliminary teaching work of chemistry, physics, biology, anatomy and physiology?—Yes.

422. I should like to ask you whether a very considerable amount of what you spend upon your medical school would not be saved if you were able to use these premises and appliances for hospital purposes, and if these subjects were treated elsewhere. I do not know whether I am anticipating what you meant to say?—I know your point quite well. My answer to you is this—I do not know whether everyone would agree about this, but my answer is, that if you took away the preliminary education from the London Hospital our school would cost more than it did before. Although we should save £1,800 a year immediately, we should get so much less from fees from students that we should have to supplement it still more. That is the answer. The buildings that we should get, the few rooms that we should get, where these subjects are taught (which are also used for other purposes as well) would certainly come into the hospital for use, but it would be exceedingly difficult to find any use for them, because they are in another part of the building. We could use them undoubtedly, and we could save £1,800 a year, but we should have to carry on the school at even a greater cost.

423. The CHAIRMAN: Now, I should just like to mention one general consideration that has been put to us. It has been said, and of course truly, that the hospital is of enormous benefit to the school and of enormous benefit to the students of the school. On the other hand we will assume that the school is a benefit to the hospital. Ought not those two benefits to be set off practically one against the other, ought not each to stand on its own bottom, and each to be independent of the other as regards fees, neither paying anything to the other?—It is really very very difficult to answer that, because on the face of it it is such a fair sort of statement that it ought to balance; but on the other hand I really do not know that it ought, if the Hospital gets the best of the connection.

424. You would concede would you not that each benefits the other?—Certainly, I admit that.

425. The students would have to pay to get clinical instruction in the hospital if they did not get it free?—Yes, and if we did not get the students we should have to pay them to come.

426. Quite so; each benefits the other?—Certainly, but I think the hospital gets infinitely more benefit—infinitely more.

427. More benefit than the students?—Oh dear me, yes.

428. What greater benefit could the students get than the opportunity of visiting the wards?—They pay for that.

429. They pay for the school?—They get the benefit of visiting the wards, certainly, but we are talking of pecuniary benefits. We get as much from the students as we can, of that you may be quite sure. If we could raise the fees we should raise the fees, because we want the money. But we could not. There is no question about it that the hospital gets infinitely greater pecuniary value. The two things do not balance. The hospital gets the greater benefit, and if I did away with my school I should find that out the next day.

430. The BISHOP of STEPNEY: Just let us take that point of the fees. Is it not the case that the fees of the London are very much lower than the fees of the other medical schools in London?—No, I do not think they are. There are different ways of commuting the fees. Guy's, I believe, at this moment are lower than ours, but the Warden would be able to answer that better than I can. I think Guy's take a smaller fee down, with instalments afterwards. But, even if our fees were lower, that may be perhaps explained by this difficulty. There is still a prejudice against coming to Whitechapel, and unless our hospital was booming, as it is now, we could not attract the students. People do not like to send their sons down there; they would rather have them at Hyde Park Corner or at Charing Cross. A few years ago our hospital was not known. When we did raise the fees we had a tremendous drop at once in the number of students.

The BISHOP of STEPNEY: Still, as a matter of fact, the fees are considerably lower?

Mr. SCOTT: No, they are lower than some schools, but they are not lower than Guy's.

The BISHOP of STEPNEY: I understood that the fees of the London for medical students were lower than Guy's, Bart.'s, Thomas's, King's and Middlesex.

Mr. SCOTT: A gentleman stated that to me yesterday, and I produced to him the Guy's prospectus and the London prospectus. At Guy's they have a subsequent clause by which they make a margin, if I may put it in that way, out of the student in later years. They hold it out that for five years a man can go into Guy's and go through the whole course and get his L.R.C.S., L.R.C.P., and the University degree, for 140 guineas. At London Hospital we charge 150 guineas. St. Bartholomew's is decidedly higher than London.

The BISHOP of STEPNEY: Then is there not a considerable amount remitted to the student by way of scholarships as a further means of attracting students at the London Hospital?

The WITNESS: That is so, but not from the hospital. People give us a hundred pounds or something of that sort; I do not know whether the College gives anything out of its own funds.

Mr. SCOTT: I believe part of the College grants cover some scholarships.

The WITNESS: At any rate, most of our scholarships are given by generous donors.

431. The BISHOP of STEPNEY: The hospital itself contributes nothing?—Oh, no.

432. To return for a moment to the point in which you said that, if you had to do away with a large part of your building and apparatus that now go to preliminary education, what remains, the clinical part, would ultimately cost you more than it does?—That is so.

433. We had a very eminent person before us yesterday who distinctly said that the purely clinical work in the later stage of the teaching which would be necessary for a good hospital would be comparatively small compared to the cost which the teaching of the general subjects involved?—All I can say is, I have given my firm conviction, and I am prepared to ask anybody who agrees with the view that you have just put to meet our Warden here and have it fairly argued out. It is a difficult subject. Only yesterday I said to one of the staff "I have not time to look into this; will you go down and get evidence one way or the other?" That was a man who took the view you do.

434. It is not my view. I was only quoting the view put before us yesterday?—He took that view, and he went down and went into the whole matter. When I saw him afterwards he told me he was absolutely converted to the view I have put forward just now. However, suppose I am wrong, or suppose that gentleman who gave the evidence is wrong; that is all a matter for the future. We have got to deal with the present. It has got to come. They are going to centralise this education; then, when the time comes, we may have to enquire which of the two views is right.

435. The CHAIRMAN: But your impression is that you would lose by it?—I am sure of it.

436. Lord WELBY: Before you pass to another point, I should like to make my mind clear upon this. You say that if you gave up the school you would be the losers. You would save on the one hand £1,800 a year, but on the other hand you would be an actual loser by fees?—Yes.

437. What is the amount of the fees now?—A man pays 130 guineas.

438. What does it come to a year?

Mr. SCOTT: A man pays 120 guineas in all, or 130 guineas by instalments.

Lord WELBY: But what does it come to in the year.

Mr. SCOTT: I am sorry I cannot answer that question directly.

Lord WELBY: But you can give us the average of over a number of years, because it is a part of your income.

Mr. SCOTT : They pay so much at the commencement of the first year, so much for the second year, and so much for the third year.

Lord WELBY : That does not affect the finances. The question would be what are your average receipts.

Mr. SCOTT : I can give you that from the balance-sheets. The receipts from fees last year were £7,757. 8s. 7d.

Lord WELBY : Mr. Holland's argument is that if the schools were abolished he would save £1,800 on the one hand, and lose £7,757 on the other.

Mr. SCOTT : No ; he would not lose the whole £7,000. I think Mr. Holland meant, if the preliminary and intermediate subjects were abolished.

The WITNESS : I was dealing with what it was supposed to centralise.

Lord WELBY : The question I put to Mr. Holland was, what would be the effect if the schools were abolished.

The BISHOP of STEPNEY : Mr. Holland's point was that, if the school as a whole were removed from any financial connection with the hospital, there would be an immediate gain of £1,800, but there would be a loss of something or other on the fees. Then my question followed that on a separate subject.

The CHAIRMAN : The hypothesis of the Bishop of Stepney was, transfer the preliminary teaching elsewhere, would there be a gain or a loss.

439. Lord WELBY : However, you say, Mr. Holland, you would lose more than the £1,800 that you would gain?—Yes, we should save the £1,800, and we should lose a great proportion of those fees. Of course they would pay some fees, but for a man who is learning his preliminary subjects at Cambridge now we get only 60 guineas instead of 130 guineas. Therefore a man who was doing his preliminary work at the University of London, say, would pay us only 60 guineas. However, I do not know whether we can keep off this : it is rather a big and difficult subject. I am dealing for the moment with the point of abolishing the whole school. It is very difficult to argue this from a money point of view, because I assure you the work of a big hospital like the London cannot go on without a school. Look at the question now of our residents, if I may go back for a moment. If we had no school we should have to hire these men from Liverpool or some of these endowed schools. We should not get enough for certain. I mean, in times like the South African war other hospitals like Poplar had great difficulty in getting men at all, and had to increase their pay very much. We could not get enough men to fill these positions ; we should not be able to get them in cases of illness or absence of the regular staff, as we can do now by just going to our medical school and getting qualified men at once. We should have to take the leavings of the other schools ; we should have to take men we knew nothing of. Where would the discipline of a great place like this be if we had to rely upon a heterogeneous lot of men who only came to us for just what they could get out of us ? Then, they would not necessarily come to the London or to Guy's ; they would go to where Mr. A. or Mr. B. was ; they would go to hospitals at which there would be men they knew. Now we can get our house surgeons or our house physicians as we choose. Why do they work for nothing, you say, when they can go and get payment elsewhere ? The answer to that is, because there is a school. It is the ultimate ambition of a man who comes to such a school to get a house physicianship, or a house surgeonship ; it is rather a disgrace to him if he does not get into one of these positions ; he is brought into touch with the most eminent men in his profession, and he qualifies himself for almost any position in the world.

440. The CHAIRMAN : It is an advantage to him for the rest of his life, I suppose?—Yes. Then the result of having a school, too, is that we really never have any trouble with these young men ; for instance, take matters that may occur between nurses and doctors ; such a thing

never occurs with us. We have a high tone in the school, the students would do anything for their Alma Mater. The *esprit de corps* of the hospital is as splendid as the *esprit de corps* of a University. All that would be gone if I had to go and get men from Liverpool, Aberdeen, and different places.

441. The BISHOP of STEPNEY: Then what would you say of University College, for instance, where they have a medical school attached to the hospital, but the financial operations are quite distinct, and the hospital makes no sort of payment to the school?—But that has come to an end I understand now.

442. It is going on at present, I think?—Then I understand it is coming to an end. The hospital now has got to build its own laboratories and its own clinical and bacteriological departments and what not.

The CHAIRMAN: Till the present time they have been going on without payment on either side.

443. The BISHOP of STEPNEY: Is it inconceivable that a medical school should exist, getting the enormous clinical advantages of the London Hospital, without being subsidised to the extent of £1,800 a year?—I think so quite. University is a very small hospital compared with ours. It would be quite impossible for us.

444. Taking it as established that the school confers enormous benefits upon your sick patients, is it inconceivable that a very fairly adequate school—perhaps not the school as you have it in your ideal, but a fairly adequate medical school—could be run in connection with the London Hospital without the hospital contributing an annual subsidy?—Why should you press me to do less good work for the sake of a wretched few number of pounds?

445. I am not pressing you really?—Why should anyone press it, why should we be content with an inferior school in the biggest hospital in England?

446. The CHAIRMAN: But the criticism is made. Is it not desirable that the finances of the two institutions should be separated; if you want a school, get subscriptions for your school, do not take subscriptions that are given for the hospital. That is the kind of way in which it is put; I do not say whether it is right or wrong; but when you see a place like University College carrying it into effect, the equation I was suggesting to you does strike one?—I understand that University College is very largely endowed, and therefore the school is a rich one, and it can afford to do all this for the hospital which a school not being endowed could not afford to do. I do not know the circumstances of a University. I only know that the arrangement has come to an end.

447. It has not come to an end because it has failed financially; it has come to an end because of an arrangement with the University of London?—I do not know the circumstances.

448. However, we take it that up to the present time the school has been supporting itself, and the hospital has been supporting itself?—I only know that we have failed to do so, and that in 1896 if we had not given this grant to our College our school would have come to an end, and we could not have done any good work in the place at all. I am sure I need not dwell further on the advantages of the school. Think what it is to the Staff to operate and work before a lot of young men, the keenest inquirers—men who, having no responsibility, are therefore the keener critics. I should like also to emphasise another thing. If I cannot make this grant my school comes to an end. If it is considered to be immoral to make this grant, we cannot go on. And I cannot get rid of these scientific men: they must be in the hospital, because we cannot get the best help for patients without. I have got here two instances of that sort which I should like to hand in, because it shows you the enormous importance of the clinician working in close touch with the man of science. The first is a statement made to me by Dr. Keith, our Professor of Anatomy, which well

illustrates the sort of work done at a hospital with a college attached; the other a paper written by Dr. Henry Head, F.R.S., showing how the London County Council feel the need of a school attached to their asylums, and pointing out how much better the work would be done for the patients if there were one. Whenever our doctors get into a difficulty they go over and meet one of the professors and talk over the case, and very often they get at some very great discovery and advance. Luckily one of these professors himself just lately has been suffering from consumption; they all put their heads together, and in this paper you will see the result; I need not read it now, but it shows perhaps the very greatest advance that has been made against consumption.

449. I think it would be going into rather too much detail to follow that up; we quite appreciate the advantage?—Then another point is this. Here are the County Council lamenting that they have not got a school in connection with their work for the insane, and saying that the work deteriorates in consequence, and what a great advantage it will be for everybody to have a school. I do not care to give my time and my life to work that is going to be bad work. We must try to progress; and I cannot go on without my school at the London Hospital; and I repeat that none of my subscribers object.

450. Unless you have anything to add, I think we understand your views?—May I ask you, Sir, in your leisure moments, if you have any, to look at Professor Osler's book on this subject. You, of course, know who Professor Osler is (handing a book entitled "Æquanimity and other Addresses"). I may just add one thing. At some hospitals they have large dental schools. For instance, at Guy's, the hospital gives much less to the school than we do, but they have a very large dental school which helps them enormously in money; that is a very lucrative asset. At the London we have not got a dental school.

[The Witness withdrew.]

The Witness has forwarded the following addition to his evidence:—

In my examination by Lord Welby I was pressed as to why the general rule did not apply in the case of hospitals, that the larger the business, so to speak, the cheaper it could be run, and I was asked also to explain why, though the "London" obtained a large amount of gratuitous service which the Great Northern Hospital had to pay for, nevertheless, the salaries and wages at the "London" were higher.

The amounts quoted were: the Great Northern Hospital, with 150 beds, spends on salaries and wages £23. 18s. 9d., whereas the "London," with nearly 700 beds, spends £41. 10s. 10d. per bed.

I have analysed the figures of this account at the London Hospital, and, with the permission of the Committee, would like to supplement my evidence on the point raised.

First, as to the general rule that a big undertaking ought to be run cheaper than a small. I submit that this general rule does not apply to hospitals. As Mr. Lockwood pointed out, if the comparison was restricted to expenditure common to both, called by him the "Ward-unit," the rule ought to apply, that is to say, a "sister's" salary might possibly be spread over more beds in a big hospital than in a small, the Matron's salary would certainly be spread over more beds, so also would the office salaries, and all such salaries which must occur, whatever the size of the hospital. If the salaries common to both the big and small hospitals were taken, the big hospital ought certainly to spend less per bed than the small.

But a big hospital like the "London" has many duties to perform which never fall upon a small hospital. Showing people round may seem a trivial example to take, but, as a fact, at the "London," two of our "sisters" are constantly employed, and often one of the clerks too. People come from all over the world to see the "London"; nobody, or comparatively nobody, calls to go over the Poplar Hospital, which is a

hospital with 100 beds, nor, I presume, over the Great Northern Central Hospital. Those who may happen to call can be shown over without any serious interference with the time or duties of the permanent staff.

A very complete Rontgen Ray and Radiographic department, which costs us £720 in salaries, has to be in existence at the "London"—no such department exists at a small hospital. At Poplar, for instance, we pay the London Hospital Radiographer a small sum when he is wanted.

The Finsen Light department, non-existent at any small hospital, costs the "London" the salaries of two "sisters" and thirteen "nurses," who do nothing else, and an engineer to see to the electric motors. The cost of these salaries may fairly be put at £400 a year.

Again, registrars and their clerks have to be paid for at the London Hospital (£404 per annum). At Poplar and other small hospitals they are content to register the patient's name and his disease. At the "London" a very complete record is kept, not only of this, but also of all diseases, and anyone wishing to study a certain disease can find there, concentrated, tabulated and indexed, the experience gained on every existing disease for many years past—a most valuable help in the treating of patients. Nothing of this sort is done at a small hospital, but they all benefit by the results of such work.

Again, the "London" pays £150 to the Pathologist, and £290 to post-mortem room assistants. If we were content at the "London" simply to discover the cause of death, as we are at Poplar, most of this could be saved. But we have 1,300 post-mortems every year, and, as far as we are able, every case is most carefully investigated, and we try to discover the cause of the cause of death, and how each part of the body is affected—work which must be paid for, and which is invaluable in the treatment of future patients.

£180 is spent in salaries in the clinical laboratory. There is no clinical laboratory at the Poplar Hospital, and I do not think any small hospital pays salaries for a clinical laboratory. But the result for the patients is most beneficial.

£2,184 is spent in dispensary wages, as we are a manufactory of medicines. We should save in salaries and wages if we bought our medicines, but our drug and medicine bill would go up very much. As a fact, our drug bill per bed is about the same as that of the Great Northern Central Hospital, though the numbers treated in the out-patient departments, where by far the greater proportion of medicines is consumed, cannot for a moment be compared. We have 279 out-patients to each bed occupied, as against 174 at the Great Northern Central.

We pay £600 a year to the staff who attend these out-patients; £80 to senior dressers (qualified) and £320 for clinical assistants, all owing to the great amount of work to be done in a given time, and not needed where the work is small.

Then situated as we are in close proximity to the manufacturing district of London, and close to the river with its docks and riverside workers, and having no other hospital, except Poplar, to help us to treat the great mass of poor population, we are obliged to have a very large casualty department open all day and night. At a small hospital, the house-surgeon does all this. In the salaries and wages under review, is included an amount of £600 a year to six casualty officers called receiving room officers. We actually take in, as new in-patients, 40 to 60 patients a day from this receiving room, and deal with 100,000 casualties there every year. The work of a small hospital cannot compare with this.

Again, at a small hospital, the purchase and distribution of the food is done by the secretary or matron, but, at the "London," we have to employ a steward at a salary of £300, and clerks to help him, costing £485 per annum = £785. These clerks are fully employed in registration of patients, with full details, etc., etc.; preparing diet books and checking diet boards; keeping receipt and expenditure of stores; compiling the

wages of "sisters," nurses, probationers and servants; paying weekly salaries to porters and others; answering enquiries respecting patients.

A small hospital can send out its washing or have a laundry on quite a small scale, but, at the "London," where we have to wash 48,000 pieces a week, a much larger laundry, in proportion, is needed. Take one item—90 white coats are soiled every day in the operating theatres alone. We get more patients through our beds than a small hospital. The average time occupied is 19 days, as against 24 days at the Great Northern Central Hospital. This involves more washing.

Then, again, the very size of a big hospital necessitates a considerable increase in salaries and wages.

The "London" covers eight acres of ground, and the wards are all served from one kitchen. But this means the employing of a good deal of labour in delivering these dinners. One block, containing 100 beds, is 200 yards away from the kitchen, even when the dinners have come down in the lift on to the ground floor. All medicines have to be sent over great distances, and so on. I do not think I need enlarge on this, it is too obvious.

In a huge hospital, too, a surveyor is needed and workmen under him to see to the repairs and maintenance of so large a building. The cost of this department with us is £2,900 per annum. If we had no such department, our "repairs" bill on our old building would be much higher. I think it would be generally admitted that the repairs on a big building (some of it 130 years old) are heavier in proportion than those on a small.

And, to sum up, all progress is expensive, and progress in medicine and surgery is only made at hospitals with schools. We are progressing, and we are doing duties which are not required of, or expected from, small hospitals.

Mr. LEWIS HERBERT GLENTON-KERR, called in and examined.

451. The CHAIRMAN: You are Secretary to the Great Northern Central Hospital?—I am.

452. How long have you been Secretary?—I have been there 11 years.

453. And before that?—I was for seven years at the Middlesex Hospital.

454. Which has a large school as we know?—Yes.

455. The Great Northern has not a school attached?—None whatever.

456. You have formed some opinion, comparing those two hospitals, of the advantages of having a school attached to a hospital?—Yes; I think that undoubtedly the possession of a school is an advantage to the hospital.

457. An advantage to the patients of the hospital?—I am not of opinion that the patients derive any extraordinary benefit from the existence of a school in connection with a hospital. There are reasons given sometimes which would lead some to think that it is not altogether an advantage, at any rate that the patients themselves do not always appreciate it. But I think that for the financial advantage of the hospital it is very desirable to have a school indeed. The fact that a number of young men are turned out every year and go all over the country and all over the world, you may say with a keen interest in the hospital which trains them, is as a rule reflected in the receipts of the hospitals. I think a glance at the figures will show that. For instance, the receipts from annual subscriptions are larger in hospitals that have schools than in those that have not. That seems to me to be an important indication that the presence of a school creates a wider interest in the hospital, and the hospital receives a larger income.

458. That is a purely financial benefit?—A purely financial benefit.

459. Is there no other benefit?—I do not think that the possession of a school is necessary in order that medical officers may be obtained. My experience is against that.

460. Medical officers, of course, can be obtained without a school, but do you mean that you can get as high class medical officers in a hospital that has not a school?—Yes. I think so. There are a very large number of provincial hospitals at the present moment, and the number is increasing every year, at which good work is done although there are no schools. It is the ambition of men to come up from these schools to London, and practically the only hospitals open to them are the hospitals without schools. So that really the hospitals without schools have a selection which is in my opinion quite equal to that enjoyed by hospitals with schools, no matter how large or of what standing.

461. You are not a medical man?—No; I am not.

462. Then you are probably not in a position to give us any evidence with regard to the medical treatment of patients?—No. That is a matter into which I could not very well enter; but I do not know whether there is any evidence existing to show that the patients at hospitals with schools have any better treatment than patients at those without schools. There must be some evidence if the results are different.

463. I suppose in hospitals without schools there is not much scientific work done in comparison with that done in hospitals having schools?—No, that is so; although at my hospital we possess a pathological department and we employ a pathologist to whom we pay a salary. He is a man of standing.

464. You have a pathological department you say?—Yes.

465. Have you a bacteriological department?—Bacteriology is also investigated.

466. By the same man?—Yes.

467. You have not a special department?—No. Of course we cannot pretend that the work done at our hospital is anything to be compared with that done at the large hospitals.

468. You have 144 beds?—159. 144 is the number usually occupied.

469. Then you have a clinical laboratory in which observations are made on the excretions and so forth?—Yes; the whole of this work is done by our pathologist.

470. One man is found sufficient?—Yes. The medical officers are only too ready to help him, and they derive a good deal of benefit from that; they conduct a great many observations on their own account.

471. The BISHOP of STEPNEY: Would you tell us what is done in your hospital in the way of recording cases. I presume you have salaried officials who do that?—Yes.

472. And that is done in a hospital without a school?—You mean in regard to noting down the cases in the wards?

473. Yes?—In our hospital it is the duty of the house surgeon and the house physician to keep notes of the cases. We have no clerks or dressers as they have in hospitals with schools.

474. Lord WELBY: The physicians and surgeons have to keep the notes themselves?—Yes.

475. They have no assistance whatever?—No.

476. The BISHOP of STEPNEY: Is there any record kept of interesting cases?—Yes, we have written records bound up annually in volumes and indexed, and we have them in existence since the hospital was transferred to Holloway in 1887.

477. If any man came in who had been in the hospital some years before you would know his record?—Certainly.

478. Do you let other hospitals or other physicians know of the past records of any patients that you have kept?—Yes. It is not an uncommon thing for us to receive an inquiry from another hospital, "So-and-so says that he was at the Great Northern Hospital at such and such a time; kindly look up his case and let us have the notes."

479. The records go back how long?—In our case since 1887. The hospital did not exist in its present form previous to that.

480. The CHAIRMAN : Those records are kept by the resident house surgeon and house physician?—Yes.

481. The BISHOP of STEPNEY : Then with regard to the dressings. Are the ordinary dressings done by the nurses with the assistance of the resident staff?—Yes, to a very large extent, far more so, of course, than in any hospital with a school. We have only nurses to do the dressing, unless the house surgeon does it himself, but usually he has a great deal to do and will only do it in exceptional cases.

482. Do you pay the nurses a higher salary because their work includes the dressing?—No; the scale of salaries I am sorry to say at the Great Northern for nurses is low. They come for the first year without salary, and they pay us an entrance fee of 10 guineas. Then for the second year they get £20 and the third year £25, with, of course, board and lodging and uniform, and we have no difficulty in getting nurses on those terms.

483. Efficient nurses?—Absolutely efficient. I think I am right in saying that the Great Northern nurses are well known in London as being extremely efficient; many of our ladies obtain excellent appointments elsewhere.

484. Is any instruction given to the nurses by the honorary or resident staff in these special duties of dressing and so on?—Yes, we have a very comprehensive system of instruction for nurses; there are lectures on surgical and medical nursing given by two members of the honorary staff, a surgeon and a physician. The sisters, who are all trained nurses of considerable standing, and possess first-class certificates, instruct the nurses in the wards. The assistant matron, who is also a trained nurse, holds weekly classes, and there is an annual examination of the nurses to ascertain what they know.

485. The CHAIRMAN : Conducted by whom?—By two members of the honorary staff.

486. The BISHOP of STEPNEY : How many salaried officers have you in the institution?—We have three house-surgeons and two house-physicians, a casualty officer, and a pathologist—that makes seven.

487. And then the nurses?—Yes.

488. I observe that the cost per bed for salaries and wages is rather low, £23. 18s. 9d.?—Yes.

489. How do you account for that; is it partly because you pay the nurses less than most of the other hospitals do?—I think that has something to do with it, but it can hardly account for the very large difference that exists. I do not know sufficient about the state of affairs at other hospitals at present to be able to form any idea why the difference exists. We are satisfied that everyone is paid a reasonable salary at the Great Northern; No one is really underpaid.

490. You hinted just now that you thought the nurses were not paid as well as they might be?—Well, I think the system by which they are required to pay us an entrance fee is rather hard upon them; apart from that, the salaries they get in the second and third years are not unreasonable.

491. Lord WELBY : Then on the whole you are not dissatisfied with the results obtained at your hospital, where the cost per bed occupied for salaries and wages is as low as £23 18s. 9d.?—No, except on the point I mentioned with regard to the nursing staff; as I said, that is a hardship, but apart from that the salaries are on a fair and reasonable scale.

492. The BISHOP of STEPNEY : Could you tell us—perhaps you would rather not, but it would be helpful—whether you feel that the work of recording a new case and of dressing is done very much more carefully and thoroughly in a hospital where there is a school than it is now in your hospital where there is no school?—I do not think that is so. The

records of these cases are very frequently taken by young men who have some difficulty in conveying their thoughts into writing. I have seen notes kept by clerks in the hospitals which really may be called disgraceful. The house surgeon, of course, is a trained man.

493. The CHAIRMAN : Does not the surgeon or physician look over the notes made by the students ?—Yes, they do, I believe.

494. And correct any inaccuracy ?—Yes ; correction goes on, but I cannot say I am of opinion that the notes on the whole are better kept in a hospital with a school than they are at a hospital without a school, if the officers responsible for the work look after it.

495. The BISHOP of STEPNEY : Would you say the same with regard to the dressing ?—I am strongly of opinion that our dressings are done as well as in any hospital in London.

496. The CHAIRMAN : We have been told that there is a very marked difference in the interest taken in cases, and the thoroughness with which cases are investigated, in hospitals that have schools and in hospitals that have not schools. Have you any impression on that subject ?—I do not think that that is so. I think one of the most remarkable things in connection with hospitals without schools is the extraordinary interest taken in the patients by the staff. It is true there are not the same inducements to them, perhaps, to go so fully into the details in each case as there would be if there were a class of students looking on ; but it is a remarkable thing, at our hospital, the amount of time that is given by the staff, and the really intense interest that is taken in each case.

497. In cases where daily observations have to be taken of the condition of the blood and the condition of the excreta and so forth, is not that work done much more efficiently where you have a number of young men who can do it than it is possible to do it where you have one man who does pathological and bacteriological work as well ?—I can only speak from my own experience, and I know that all that sort of thing is done very carefully, and practically to the same extent as at any other hospital. It is done by the nurses and the resident officials.

498. The nurses are not competent to make that class of observation, are they ?—Well, most nurses after three years' training are almost as competent to make examinations and tests of urine and so forth as students.

499. They would not do blood tests, and things of that kind ?—No ; that would be for the pathologist.

500. Lord WELBY : You are, I gather, on the whole satisfied with the results obtained in a hospital without a medical school, allowing—perhaps you might be disposed to allow—that certain advantages might be derived from the medical school ; but I suppose from what you have said you would put a limit on that advantage, and you would not think that it is so great as to justify such a very much higher cost per bed as has been brought to our notice in other hospitals ?—Quite so.

501. Where you have a limited income to deal with and you want to make the very best use you can of that limited income, there should be some attention paid to this point—whether the result of very largely increased cost per bed gets a fully corresponding advantage ?—Quite so. I think it is well known that the cost of hospitals with schools is considerably higher than the cost of those without schools, and I am of opinion that it is directly due to the fact that students are educated at the hospitals.

502. The CHAIRMAN : I should like you to go a little more into detail upon that. How is that expense incurred ? We start with this : that the vast amount of work which has to be done by paid labour in your hospital is done by unpaid labour in a hospital having a school ; yet the expenses of the latter schools are higher ?—I think there is a great deal of waste in the hospitals that have medical schools—over-dressing, for instance.

503. That is a very small item, is it not ?—Well, it is one item. If accounts were examined, the principal difference, I think, would be found to exist in the provisions. The difference in the total amount spent on

provisions in hospitals with schools and hospitals without I think is rather large, in many cases altogether accounting for the difference.

504. I do not see why the presence of the students should induce the cook to send up a better dinner?—It is not clear without an explanation. I think it is due to this fact: that the staff feel called upon to feed their patients on a more expensive scale; they try all sorts of dainties. The extras in large hospitals will amount to a considerable sum. At the Great Northern Hospital, fowls, which are an extra, are not frequently ordered; the ordering of fowls is discouraged unless absolutely necessary. At one general hospital with which I am acquainted, the amount spent on fowls per week is between £6 and £7; they have just double the number of beds we have; our expenditure throughout the year might be 7s. 6d. a week.

505. The BISHOP of STEPNEY: Would you say there is much waste incurred in actual surgical and dispensing expenditure where there are students?—That is rather on the points of surgery and dispensing; I do not know that there is any considerable difference on those points, but I think the existence of a school tends to put up expenditure.

506. The London Hospital, for instance, in regard to surgery and dispensing, costs per unit, taking the out-patients into consideration, £7 11s. 11d., and the Great Northern £7 6s. 3d.; there is not any very great difference there?—No, I do not think there is a considerable difference there.

507. The CHAIRMAN: To go back to your fowls, I do not understand that the students order the fowls?—No.

508. Then what is the connection between them?—The staff order expensive extras, such as poultry, in order to demonstrate to the students personally the advantages of a varied diet; I will put it in that way; and that undoubtedly adds to the expense of the hospital.

509. Now take the question of medicines. It has been suggested to us that medicines are very much more expensive in the case of hospital schools where younger members of the profession like to try experiments with very expensive medicines which are ordered when they could be done without. Does the student order the medicines?—No; the students do not order medicines, it is true, but the resident officers frequently do.

510. Then it is the presence of the students that inspires the medical officers to this very great expenditure?—I think so.

511. The BISHOP of STEPNEY: Do not these items of the cost of medicine come in the uniform accounts, under the head of dispensing and surgery?—Yes.

512. On those returns there is only a difference of 4s. between the two hospitals?—Yes.

513. Lord WELBY: Speaking about provisions, your argument appears to be rather borne out by the table that is before us. For instance, take the London Hospital, which has 776 beds; the cost per bed for provisions is £31. 17s. 10d., while the expense of yours is £20 13s. 6d.; that is a considerable difference. I do not want to press this point too far in the case of hospitals, but you generally expect that where there are a great number of people to supply, the cost of provisions is rather smaller per head?—Quite so.

514. The London Hospital had 676 beds and yours had 144 beds occupied in 1903; the difference is very large, and on the reverse side to that which one would generally expect?—Quite so.

515. So far that seems to support the view that you have put forward, that, for some reason or the other, in the great hospitals with schools attached, the cost of provisions is high?—Yes.

516. It is a very tremendous difference, and there must be some reason for it?—No doubt.

517. I presume you could not be criticised as underfeeding your patients?—No; I never heard that criticism at all?—I think the patients are pretty well satisfied.

[The Witness withdrew.]

Mr. CHARLES BARRETT LOCKWOOD, F.R.C.S., called in and examined.

518. The CHAIRMAN : You have been connected with the Great Northern Hospital ?—Yes ; I was on the staff of the Great Northern for many years.

519. And you are now on the staff of St. Bartholomew's ?—Yes. I was concurrently on the staff of the Great Northern and St. Bartholomew's for a year or two. I gave up the Great Northern, and now I am only on the staff of St. Bartholomew's.

520. Therefore, you have had experience of hospitals with and without schools ?—Yes.

521. Then you can give us, I have no doubt, some light on the subject. I find that the cost of salaries and wages per bed in the Great Northern is £23. 18s. 9d., in the London £41. 10s. 0d., and in St. Bartholomew's £44. 0s. 8d. Take St. Bartholomew's, with which you are acquainted. Can you give us any explanation why the salaries and wages are so much higher in the case of the St. Bartholomew's than in the case of the Great Northern ?—I think simply that St. Bartholomew's is a hospital which has been so fortunate as to have endowments, which has enabled them to pay their medical officers something for their labour. The Great Northern is a very poor hospital, and could not do it if it wished.

522. Take the London Hospital, where the cost is £41. 10s. per bed. Though that is not so high as St. Bartholomew's, it is very much in excess of the Great Northern ?—The London is a great hospital, with prestige, and I have no doubt that the authorities of the London Hospital will be actuated by the same motives as the authorities of St. Bartholomew's, and would wish if they possibly can do it to make some return to their medical officers for their labour.

523. But what strikes me is the fact that a greater amount of voluntary labour is done in the case of the hospitals with schools, and there is no such labour done in hospitals without schools, and yet in spite of all the unpaid labour the salaries are greatly in excess ?—I do not think I follow that.

524. Take the case of the Great Northern, all the medical work is paid for, is it not ?—No ; the honorary officers receive no salaries.

525. I am speaking of the work in the hospital ?—You are referring to what we should call the junior staff of the hospital ?

526. Yes.—I am quite aware of that.

527. There is no voluntary labour there ?—That is so.

528. At St. Bartholomew's, there is a great amount of voluntary labour ?—Yes.

529. Therefore we come to this remarkable conclusion ; that, in a case where the whole of the labour is paid for, the cost is much less per bed than in the case where the greater portion of the labour is voluntary ?—I should say this, that in a place like St. Bartholomew's the labour is supplied on a much more lavish scale. You are not quite correct in what you say concerning St. Bartholomew's. If you will allow me I will tell you how the junior staff is arranged. First of all as regards each surgeon, like myself (and there are five), he has a senior house surgeon who works for six months ; he is lodged by the hospital, and during the six months he receives £40 to provide himself with his board. I also have a junior house surgeon who is not resident ; he comes early in the morning and leaves late in the evening, and he receives £12 10s. for his six months' work and boards and lodges himself outside. Then in addition to that, at St. Bartholomew's there is a staff of anaesthetists, for instance ; we have two anaesthetists who are in the West End, who are both salaried officials ; but in addition to that we have two anaesthetists in the hospital who receive one, I think, £100 per annum, and the other £90. In addition to that, at St. Bartholomew's the obstetric staff have their senior house physician and junior house physician. In addition to that, the ophthalmic staff have a House Surgeon, and they all receive emoluments besides.

530. Then there is very little unpaid labour in St. Bartholomew's?—There is an enormous amount of work done by the senior students who become dressers and clerks. The kind of labour that they perform would be exemplified by the kind of labour which they do for me. I do not know how many patients the paid officials could themselves look after (I am speaking now of the senior and junior house-surgeon that I have) but I do not think they could very well look after, if they were left to their own resources, more than 20 beds each. They are able to look after more beds and to perform their work more efficiently because they have the assistance of the dressers to get up the case for them and the case is then put before me. The case is got up by the dresser, it is then placed before the house-surgeon who assists, and then put before me. Of course, as in your profession, you are aware of the enormous saving of time that may be effected by juniors in getting up a case for you. Moreover, the dressers and clerks perform the function of keeping elaborate notes. That is of the very greatest importance to the patients, because I do not suppose I ever go down to the hospital without seeing some patient who is returned for examination, or for further operation, or for enquiry, and the first question is "Have his notes been looked up?" At St. Bartholomew's it is the rarest possible thing to find that points you wish to know have not been properly noted. Now, at the Great Northern Hospital, obviously the surgical work was done in the same way as at St. Bartholomew's, because it was done by the same man: the house-surgeon is as good as you can possibly wish, and as good as anyone at St. Bartholomew's; but the thing one missed was the great assistance which the senior student is able to give you in the working up of cases and the proper record of notes. It is true that they have surgical registrars—I have been one myself—but the surgical registrars cannot without enormous labour and proper remuneration take the voluminous notes now required in surgical work.

531. Then it comes back to this, that a considerable part of the labour at St. Bartholomew's, is unpaid, whereas at the Great Northern there is no unpaid labour?—That is so.

532. Then I come back to my inquiry, how is it that the cost at the Great Northern, where everybody is paid, is less than it is at St. Bartholomew's, where only some persons are paid?—I heard part of Mr. Glenton-Kerr's evidence. The presence of the medical students provides the element of publicity. People who have to perform their labours in the light of day and with everybody looking on would naturally try to perform them in the most perfect manner that was possible, and I should not doubt that in a hospital the presence of dressers and numerous house surgeons naturally tends to put up the diet. It is difficult to explain how it comes about—it would not affect my mind: I should give a person whatever I thought right, whether at St. Bartholomew's or at the Great Northern; but these young persons will frequently say to the surgeons, "Cannot he have a little wine—cannot he have a little minced fowl," and so on. In that way you get an almost inappreciable putting up of the diet list, which mounts up in the long run.

533. I was rather keeping to salaries and wages, and was not dealing with the question of diet, which is a different question. I was on the point that the payment per bed for salaries and wages is less where the whole of the labour is paid for than it is where a great portion of the labour is unpaid?—I have already answered that by saying that there is more labour.

534. More labour is done?—More work is done.

535. The BISHOP of STEPNEY: You mean, besides the greater amount of voluntary unpaid labour, there is, where there is a school, a greater amount of paid labour?—Yes.

536. The CHAIRMAN: Does that increase the benefit to the patients?—Yes, I think they get better done.

537. They get the money's worth?—I think so.

538. Lord WELBY : I suppose you would admit that there is a limit to that, would you not : that is to say it is a point to be carefully watched ?—Oh, very.

539. I am putting this upon the evidence that has been given before us to-day. It is represented to us that in one hospital if the school were taken away the cost per bed in salaries and wages would be raised to £54 per bed, as against the Great Northern £23. Now I quite follow your view that more labour is done, and therefore better attention is given to the patients in that way ; but, allowing for that, and allowing for a certain increased benefit from it, I suppose you would admit, as I said at the beginning, that there must be a limit to that ?—I quite agree.

540. And it would be a question whether such an expense of £54, as against £23, is not somewhat beyond what is necessary. I am not asking you whether £54 is excessive, but, from the financial point of view, whether in the interests of education, as well as in the interests of efficiency, careful watch ought not to be kept on such expenditure ?—I quite agree. I do not know whether this point has been put to you. Take a hospital like St. Bartholomew's. At the Great Northern the senior officers are purely honorary officers ; at St. Bartholomew's each surgeon and physician receives an emolument. That, of course, puts up their cost per bed for salaries very much.

541. The BISHOP of STEPNEY : May I take it that, as a rule, where there is a medical school attached to the hospital, those who would be usually called the honorary staff are, because they are professors and teachers, paid a certain emolument ?—They are where the hospital can afford it.

542. The CHAIRMAN : I rather think I interrupted you in saying something about the relative cost of diet which you were going to explain to us. You were referring to the fact that the expenditure on provisions was rather higher in some hospitals than in others ?—I think it would naturally go up where there is a school. I will tell you where you would probably find the diet is less per bed—in cases like an infirmary. I will give a fancy name for the moment ; say the Vauxhall Infirmary (I believe there is no such infirmary) ; there the diet scale is altogether different, and the cost per bed is very much less. I have always understood that the Guardians or those in authority did not care to have students visiting, or to have honorary officers going in and out, because they thought it would put up their cost per bed at once. I think they are right. I think if you had that element of publicity it would necessitate everything being done on a little more elaborate scale.

543. The BISHOP of STEPNEY : May I return to the point of salaries and wages. Noticing the difference between St. Bartholomew's and the Great Northern, would you say that there is a very considerable difference in wages at St. Bartholomew's—by wages I mean, as distinguished from the salaries of the medical officers ?—Yes. I think that the presence of medical students in a hospital would probably necessitate more scrubbers and cleaners. There is more traffic, and it would necessitate more cleaners in the wards ; the students go into the wards say at 10 o'clock, and necessarily six young gentlemen walking about there necessitates a clearing up ; there is also necessity for more polishing of floors ; then I think it would necessitate additional porters at the gates. It would naturally tend to put up the wages.

544. The presence of a school will add to the cost of labour ?—I think it will add a little to the cost in wages.

545. But the main difference would be in the salaries of the medical staff ?—It happens to be so at St. Bartholomew's.

546. Lord WELBY : To a certain extent would you not expect that in a hospital where there are a large number of beds the expenditure per bed in the salaries would be rather more moderate, in fact, than where there is a smaller number of beds. I am putting what is a very generally understood rule, that great establishments cost per head something less than small establishments. But that does not seem to be the case with

hospitals?—I am not quite sure of that. I do not quite know whether in this particular instance that is a correct method of reasoning. A hospital, after all, is not a big establishment, it is an aggregation of ward units; and the more just way of working out the whole question would probably be to estimate the cost of each ward unit.

547. The CHAIRMAN: You mean the ward is a unit which provides its own accommodation and food and so on separately?—Just so, and the staff of nurses. Then you must remember, at a place like St. Bartholomew's they have a great many professional nurses; they have got a female staff who are almost in the position of students, they are female students; they have come to learn to be qualified nurses. It would be hardly just to put down a question of increased expenditure say at a place like St. Bartholomew's to the male element entirely.

The BISHOP of STEPNEY: I forgot to ask this question when Mr. Holland was before us. At the London Hospital there is a staff of trained nurses?

Mr. SYDNEY HOLLAND: Oh yes, very large indeed.

The WITNESS: Perhaps I may discuss the female element a little more. At St. Bartholomew's we have matrons, and assistant matrons, and night superintendents, and sisters and nurses, all on a lavish scale. I am sure that if it was diminished you would find you would have to increase the hours and labour of these young women; you would have them becoming ill and breaking down; there would be cases of consumption amongst them, and all sorts of things. With a large female staff you must have at the head of it highly competent people; you are quite aware that you have to pay for ability, and I think you would probably find that in a large hospital like St. Bartholomew's you would have to pay to get an exceptionally able woman to look after it all. I think you will find that the matron at St. Bartholomew's gets a very much larger salary than, say, the matron at the Great Northern.

548. The CHAIRMAN: Would she get a larger salary if you take the total sum spread over the whole number of beds. At St. Bartholomew's the matron is the superintendent of a very large establishment, and you would expect to have to pay a larger salary there, but if you spread that by way of average over the whole number of beds under her it might be smaller than the salary paid to the matron of a smaller establishment?—That would be true if in addition to that she did not have a more lavish staff below her; I use the word "lavish"—perhaps it is not a perfectly correct term, but what I mean is this: For the best nursing work you want an abundance of nurses; their hours must not be too long; they must be exceedingly well fed; they must be very well looked after; they must be capable of being replaced; and for night work an abundant supply is required. There again, you come to the same point, because with a staff like the staff of the London or St. Bartholomew's, with the house surgeon and the dressers working under them, there is complete publicity, and they want everything of the best.

549. Publicity costs a lot of money?—It is very expensive, yes.

550. When you say "lavish," you do not mean to criticise it as being beyond what it ought to be?—Not beyond what it ought to be, but up to the highest standard.

551. The BISHOP of STEPNEY: Would you say that the cost per bed in the way of salaries and wages and the like, which would vary with the average number of days on which each patient was resident in the hospital, would be cheaper where the patient stayed a long time than in a smaller hospital where he would stay only a short time?—I do not think you are quite right there. If you were asked to admit into the Great Northern a very heavy case that wanted an enormous lot of dressing, and which was obviously going to be in the hospital for six months—I have cases in my mind which wanted elaborate dressing twice a day, which wanted special food, special wine, and special diet—they would probably

say : " Really, we cannot take this man into the Great Northern ; he will occupy a bed for six months ; it is not quite just to allow him to have a bed in this particular hospital for so long, when it might be used say for six other cases ; " but at St. Bartholomew's, where there is an abundance of beds, and abundance of help, and there has hitherto been an abundance of money, you would say : " Well, it is a horrible case, it is going to be in a very long time, but I think we ought to take him in and do our best for him. "

552. We heard evidence this morning that at Poplar they would take a case and let it stay in for any amount of time, whereas at the London Hospital, where there is a school, they could not afford to give him accommodation for such a long time, and must send him away. You say that the difference between a hospital with and a hospital without a school is just the reverse ?—No, I am taking St. Bartholomew's and the Great Northern. That is the way in which I should feel myself about the two places.

553. The CHAIRMAN : I suppose St. Bartholomew's is so rich that it can afford to take in these cases ?—It has hitherto been well enough off to afford it. I do not think the long cases are cheap cases ; on the contrary I should say they are often very dear cases.

554. Lord WELBY : I understand you to say that, good as the work is that the Great Northern has done, and sufficient as it may be, speaking generally, still it is not quite up to the mark, owing, of course, to the fact that it has not had the means ; it would mean much larger expense, which you give reasons for, and would have to be what you describe (with the necessary qualification) as "lavish." Does not that lead one to the conclusion that the expenditure at the Great Northern cannot be sufficient for efficiency ?—When I was at the Great Northern they never refused anything that I required in the way of appliances or dressing or food, but you had always the feeling that you had got behind you a poor hospital, and, therefore, the patient had better take what was quite good enough for him, but not quite so nice for him.

555. You had a limited income which you had to make the best use of ?—Exactly.

556. But in the case where there is a large income—I will not use the word "lavish"—does not it rather lead up to the idea that in those cases the expenditure may be more than is necessary. I ask this question with a view to this : whether, with the money available for the sick poor of London, it is desirable that it should be laid out, there being a limited sum and there being complaints that it is not sufficient, in the best manner that it can be. With the bigger hospitals, as we see, there is large expense under the head of provisions and salaries. Is there not a danger to guard against of an expenditure being incurred which does not make the very utmost use of the funds that are available ?—I quite agree that it is a danger which has to be guarded against and ought to be guarded against by the lay authorities. The way it is guarded against at St. Bartholomew's and the Great Northern is by the House Committee frequently drawing attention to it. For instance, at the Great Northern, when I was on the staff, I had an intimation from the House Committee that my expenditure on alcohol was so much, could I reduce it, and I endeavoured to do so. At St. Bartholomew's we received, not long ago, an intimation from the authorities that extras were being used on too large a scale ; that was all gone into, and that is down now.

557. Still there remains the fact of these very considerable discrepancies between the non-schooled hospitals and the schooled hospitals under these headings ?—Yes, and I have given you such reasons for that as occur to me.

558. The CHAIRMAN : I should like to ask you one general question. You have been connected with two hospitals, one with and the other without a school. What indirect advantages do you say are derived by the hospital from the presence of a school ?—Indirect advantages ?

559. Or direct—what advantages I will say?—I think it derives direct advantages. I believe I am correct in saying that the students who have been educated at Guy's and have passed out have recently collected a considerable sum of money for the help of the hospital. I believe that is a correct statement. The students who have gone out of St. Bartholomew's are now engaged in collecting a sum of money for the building of the pathological department and they have already done something. Those are obvious and perfectly direct advantages. Another advantage is that they go everywhere and they often assist in diverting money towards the hospital to which they have belonged.

560. A larger number of people who are interested in assisting the hospital pecuniarily?—Yes. Then another indirect advantage is this. I suppose you must take it as a fact that one of the attractions of medical men to the staff is the fact that they have students there to afford them the element of publicity, such as a man at the bar will have in work at the Courts of Law.

561. You mean that medical men prefer hospitals where they have pupils, because it means a larger number of persons becoming cognisant of their ability?—Certainly; it is the element of publicity.

562. And you get a better class of medical men at hospitals with schools than at hospitals without?—Yes, that goes without saying.

563. The last witness told us that hospitals without schools have the pick of the men who desire to come from the provinces up to London, many of them extremely able men, and men who would not attempt to get into the hospitals with schools, but are very glad to get places in hospitals without schools, and in that way the hospitals without schools get a very large supply of good men?—If you cannot get what you want you must take what you can get. I have friends at hospitals without schools, and friends at hospitals with schools, and they will all tell you at once that their ambition in life is to be on what they call a teaching hospital. Every able man likes to teach.

564. Lord WELBY: In the teaching hospitals they have the pick of the basket, so to speak?—I am sure they do.

565. The CHAIRMAN: Then your answer as to the benefits derived is that the presence of students assists financially and it also assists in getting a higher class of men?—I have given you an instance of direct financial assistance; it is small, but there it is.

566. The BISHOP of STEPNEY: May I ask a question on the same point of the comparison of the two classes of hospital. Can you compare at all the assistance which you get from the pathological work in the laboratory at St. Bartholomew's with the pathological work that you get at the Great Northern?—I am speaking from memory, but I am almost certain I am right in saying that when I wanted pathological work done at the Great Northern I had to have it done elsewhere; they had not got then a pathological laboratory, and they had not got a pathologist. I do not know whether you observed that at St. Bartholomew's the hospital pays a large sum, £300 a year, to its pathologist. It has to pay him that, and it will have to pay him very much more in the future, because a man who devotes his life to pathology receives no emolument outside.

567. When you were at the Great Northern was there a pathologist?—There was a pathologist and registrar, but he was not, like the man at St. Bartholomew's, devoting his whole life to that work.

568. Speaking generally from what you know of the two hospitals, hospitals with schools and hospitals without schools, is there any comparison between the assistance which the staff derives from a hospital where there is a pathological laboratory, and one in which there is not?—If I went back to the Great Northern now they would have to provide me with a first-class pathologist, whom they would have to pay highly, and a first-class pathological department, or I could not do my work. I am speaking of myself personally. That is my personal opinion.

569. Lord WELBY : And they have not got that now ?—I cannot tell you ; they had not it when I was there.

The CHAIRMAN : We had evidence this morning that they had one person who did the whole of the work.

570. The BISHOP of STEPNEY : Speaking generally, you say undoubtedly the assistance given by the pathological laboratory in a hospital where there is a school must be much greater to the staff than the assistance given in pathology in a hospital without a school ?—Much.

571. The CHAIRMAN : Do you think that the patients are better treated and that more recover in a hospital with a school than in a hospital without ?—That is rather a matter of statistics. I do not think there would be very much in that.

572. Suppose there were no persons to be benefited like medical students, and no object to be pursued like that of knowledge, and that the only object in life was to assist these unfortunate people who are sick, is there any difference between the two classes of hospitals ?—Yes, I think it would work out in this way. It must be obviously better for the human being to have a scientific diagnosis made of his case before he has a scientific operation performed. If you went into statistics you would find over a large series there would be a slight saving in life with the more scientific treatment. On the other hand the more scientific men may be dealing with a much more severe class of cases. May I make one other point, as you have said so much about the Great Northern ? When I was at the Great Northern they had not got an elaborate and well equipped electrical department. That is, again, an expensive department to run. It is essential to me as a surgeon, because I have every fracture case photographed as a matter of course, and it may be photographed more than once during the course of the recovery ; in many cases tumours have to be photographed. We are continually sending up to the electrical department. Many cases require subsequent electrical treatment.

573. The BISHOP of STEPNEY : Would you say then that the presence of a school attached to a hospital was a great inducement to the hospital to get such treatment as the electrical treatment you speak of and other new discoveries for the benefit of the hospital ?—Yes. I may put it in this way, if you will allow me. Most hospital authorities have begged the question, and assumed that medical students and schools are of great use to them, and if they wish to attract them they must have all their departments up to the mark, or they do not get the students.

574. Then indirectly that confers a benefit on the patient ?—Great ; for instance, you could put a senior student on to apply electrical treatment to a patient for half an hour or three-quarters of an hour, whereas you could not put the other officers to do the work ; their time is more valuable and expensive.

575. The CHAIRMAN : In obscure cases you would say that the benefit of the scientific appliances of a large hospital are very important ?—Yes, and, of course, in hospital practice such a vast number of cases are obscure. They are naturally sent to a place which is elaborately equipped like St. Bartholomew's or the London, because they have got appliances and they have got the staff.

576. The BISHOP of STEPNEY : Is there any difference that you would notice, according to the district from which patients came, between the two classes of cases ? Were the persons who came to the Great Northern, for instance, apparently persons from the locality, or, at any rate, London patients, or were they more frequently country cases ?—I think the proportion of country cases coming to the Great Northern was less. The whole of the question was gone into some time ago, because some member of the Committee wanted to find out the benefits from the hospital to patients in the immediate vicinity of it. It would naturally be disastrous for the medical staff there, the honorary staff, to have their reputations merely confined to the district of Holloway, and they proceeded to refute that, and they did refute it in this way. They showed conclusively

that the Great Northern got more legacies outside the district than inside it.

577. But you would say generally that where there was a school attached to a hospital there was a larger proportion of cases which came from all parts of the country?—I was going on to say that at St. Bartholomew's the old students continually send up patients to their former teachers?—So that a large part of the extra benefit which is given to patients where there are schools falls upon other than the sick poor of London?—Doubtless. I am taking St. Bartholomew's as more than a mere London hospital.

[The Witness withdrew.]

The Honourable SYDNEY GEORGE HOLLAND recalled and further examined.

579. The CHAIRMAN : I think you want to say something further to us?—I suppose I may not cross-examine the last witness?

580. Oh, no. I understand you wish to add something to your evidence?—This last gentleman alluded to an apparent discrepancy between Mr. Lockwood and myself about a case being taken in at the Poplar Hospital that would not have been taken in at the London Hospital. What I meant by that was this. There are, of course, many cases which would be taken into the London although they are going to take a long time, because we are able to do them good. My point was that in a case of a broken spine, which we kept in at Poplar for two years, although we could do no good, we should not have kept him in at the London. At Poplar we could keep him, because there is not quite the rush on the place that there is in a hospital like the London.

Mr. LOCKWOOD : I put it that you might utilise the place better by putting a greater number of people in the beds.

581. The BISHOP of STEPNEY : As Mr. Holland is here I may take the opportunity of putting to him this :—With regard to your grant which you pay the medical school from the hospital funds, which I think amounts to £2,588 a year, do you pay that over to the general expenses of the medical school, or do you allocate it for any particular purposes in connection with the school?—I do not allocate it, but if I get into trouble with this Committee I shall be very happy to allocate it, because I could allocate the whole to work done in the hospital. In the clinical and laboratory work there is such an immense amount of work done in the hospital by the school which would have to be paid for if it was not done in that way. I could quite easily alter my accounts, if necessary, so that we should give nothing to the school at all. I could do it by paying the staff, if you like.

582. But at present you do not allocate it?—No.

583. It is not given specifically to salaries and wages or anything like that?—No.

584. Then another question I want to ask is this :—Do all your teaching staff, even those who teach the preliminary subjects, work also in the hospital, and give their services to the hospital?—No, these scientific men, Doctors Keith, Bulloch and Leonard Hill, do not work in the hospital. They work in their own scientific departments, but they are working for the hospital, they are doing all the bacteriological and anatomical investigations which we must have done, and are constantly, of course, in the hospital.

585. I was referring rather to the preliminary subjects, physics, chemistry and the like?—No, some of those are quite outside men, doing no work in the hospital at all.

586. You would say in fact that up to the point where you reach the clinical stage the work is done by the professors and teachers outside the hospital strictly so called?—Yes.

[The Witness withdrew.]

The Reverend ARTHUR CAYLEY HEADLAM, D.D., called in a
examined.

587. The CHAIRMAN : You are Principal of King's College ?
—Yes.

588. I have no doubt you know generally, if not in detail, the terms of reference to us ?—I know them generally.

589. The first relates to the specific question how much money subscribed for the relief of the sick poor to the 12 London hospitals having medical schools is contributed directly or indirectly for the maintenance of medical education. Probably you have nothing to add to the return that has been sent by King's College to our secretary ?—No, I think not. At King's College we have always kept the hospital and the college perfectly distinct, and, so far from the hospital contributing to the college if anything it is the other way—the college contributes to the hospital.

590. Your return shows that there is no cash payment made by the medical school and no cash payment made by the hospital ?—No.

591. Then there is a note, "Although apparently not coming within the terms of the return I should mention, for the information of the Committee, that a rent-charge of £240 per annum for that portion of the hospital site on which the original hospital stood is paid under the Act of Incorporation by King's College." That is the only pecuniary relation between the two bodies ?—Yes, except that you will see on the last page of the return that the College pays certain registrars who work at the hospital, and whose work is not entirely clinical, but who do a certain amount of clinical work.

592. The College pays those although they do some benefit to the hospital ?—Yes.

593. I suppose it is impossible to divide that except by rule of thumb, so to speak ?—It would be quite impossible to divide it. The hospital, as you will see, pays a clinical pathologist but the clinical pathologist is not allowed to do any teaching, all the teaching in connection with the subject is done at the college and in the college laboratories.

594. And the accounts have always been kept quite separate ?—Entirely.

595. Perhaps what you may be most likely to wish to speak to us upon is the second question : "Whether any direct or indirect return for such contributions (if any) is received by the hospitals from their medical schools." That does not arise in form in your case, because there is no contribution, but are there in your judgment any direct or indirect benefits conferred by the presence of the medical school upon the hospital ?—If you take "indirect" in its widest sense, the indirect benefits are very considerable indeed. If there is not a medical school you are not likely to get the same amount of attention from distinguished members of the medical profession that you get at present. There is no doubt that the assistance of the medical school generally is to the benefit of the hospital. With regard to the less indirect benefits, my own inclination is to distinguish the two parts of the medical course. You are aware I think that from the University point of view the first three years of a student's course differ materially from the later years. With regard to the first three years I should say there is not really any direct benefit to the hospital from these being connected with it at all. With regard to the latter years there is considerable benefit. The clerks and dressers and residents and so on come from the medical school and are a great advantage to the hospital.

596. Your expenditure per bed on the wages and salaries is £20 19s. ; that is not a very large expenditure ?—No, none of our residents get any payment. They, and, I think, the resident obstetric clerk, get their board and lodging, but nothing else.

597. Then what you say rather tends to show that you approve the

idea which is afloat of separating the preliminary and intermediate studies from the clinical studies?—That both on general grounds and also on the special grounds relating to our own college and hospital, represents the policy that I am in favour of. It is a policy that we as a college and hospital have definitely embarked upon, and we are anxious to carry it through.

598. That is connected with the removal of your hospital to Camberwell?—It has been brought to a head by that, but it has always been the policy of the College ever since it was founded. The College has done all the scientific teaching; no student of the College takes a ward clerkship or dressership until his intermediate studies are complete.

599. Therefore the hospital has nothing to do with the preliminary and intermediate studies?—No, it never has had in our case.

600. The BISHOP of STEPNEY: In that respect you are practically in the same position as University College and Hospital?—I think we are in exactly the same position; there may be some little difference in detail, but the relation is so exactly parallel that it is not worth while to go into the details. I feel that the system which prevails at present in the medical schools has very considerable disadvantages which perhaps I might put before you. In the first place, keeping up a large number of small laboratories means an expense out of proportion to the result. Then again, it means that in many of the hospitals there are very inadequate laboratories, and the teachers generally are very badly paid. It means, I think, also a very confined life to the student. A student who comes to London for his medical course enters a hospital at the age of 17 or 18, and remains a member of that hospital and no other institution for five or six or seven years; he is never brought into contact with people who are working in any other profession, and even in his own profession he only sees a very limited side, both of the scientific teaching and otherwise; he does not really get any of the benefits of University life. That seems to me a very serious thing, and to have been rather unfortunate in the general training of the medical profession.

601. That would be very much remedied, you think, by separately teaching earlier subjects in the earlier years?—Yes, provided that they were not made too specifically medical. I feel that at both University College and King's College a student who comes to us for the first three years has the advantage of being associated to a certain extent with engineers and theologians and members of other professions. That is the idea we should work for. If we could get a properly organized London University where students were brought into contact with one another, we should get the same advantage. You must either get it by having a good College life, or a good University life of the Scotch type.

602. The BISHOP of STEPNEY: That rather bears against the proposal to have merely a medical institute, say at South Kensington?—I do not wish to take any attitude against that medical institute; I do not think it would be wise, or right, for me to do so; but I think that, in developing that medical institute, the people who take it in hand ought to have the idea of a University before them. I feel that very strongly.

603. Lord WELBY: May I take it from your last answer, that on the whole you would prefer the removal of the students to a separate institution for the first three years, leaving it to experience to widen that if possible and bring them into contact with other professions?—Certainly; to a separate institution or institutions.

604. Now let us look at that from the financial side. How would that affect the laboratories at the different institutes for clinical experiments, and so forth, that you have; would you be able to get rid of a considerable number of them, or would you be obliged to keep them as they stand now in that case, or very much so, for the purposes of the hospital itself?—We look forward at King's College, as they do at University College, to be ourselves centres for preliminary teaching.

605. The CHAIRMAN: You hope that your laboratories will

probably become the laboratories of the University?—They would become some of the laboratories.

606. The BISHOP of STEPNEY : You would be colleges within the University?—We are colleges within the University, and we should go on as we are going on at present.

607. The CHAIRMAN : You would, probably, be one of the centres selected for teaching these preliminary subjects?—Yes. The proposed change is entirely in our interest, I may say, provided that we are recognised as one of those centres.

608. We are only interested in its peculiar bearing on medical schools. Do you think that that step would diminish the expense of medical education?—Very materially indeed. I may give as an instance this. We are preparing for this division on our own part. The secretary of the college has gone through the accounts, dividing the expenses of the preliminary and intermediate teaching on the one side, and the hospital course on the other. We have divided the fees and divided the cost. We find that, whereas on the first part the college will be £400 the loser, on the second part the school at the hospital will be £200 to the good.

609. I do not quite follow that. What are the two parts?—The first part is the preliminary and intermediate subjects—those subjects which are done at the college. The expenses of those are very considerable, and if we take the proper share of fees and give it to those subjects, and then take the expenses, we find there is a deficiency of £400 on last years working. If on the other hand we take the second part of the course, that which goes on at the hospital, we find there is a balance to the good of £200.

610. The BISHOP of STEPNEY : Your inference from that would be that where a hospital confines the teaching of its school to the second half the school would not lose, but it would save to that extent if it lost its first half?—Yes.

611. The CHAIRMAN : That is to say the hospital gains and the college loses at present?—Yes. When I say gain I mean there is a balance over which might be divisible amongst the professors or anything of that sort.

612. Lord WELBY : I do not know that the Bishop and I quite follow the figures in the same way. I understand you to say that if there were a central institute for the first three years' teaching the school at the hospital would be the gainer by some £200 or £300?—Yes.

613. That would be a relief to the hospital finance. Then, at present the gain in the later part about balances the loss on the earlier part; at least, it is £400 on the one, and £200 on the other; at present there is a deficit on the whole?—At present there is a deficit on the whole.

614. If you made the separation as you suggest, there would be a gain for the hospital?—Yes. One of the reasons why there would be a gain for the hospital is this. It is not necessary to pay at all, or to pay highly, for the clinical and later teaching—I will not say to pay at all, but to pay highly—because it is done by men who are mostly in good practice and who are prepared to do the work because of the incidental advantage which comes from it, but in the case of anatomy and physiology we must pay a man a sufficient salary because it is his profession—he is a specialist, and he lives by it. For the earlier portion there are two expenses, first an expensive laboratory to be kept up, and secondly there are salaries to be paid, because the man's time is wholly occupied in the work.

615. The BISHOP of STEPNEY : That is a most important point, and I am glad that you mentioned it. Judging from that, would your opinion be that while we find in hospitals with medical schools attached an enormous sum is expended on salaries, the larger part of these salaries would go to the payment of teachers and professors in the pre-clinical period of teaching? That would be certainly my impression. Judging from my own experience at King's College, practically our own clinical

professors get nothing. Our preliminary teachers do not get paid as they ought to be paid, but they are all paid and have to be paid.

616. The CHAIRMAN : Then that loss which you speak of would still be there, even if you separated it, would it not? The fact is that the college is put to a larger expense than the proportion of fees represents. Then, suppose you established a central institute, or suppose your college was one of the centres, that loss would still exist?—I do not think it would necessarily exist if, as I have strong reason to hope, we were to combine the preliminary teaching of three or four schools. Suppose you have a professor of anatomy and an anatomical laboratory; then, our own school is a small one, and we cannot afford to keep it up; but if you get 30 or 40 more students it would work very well.

616A. Lord WELBY : Instead of having four teachers you might do with two?—You would have one professor, an assistant, and perhaps two demonstrators, instead of having four teachers and four demonstrators.

617. The BISHOP of STEPNEY : Then your opinion would be that the expense of a medical school is chiefly in that portion which is least beneficial to the hospital?—Most certainly. I should like just to mention one interesting point in which I think London loses, and is likely to lose more in the future, by this division of preliminary study amongst all the hospitals, and that is, that good men will be attracted away from London. I can give an instance which occurred only yesterday. Our professor of anatomy, Mr. Arthur Robinson, who is professor at King's College, is an excellent anatomist; we cannot give him as high a salary as he should have; yesterday he was elected professor of anatomy at the Birmingham University; at Birmingham he will get a salary fairly adequate to his scientific attainments. Now, if there had been three or four centres of teaching in London his services would have been retained here.

618. The CHAIRMAN : Therefore, you entirely agree with the instruction given to the Senate of the University, that it should "use its best endeavours whenever practicable, to secure such common courses and instruction for Internal Medical Students in the preliminary and intermediate portion of their studies under appointed or recognised teachers at one or more centres." I think that expresses the view you entertain?—That is exactly my view.

619. Then, going back to the question what direct or indirect benefits are conferred by the present schools to the hospitals, is there any other point you would like to call our attention to?—I should like simply to sum up my opinion on that point. It would be perfectly reasonable that a sum—not a very large sum, but a sum in proportion to the services rendered—should be given to the medical school by the hospital in return for the work done by dressers, clerks and other students, but the amount should be settled by some competent outside authority.

620. The BISHOP of STEPNEY : You would suggest that it would be possible to arrange some basis of apportioning the amounts which the services have properly earned?—Yes.

621. The CHAIRMAN : Is there not a *per contra* to that. The hospital confers great benefit to the medical student, the benefit of being able to see patients—the clinical teaching which without the hospital they could not get, and which, if they were not otherwise treated, they would have to pay for?—I admit that, I am giving the most favourable aspect to the medical school that I can: it does not concern myself, and I do not wish to act unfairly as to other schools.

622. There was a very eminent witness before us yesterday who suggested that the position you are in at King's College—I do not know that he referred to King's College—was that the hospital neither received or gave—that the medical school derived a benefit from the hospital, and the hospital derived a benefit from the medical school, and that these two might fairly be set off one against the other, neither of them paying or receiving anything?—I suppose that has been our traditional view.

623. The BISHOP of STEPNEY : It was alleged in the case of University College, as the reason why they were able to do this, that they were largely endowed. How far is King's College endowed in its scientific work ?—Not nearly as adequately as we should like. We get grants from the Treasury and from the County Council and so on, but our endowments consist mainly in having the building.

624. Would such grants be available do you suppose for any other central institute of preliminary medical science ?—No ; I do not think they would be ever given to an institute which was purely medical, because that is a professional study ; the Treasury grants are given for scientific teaching.

625. Lord WELBY : The Treasury grants are given for scientific teaching, and the allocation lies with the college ?—Yes, but we can only allocate the money to the purely scientific chairs. For example, every medical student is bound to learn zoology ; if every medical student learned that alone, it would be very expensive, but if they come to the college they attend zoology classes which are given for them and for many other persons. That is an advantage both from the point of view of education and also of economy.

626. The Treasury would not interfere with the discretion of the college authorities in allocating these grants, supposing always that the college authorities applied them to anything that might fairly be called scientific teaching ?—Purely scientific teaching, yes ; but I think they are careful always to say that it is not to go to professional teaching. Both in the case of engineers and in the case of medical men the student will obtain a monetary return for what he spends.

627. The BISHOP of STEPNEY : If you had not these grants from the Treasury you would find it more difficult to obtain medical-scientific education in the college ?—More difficult to give the scientific education which medical men require.

628. And therefore any medical school which had not these grants would be more inclined to apply to the hospital for assistance ?—Most certainly.

629. Now, when you spoke of some sum being entered as proportionate to the service which the school renders to the hospital, had you in mind the clinical and pathological investigation which the laboratory in connection with the school would do ?—Do you want to know whether I think that hospital funds should be applied for the general purposes of a pathological laboratory ?

630. Whether that is one distinct service, which, in your opinion, is rendered by the school to the hospital ?—You must have a pathological laboratory in a hospital ; our accounts show that. We have got a proper bacteriological laboratory in the college, which is used for teaching purposes, but we have to keep on the spot in the hospital a clinical pathologist who does hospital work, and who gets £250 per annum. That shows that you would require to have it if you had no medical school, and therefore it is perfectly reasonable that the pathological laboratory should be paid for, at any rate in part, by the hospital.

631. The CHAIRMAN : In fact it serves two purposes ?—It serves two purposes ; now-a-days there is a great deal of scientific investigation of various kinds required in hospitals for purposes of diagnosis.

632. Lord WELBY : Are you fairly satisfied with the remuneration you are able to give to your officials, do you think they are fairly paid, I mean what comes under the head of salaries and wages and covers all your establishment expenses ?—You mean at the hospital ?

633. Yes, at the hospital ?—I do not think I have ever heard any complaint made on the subject. I dined the other day with the residents, who get their rooms lodging and food and no salary ; they are young men who have just taken or are going to take their degree, I gathered from what they said that they had no complaint to make, except that their washing was not paid for.

634. Of course dealing with any establishment we all know that you could do more if you had greater funds, but there is no cause to complain, you think?—I do not think so. I have never heard of any great cause of complaint.

635. I am much struck with the fact that your salaries and wages compared with the other hospitals—the cost per bed—seem remarkably moderate. I have been struck with the fact of the very large difference that there is between the different hospitals. Some of them appear to be excessive. For instance, London, against your £20 19s. 6d. is £41 10s. 10d., Bart's. £44 and St. George's £47. It is submitted to us that those expenses are necessary and very much caused by having the hospitals, if I may say so, as a sort of model hospitals in London; but there is a limit, I think, to expenditure of that kind. I was asking you with regard to King's College, because your account is so excessively moderate? It is very difficult to compare these things. I believe I am right in saying that at St. Bartholomew's the residents, that is to say the medical officers, get salaries and pay for their food. With us they get no salary but they get their food.

636. The BISHOP of STEPNEY: Will that affect to some extent the extremely large item which King's pays for provisions compared with other hospitals?—I should think it probably would.

637. Compared with St. Bartholomew's it is something like £5 per bed more in provisions. Would a large part of that be due to providing for the board of the resident officials?—It would be partly due to that. I believe, as a matter of fact (we are a small hospital), we board our patients and staff and everyone rather better. I do not like to say that that accounts for it, but I daresay it helps it.

638. The CHAIRMAN: Now to return to the point of the salaries?—Suppose in the case of St. Bartholomew's all these people are getting paid and ours are paid nothing, that may well account for the distinction, but then our people are paid by what I think a young man of that sort finds most convenient; he is just given all he wants to eat and drink and his rooms; that is a better way to do it I should think, and more economical to the hospital.

639. It saves in the items of salaries of course?—Yes.

640. Lord WELBY: What the Bishop called your attention to rather confirms what you were alluding to; at the same time I would point out, in regard to St. Bartholomew's that after you have made that allowance, where you spend £50 St. Bartholomew's spends over £60; there is still a considerable difference?—That is so.

641. The CHAIRMAN: It is very difficult to understand how one should be £41 and the other £21?—To get at the bottom of hospital accounts is a thing which the very greatest expert would find difficult; each institution seems to do things in a different way.

642. Lord WELBY: Still, you can get at the total. I agree as to the difficulty, but the point is that finally, at the end of the year, you find that a certain amount has been spent in one case which you are able to compare with a similar amount in another case. I think that rather naturally suggests the consideration that if you see one hospital very much higher than another probably they take, as I say, a liberal view of what is necessary, to put it mildly?—No doubt.

643. The CHAIRMAN: However, you do not think you are under-salaried?—It has never been suggested. Of course we are a small hospital. I believe, however, that our administrative staff is considered somewhat small.

644. The BISHOP of STEPNEY: What is the number of students in your medical school?—It is under 100 I think, at present.

645. Do you happen to know approximately the number of students at the London Hospital to compare with that?—The London has an entry of over 60 a year; I think there are 300 or 400 at least.

646. Lord WELBY: We have been told that the number of entries

of medical students in London has been diminishing very much of late years ; in fact it has been shown to us that from 1879 to 1900 the entries have fallen off more than half ?—One reason of that is, I think, the competition of the provincial hospitals, and that is a matter we have had to consider very carefully. A committee of ours has just been going into the fees at hospitals, and they have found that whereas the lowest London composition fees are 110 guineas at Westminster, the highest composition fees are at Birmingham, £119 I think. The London fees vary—I cannot say accurately, but I believe from 110 guineas up to about 170 guineas, and in provincial hospitals the highest is about 120. Then there is a very large clinical material in the big provincial hospitals, and of course all the local people are attracted to their own hospitals instead of coming up here.

647. The CHAIRMAN : It is the improvement of medical education in the provinces that really accounts for it you think ?—Yes ; and the greater cheapness of living.

648. Lord WELBY : That is important, because it seems rather to add force to your argument for a central school in London for the first three years instruction ?—I think it does, especially in regard to what I say about good teachers. We shall find soon that all the good teachers go to the provinces.

649. The BISHOP of STEPNEY : Has there been any request from your school for any direct money assistance from the hospital ?—It has been so absolutely contrary to our traditions that I do not think there has been any idea of it, nor would it be entertained. I think there is a good deal of feeling on the part of the clinical staff that they ought to get better remuneration.

650. The CHAIRMAN : But they do not propose to get it from the hospital ?—No.

651. The BISHOP of STEPNEY : If they wished to increase the equipment of the clinical side of their work, their appeal would be rather to the public than to the college ?—When we move the two will be separated, and I do not know how it will work out ; it will mean, I suppose, getting a special endowment and special sums for our new building at Camberwell. What I am aiming at is that we should try to build these buildings out of special funds collected for the purpose.

652. The CHAIRMAN : Is there anything else you desire to add ?—Might I say that, while admitting to a certain extent that it may be right to apply hospital funds to medical schools, it seems to me that very great care should be taken that it should not be used to enable one hospital to undersell another. That seems to me a matter of very great importance. I should like to give an instance referring to one hospital. For the first year's work we charge at King's College, and they charge at University College, £25 for preliminary scientific instruction ; that is not at all a high fee for a year's work in the laboratories. At the London Hospital it is, I think £10. It is obvious that the work cannot be done for this money, and that it is made possible by assistance from the hospital's funds. A hospital that does this is able to attract students to itself by charging such low fees.

653. I do not think that that is within our scope at all, we are merely enquiring into certain facts ?—I think, if you will excuse me, it means that a larger portion of the money which is contributed to some medical schools is really not used for any purpose beneficial to the hospital, but to enable one medical school to compete with undue advantage.

654. The BISHOP of STEPNEY : May I just ask one question upon the subsidiary point. Is it true that your fees are very much higher than the fees of the London hospitals as a whole, taking the whole course of five years ? Our fees come in the intermediate group. As far as I can calculate them out, the lowest group consists of Charing Cross Hospital £121, the London Hospital £120, and the Westminster £115. The highest group is St. Thomas' and Guy's £170. Between the two come University College £160, St. George's £150, St. Mary's £140, King's

£135, and Middlesex £135. I think it will always be the case that the smaller hospitals will have to charge rather smaller fees than the larger ones. The students naturally go to the larger hospitals, where they have greater opportunities. May I just sum up what I should rather like to put forward as what seem to me the points to aim at? First of all, I should like to emphasise the importance of concentration; secondly, that there should be a certain attempt at equalisation of fees, allowance being made for the fact that the smaller hospitals ought to have rather lower fees than the larger ones; and, thirdly, that it would be very desirable that all medical schools being schools of the University should be under something like public management. That I think has been brought before you before.

655. The CHAIRMAN: I am afraid our Inquiry hardly reaches to those questions?—I was going to suggest the publication of accounts and so on, which would really bear upon your Inquiry. Those are the three points that I should like to suggest as being likely to meet the difficulties.

656. Lord WELBY: Who audit your accounts?—We have a professional auditor. Our medical school accounts are audited with the rest of the college accounts; they are presented to the Court of the college as part of the college accounts, and they go in together with all the rest of the college accounts.

[The Witness withdrew.]

Mr. MUNRO SCOTT, Warden of the London Hospital Medical College, desires to make the following statement in connection with Dr. A. C. Headlam's evidence (Answers 652-4):

It was not quite correct or fair that Dr. Headlam should say that the London Hospital Medical College was underselling other schools, and was able to do so in consequence of receiving a grant from the hospital.

It is quite true that at the London Hospital Medical College the fee for the Special Classes for the Preliminary Scientific Examination is only 10 guineas, while King's College charge £25 for the same classes; but a student at "The London" pays fees amounting to £136. 10s. for the full course, including these classes, while at King's he pays for the same £148, so that there is not very much difference.

The fee was fixed nearly 25 years ago, long before the present grant was thought of. It was made a very low fee so that students might not be discouraged in proceeding for the degrees of the University of London.

At some schools no extra fee is charged for these classes, they pay a fee is true, but that fee is merged in subsequent payments.

It is not right to say that the grant from The London Hospital to this College is not used for any purpose beneficial to the hospital, but to enable one school to compete with another. As a matter of fact one-third of the grant goes for the Hospital's Bacteriological Department, the remaining two-thirds are utilised to enable the Staff to give ample time and trouble for their clinical work in the hospital, which they could not be expected to do without some return.

It is not right to say, as Dr. Headlam has said in Answer 654, that The London Hospital is in the lowest group of fees.

From the prospectus issued for 1904-5, both Guy's and St. Thomas's offer to take students for the sum of 140 Guineas, payable by instalments, which will cover a five years' course and the University of London Classes. At The London Hospital the fee for the same time is 150 Guineas. It is true that at St. Thomas's and Guy's more fees will be charged at the expiration of the five years if the student has not then qualified.

The fees at "The London" were in 1889 raised to the average of the highest schools, that is to say, 120 Guineas in one payment, or higher if paid by instalments, with additional fees for University of London Classes.

The other schools have since raised their fees, apparently without good results.]

Mr. HENRY TRENTHAM BUTLIN, F.R.C.S., D.C.L., called in and examined.

The CHAIRMAN : I think you were until recently Dean of the Faculty of Medicine of the University of London ?—Yes, I have just completed my term of office.

657. I presume you know the objects of our inquiry, that they relate to the disposition of sums subscribed to the hospitals ?—Yes, the subsidising of medical schools by the hospitals.

658. And also the question whether, if the schools are subsidised to any extent, there are any benefits, either direct or indirect, conferred in return by the schools on the hospitals. I suppose what you would desire to speak to us upon is rather the question of direct or indirect returns for the contributions ?—Yes. Do you wish me to make a kind of preliminary statement ?

659. I should like to hear what you have to say in answer to this question : “ Whether any direct, or indirect, return for such contributions (if any) is received by the hospitals from their medical schools ” ? I will say at once that the uses of a school to a hospital may be summed up in this way. I will take my own hospital, St. Bartholomew's, as an example, and tell you what the students do. In the first place, the students go into the wards and dress the cases, and they do actual work in the wards. In the second place, they act as what are called pathological clerks ; that is, they are responsible for the examination of tumours, and of sputa and things of that kind, of course, always under the superintendence of the professor of pathology. In the third place, they make notes of all the cases, under the medical and surgical registrars. Those notes are often voluminous, and sometimes exceedingly good ; they vary, of course, according to the dressers. They are all bound up and indexed as a record, so that they have direct value, not merely from the scientific point of view, but from the patient's point of view, in this way ; when a patient is re-admitted into the hospital, we take his previous records, and we know exactly, so far as it was known at the time, what was the matter with him. Further, we have in the last few years established a kind of system of communication between the different hospitals, so that when a patient comes to us who has previously been, say, to King's or St. Thomas's, we have the advantage of knowing his record there, and that is often of the very greatest value and help. Then again, these men act as assistants in the out-patients' department, the casualty department, and the special departments ; and, finally, they form what is called the junior staff of the hospital, which consists of about 25 young men, house physicians, house surgeons, obstetric assistants, and so on.

660. They are all drawn from the students ?—They are all drawn from the students, and, as all students are not fit to be house surgeons or house physicians, we require a very considerable school in order to train an internal junior staff of about 25 really satisfactory young men.

661. In hospitals that have no schools those young men are drawn from outside ?—They have to buy the services of those young men from elsewhere. I am speaking now of the quantity of work done by them, not of the quality. Then I would say further, with regard to the quality of the work, I have belonged to both kinds of hospitals. I was first at the West London, and then for 20 years I was assistant surgeon and surgeon at St. Bartholomew's. I have no hesitation in saying that the quality of work is very much higher in those hospitals to which schools are attached than in those that have no schools. The criticism of these young men, and the constant doing of work before them, is an enormous stimulus to the best kind of work. I have no hesitation in saying that.

662. Do you think that a patient is better off in a hospital with a school attached than in one that has not a school ?—Not a doubt. If I were a patient going into a hospital, I would go into a hospital where

there were plenty of young men about to see what is done ; they are very sharp and very unsparing critics ; they are very keen nowadays. I will give one other example of the value of a school in this way. Within the last few years there have been in most, I suppose, of our London hospitals, departments of pathology. In the first place they were established by the medical and surgical staff ; then, in the course of time, the professor of pathology and his assistants were employed in work on individual patients : Their assistance was obtained in the general hospital work. For instance, I have a patient in my ward ; he has got something the matter with his bladder, it is of the utmost importance to know whether he has tumour—cells or tubercle bacilli in his urine ; I cannot examine it, nor can my dresser ; he is an ordinary dresser, and would not know enough of the microscopic examination of tumours and so on. That is all done now as a regular business, and is added to the notes of the patient. From that point of view, I think a school is valuable to a hospital.

663. Do you think it saves the hospital money ?—That I cannot say ; I should not think so, from what I have heard. I have heard that schools are very expensive. My own impression is that there is more waste. When you have a number of people working I should think there must be more waste. That accounts for some at least of the expenditure.

664. It is difficult to imagine that that waste can account for much of it, is it not ? One would have thought that the amount of waste that took place in bandages or medicine or drugs would be comparatively small ?—Oh, it is a good deal.

665. The BISHOP of STEPNEY : It is mostly in diet ?—In diet, too ; that is my impression.

666. The CHAIRMAN : But how does the presence of students affect that ; they do not prescribe the diet ?—The house surgeon or physician prescribes it.

667. But how does the presence of the students affect the expenditure on bandages, and so on ?—You ask me that, but I tell you at once that I am not capable of answering it ; I have a very shrewd suspicion that there is a little more waste ; it is only a suspicion.

668. Your observation agrees with what we have heard from other witnesses ?—That is my suspicion.

The BISHOP of STEPNEY : According to the evidence we have had and the figures we possess, the difference is not so much between the surgical and dispensing cost in the two classes of hospitals, but it is in the matter of provisions that the difference is very striking.

669. Can you explain at all why hospitals with schools should have so much larger salaries ?—No, I never knew anything about it till the other day, when Mr. Tweedy told me of it.

670. The CHAIRMAN : Take St. Bartholomew's, they pay £44 0s. 8d. a head per bed, at the Great Northern they pay £23 18s. 9d. ?—That is an enormous difference, and the Treasurer this morning at the Governor's Court said that he had been complimented by Mr. Danvers Power on the economy with which the hospital was administered.

Mr. POWER : With the single exception of salaries and wages.

671. The CHAIRMAN : Where do the salaries go in cases where there is a medical school, take the salaries at St. Bartholomew's for instance ?—There are no salaries paid to the junior staff, so far as I know.

672. But are the salaries of the salaried staff paid largely to those who are undertaking purely scientific teaching work as well as clinical work ?—I do not think any of the salaries are paid for purely scientific teaching. They pay all their medical officers. I, as surgeon at the hospital received £105 as an honorarium. I received £100 when I was assistant-surgeon I think.

673. We have had it put before us that there is an immense saving in dressers, clerks, and the like ?—I have never looked upon it as a saving. I look upon medical education as an absolute necessity. We must have

schools for teaching these young people, and, if there is an enormous increase in the expense owing to it, that ought to be looked into.

674. Your point would be that the dressers and clerks doing work for nothing is not really a very considerable saving to the hospital?—No, I think not.

675. Then it cannot be in those respects, at any rate, that there is an increase of salaries?—No.

676. To whom are the bulk of the salaries paid in a hospital like St. Bartholomew's?—I can only tell you, in my own case, that I received so much a year, and that all my colleagues received a like sum, and that all the surgeons and assistant surgeons, the obstetric physicians, and the ophthalmic surgeons, are paid.

677. In other schools, do they receive payment?—I sincerely hope they do, but I do not know. I am not at all an advocate for free trade in that respect.

678. Would it be your opinion that the bulk of these salaries in hospitals with great schools go to minor officials?—I have not the least notion. To tell you the truth, I do not know what hospitals pay their staff and what do not; that has never come within my purview.

679. The financial part of the matter has not attracted your attention?—Not at all. What I would say about hospitals subsidising schools is this. The pathological department is quite rightly subsidised by the hospital, because it is a necessity, nowadays, for the carrying on of the best work of the hospital. All the work of which I have spoken is performed by the students of the advanced medical side, and none of it by the students in the preliminary and intermediate studies. But when it comes to the departments of preliminary and intermediate studies, I cannot see any reason in the world why the hospital should contribute one farthing towards the expense of that education; nor can I see why the hospital should contribute for medical and surgical teaching, lectures, and that kind of thing, which is not a necessity for the hospital.

680. What you say is that in certain departments like the pathological department and the clinical laboratories, and I suppose the bacteriological laboratory, which answer two purposes—they are necessary for the hospital and they are also necessary for the teaching—the expenses ought to be divided between the two?—Yes, that is fair enough.

681. Lord WELBY: And that all the expense of the preliminary and intermediate teaching should be borne by the schools?—Absolutely. And I would say further that there is not the least reason why any departments of the hospital should be given up to the teaching of those subjects; the students do not require a hospital to learn them in; there is not the least reason why those subjects should be taught now in the hospital. The London system of medical education is a most extraordinarily wasteful system.

682. The CHAIRMAN: Your observations, then, tend to this conclusion, that you think each institution (hospital and school) ought to stand on its own bottom independently, dividing between them those expenses which are in common?—Quite so; but, when it comes to the teaching, quite apart from hospital work, the hospital should not on any account contribute to it.

683. The BISHOP of STEPNEY: Take the case of St. Bartholomew's. Would it have been possible for the hospital to use for its own purposes, hospital purposes, any portion of the buildings that are now reserved for school purposes?—I do not know whether they want them all immediately, but they want ground there so badly it is almost a pity they were ever built.

684. The buildings could be utilised for hospital purposes?—Yes, very well. This question of the eleven London schools has been under consideration, and has always been condemned. It was condemned by the Gresham Commission, and by the University of London Commission in 1898. These are matters which have come to me as Dean of the Faculty

of Medicine. Take, for instance, the wastefulness of such a system. In 1901 I received information that there were at that time about 1,250 students at the 11 schools studying anatomy and physiology. To teach those 1,250 students there were between 80 and 90 teachers, and the amount of money which was expended on salaries alone for the teaching of those subjects was more than £10,000 a year; then, think of the up-keep of the different establishments and things of that kind. If you want a comparison with that, take Edinburgh. Edinburgh had at the same time about 450 students in anatomy and physiology, and they had for those about ten teachers. If you multiply those figures by three, you will get a larger number of students, and you will find that 25 or 30 men ought to have been quite sufficient to teach them, and would probably have been much more than sufficient to teach them. Then, we find such anomalies as this. We have one school returned as having 88 men studying anatomy and physiology; another has 87; in one school there are two teachers, a lecturer and a demonstrator, and in the other four; yet the amount of money assigned to that department in each school is as nearly as possible the same. It is very difficult to understand why it should require four persons in one school to teach 87 men, when in another two persons can teach 88 men. As to the salaries which the teachers receive, here in London, in spite of all the money which is spent on the teaching of anatomy and physiology, there is not one single professor of anatomy and physiology who receives anything like an adequate salary; it is most cruel upon them.

685. Lord WELBY: Speaking of the advantage derived by the hospitals through the medical schools training their own house officers. Are your house officers always chosen from the students?—In all the large schools. I understand that in some of the small hospitals they cannot find enough men.

686. But you do draw your house surgeons and house physicians from your own men?—Yes. I never remember anyone else being appointed all the time I was there.

687. We have had some evidence given to us in favour of separating the earlier part of the studies of the medical students—that is to say, taking five years as the course of study, that it would be of advantage if the first three years were passed at a central institution. Have you any views upon that point?—Oh yes. I am sorry to say I am trying to collect the money for it for the University of London; I am one of the Treasurers of the Committee of the University of London to get money for an Institute of Medical Sciences at South Kensington, in order to liberate the schools from this burden.

688. If that is carried out only a portion of the time would be spent in the hospitals?—The last two or three years.

689. The BISHOP of STEPNEY: Would you agree with another eminent witness, who said that the cost of the purely clinical side of medical teaching is comparatively small compared with the cost of the preliminary general scientific teaching?—Yes.

690. The CHAIRMAN: Then we had another eminent witness who said that the school, he thought, gained by teaching the preliminary subjects?—I should like to know how?

691. Gained financially?—I should like to know who he is, and I should like to know the school; for it is ruining all the other schools. To begin with, we have got new subjects introduced in the last few years; we have got biology and physics added to chemistry, anatomy physiology; all these subjects are what is called *practically* taught; that means to say, laboratories and class rooms; it means to say equipment; it means to say expensive apparatus; it means demonstrators to supervise the work that these young men do. That is gradually eating all the revenues of these schools away. At the present time, you will find if you enquire into the matter, there are several hospitals here in London where the lecturers in medicine and surgery have not received a

farthing for years; they have given up their own moneys which they ought to have received to the teaching of these earlier subjects.

692. Would you say that it ought to be much more possible for a school which confined itself to its clinical work to do without subsidies from the hospitals?—Yes. It ought not to want any subsidy, except for pathology. I cannot conceive why it should have a subsidy at all.

693. One other question. When you said you thought there were several things, such as pathology, with regard to which it was legitimate for a hospital to contribute something towards its medical school, could you at all indicate what in your opinion would be, besides the pathological work, put down as a fair subject for the hospital to pay for. You would not, I gather from what you said before, include salaries to dressers and clerks?—Oh no. If any salaries are paid, they should be paid by the hospital, but there are no salaries; we do not pay them anything; the school does not pay anything, and the hospital does not pay anything.

694. You practically say that pathological work is the main thing that a hospital ought reasonably to pay its school for?—Yes. I will leave with you the papers that have been drawn up to show the falling off of medical education in this city. That is one of the reasons why the schools are obliged to go to the hospitals. Twenty years ago there were as many as 700 entries here in London, and if you look at that document you will see that it has run down to 400 in a year; and, out of those 400, at least 100 have been already educated in their preliminary and intermediate studies at Cambridge or elsewhere.

695. Lord WELBY: Our attention has been called to this very striking fact. We asked one witness whether he did not think that that was really an additional argument in favour of the centralisation of teaching in the earlier years of studentship, and he admitted that to be the case?—Yes. While exceedingly anxious that concentration should be effected, I should express the hope, if it is not impertinent, that you will do your best to discourage any hospital from subsidising a school except for the later subjects of medical education. Nothing could be more advantageous, in the end, than the concentration of preliminary and intermediate studies. I do not mean that it should be done instantly, because there are a number of these young men who are teaching, and it would be very unfair at a moment's notice to send them adrift.

The CHAIRMAN: We have not to deal with those larger questions, our duty is to enquire into a much narrower question—what the sums contributed to the schools are and what are the returns the schools make to the hospitals for those sums.

[The Witness withdrew.]

Dr. ROBERT WILLIAM BURNET, M.D., F.R.C.P., called in and examined.

696. The CHAIRMAN: I believe you are connected with the Great Northern Central Hospital?—Yes, I have been 25 years on the staff of that hospital.

697. That, as we know, has no medical school attached to it?—No.

698. Have you been at any time connected with a hospital which has a medical school attached to it?—Not on the staff.

699. As a student I dare say you have?—I was at the London for a time after leaving Aberdeen.

700. You are aware, no doubt, that the objects of our inquiry are, in the first place, with regard to what sums are actually contributed by hospitals to schools. Upon that you have, probably, nothing to say. In the next place, with regard to returns, direct or indirect, made by the

school to the hospital. We have heard a great deal of evidence to show that the hospitals derive great benefit from the presence of the schools, and from the presence of the students, and from the stimulus it gives to medical men to keep themselves up to the highest point. Will you give us your opinion upon that?—I think it divides itself into two portions. First of all how is the work of the hospital to be carried on apart from the school staff, that is to say, how they are to be helped in their work, and secondly, as regards teaching. At the Great Northern we are recognised as a place of study for the fifth year, so that we have clinical clerks and dressers who come there (not in large numbers, but several of them) to finish and get experience.

701. They come from other hospitals?—They come from other hospitals, but we have to pay our residents, which a hospital with a school does not have to do. Our house physicians and house surgeons do get small salaries which come out of the hospital funds.

702. Then you have an expense in that way which you say a hospital with a school has not?—Just so.

703. Do you think it is a financial saving to have a school?—I do not think it is really. I think the expenses are much greater as a rule; the contribution that the hospital has to give in many cases to keep up a school is greater than the proportion that we have to give to our residents.

704. How do you account for that?—Well, it is a matter of subsidies as regards teaching.

705. In many cases hospitals which have the voluntary assistance of students as clerks and dressers pay more in salaries than a hospital like yours which has no such assistance?—Because we have no teaching in the early stages of medical education.

706. You mean that the great expense is in the early stage of preliminary teaching?—I have no doubt of it.

707. That is the great source of leakage?—I think so.

708. The BISHOP of STEPNEY: Your opinion also would be that if the schools confined themselves to purely clinical teaching and did not undertake preliminary scientific teaching they would not make such demands on the hospitals for assistance?—I do not think they would make any demand.

709. You think that is practically the great source of expenditure?—I think so, undoubtedly.

710. Whether directly or indirectly, your point is that the subsidies from the hospitals are wanted for the salaries of those who teach in the schools?—I think so, undoubtedly.

711. The CHAIRMAN: Now comparing a hospital without a school and a hospital with a school in other respects, what do you think of the advantages conferred by the school—are there any other advantages. We are told that the presence of the students is a great stimulus to the medical man?—I do not think it is so far as the treatment of his patient is concerned.

712. You think that the sharp eyes of the student do not help him?—I do not think so, I do not think there is any difference. To begin with, taking the men at all the good hospitals, excluding small special hospitals of which I do not know much, but all the good hospitals coming next to schools, we will say, the qualifications required are just the same. It is very often an accident whether a man comes to a hospital with a school at all; if there is not a vacancy there he will go to a hospital without a school. In my own hospital several good men have gone back to a hospital that has a school when a vacancy has occurred, but we have had them some years with us. In some cases no vacancy occurs, and he remains at the hospital without a school. The tendency is to go back to the school that he was associated with, and where he has held junior offices.

713. The BISHOP of STEPNEY: But you would admit that in regard to scientific progress the tendency would be that a man kept more

abreast of it when he had students to teach than when he had not?—I am not sure that I understand your question. If it means that he would do more original work I doubt it.

714. You think that the physician or surgeon himself would keep as much abreast of the progress of scientific discovery in his own branch if he had no direct teaching to do?—I think so, quite. I have in my mind men connected with hospitals without schools who have done a large amount of original work.

715. The CHAIRMAN : I suppose there is no doubt that the great schools are abreast with the advance of medical science. For instance they can afford great appliances which are very expensive, such things as the application of the Rontgen Rays, and so on?—They begin with the great hospitals, certainly, but they are not long before they get to the small hospitals, whether they have schools or not. I again exclude the special hospitals.

716. The BISHOP of STEPNEY : There are opportunities for research in the laboratories in hospitals which have large schools attached which cannot be obtained in hospitals with no schools?—No. We have our laboratory, our post-mortem room, and our museum.

717. We heard this morning that there was a salaried pathologist. Does the general as well as the scientific staff make use of that laboratory?—Oh, yes; in every way.

718. But I suppose in the way of equipment and appliances that laboratory is not equal to what it would be if there were a school there?—Not in extent, but in facilities for work I think it is just as good.

719. The CHAIRMAN : I suppose the house surgeon and the house physician act as registrars?—No, we have a special registrar as a rule, and pathologist.

720. The BISHOP of STEPNEY : Whom you pay?—A small honorarium.

721. When you get dressers and clerks coming for their fifth year from other hospitals do they work voluntarily?—Yes, they are not paid.

722. Is it at all a usual thing?—Yes, we very often have two or three.

723. You said you were recognised as a school?—Recognised as a place of study for the fifth year.

724. Is that true of a certain number of hospitals which have not what are usually known as medical schools?—Yes.

725. In fact you offer a certain amount of clinical instruction though you do not call yourself a medical school?—Certainly.

726. Is that the case with others?—With several others—I think the West London. Certainly the Great Northern, and I think the West London is another.

727. The CHAIRMAN : Is the German Hospital one?—I do not think so.

728. Or the Seamen's "Dreadnought"?—No.

729. The BISHOP of STEPNEY : So that in a sense you are in a minor degree a school?—That is so—a very minor degree.

730. The CHAIRMAN : You do not get what I have called the pre-clinical work?—No, it is all clinical work. We have more work in the out-patients' department in that way than in the in-patients' department. Men of the out patient staff have clinical assistants who are appointed for three or six months.

731. Are they appointed from among the students of other hospitals?—Yes, and qualified men very often.

732. Do you find any difficulty in getting these dressers, and so on, to reside there?—Men prefer to be at their own hospitals, and we are at a great distance from the centre.

733. Lord WELBY : Do you give them board and lodging?—We give them lunch, I think, if they come from ten till four.

734. The BISHOP of STEPNEY : With regard to the out-patients,

you have no difficulty in obtaining the services even of qualified men?—Oh, no; they like the out-patient work apparently better than the other work; at least they take to it more.

735. So that, as a hospital without a school, you find no difficulty in obtaining men to do your out-patient work?—To assist in the out-patient work. We have physicians and surgeons appointed for out-patient work.

736. Are they paid?—No.

737. The CHAIRMAN: Are the salaries paid in your hospital adequate and reasonable in your opinion?—I think they are very small comparatively; still we get good men as residents. There are five residents at the Great Northern, two house physicians and three house surgeons.

738. And you are able to pay them?—The two seniors get £60 a year honorarium, and the two juniors £30 a year with board and residence. They come for the work and the experience really.

739. The BISHOP of STEPNEY: As far as you know what does one of the resident junior staff get in the way of emoluments, or equivalent to emoluments, in your hospital compared with what he would get at the ordinary hospitals with great schools?—As regards work do you mean?

740. No, as regards emoluments?—No emoluments at all.

741. You pay your juniors no emoluments at all?—No.

742. We were told in the course of the evidence to-day that there was no instance of a hospital without a school in which its resident staff received no emoluments?—I do not refer to the residents; I thought you were referring to the out-patients' department.

743. No, I was speaking of the junior resident staff?—Our junior resident staff are paid 30 guineas a year as an honorarium.

744. In other cases where there are schools I gather they receive board and lodging?—Yes, sometimes board and lodging and sometimes only lodging.

745. Then when it is said that in a hospital without a school you have to pay your junior resident officials, that means you only pay a nominal salary of £30 or so?—Yes.

746. It does not make much difference?—No.

747. Lord WELBY: It means some difference if the staff is large?—The two seniors get £60 each; that makes £120; then three juniors £90, say £200 altogether.

748. These people that you are talking of now are resident?—Yes.

749. Therefore you give them board and lodging?—Board and lodging and a small salary.

750. Whereas in the other hospitals where there is a school they give them board and lodging and no salary?—No.

The BISHOP of STEPNEY: It is nothing like so large as was represented to us.

751. The CHAIRMAN: One other question on the matter of comparison between the two classes of hospitals. Do you think the patients get as well treated in one class as in the other?—I do not think there is the slightest difference. It entirely depends on the man. Where a man is keen on his work he may not always see all his patients either in a hospital with a school or in one without, but the patients are equally well treated. I think there is at least as much attention paid to the patients in a hospital without a school, because a man's time is not taken up with teaching. I had experience of a large clinical hospital at one time in visiting it with a physician long since dead. He had to do the clinical work, and I was responsible for part of that clinical work for five or six years. On days when lectures were given only one-third of the patients were visited; he never could do more.

752. But the physician goes round with his pupils?—On a day of clinical teaching he could only visit one ward; he might be two hours in the hospital, but he could not do more than one-third of the patients.

753. You say if he had been free from his pupils he could have done more?—He would have seen the whole of his patients.

754. Then it is your impression that a patient is rather better off in a non-schooled hospital than in a hospital with a school?—I think he is quite as well off, I should not like to say better.

755. The BISHOP of STEPNEY: The point you mentioned is important with regard to the question of taking the record of the diseases from which patients are suffering. What we are told is that, without the large staff of clerks whom you can get in a hospital with a school, it would be impossible to take a scientific record of the progress of each case; but do I understand from what you say that if the senior officers were able to be more constantly about in the wards there would be less necessity for that record, so that it could be kept without these clerks?—It is kept in the hospital I belong to, the Great Northern; we have a complete clinical history of each case taken.

756. You know the difference between the records say at the Great Northern and those you were familiar with when you were a student at the London Hospital. Would you say that there is any very conspicuous difference between the accuracy and fulness of the two records?—No; not at all. In the case I have mentioned of clinical teaching, separate and special accounts of the cases were taken independently altogether of the house physicians' or the dressers' or the clerks' notes, for the sake of the clinical demonstration or lecture; special notes were taken and special examinations made.

757. The CHAIRMAN: Take a case in which daily observations of the excreta, or of the blood, are desirable or necessary for the purpose of the proper treatment of the case. Are there the same facilities in the hospital without a school?—Certainly. We have simply to requisition the pathologist or to get it done in the pathological laboratory.

758. In your experience at the Great Northern Hospital, have you ever had to take any substance to another laboratory?—Yes; I think we have had to do so before the appointment of the pathologist, not when we had a competent pathologist, certainly. We used to employ at one time the Clinical Research Association and sent our things there.

759. Was not that highly inconvenient?—It delayed things perhaps for a day or two days.

760. I suppose your patients might slip through your hands sometimes, meanwhile?—I do not think it would be quite so serious as that.

761. The BISHOP of STEPNEY: With regard to the question of dressing, would you say that on the whole the nurses dress as quickly and as efficiently at the Great Northern Hospital as at hospitals with schools, where the dressing is done by dressers?—Yes, I should say so, but there has been a great change in the nursing in the 25 years I have been at the Great Northern, and I have not had an opportunity of seeing much of other hospitals. The teaching of nursing, and the experience of nursing has very much improved. Looking back upon the 25 years I have been at the Great Northern I see a great difference.

762. The CHAIRMAN: You say that the dressing is well done by the nurses?—Very well done. For six years I had the responsibility of lecturing to the nurses, and I found them a very intelligent class, quite capable of taking in what was taught them.

763. The BISHOP of STEPNEY: Is there not something in the consideration that, where you have hospitals with very flourishing schools, with a great reputation, there is more incentive, perhaps, to keep up the standard of efficiency in all matters. Suppose there were no great medical schools attached to the London hospitals, do you think that the standard of efficiency would be kept up as much as it is now when there are these great medical schools?—I think so. The Committees of the various hospitals are quite alive to the importance of that. My own experience of our own Committee is

that the Committee is determined to have the highest standard they can. They are very keen on the good name of the hospital in every way, and they look into things exceedingly keenly. I do not think in our own case, the Great Northern, we are influenced at all by the fact that we have no school.

764. Not even indirectly?—I do not think so. I confess that I had not thought of the question before, but I do not think so, on the spur of the moment.

765. If medical schools are not necessary to hospitals, how would you provide for the clinical teaching, it must be done I suppose?—It must be done.

766. I gather that the point of your evidence is that while medical schools are good—as to that we must agree—?—Certainly.

767. They are not necessary to the efficiency of the hospital, that is what it comes to?—I think that is what it comes to. We must have medical schools, we must have clinical material, and we do not make the best use, perhaps, all over of our clinical material; it is only recently that the smaller hospitals have been utilised at all.

768. But you would agree with a good deal of the other evidence that the medical school, as such, should restrict itself to clinical work?—Yes, I think it would be very much better if the plan I was brought up on were adopted; we had nothing to do with the hospital until we came there to attend clinical work. May I just add one word. I have had opportunity recently of seeing hospitals without schools as a visitor under the King's Hospital Fund, and I should just like to say that these hospitals that I have seen seem to me as carefully managed as regards the treatment of patients as any hospital with schools could be.

[The Witness withdrew.]

Mr. JONATHAN FORSTER CHRISTIAN MACREADY, F.R.C.S.,
called in and examined.

769. The CHAIRMAN: You are connected with the Great Northern Central Hospital?—The same hospital as Dr. Burnet; he is the senior physician and I am the senior surgeon.

770. You heard some portion of his evidence?—I heard all his evidence.

771. Do you concur or differ with that evidence?—I concur with his evidence, but he said that the nurses dressed the patients, and dressed them very well. He ought to have said, I think, that all important dressings are done either by the house surgeons or by the surgeon himself at those hospitals.

772. The BISHOP of STEPNEY: But the point would remain that the dressings which would usually be done by one of the student dressers at a hospital with a school are frequently done by the nurses?—Yes, that is what it comes to.

773. The more important ones would not?—No, they would not touch them.

774. The CHAIRMAN: The surgeon himself does the more important?—The surgeon or the house surgeon.

775. Now have you been acquainted with, or connected with, any hospital with a school attached?—Yes, St. Bartholomew's.

776. What is the opinion you have arrived at with regard to the benefits conferred upon a hospital by a school?—I do not know as regards the patient himself that he gains anything by having a school attached to the hospital. I think it is the man who learns who benefits by going to

the hospital, not the patient. I think the patient comes off quite as well at a hospital without a school.

777. He is less worried?—He is much less examined and it is much better for him. At a big hospital with a school he is overhauled by perhaps 20 people before he comes to his treatment.

778. The BISHOP of STEPNEY: Therefore would you say, as a surgical matter, that the constant examination of patients before the treatment is deleterious to his health?—It is very undesirable from the patients point of view.

779. The CHAIRMAN: It has been represented on the other hand that the examinations being consecutive and numerous, the case is thoroughly threshed out before it comes to the final decision of the great man?—Oh, no, the great man does not need that, it is really the student who benefits by that examination, not the patient at all.

780. Then you think that really the patients are subjected to unnecessary suffering?—I think that is the price they pay for the benefits afforded by the hospital.

781. Do you think that experiments are made upon them in the way of new medicines; we have heard something about that?—No, I do not think we ought to say that.

782. That is one of the items of expenditure that we have heard of—new and costly medicines are introduced rather by way of experiment?—No. I do not think they begin with the patients; they begin on something lower.

783. Then to go back, do you think the presence of students is not a benefit to the patients?—No.

784. Of course it is essential to medical study?—Yes.

785. The BISHOP of STEPNEY: Do you agree with what Dr. Burnet said about the records which are kept?—The records are kept quite strictly in both the schooled and non-schooled hospitals. That is essential.

786. From your recollection of St. Bartholomew's, when you were there, should you say that their records were kept in much the same way at the Great Northern as they are in Bart's.? Yes. For a great many years I kept the records at St. Bartholomew's and I do not see any difference there. I was registrar at Bart's, and I used to take the records.

787. The CHAIRMAN: Now you do not take the records I suppose?—No, somebody else does it now.

788. You superintend the house surgeon who takes the records?—Yes.

789. You look them through?—Yes.

790. The BISHOP of STEPNEY: Would you say that there was anything left out that was of value either to the patient or to science in the records kept where there is no staff of clerks?—No, I do not think the clerk has much to say on that.

791. Then where is it that the clerks' work specially comes in in the way of recording cases?—The clerk does his work to help himself to teach himself. I do not think he helps the school beyond that.

792. Is it really work done for the purposes of education?—Yes.

793. Would you agree with what is said about the absence of scientific stimulus when there is no teaching?—I do not think that is the case. A great many men who are on the hospitals without a school use that hospital as a stepping-stone to a hospital with a school, and they must shew that they are thoroughly competent or they will not take them at a hospital with a school.

794. That rather confirms what I was suggesting to Dr. Burnet, that, however indirectly, the presence of students does keep up the standard at hospitals which have schools?—Yes.

795. To that extent you would modify what Dr. Burnet says?—Yes.

796. The CHAIRMAN: I suppose the tendency is to prefer an appointment where there is a school?—No doubt.

797. And, therefore, very often a man goes from one that has not a school to one that has ?—A great many of the officers of one are the officers of the other ; they hold double appointments.

798. I suppose a medical man in a non-schooled hospital has more leisure for independent research ?—Yes.

799. He is not burdened with teaching ?—He is not teaching much ; he does a little teaching, but not much.

800. Teaching the nurses ?—No, the practitioners around come in and want to be taught, so that he does get some little teaching in that way.

801. The BISHOP of STEPNEY : From a surgical point of view would you say that the assistance which you obtain from the pathological laboratory at the Great Northern is quite sufficient for an ordinary, or even an extraordinary, case ?—Yes, I think it is adequate, and, if it was not, one could get at it in another way at one of the research places.

802. The CHAIRMAN : You do not think there is much difference between the two classes of hospitals really ?—Not as regards the patients.

803. Nor as regards the medical men ?—No, I think they are pretty level as regards the medical men, but I think the patient is really more comfortable in a non-schooled hospital, he is more at peace.

804. Suppose a very obscure case comes in, is not there more chance of detecting what it is the man is suffering from with a number of eyes than when there is only the surgeon there ?—The number of eyes are inexperienced eyes ; they are not all fully-blown medical men.

805. They are all on the *qui vive* ?—But their experience is very, very slight ; I do not think it would be likely to assist an obscure case.

806. The BISHOP of STEPNEY : Is it not sometimes said, and certainly our knowledge of human nature rather bears it out, that a certain class of patient is rather proud of all the attention paid to him ?—Oh, yes, they think it does them good.

807. So that it is not always a hardship on them, although it may be bad for their health ?—Yes.

808. May it not be that that stimulus to their interest in life is medically beneficial to them ?—Yes, it helps as a sort of faith cure perhaps.

809. That, to some extent, neutralises the evil effects of overmuch examination ?—I am supposing, of course, that they are examining a case in which it does not matter whether they examine 20 times or once, but if a person is ill it does make a difference.

810. The CHAIRMAN : Whatever makes them think that their case is of interest I suppose helps them ?—I suppose it does help them a little.

811. Generally, I think, you agree with what was said by Dr. Burnet ?—Yes.

[The Witness withdrew.]

(Adjourned.)

MINUTES OF EVIDENCE
 TAKEN BEFORE THE
MEDICAL SCHOOLS' COMMITTEE,
 AT THE
 WESTMINSTER PALACE HOTEL, LONDON, S.W.,
 ON
SATURDAY, DECEMBER 10th, 1904.

PRESENT—
 SIR EDWARD FRY.
 THE BISHOP OF STEPNEY.
 LORD WELBY.

SIR EDWARD FRY, in the Chair.

*Transcript of the Shorthand Notes of Mr. G. WALPOLE, 1, New Court,
 Lincoln's Inn, W.C.]*

THIRD DAY.

Sir HENRY BURDETT, K.C.B., called in and examined.

812. The CHAIRMAN: I believe that you are acquainted with the terms of reference to us?—Yes; I have read them.

813. The first heading on which we are required to make an investigation is:—"Whether any, and if any how much, money given or subscribed for the relief of the sick poor to the 12 London Hospitals having medical schools is contributed, directly or indirectly, by those hospitals, or any of them, for the maintenance of medical education." With a view to answering the inquiry we put out a form of return: have you seen that?—Yes; I have it here.

814. Do you think there is any information required to answer that first matter which is not sought to be elucidated by that form of return? I do not think so, although on looking through the return at first it gave me the impression that it was a sort of statement which favoured the preservation of the present state of things.

815. You do not find anything which ought to have been put which is omitted?—No, I do not think I do. The point which I do not quite understand is return B. I think that may give rise to a great deal of misapprehension.

816. We have had interviews with the various people who made those returns, and have endeavoured to elucidate the true facts. Then I will take you to the second inquiry, which is this:—"Whether any direct or indirect return of such contributions (if any) is received by the hospitals from their medical schools." On that point we shall be glad to hear what you say as to whether any direct or indirect return for the contribution is

received by the hospitals?—In order that the Committee should understand the position, I think, if I might, I should like to say a very few words on the general position.

817. We are not concerned with what may be called the general position. We are concerned with certain specific enquiries of fact. We are not asked to consider the general position of hospital schools; we are asked to enquire into facts in order to elucidate that question?—But I do not think you can elucidate that without going to the principles on which it rests. I only wanted to show you that these payments for medical education, this degenerate tendency which originated—

818. If you will allow me, I will put this to you in order to get rid of that question. Have you anything to say in regard to direct or indirect return?—Yes, certainly.

819. Then, perhaps, you will mention that first, before you go to the general question?—My difficulty is that if I do that I am afraid I shall have to cover the ground again. I think if you would let me very briefly indeed—I do not want more than five minutes—just put the point of view as I see it—and I have been in it nearly 40 years—I think it would save time, because all this is embraced by the question that you ask me. The position is this: The whole system, in my judgment, of hospital administration in this country is wrong, and it has led to a position of affairs which cannot go on. We have an eleemosynary medical service, and that eleemosynary medical service largely controls the whole machine. For instance, every London hospital has a large number of doctors who very generously give their services for nothing. I need not waste time in saying that I fully recognise all we owe to the medical profession; I have been identified with it all my life, that we may take for granted: but this free medical service is the real underlying cause of most of the trouble. These gentlemen give their services to the hospitals, and they get out of the hospitals much of the reputation and the experience by which they live. Now, if we had hospitals conducted on a business basis, by paying every medical man who now gives his services to the hospital, the result would be this: that the funds at present given for the support of the London hospitals would be ample, the cost per bed could be materially reduced, and the number of patients treated could be kept within the necessary limits of the poor of London. Another and still more important change would be this; that our hospitals then could be controlled by the managers and not mainly controlled by the doctors. Everybody inside who is working in hospitals knows perfectly well that the patients in the hospitals at the present time are not merely poor patients residing in the immediate neighbourhood of the hospital, but are patients brought in by the medical staff, who usually control the admissions. Here is the underlying cause, in my judgment, of most of our difficulties in reference to voluntary hospitals. If you look at it just simply from the point of view of the relations of the doctors, young and old, to the hospitals, you will find that, if you go back far enough, it was once the practice (and there was keen competition) for a student who wanted to be a house surgeon or a house physician first of all to get the patronage or goodwill of some gentleman who was on the staff, in order that he might get a house physicianship or house surgeons, for which he paid a fee.

820. We are not called upon to frame a scheme for the reform of the hospital system?—But this is all related. I am coming down to hospital funds for medical education in three steps. To-day the hospital residents do not pay anything. They go into the hospital, they get free residence, and some of them are paid. We have a practice in the hospital world which is only just commencing at some hospitals, and that is the payment of the honorary medical staff. At the big hospitals, like St. Bartholomew's, they used to pay each member £100, just reduced to £50, I understand. At St. Thomas's and Guy's they pay each member, for what they call carriage hire, about £50 a year. Then a hospital like Brompton Consumption has recently begun to pay, I think, £50 a year to each of its

medical staff on the ground that in that way the Committee acquires some control. These payments are the technical recognition of the Governors' control; but the real difficulty is that the managers of many hospitals do not control the medical staff because it is held that they render such enormous services without payment that if they express a wish in any direction or want anything done they ought to be paramount. That is the underlying principle of the whole system. So that we have changed from the first position where the residents paid for their appointments back to the point where they paid nothing, on to the point where the schools (as they do in some cases now) pay the hospitals for the privilege of the clinical instruction and experience which their students receive, back to a more recent innovation, which only goes back to about 1897, when the hospitals began suddenly to support the schools. Now, this is the important point. Why has this happened? Mr. Stephen Coleridge will tell you that it is because the King's Hospital Fund was established, but as a matter of fact that is not the reason. That is merely a coincidence. The real reason is this. If you look at the returns you will find that the number of entries of students at the London schools began to fall off, and has so steadily decreased that if you take the five years from 1894 to 1899 you will find there were on an average 527 who entered; in the four years from 1900 to 1903 that number had fallen to 423; that is by 20 per cent. In the last year—1904, as far as the figures are available, it appears that they have fallen again to 411. When certain schools found that the students were not coming, they began to approach the hospitals and ask the hospitals to support the schools with money out of the hospital funds. A few hospitals have done it, but it is really a very few of them. If you take the whole 11 schools you will find the case of Guy's and St. Thomas' is normal, except that at St. Thomas's they have begun to increase their salaries, and that, I think, is legitimate, because, with the development of science you must have more assistance and it means more salaries; but in the case of the London and Middlesex and St. George's the grants or increased salaries have been abnormal. At St. George's for instance although the amount of money apparently given to the school is not so very great, the increase in the salaries, which is really a gift to the school, is very striking. Then you come to St. Mary's, which has always given large sums of money to its school. King's College Hospital never has given any money at all. The reason is that although it is one to which medical science and education owes much, thanks to Lord Lister, it has never had any money to give; they have hardly been able to keep things going; and with all the pressure they could not spare any money. Then you have the case of the University College and the Royal Free Hospitals, where they pay for the privilege of having their students in the hospital. At University College, I am old enough to know exactly what happened on this question. About 1877, I think it was, or 1876, the hospital was in a very bad financial condition. At that time the whole of the fees which were paid by the students went to the medical staff, but it was pointed out in the papers, especially in the "Lancet" and the "British Medical Journal" that there were very great advantages accruing to the school from the hospital, that they could not have a school without the hospital facilities, and so one-third of the whole fees were given back by the staff to the support of the hospital.

821. I may tell you that we have the statistics for all the hospitals with regard to their particular contributions. We are quite aware that at University College a small sum is paid by the school to the Hospital?—That is how it occurred.

822. We are quite aware that that is the present position of things.—The payment has not been of long standing: I only mention it as an interesting fact.

823. What we have to enquire about is the present state of things. We have had information from all the hospitals which you have mentioned with regard to the contributions on the one side and on the other?—Now

the present position is this; with regard to the question that you asked me about: that is as to what the benefits are that the hospitals get from the medical schools. I should say the benefit is this. Looking at them as if they were business establishments simply and solely, and looking at the question in the light of those hospitals where there are no medical schools, the great benefit is the treatment of the patients in a clinical hospital. The difference between being in a clinical and a non-clinical hospital is that the patient gets an amount of attention and knowledge brought to bear on his case which is so exceptionally great owing to the criticism and presence of the students that no one who has resided in a clinical hospital, as I have, for a great many years and known about its actual daily work would ever desire, if he had to go to a hospital, to go anywhere else than to a clinical hospital, though he would have to submit to the annoyance and trouble of being used for the purpose sometimes of clinical education. That is really the valuable service which is rendered by the school. It is the one great asset. It makes for efficiency. There is no doubt a medical school makes for real efficiency in treatment, and it keeps everybody up to the mark.

824. That is in your view the great indirect return? That is the great indirect return, but so far as the direct return goes which is claimed by the schools, that is to say that if you did not have students you must have more nurses, and that if you did not have students the cost to the hospital would be very much greater than it is at present, all my experience, and all the figures of the hospitals in my judgment go to prove exactly the opposite.

825. You think it is more expensive to have students than not, but the work is better done?—It is better done but it costs more. As far as the hospitals are concerned they do not benefit. To show you that I am not speaking without book. I will give you a few figures. I will give you the average cost per occupied bed during 1902. I have got the figures for 1903, but as I have not audited the figures and they are not quite ready, I am giving you 1902 which I can stand by. If you take the London Hospital, which is the hospital which gives the most to its medical school, which has been the leader practically in the new departure of giving funds which are subscribed for the sick to the cause of medical education, the cost is £128 5s. per bed; that is the cost per occupied bed during 1902 on the total ordinary expenditure.

826. That is the whole cost?—Yes, I am taking the whole cost; you cannot go into anything else, I think. That is per occupied bed, not per actual bed, because to be fair you can only take the occupied beds. The cost is £128 5s. That is a hospital which has a clinical school. Take, then, the Great Northern Central Hospital, which is one that has no school. I take the Great Northern Central because having regard to its being a modern hospital and to the fact that it is very efficient—

827. We have had evidence with regard to that hospital?—I could give you several others, but it is difficult to know which to select. The cost per bed there is £99 5s. That is where there is no school. That is a difference of £29 per bed. In the London Hospital they had 676 beds constantly occupied in 1902. The Great Northern Central had 144. Those are the actual numbers. So that really and truly, they may say what they like, but where you have a large quantity and a large turnover you ought to do your business cheaper.

828. I should like to ask you this. Should not I be right in supposing that the great difference in expense per bed in the cases of the Great Northern and the London is with regard to salaries and wages?—In what department?

829. Salaries and wages are one of the items which go to the total expenditure per bed?—I think you will find there is an increase all through, taking all departments.

830. You say there is a total difference of £29 per annum for each occupied bed. The evidence before us goes to show that the Great Northern Central figure is £23 18s. with regard to salaries and wages, and the London is £41 10s., and the St. George's £47 ?—St. George's is very high. If you have the last report of St. George's or the report for the previous year, you will find a statement with reference to the reasons why and the extent to which they have increased certain salaries, and I am sure if you will read that you will see how extravagant they have been. I know that some items are higher and must be higher, but the question of salaries does not affect my point, because I do not consider that they ought to be higher.

831. Lord WELBY: The difference between these hospitals under that head alone goes a long way towards the difference that you have pointed out? If I took the individual items and went into the expenditure—that would take us the whole day—I think I should be able to show you that, although apparently it seems a great difference, in fact it amounts to very little. I mean, when you take an item like that of salaries and wages, you must ascertain what salaries they are. You have to analyse all these salaries in detail, to ascertain whether they are necessary, and how far they relate to other matters than the mere treatment of patients. In that way the differences would be considerably boiled down.

832. You have taken the total expenditure of the hospitals?—Yes I have got all those items out, but it would take too long to go into the details just now.

833. The CHAIRMAN: I should like to ask you one question before you part from that. Why does the presence of medical students increase the expense of provisions?—I cannot tell, but there may be waste, indeed, I know there is waste in several hospitals.

834. You would not attribute the waste to the presence of the students, would you?—Possibly, there are points relating to internal administration which one could not properly state for publication.

835. We wish to give publicity to all the evidence we take; we do not wish to act on secret evidence, and if you object to its going down you had better not answer the question?—With regard to provisions is the only conclusion that the students must have food in the hospital? If so, whether that arises from the absence of a medical superintendent: whether that comes from the entertainment of friends by the doctors or from the amount of teas and other things that are given in the wards, or how it happens, is a matter for those responsible for the administration of the particular hospital.

836. You have no particular explanation to give of the fact? No, it is not possible to give any explanation on any rational lines; the patients and the nurses do not eat more because there are students in the wards. That is absolutely certain.

837. Lord WELBY: There may be differences in this way. One hospital may be more lavish in the matter of diet than another?—That would have been true years ago, but I take it to-day the average of food efficiency is so generally high that I cannot conceive that any hospital can show a higher bed rate for provisions unless there is extravagance.

838. The CHAIRMAN: We have had evidence from the Great Northern that a great deal more mutton is given there as compared with chickens than in some other hospitals?—Then, who eats the chickens?

839. The patients?—Do they? I have had great difficulty to decide what I should say. I proposed rather to give you general figures. If you think it worth while to go into the details, I will take every item in the account and go through them one by one, but you will not want it, I think.

840. The BISHOP of STEPNEY: We may take it it is obvious from the returns that except in the matter of surgery and dispensary expenses every item at the London Hospital is considerably more expensive than at the Great Northern for the purpose of comparison between the two?—That is possibly so.

841. The CHAIRMAN : What I wanted to get at was, how you connect the presence of the students at the hospitals with the increased cost of provisions ?—On the lines that I have indicated. They may be a happy family party, and may thoroughly enjoy themselves. There is no medical superintendent in charge at the London Hospital. The system to my mind is wrong, because you cannot have an enormous establishment like that left for days in the control—and especially at the week ends—of young doctors recently qualified who have practically charge of the whole of the admissions, and it is quite clear to me that the system ought to be altered. I have not any doubt about that. Now let me go on to this matter of cost—I want to put it as clearly as I can. The London Hospital cost £128 5s. per occupied bed in 1902. The Great Northern Central cost £99 5s. ; that is a hospital without a medical school. In the provinces, and in Scotland, they have a system of very definite control over their expenditure. Take the hospital of the University of Glasgow—I take that because in my judgment on the whole it is a most efficiently administered hospital.

842. The BISHOP of STEPNEY : That is the Western Hospital ?—The Glasgow Western Hospital. The cost per bed is £70. I have been at infinite pains to go into the accounts, and I find that under their system of a medical superintendent in charge of everything, every single item is under control, and the expenditure is maintained on a nearly uniform basis. If you take the case of the Birmingham General Hospital, one of the largest of the Provincial hospitals with a school—I give you that because the standard is high—they have not a medical superintendent, but they have a house governor there ; there the cost is £70 10s.

843. The CHAIRMAN : Very nearly the same as Glasgow ?—Yes.

844. I suppose provisions are cheaper in Birmingham and Glasgow than in London ?—I think not ; I have gone carefully into that and I find that some things are even cheaper in London.

845. Lord WELBY : On the whole I think the tendency is that at big places you get things cheaper ?—Yes, I had the question of tinned foods before me in reference to a business in which the supplies of provisions are very large indeed, and what I found was this, that we can practically get every description of food throughout the year in the London market. If you sent down to Covent Garden you could get fresh vegetables of every kind almost without exception ; they come from all parts, and the cost is really very little more, if any, than the tinned vegetables which are, of course, not so good. But, if this presence of the students really helped the hospital it would be shown clearly in the lessened cost per bed for nursing. Where there are no students the nurses have to do the dressings, therefore where there are students there should be fewer nurses because there would be more hands to do the work. That is the contention ; but if you take the average cost of nursing, including wardmaids and attendants per occupied bed during the year 1903 (these are figures I can vouch for) at the London Hospital the cost is £30 10s. ; at the Glasgow Western Infirmary it was £21, that is £9 10s. less ; at the Birmingham General Hospital it was £16, that is £14 10s. less, and at the Great Northern Central Hospital it is £16 or £14 10s. less.

846. The CHAIRMAN : Very nearly half as much ?—Very nearly. If you want any more information on the nursing in any form I have it all here, and I can give you the number of patients to each nurse, worked out for 1903, if you like.

847. The BISHOP of STEPNEY : In the Western Infirmary at Glasgow and I imagine in the Birmingham General Hospital there is continually the presence of students ?—That is so. I have given both types of hospitals, *i.e.*, with and without schools. What I want to bring to the Committee's mind is this. If there is any contention about it, please remember it is the whole cost per bed that reveals such a difference in the Scotch and provincial hospitals with medical schools,

as compared with the London hospitals, and also with reference to their nursing cost.

848. The CHAIRMAN: But your point is rather that there is a general extravagance in regard to say the London Hospital, than that it is the presence of the students, or in other words of a medical school, that accounts for that extravagance?—Yes, and I may say that at the London and at most of the London hospitals the cost is too high.

849. Can you tell us what is the relation between the infirmary and the college in Glasgow?—I mean the medical faculty—in regard to finance?—The hospital has nothing to do with the finance of the school I believe.

850. That is because it is a university?—Yes.

851. Birmingham would be more analogous. Is the Birmingham a medical faculty attached to the Birmingham University?—Yes, it is now. In 1868 there was a Sydenham College attached to the General Hospital and the Queen's College in connection with the Queen's Hospital.

852. But in these provincial cases where there are medical schools, the medical school is entirely in every financial way separated from the administration of the hospital?—Certainly.

853. Therefore it seems to show that this excessive expenditure is not due to the presence of the medical school but due to something else?—Not necessarily, for I was going to instance the case of the Leicester Infirmary. Its economical working without students struck me more than 20 years ago, but I have not had time to go down to Leicester lately and I do not want to give you any evidence that is not recent and up to date. Now, these are the facts so far as the actual direct results go. I should like on this general question to put in a few more figures of another kind. I want you to have the whole position of the London Hospitals on your notes. If you take the population of the County of London, in 1894 it was 4,349,166; in 1903 it had increased to 4,613,812. That shows an increase of 264,646, or about 6 per cent. If you take the hospital population for the 94 hospitals in the County of London— I have taken every hospital I could find which I could call a hospital in the County of London and deal with for the purpose of this return—at these 94 hospitals the actual total patients treated in 1894 was 1,429,033; in 1903 it was 1,759,499. This includes out-patients.

854. This includes out-patients? It includes in and out-patients. I will give you the details in a minute. That is an increase of 23·12 per cent. in the hospital population as compared with an increase of only 6 per cent. in the whole population. Now, if you take the actual increase in the hospital population for the 94 hospitals it was 330,466 patients, whereas the actual total increase of the whole population of the County of London was 264,646 only, showing that if every person who was born in London and every person who came into London as a new member of the population had gone to the hospitals, over and above them, the increase in the relief given to additional patients on these figures exceeded the new population by 65,820 people. When you remember how great is the infantile mortality in towns, and with regard to how large a proportion of this new population it would be humanly improbable that they could ever get to a hospital, it will give you an idea perhaps of what the hospital problem in London is to-day. About the year 1876 I showed that the number of patients who went to the hospitals was about 1 in 3 of the population. In 10 years it had increased to about 1 in 2, and now to-day we have arrived at a rate of increase which exceeds the whole number of the new population. The whole condition of affairs with reference to this question of the treatment of patients at hospitals is a most serious one and will have to be reconsidered. Indirectly it illustrates the danger of granting funds from the hospitals to the schools, because it emphasises the control exercised by the doctors over the whole government of the hospitals and the real reason why there is this growth in the hospital population is that the point of view of the hospital physician and surgeon and teacher very frequently is: "Send us every case to the hospital that we may have the widest selection for clinical purposes."

855. We are not asked to advise as to whether this should go on?—I know you are not, but I should like to bring the figures to your notice. In 1894 there were 9,110 beds in the hospitals; in 1903 there were 9,771; that is an increase in the beds of $7\frac{1}{4}$ per cent., which is $1\frac{1}{4}$ per cent. more than the increase in the population. The in-patients were 92,517 in 1894, and 112,523 in 1903; that is an increase of 21·62 per cent. The out-patients were 1,336,516 in 1894, and in 1903 they were 1,646,976, or an increase of 23·22.

856. Lord WELBY: Would you think that this increase means in any way an abuse of the hospital facilities and hospital accommodation?—Yes. My own view about that is this: If these hospitals were conducted on a business basis the hospital population would be reduced by very large proportions, especially in the out-patient department. You have this extraordinary anomaly, which confirms the view I desire to put before you. On the one side there is the medical press, the "Lancet" and the "British Medical Journal," with the British Medical Association, crying out for a reduction in the numbers of patients treated at the hospitals, and saying that the profession is being ruined by it, and yet hospitals are continuously increasing the number of patients admitted; the real underlying cause being: "do not refuse a case; let every case apply, so that we may have the widest selection for clinical purposes." That has been going on for years with increasing force.

857. With the increase in philanthropic feeling in London, and considering the masses, the increasing masses, I am afraid, of extreme poverty, would not you expect that the tendency would be an increase of patients admitted to the hospitals?—My own view on that point is this: that, with the advance of science, and with the enormous increase of cases of operation, you would find if you compared the class of cases admitted now and the class that were admitted formerly, the beds are mainly taken up by what are called "interesting" cases rather than by cases which may be of urgent importance having regard to the patients themselves. There are a great number of cases which are acutely chronic; a man for instance, has bad heart disease, he gets worse in the winter; his symptoms are aggravated; he has no means of being treated at home. In the old days he would have been admitted into one of the wards—and he is a very useful patient for clinical purposes to have in the ward, because that is the sort of case that the doctor must have to look after in his private practice—but nowadays that class of case has gradually, if not entirely, disappeared. I was talking to the Glasgow people on this very subject, and they say the way they have remedied that danger is by their medical superintendent having charge of the admissions; he takes care that every case which really is suitable for the hospital shall be admitted, and that the younger men, the residents, there do not admit the cases; the superintendent admits them, and the junior medical officers refer to him or his assistant before they refuse a case.

858. The BISHOP of STEPNEY: I thought you said that a case like that would be very useful for clinical purposes?—Yes.

859. Then why should they not be welcomed at the hospitals?—Because the whole trend of the time I think is—well, to give precedence to "interesting" cases.

860. My point is this: I do not want to dwell too long upon it. What you say is that in the old days that kind of case would have been admitted but at the present day he is not admitted?—Let me put it in this way; he would have been admitted formerly much more readily than he is to-day.

861. The purport of your evidence is to show that a great evil arises from the condition of admitting all patients that are clinically interesting rather than others. Here is a case which you say is clinically interesting, and yet you say owing to the increasing control of the doctors such cases are not admitted?—Perhaps that is where the misunderstanding arises. Clinically interesting such a case is not, in the modern sense, probably. I mean to say that from the students' point of view it is very useful, but—

862. The CHAIRMAN : What you rather mean is this : that it is a case of common disease very useful for the student to know ?—That is so.

863. But on the other hand it presents no novelties such as the doctors like ?

The BISHOP of STEPNEY : That is not what Sir Henry Burdett says. His complaint is that in these cases it is the residents that admit them.

The CHAIRMAN : But they like extraordinary cases.

The WITNESS : Let me bring it clearly home to the Bishop. You are ill in bed, you have a modern nurse to attend to you, you have, we will say, bronchitis, which is a great trouble and keeps you in bed, and it is very uncomfortable, but—you are not an “interesting” case, and the modern nurse may want to leave you because you are not interesting. What is the work of a hospital to a large extent and what it used to be largely is now being greatly done by the Poor Law Infirmaries in the Metropolis. For clinical purposes, as was pointed out at the Westminster Town Hall only a few months ago, it is essential that students, for their own sakes and for the sake of the poor, should be admitted into the wards of our Poor Law Infirmaries. In brief, the system of admission in London tends more and more to the exclusion of certain urgent cases of disease, and favours picked cases of special interest.

864. Lord WELBY : You were putting Glasgow as a case in which the evil of over-admission was kept in order by the fact of there being a strict control from above in the admission of cases ?—That is so.

865. You look upon that as the remedy ?—I look upon that as the remedy ; that is one remedy, and the payment of the medical staff is another remedy.

866. Do your 94 hospitals include the Poor Law Infirmaries ?—No, I was only dealing with voluntary hospitals.

867. The CHAIRMAN : There were 101 hospitals to which the King's Hospital Fund contributed in 1903 ?—Some of those are not hospitals ; that is to say, not hospitals in my sense. May I correct the answer I gave to Lord Welby just now, by saying that I cannot answer his last question definitely ? I will not be certain about it ; the printers have broken down in the type, and they have not returned me all these papers ; and speaking from memory I could not be absolutely certain whether the figure I gave does include Poor Law Infirmaries or not.

868. Lord WELBY : It is rather an important point.—Yes. I will let you know. [The Witness has subsequently reported that Answer 866 is correct.]

869. The CHAIRMAN : Does the King's Hospital Fund subscribe to the Poor Law Infirmaries ?—No. Some of the Poor Law Infirmaries are as well equipped as any hospitals we possess.

870. Lord WELBY : When you are considering the public administration of the sick poor the Poor Law Infirmaries are a very important item ?—Quite so. You were asking me about abuse. I consider that that is an abuse of hospitals. I consider that, whatever the necessities of medical education are, the first consideration which the population of London demands at the hands of the hospitals is that they shall be so administered that every poor person whose circumstances warrant it shall be admitted without question if they are medically or surgically ill and fit to be in-patients. That is what I want to clearly state, and I do not consider we have this system fully to-day. Then, abuse arises in another way : people are attracted to the hospitals—and they are quite right—if I had an accident to-morrow, the worse it was the more strongly should I desire to be taken to a hospital, because one gets everything there with the least risk of permanent injury : but abuse exists, especially in the out-patients' department, it would be difficult, I should say, to exaggerate the number of cases which might be excluded with great advantage to the thrift instincts of the people, to the medical profession, to the public, and to the hospitals, too.

871. The CHAIRMAN : Now I will go back, if you will allow me to our second inquiry with regard to direct or indirect returns from the schools to the hospitals. I think I may summarise your evidence in this way : that you consider there is a great benefit in the superior character of the medical examination, and the medical skill given in cases where there are medical schools, but that there is no saving of expense, although there might be a saving if they followed the example of some of the provincial hospitals ? --I will put it in this way. I recognise everywhere the value of the services of the medical profession to the sick poor in our hospitals, and I know, as they know, that where there are students constantly in the wards the medical staff are necessarily kept up to the highest efficiency by their presence-----

872. That you consider to be of great benefit ? --Yes ; but in a business sense I consider it is a disadvantage.

873. In point of expenditure it is a disadvantage ?--Absolutely a disadvantage.

874. That is the substance of your evidence on that point ?--That is so.

875. Then we come to the third inquiry : " Whether in the event of the Committee finding that any hospital contributes to its medical school a sum in excess of the return it receives from the medical school, there are any special considerations advanced in justification of such expenditure, or any general considerations which would apply to all hospitals having medical schools." The last part of that question probably is one that would interest you most :--" Any general consideration which would apply to all hospitals having medical schools ?"--I say that that part answers the first two points. I am sure I shall appeal to you as a lawyer in saying that the general consideration is this : if I contribute £1 to a public object and I place it in the hands of trustees whose duty it is to devote it to that object, I do not want it diverted to another object. That is the whole underlying principle. Some of us have given up all our leisure, as a great principle of our lives, believing, apart altogether from the relief of sickness, that this voluntary principle of hospital support is vital to the best interests of the character of the people of these islands--we have fought that battle, and the public have responded nobly. If I went into figures I could show you the extraordinary way in which in these ten years the public has responded and have practically given everything that they were asked to give. Yet the hospitals have gone on spending beyond anything which the most prodigal liberality of the public can continue to provide. With regard to Mr. Stephen Coleridge, we may have our own opinion about him, but he is a most astute critic and a most zealous man, and one must give him full recognition for what I believe is his honest endeavour to maintain the principles which he believes in ; we cannot support him, but one always has great admiration for a man who does not shrink from advocating what he believes to be right. He is right in saying that he has on the face of it evidence that about the date when the King's Hospital Fund was started these grants from the hospitals to the medical schools began to increase. I have put in figures to show you what the cause was, viz. : the diminution in the number of students and the poverty of the schools which happened to become acute at this very time was merely a coincidence, and had nothing to do with the commencement of the King's Hospital Fund. On the general principle what seems to me is this. There is the subscribing public to be considered. From the point of view of the subscribing public I think they know little and care less probably about medical education ; they have in their minds the sick poor whom they wish to have as their guests in the hospitals, and they subscribe for that purpose. I do not consider therefore that anybody under any circumstances whatever is justified in giving money from the hospital funds to the purposes of a medical school. I am of course speaking of voluntary hospitals.

876. I should like to put this to you. It has been suggested to us

that the hospitals confer great benefit on the schools by giving them the opportunity of obtaining clinical instruction?—That is true.

877. And that the schools on the other hand confer benefit on the hospital by the attendance that they give and the acuteness which they provoke in the medical man to which you have already referred. It has been suggested that these mutual benefits ought to be set off the one against the other, and that no money relation ought to exist, no money should pass from hospital to school or from school to hospital?—That is all sound principle, and it is the principle which had always prevailed until (it may be) a little indiscretion on the part of two or three hospitals brought about all this trouble.

878. Do you think that that is a fair calculation to arrive at?—Yes. I ought to tell you that I have been connected with a large medical school for some years. I was Registrar of the Birmingham school, and brought about the amalgamation.

879. The BISHOP of STEPNEY: May I ask your opinion as to this. You say that nothing ought to pass from the hospital to the school, but you would be quite willing for the hospital to pay a school for services rendered in the way of pathological work and the like?—Yes, if it can be shown to be a legitimate charge, but I should provide that as part of the hospital expenses. I should not have the position you have here at the Westminster Hospital for instance, where you have school buildings which were erected by money subscribed through the hospital, and the Governors feel bound as the owners to maintain these buildings, and that is why they are contributing to the school.

880. Where it could be shown that the laboratory work of the school is a direct and necessary benefit to the hospital, you would not object to the hospital paying something in consideration of those services rendered?—What I should prefer is this, because what the Chairman has laid down, the actual independence of the school and the hospital financially is most important in principle. I should prefer that the hospital should not give anything to the school for that purpose, but that the hospital should have its own department if it wants it; and, anything that a hospital requires in that direction should be at its own expense. That in all these instances is quite an easy matter.

881. The CHAIRMAN: Do you say that in the case of Westminster the medical school buildings were erected with the proceeds of money subscribed for the purposes of the hospital?—No; they were subscribed by public funds which were raised for the purpose of the medical school, but were given to the hospital, which expended the money on the school, and have since felt morally bound to maintain the buildings.

882. They were built by moneys specifically given to the school?—Yes.

883. Are there not many other cases in which the school has been quite as much the object of the original founder as the hospital. At St. Mary's the hospital and the school were founded together; the subscriptions were given for the hospital and the school, and at the same time, openly and professedly.—I cannot say, but I know as a matter of fact in reference to St. Mary's Hospital that its early history is not quite clear. What I mean is, that I cannot accept that statement, unless, of course, you make it of your own knowledge.

884. We are informed that the two were recognised as part of the foundation?—The public do not understand anything about it; if they understood it I am certain that there would be a meeting of the Governors of St. Mary's before very long, and if I understand anything of public opinion the subscribed funds would not be kept in that way very much longer.

885. And again in the case of the London we are told that the contribution of £2,500 has been confirmed every year by a vote of the meeting of the proprietors; you do not suppose that the proprietors did not know what the money was being subscribed for?—I do, knowing what these meetings are, and you would too if you had seen them as I have done. The

difficulty is to get anybody at them. The London perhaps is in a better position, because a few people round about the hospital attend the meetings.

886. The BISHOP of STEPNEY: But the point is that it is open to any subscriber when notice is given of a meeting to go and state his objections if he desires to do so?—That looks quite open and all very sound, but in practice men give their money, but they have not the time to go to Governors' meetings regularly and fight these things out.

887. Lord WELBY: You put to the Chairman the point that it is wrong to divert funds given to one purpose to another. Before we say that, ought we not to be pretty clear that the subscribing public really understand the question. No doubt anyone of us who subscribe to a hospital would be thinking of the sick poor chiefly; but is it not possibly rather forcing the conclusion to say that they would object to any part of that money going to a medical school if they were told that the medical school was of use to the hospital? I think any one of us who might be subscribing would probably not go into that detail. One would be content to accept what the hospital is doing. I only put it to you as to whether we ought to assume without qualification that a man who subscribes to a hospital does not intend any of that money to go to a medical school?—Well, I made that statement with the utmost deliberation. I mean, I am more in touch with the givers to hospitals than probably anybody in this country. This question has now been agitated because it has only arisen since 1897: and is not the very cause of this Inquiry the answer to your question, and the best proof I could give. A generous donor offers such a splendid sum, roughly, as £5000 a year—giving property which produces £5000 a year—and puts it not exactly as a condition because, no doubt, he was dealing with the Prince of Wales, but he makes a clear indication of his view that he wants his money to go to the sick poor.

888. In that case you have a man who makes a donation, but in the case of a man who subscribes in the ordinary way, do you think it is as clear?—That seems to me to tell the other way, because subscriptions are invited for the support of the hospitals.

889. The CHAIRMAN: To the General Fund?—That is the view put, I know.

890. It seems to me the common sense view?—But the subscribers have no knowledge of these matters; they imagine that the hospital is for the benefit of the sick poor, and they do not understand that any of their money goes to another purpose.

891. No doubt the public mind has only a vague idea of these matters, but I should have thought most people were acquainted with the fact that there were medical schools attached to hospitals, and that some relations existed between them, although they do not care or trouble to inquire exactly what the relations are?—I do not think so. I think they have assumed that the money they gave went to the hospitals alone.

The BISHOP of STEPNEY: I am bound to say that I have met with many expressions that bear out Sir Henry Burdett's view. I have heard it said, "I cannot refuse to subscribe to the hospitals, but I should subscribe with much greater readiness and confidence if I were assured as to the relationship between the hospitals and the schools."

892. Lord WELBY: My point is this. I can quite understand your putting it to our Chairman, as a lawyer, that there is what you call a diversion of funds, but we want some evidence on the subject, if there is a diversion of funds?—Take the terms of the document, and try to follow clearly the argument that is raised from the public point of view. These funds are given to the hospital—if you like, without condition—but they are given to the hospital, and the popular idea of a hospital is the relief of the sick. Now, if the person who receives the money at the hospital is going to expend it on any other purpose except the relief of the sick in the hospital, he ought certainly to intimate that.

893. The CHAIRMAN : I go with you entirely in this, that the line ought to be defined ; I think you are perfectly justified in saying that the public ought to know to what they are giving ?---I have been called in in many of these hospitals, and I have sat very often at board meetings : I have heard more discussions upon this than upon almost any other topic in the last 25 years. The old robust spirit was that it was an absolute breach of trust, and the committees would not give a penny : they have always resisted it, until the "weaker brethren" came in in 1897. There is one other point of view I should like to put before you with regard to these payments. I have, say, a boy, and I am going to put him into the medical profession, and I want to pay his fees. Why should I not pay his fees ? Is it not a dreadful thing to be told that my boy is to be partly educated out of money which was given by the public for the sick poor ? I most strongly object to that, and it would have the effect in my mind that I should not send my boy to a hospital which contributed money given for the relief of the sick to the support of the medical school.

894. You must bear in mind that the greater part of the higher education in England is eleemosynary ? It is eleemosynary in the sense that there are foundations, and in that sense no doubt we are all indebted to eleemosynary institutions ; but here is a real living thing, the money is given by the people of to-day for the people of to-day, and it is diverted to medical educating, which has properly nothing to do with the object for which the money is subscribed. I (and the same would be true of any one of us here) would be prepared to pay just as willingly the necessary amount of money to educate my son for the medical profession, as for engineering or any other profession ; why I should not be charged the proper fees for that, whatever they may be, is most remarkable. If we look into the matter, the explanation is that there is a competition between these schools. There are a great number of little schools in London, which is bad for medical education, and therefore bad for the public, and bad for the whole nation. We ought to have an amalgamation of all these schools, we ought to have a proper system of medical education, and then we should hear nothing of this question at all ; it would *de facto* be absolutely settled. It is simply competition which is destroying medical education in London and injuring the hospitals by what I venture to say, with all respect to you, if I may still use my own term, is a clear diversion of the funds.

895. We have really nothing to do with the question whether there is a diversion of the funds or not ; all we have to do is to answer the three questions put to us in the terms of reference ?---From the point of view of the medical schools I say this : that the system is ruinous to medical education ; that it deprives the metropolis of a really great medical school ; and it causes an immense waste of material. I have told you generally from the clinical point of view, about the patients, that the system of admission in London tends more and more to the exclusion of certain urgent cases, and favours the admission of picked cases of a special kind. And I should say that on this matter which you have under consideration, in my judgment, no £ s. d. account is of any value in determining the question, as a matter of fact, for the reasons I have stated. It is a matter which has to be treated wholly on its merits. I think it is bad for the schools and bad for the hospitals, and it is certainly calculated, unless I utterly misread public opinion, to injure the hospitals out of all proportion to any benefit that can possibly be conferred by its continuance upon the schools. If any particular hospital desires to help its school, and to keep up the present system of division and subdivision, let Mr. Holland, as I told him the other day, start a special fund and ask people who want to give money for medical education to support him. He does not like to face the position, and if he does not like to face it on public grounds, that is I think the best evidence that could be given that on the whole public opinion is very distinctly against this abuse, as I consider it, which has grown up within

the last few years. I have been very loth to give evidence, as a matter of fact, I may tell you, because I am too much of a critic, and I have, necessarily, too much to do with these things. At the same time, you have duties to discharge, and as you invited me I was perfectly ready to come before you. If there are any details or figures that you want, or any document or verification, if you let me know, you shall have them. I am sorry to have taken up so much of your time, but of course, this is a most important subject.

[The Witness withdrew.]

(Adjourned.)

MINUTES OF EVIDENCE
 TAKEN BEFORE THE
MEDICAL SCHOOLS' COMMITTEE,
 AT
81, CHEAPSIDE, LONDON, E.C.,
 ON
TUESDAY, JANUARY 17th, 1905.

PRESENT—
 SIR EDWARD FRY.
 THE BISHOP OF STEPNEY.
 LORD WELBY.

SIR EDWARD FRY, in the Chair.

*[Transcript of the Shorthand Notes of MR. G. WALPOLE, 1, New Court,
 Lincoln's Inn, W.C.]*

FOURTH DAY.

THE HONOURABLE STEPHEN WILLIAM BUCHANAN COLERIDGE
 called in and examined.

896. The CHAIRMAN : You know the terms of reference to this Committee?—Yes.

897. And you know, of course, that we cannot go beyond them. You also know the evidence that has been given before us?—Yes, I have seen it.

898. With those two observations, we should like to hear the observations you wish to address to us?—I have carefully read the evidence. The first consideration that occurs to me is, that these diversions according to the evidence before you, are not in the nature of a contract; they are not in the nature of being given in return for any specified services rendered; they are not paid direct to those individuals who are stated actually to render the services; and therefore it seems to me on the evidence before you that these, what I call, diversions are in the nature of a free gift, regulated by no financial or business consideration. To begin with, therefore, they are, in my opinion, entirely unbusinesslike and therefore unjustifiable.

899. Would that apply to cases where the school was part of the object of the foundation as well as the hospital?—No; in a case where the original founder of the hospital specified in the deed of trust that he desired his money also to go to the establishment and support of the school, I should have no criticism to make.

900. That is the case, as we know, in some instances?—In some instances. Then, I think, it is interesting to observe this. If you turn to Dr. Foster's evidence, at Q. 141-143, you will see this: "Is there not some contribution from the school to the hospital in the case of the fees for clinical instruction?—Yes; those are made over to those who give the instruction. The fees do not go into the hospital treasury." That is emphasised again: "They do not go into the College funds?—They do

not go into the treasury. (Q.) They do not benefit the hospital?—They do not benefit the hospital, except in the indirect way that thereby you are able to attract a stronger and better staff to the hospital than you would otherwise.” Now, on the one hand, that is in cases where a payment is made into the hospital by the school, it does not go into the treasury of the hospital, but into the individual pocket of the person who renders the service. *Per contra*, when a payment is made from the hospital funds, in the other way, to the school, it does not go to the person who renders the service, it goes to the institution. As I read the evidence, the services rendered are mostly rendered by the students in the way of dressing and clerking and such services. But, when the hospital claims to pay for those services, they do not pay the pocket of the student in the same way that on the other side they pay the pocket of the clinical instructor; it goes into the general funds of the school, and practically, as far as I can see, generally does not go even in reduction of the fees of the students; it goes to swell the emoluments of the professors, who may be teaching chemistry or biology, or other subjects quite outside the purview of the healing of the sick, and only remotely connected with the actual work of the wards of the hospital. In my opinion, when you come to consider the payments on the one side and on the other, that distinction is a very important one; in the one case it goes into the funds of the institution, in the other it goes into the pockets of the individual. In estimating the reciprocal benefits between the two institutions, and when you come to consider the payments from the one to the other, that is an important and fundamental consideration, and it is one which as far as I can see has not been alluded to by any of the witnesses. The hospital is an institution founded and supported by the charitable for the purpose solely of relieving the sick; it is a charity; it is a charitable institution. The school is a private financial enterprise, wherein if there be profits they would go to those who manage them and own them, and therefore, when a payment is made from a charity to a private financial institution, it seems to me a totally different transaction from where a private financial institution chooses to make a contribution to a charity. The two bodies are so totally different in their fundamental principles, that I venture to say, that when you estimate the reciprocal payments that should not be lost sight of for a moment. I may, perhaps, be allowed to add that when the private financial enterprise happens to be an institution that is dedicated by law to a practice which to a large number of worthy people—

901. We cannot go into the question of vivisection?—I may say just this; that when it is dedicated to that practice it naturally must and always will arouse deep and earnest hostility from a large number of people. There are some of us who as long as that practice is carried on feel that we must protest against it.

902. Our inquiry does not involve that, and I am afraid we cannot go into it?—I thought it was as near the line of inquiry as the question of spending hospital funds on building cricket pavilions, and that you might allow me to say that; however, I quite understand that you do not wish to deal with that subject. Now, I think I may be permitted at any rate to deal with statements that have been made in reply to questions from yourself, on the point whether the foundation of King Edward's Hospital Fund had or had not any influence or concern with the remarkable rise in the amount of these diversions that synchronised with the foundation of that fund. Mr. Sydney Holland has denied it, and Sir Henry Burdett has denied it, and their denial has been received by this Committee, and therefore, I think it is perfectly open to me to rebut those statements. I will deal with Mr. Sydney Holland first. He says that a deputation of the surgical staff came to him in January 1897; he did not say what time in January. Only on the 5th February the King's appeal was published in *The Times*, and therefore it is natural and reasonable, I think, to suppose that the members of this deputation were not wholly unaware in

general that there was going to be this fund. The King's Hospital Fund of course was not started all of a sudden on the 5th February, and I imagine that such a place as the London Hospital had been approached some little time before in connection with the matter. The Committee did not come to any conclusion as to what they should recommend to the subscribers to the hospital until March; that appears in the answer to Question 358; and it was not till June that the meeting was called that finally authorised the diversion of £1,800 to be raised. Therefore, when Mr. Sydney Holland says that the dates he produces before you preclude my suggesting that that rise of £1,800 was directly attributable to the knowledge that when King Edward's Hospital Fund was started they would certainly get something from that—

903. You would say, perhaps, not knowledge, but expectation?—Expectation; Mr. Holland perceives that that would be a difficulty to get over, and so he states on page 45 that there was no idea then that it should be a permanent fund. That is the statement before you; he makes that statement now, and I can tell you this, that in the King's appeal on the 5th February these words occur in *The Times*, it is incredible that Mr. Sydney Holland should not have seen them, he may have forgotten them, but he must have known them at the time: "Our attention will be concentrated upon an endeavour to secure from £100,000 to £150,000 in annual subscriptions." Therefore we have it that the King was endeavouring to get in annual subscriptions, and it is incredible, if Mr. Sydney Holland had that before him, as he ought to have had, that he could have formed the opinion that there was no idea that this was to be a permanent fund.

904. The BISHOP of STEPNEY: Mr. Sydney Holland's evidence is that there was no idea then that it was to be a permanent fund, that is to say, when it was first started. He adds, "When the King's Hospital Fund was announced in February, 1897, a different policy appeared"?—Then he acknowledges that on the 5th February he knew that it was going to be a permanent fund, and the conclusion that they should make this grant was not eventually come to until March. I venture to think that I have established my case against him as far as that goes. If you look at my table as to St. George's Hospital, you will see that the diversion to the medical school had been something in the neighbourhood of £100; the £446 in 1893 was an extra, but practically it never got much above £100; in 1896 it was £118; then, in 1897, they get £1,356 5s. from the King's Fund, and immediately they divert the entire amount, all but £5; the diversion actually fits within £5 of the grant. I submit to you that anybody who says that that diversion and the grant had no relation to each other is lacking in a certain amount of humour. If Mr. Sydney Holland or Sir Henry Burdett really suggest that the grant had no relation to that receipt from the King's Fund, I must remain of my former opinion. I do not know, but I should deduce from these figures that the King Edward's Hospital Fund, when they found this out, did think that it was a little too much of it, because I observe that the hospital got no grant the following year; they did not get another grant until their diversion sunk again to £225. I think that is very eloquent evidence towards the conclusion I come to, which I still maintain, that the arrival of King Edward's Hospital Fund on the scene was the cause very largely of these diversions all over the London hospitals.

905. Lord WELBY: Might not the hospitals themselves point to the fact that you were just alluding to, that in the following year, when they got no grant at all, they still gave out of their own funds £688; might not they plead that as showing that they were giving out of their own funds apart from what I admit to be the curious fact of the close similarity between the sum given by the hospital to the school and the sum given to the hospital out of King Edward's Fund? Yes. I do not say that the entire fund was handed over as a rule at all; what I feel is that the creation of the fund and the knowledge that these grants were coming to

them seems to have stimulated the liberality of the hospitals towards the schools.

906. The CHAIRMAN: We have listened to you of course with interest upon this point, but I would remind you that the main object of our inquiry is to see what is the present state of the relations between the hospitals and the schools. I do not shut you out from it, but after all what you have been putting to us is only collateral?—I should not have gone into it but for the fact that it was introduced, as I contend, rather against me by these two Witnesses. There is one other point before I conclude. It is well recognised, and I suppose you are well aware that these diversions did rise very markedly in 1897-98; I think the figures prove that. I observe that no Witness has been asked whether the services for which those diversions are ostensibly paid were not as efficiently rendered before these immense diversions took place as they were afterwards. Suppose that question had been asked and they had said "yes, they were," there could have been no ground as far as I can see for the diversions at all.

907. I think we have been led to infer that the medical schools are less prosperous of late years than they have been before?—I can quite believe that, but is it not strange that the sudden rise all over London should have occurred in this particular year in such a marked manner. There is no other real reason for it coming in such a startling manner in that particular year, except the creation of this fund.

908. There is no doubt that the schools were less prosperous financially than they had been?—What I feel is that it is cause and effect. Then, on the question of the advantages given by the hospitals to the schools, I think most of the witnesses have not dwelt upon that with any great fervour. I think it ought to be—no doubt it is—within your mind that the real benefit the school confers upon the medical staff is, that where there is a large school it is well worth the greatest man's while to go and render his splendid services for nothing, because thereby he builds up a tremendous consulting practice which is his staff of life afterwards, yielding him sometimes a great fortune, and quite deservedly. The larger the school the greater the subsequent consulting practice, because every student, naturally, when he goes out into the world and meets a difficult case, will consult the man who was his master at the hospital. Therefore, the advantages given by the hospital to the staff *qua* staff (I am not speaking so much of the students as of the staff) are amply and overwhelmingly repaid by the enormous practice they build up thereby. It is perhaps natural that the medical witnesses before you should not emphasise that, but I think it is fair that a layman should.

909. I think we are quite alive to that?—Then the only thing I should like to say in conclusion, and I do really wish to say it, is this. It is, I suppose, quite outside the purview of the witnesses why these terms of reference were drawn up as they were, but in my opinion they are drawn up by the body that I felt it my duty to attack—

910. I am afraid I cannot let you go into that?—May I not protest against the terms of reference?

911. Oh no; you are protesting against our existence?—No; I wish clearly to say that. I am quite sure that if you had drawn up the terms of reference they would not have been in this form.

912. I was not consulted about the drafting of them; I accepted them, as we all did?—If you will say that none of you were consulted as to the terms of reference before you accepted them, I shall be satisfied.

913. The history of our appointment is not part of our inquiry?—But I should like you to realise what I feel about it.

914. I was just going to say this. I believe there is one special point in which you consider the terms of reference deficient?—Yes.

915. Will you just state what that point is?—I say that you are not invited by the terms of reference to estimate or go into the advantages rendered by the hospitals to the schools.

916. On that point we will hear anything you wish to put before us;

we consider that so far within our powers that we shall listen to anything you have to say. That will I hope remove some part of your objection to the terms of reference?—Yes it is most reasonable; I may say that if that had been included in your terms of reference, if you had been asked to investigate the enormous advantages conferred by the hospitals, with their enormous amount of “clinical material” (I think that is the phrase), to consider the advantages conferred not only on the staff but on the students, you would at once have come to the conclusion that I wish to press upon you, that when you come to investigate the advantages reciprocally, the advantages to the school from the hospital are infinitely greater than any advantages that the hospital gets from the school, and that therefore any money payment from the hospital to the school is absolutely unjustifiable.

917. You would agree I suppose that the hospital renders benefits to the school, and the school renders benefits to the hospital?—Yes, I should agree to that.

918. And you would further agree, would you not, that they are both indefinite quantities, not capable of being stated in pounds, shillings and pence, or any other mode of mensuration?—I should say that there are no services on either side that ought ever to be paid for in cash, unless you can specify them and pay the persons who render them.

919. You would agree that both of them are incapable of exact mensuration?—No, I am not prepared to say that, because if any man says, “I will render certain services to the hospital for so much money,” that is really ascertainable.

920. But he does not do that?—No, because he would render those services without payment; that is my view.

921. Lord WELBY: Is not it a question of the value of the services rendered on each side, which it is almost impossible to value exactly?—I think the only services outside the wards of the hospital that the hospital is justified in paying for are definite services, such, for example, as the bacteriological examination of matter from the patient; I do not think the hospital is justified in paying in any way for the education of the students outside the walls of the wards.

922. The BISHOP of STEPNEY: Then I gather that you contemplate as legitimate expenditure by a hospital upon services rendered by the school in the way of bacteriological and other clinical inquiry, provided that those services are definitely stated?—Provided that they are definitely stated, and provided also that the money goes into the pockets of those who render the services; and, thirdly, provided that those services do not include practices which are repugnant to a large number of very good people.

923. The CHAIRMAN: Did you read Mr. Tweedy’s evidence?—I did.

924. You will agree with the way he puts it, that the hospital confers benefits on the school and the school confers benefits on the hospital?—Yes, I accept that.

925. Neither of them capable of exact mensuration?—Just so.

926. And therefore that they might cry quits?—Yes. I should be sorry to say a word against Dr. Tweedy’s evidence.

927. That is rather your view, is it?—Yes. I protest against payments from the hospital to the school, that is all, and I do not think the money is subscribed for that purpose.

928. The BISHOP of STEPNEY: Except, I understand, with the limitation you have just mentioned?—Yes.

929. Lord WELBY: But if any specific sum could be mentioned and justified, then that might be the subject of a payment—if a definite service could be valued in pounds, shillings and pence it could be paid?—Yes, always provided that it is a service actually for the relief of an actual patient, not an experiment; and provided that it does not involve vivisection, because I do not think hospital funds ought ever to be used

in the pursuit of a practice which a large number of people—the most humane people in the Kingdom—regard with abhorrence ; right or wrong, that is the view that I am here to represent.

930. The BISHOP of STEPNEY : There is one question I would like to put, on the distinction you draw between the hospital as a charity and the school as a private enterprise. Would you call a University institution which received benefactions from persons interested in education a charity because it received such benefactions, though also it paid its professors and teachers ?—No. If any one chooses to leave a bequest to the school of the London Hospital, that is perfectly right, of course ; anybody may endow education if he chooses ; but you should not take money of other people who subscribe for something else, and endow education with it. That is the view I take.

931. Lord WELBY : I noticed that throughout your evidence you laid stress (which I quite understand) on the subject of this diversion of funds. Let me ask, was it not somewhat of an assumption that sums given to the hospital under the various heads—I am not now speaking of grants from the King's Fund, but general subscriptions—are given entirely for the hospital, apart from the school ? We have had evidence before us, for instance, that where contributions have been made to the schools out of the general funds of the hospital those contributions have been sanctioned by resolutions passed at meetings of the subscribers. Would you not admit that the statement that the managers are not at liberty to devote any of the general funds of the hospital towards the support of the school is a little too wide ?—I have attended a great many Hospital Sunday sermons, and I have read a great many hospital appeals ; I have in every way watched the method in which this money is asked for ; and I have never heard any utterance from the pulpit or read any appeal that has not put the case entirely as for the relief of the sick poor. The teaching part of the business is carefully left out ; nothing is said except about the grand object of helping the poor. And, if I criticise these diversions which I think are wrong, the only answer I get from these people is that I am attacking the hospitals ; that is not at all the fact, because I am only criticising their bad administration. I am thinking of the case of a man who gives a small donation at his church or sends his subscription in response to an appeal ; he sends it without any thought of supporting a medical school at all ; he is asked to give for the sake of the sick poor, and it is to the sick poor that he gives. No doubt a meeting may be called in the neighbourhood of the hospital in Mile End Road, which is ostensibly a meeting of the subscribers ; that merely means that a certain number of subscribers are got together who pass their resolutions ; but the mass of the people who subscribe, know nothing about it and do not care ; they have given their money in church, or in response to some appeal that has been made, very properly, in compassion for the sick poor. To my mind, the hospital is a sacred institution, dedicated to God solely for the relief of the sick, and that is what the money is given for. I do not think that any resolutions nominally passed by subscribers ought to weigh for one moment. If they asked for the money on these grounds they would not raise half the amount they now get. I have been attacked very violently for saying all this. I have tried to make it clear that it is the duty of the clergyman who makes an appeal at a Hospital Sunday Service to explain that part of the money is to go towards medical education, but I do not know that that is ever done.

932. The CHAIRMAN : You have no doubt that, in the case of the persons present at the meeting at which the resolution referred to was passed, they perfectly well understood that part of the money was to be devoted to this purpose ?—I do not doubt Mr. Sydney Holland's statement that there was a meeting convened, and that the meeting passed that resolution.

933. And notice of that resolution was given to all subscribers ?—No doubt, formally.

934. Another thing I am sure you will agree to is this; that in all cases where school grants are made by the committee of the hospital, the members of the committee must be cognisant of what they are doing?—No doubt every member of the London Hospital Committee knew perfectly well.

935. They knew that their contributions would go to the dual object?—No doubt.

936. You are no doubt right that the main object in the minds of those who contribute is the relief of the sick poor, but there is this to be borne in mind. Although people do not know definitely that the money goes partly to the support of the medical schools, they do know that the schools are mixed up with the hospitals in a general way?—I hold that it is utterly unjustifiable to apply to medical education in any way funds contributed for the relief of the sick poor.

937. Lord WELBY: I should have thought that a good number of the people who subscribe to hospitals look upon a hospital as a very useful benevolent institution, and they give their 10 or 20 pounds or whatever it may be on the faith that the managers of the hospital will distribute it as they think best, generally for the benefit of the hospital. In the case of any one of us here subscribing to a hospital, it might not occur to us that part of the money would go to the hospital school, but our idea would be that if the school is a necessary or desirable adjunct to the hospital we should have no objection to leave ourselves in the judgment of the managers. I, personally, should not consider my subscription "diverted" if the managers decided that some part of it should go for the purposes of the hospital school?—I may say, personally, that I should never have raised this agitation or said a word had the schools avoided a certain practice which we object to. It is simply that that has aroused us. We feel that it is wrong that this money which is subscribed for one purpose should be diverted to this detestable practice. If only that had been omitted in the medical education given in these schools you would never have heard of Stephen Coleridge and this agitation. I do not mind telling you that frankly. If it was not for that, as far as I and those I represent are concerned, we should have left it to the hospital managers to manage as they thought best. It is that that induced me to go into this agitation.

938. The CHAIRMAN: Then you would rather agree that supposing this practice had been absent, you would not have seen any harm in what is being done in the administration of hospital funds?—I do not know that. I should never have found it out.

939. The BISHOP of STEPNEY: Your objection, is not to the encouragement of medical education, but to the encouragement of this particular episode, I may call it, in medical education?—Having gone into the matter thoroughly, I cannot see (quite apart from vivisection) that these diversions are justified for a moment.

940. The CHAIRMAN: When I subscribe to a hospital I have a general notion, perhaps, that it has a medical school connected with it, but my subscription is to the funds of the hospital?—But how far will this thing go? Take the London Hospital; I cannot see any reason why the grant should not be £11,000 next year; Mr. Sydney Holland says it is worth it. There is no limit to what may be done in this way.

941. I should just like to say, before you go, that although we have not listened to your discussion of the terms of our reference, you must not assume that we think it open to all the criticisms that we understand you have made?—Well, as I say, I direct those remarks not to you.

942. We have heard what you have had to say on the points that you think material; is there anything you would like to add?—I think not.

943. You have no objection to what you have said being published?—Not the least; I should desire it.

[The Witness withdrew.]

The Witness desires to add the following note :—

I believe I was in error in admitting that a notice of the resolution referred to was given to all subscribers.

It appears not to have been sent to anybody, but only advertised in *The Times* (Q. 360), and it does not appear from Mr. Sydney Holland's evidence that subscribers to the Metropolitan Hospital Sunday Fund, the Hospital Saturday Fund, the congregational collections, and the boxes in the hospital (which represented £5,093. 9s. 10d. out of a total of £13,406. 10s. 6d. subscribed and given in 1896). were given a vote, and from a note published at the head of the list of subscribers, it does not appear that any but those who contribute £5 and upwards have a vote.

These considerations would seem to reduce the voters on the occasion that authorised the increase of the diversion by £1,800 to a certainly unrepresentative number, and that number must probably be further reduced to those only among them who take in *The Times*, and read its advertisements.

APPENDIX III.

As stated in the Report (paragraph 8), it has been found impossible to reduce all the relations of the hospitals to the schools, and of the schools to the hospitals, to money value, and the following particulars, therefore, purport to state facts only.

Where direct money payments have been reported to be made on either side, they are given as supplied officially by the hospital authorities; where such sums are the result of estimates similarly supplied, the Committee have accepted such estimates without further enquiry. Where payments are made on account of the schools, out of the general funds of the hospitals, in respect of items—such, for instance, as repairs, which are not sub-divided in the accounts as between the hospitals and the schools, and for which no estimates have been supplied—the fact that a payment is made is stated without giving any amount.

In regard to school buildings and land, where rent or interest is paid and where the original cost is known, the figures are given; in other cases only such facts as are ascertainable, and believed to be undisputed, are stated.

It has been thought better to include in the following particulars the sums paid by the hospitals on account of all laboratories, museums and libraries which are maintained, or partly maintained, by the hospitals. Each of the twelve hospitals referred to has a medical school, and seeing that the departments in question are necessary to medical education, as well as, in some cases and to a greater or less extent, to the work of the hospitals, the expenses paid by the hospitals, when ascertainable, have been stated, without making the attempt to assess the amounts fairly payable by the schools and the hospitals respectively. This, in case of necessity, would be more properly dealt with by experts, and, therefore, it is not to be inferred that the whole, or even any part, of these charges are necessarily contributions by the hospitals to the schools.* Where nothing is said about laboratories, museums or libraries among the expenses returned as being paid by the hospital, it may be taken that none are maintained by the hospitals; and, as all sums paid on these accounts by the hospitals are given, it follows that all other expenses (if any) in connection with these departments are defrayed by the schools.

The following notes take no account of general services rendered by the schools to the hospitals. But it must be remembered that, apart from these, which are separately dealt with in the Report (paragraph 21), the schools, in most cases, undertake many specific laboratory examinations solely for the purpose of helping the physicians and surgeons to form correct diagnoses in the exclusive interests of the patients, and that these would have to be paid for by the hospitals in any case. Where such examinations are made in a laboratory entirely maintained by a school, it is obvious that, in any exact assessment of the payments and receipts on either side, they would have to be taken into account.

It may, therefore, be taken that the following notes, while supplying a basis for apportionment by those competent to make the necessary valuations, do not provide the material for definite conclusions, except in those cases which are specifically mentioned in paragraph 10 of the Report.

* It may, for instance, be mentioned as an example that, in the case of the clinical laboratory at the Westminster Hospital, the cost of which in 1903 was £523. 1s. 4d., the authorities desire to call special attention to the fact that it "was not provided, nor is it at all used, for the purpose of medical education."

CHARING CROSS HOSPITAL.

Direct cash
payments to
School.

The Hospital paid on account of the School in 1903 :—			
Rates, taxes and ground rent	£632	4	0
Repairs	326	15	2
Insurance	20	5	0
Prizes	5	5	0
Museum, pathological and clinical laboratories... ..	134	12	10
Electric light installation	37	15	0
	<u>£1,156</u>	<u>17</u>	<u>0</u>

School buildings
and land.

The Hospital was incorporated in 1883 by Royal Charter, in Clause 5 of which it is stated that the scheme of the founders embraced the foundation and maintenance (in connection therewith as a necessary part thereof) of a Medical School, the students of which, while still students, might assist the medical and surgical Staff of the Hospital in their labours.

The buildings occupied by the School cost £21,818. 10s. 5d., and stand on land leased by the Hospital for 55½ years unexpired on December 31st, 1903, at a ground rent of £298, included in the sum of £632. 4s. 0d. mentioned above. The Committee are informed that appeals were made for funds towards the cost of erecting that part of the School building which was completed in 1881 at a cost of £13,165. 12s. 0d., thus releasing and converting to Hospital purposes the space previously occupied by the School. The result of these appeals was a sum of £8,117. 19s. 11d.

Maintenance of
laboratories and
museum.

The Hospital paid the following salaries in 1903 :—

Curator and Pathologist	£100	0	0
Bacteriologist	100	0	0

PAYMENTS BY SCHOOL TO HOSPITAL IN 1903.

The School pays to the Hospital one-fifth of the gross fees it receives, which one-fifth, in 1903, amounted to £626. 8s. 1d.

GUY'S HOSPITAL.

Direct cash
payments to
School.

The Hospital contributed to the School in 1903 :—			
For rates and taxes on old museum block	£89	10	0
For external repairs on old museum block	16	15	5
For insurance of School buildings.	47	8	0
For library books (being the last payment under an old standing arrangement)	31	16	11
Half share of annual garden party and prize- giving expenses	69	13	8
	<u>£255</u>	<u>4</u>	<u>0</u>

The Hospital keeps all the School buildings, with the exception of the Residential College, in external repair. The expense of these external repairs is in addition to the amount stated above as paid for external repairs of the old museum block, and is included in the general account for repairs of the Hospital.

The Hospital pays the rates and taxes of all the School buildings with the exception of the Residential College. The expense of these rates and taxes is in addition to the amount stated above as paid for rates and taxes of the old museum block, and is included in the general account for rates and taxes of the Hospital.

All the School buildings belong to the Hospital and stand on Hospital land; but all those erected during the past 25 years have been, or are in course of being, paid for by the School. (See below—Payments by School to Hospital.)

The Residential College was erected by the School on a piece of land originally purchased by the Hospital for £5,500. The capital sum required for the building was raised by the School by means of debentures (£20,000) issued on the security of the students' fees. The ground lease of the land expires in 1935. (For rent see below—Payments by School to Hospital.)

The Hospital pays to the School as its contribution for the entire laboratory and *post mortem* work of the Hospital, which is undertaken by the School, the following sums :—

For bacteriological laboratory	£214 14 0
For clinical laboratory	50 0 0
For pathological department	150 0 0
	<hr/>
	£414 14 0

School buildings and land other than Residential College.

Residential College.

Maintenance of laboratories by Hospital.

PAYMENTS BY SCHOOL TO HOSPITAL IN 1903.

In 1892 a sum of money was expended by the Governors of the Hospital for the erection of buildings, parts of which were to be occupied by the Medical School. It was agreed that the cost of those parts of these buildings which are used by the School should be repaid by the Medical School, as to principal and interest, by 14 annual instalments of £300, which have been duly paid to date.

In lieu of ground rent for the land on which the Residential College has been built, the Governors of the Hospital arranged with the College Committee that four resident House Physicians, four resident House Surgeons, and two Obstetric residents should be lodged and served, including the cost of fuel, light and attendance, without charge.

NOTE.—The Dean of the Medical School states in a memorandum forwarded to the Committee :—“As at present arranged the Medical School “has no corporate existence, and has no property, and the questions, “therefore, as to financial transactions as between the Hospital and “Medical School can only be answered with limitation.

“For many years now the Medical School Fund has been solvent, whilst “the Hospital has been heavily in debt. Improvements in the methods of “treating patients, which have been much desired by the Staff for the “advantage of the Charity as well as of the School, have constantly been “charged to the School account. Even an increase in the number of the “Resident Staff was only secured by the School fund making itself responsible “for any additional expense it might entail. The enormous dental “department . . . although partly supported by the Hospital now, was “in the first instance started at the sole cost and charge of the Medical “School Fund.”

KING'S COLLEGE HOSPITAL.

The Hospital provides a sitting-room for the clinical students who are working in the Hospital.

The Hospital maintains a clinical laboratory, the expenses of which are included in the general expenses of the Hospital. The salary of the Clinical Pathologist is £250 per annum.

The Hospital provides the Pathological Registrar with a private working room in the Hospital, the heating, lighting and cleaning of which are charged to the general funds of the Hospital. The Hospital pays the Pathologist's salary of £50 per annum, and provides certain materials.

PAYMENT BY SCHOOL TO HOSPITAL IN 1903—Nil.

School accommodation in Hospital.

Maintenance of laboratories by Hospital.

LONDON HOSPITAL.

Direct cash
payments to
School.

Amount contributed to the general funds			
of the School in 1903	...	...	£2,500 0 0
For rates and taxes	...	...	88 1 6
			<hr/> £2,588. 1 6 <hr/>

School buildings
and land.

The School buildings stand on Hospital land, and were built by the Hospital. The original cost was £15,494. (For rent payable see below—Payments by School to Hospital.)

The Hospital has made loans to the School, for particulars of which see below—Payments by School to Hospital.

The Hospital pays the cost of the external repairs of all school buildings.

The Hospital purchased, in 1900, about 8 acres of freehold land in Walthamstow at £400 per acre. The land has been laid out, drained and fenced, and a pavilion built. The total amount expended, including the cost of the freehold, has been £6,170. 18s. 11d. The land and pavilion are let to a club, consisting of the medical students of the School and members of the Staff of the Hospital. (For rent payable see below—Payments by School to Hospital.)

Laboratories, &c.,
maintained by
Hospital.

The Hospital maintains the clinical laboratory, the expenses of which are included among the general expenses of the Hospital. The salaries paid in respect of this laboratory amounted in 1903 to £136. 10s. 0d.

The pathological laboratory is in the Hospital, but is maintained out of a fund of £1,500, called the Morrison Grant, which is not referred to in the annual report and accounts. The fund was established by Mr. Charles Morrison for pathological research, and the capital is expended on the current expenses of this laboratory, which is worked in connection with the post-mortem room. The post-mortem room is maintained by the Hospital, and the Director of the pathological laboratory does post-mortem work for the Hospital in the absence of the Hospital pathologists. The four Hospital pathologists are paid by the Hospital and work in the post-mortem room; their salaries for part time amount in all to £150 per annum.

PAYMENTS BY SCHOOL TO HOSPITAL.

The School pays to the Hospital £464. 16s. 10d. as rent for the original Medical School buildings. But these buildings were added to in the years 1898 and 1899 at a cost of £8,990. 7s. 5d., on which sum the School duly pays 3 per cent. interest and 1½ per cent. sinking fund for the repayment of the capital sum. The capital amount now outstanding on this loan amounts to £8,433. 4s. 7d. The Hospital has also, from time to time, lent to the School, for enlargement and equipment of the School, further sums amounting in all to £2,711. 11s. 3d. on which no interest is paid, but on which the School pays 2 per cent. as repayment. This loan now stands at £2,575. 19s. 7d.

The Club above referred to duly pays a rent for the sports ground of 4 per cent. on the total outlay of £6,170. 18s. 11d., viz.: £246. 16s. 10d. and does ordinary repairs, the Hospital attending to drainage.

MIDDLESEX HOSPITAL.

Direct cash
payments to
School.

The Hospital pays the difference between the receipts and expenditure of the School for each year. This sum, in 1903, amounted to £701. 10s. 7d.

On October 1st, 1896, the Hospital took over the buildings and property of the School. The School buildings were originally erected on property belonging to the Hospital, the cost being defrayed partly by private subscription and partly by money advanced for the purpose by the Hospital. At the time of the amalgamation of the School with the Hospital, the sum still due to the Hospital on this account was £8,200 0 0

Since that time the Hospital has expended on the School buildings the following sums :—

In 1898	...	...	...	...	...	8,500	0	0
„ 1899	...	...	...	...	...	8,000	0	0
„ 1900	...	...	...	...	...	3,000	0	0
„ 1901	...	...	...	...	...	196	1	10
						<u>£27,896</u>	<u>1</u>	<u>10</u>

The land on which the School buildings stand either belongs to, or is rented by, the Hospital, and on part of it the Hospital pays a ground rent of £168 per annum.

The pathological, bacteriological and clinical laboratories are maintained out of the general funds of the Hospital, but the expenses are not separately ascertained. It may be mentioned, however, that the salary of the pathologist is £70 per annum, and the salaries of the director of the clinical and bacteriological laboratories and his assistants amount to £650 per annum.

Laboratories
maintained by
Hospital.

PAYMENTS BY SCHOOL TO HOSPITAL IN 1903—Nil.

THE ROYAL FREE HOSPITAL.

The Hospital provides the School with certain accommodation rent free. The cost to the Hospital is estimated at from £120 to £150 per annum.

School
accommodation in
Hospital.

The Hospital maintains its own laboratories, the expenses of which, including salaries of the Pathologist and assistants and cost of museum, are estimated to have cost the Hospital, in 1903, £520 9s. 10d.

Maintenance of
museum and
laboratories by
Hospital.

PAYMENTS BY SCHOOL TO HOSPITAL IN 1903.

The School pays to the Hospital five per cent. of all fees (exclusive of clinical fees) received by the School from its students. The amount so paid in 1903 was £147 18s. 0d.

ST. BARTHOLOMEW'S HOSPITAL.

The Hospital paid for the School, in 1903 :—

For fuel and lighting	...	...	...	£390	16	0
„ rates and taxes	...	...	...	236	7	4
„ repairs...	...	...	...	305	0	0
„ insurance	...	...	...	42	0	0
„ water (estimated)	...	...	...	65	0	0
„ tradesmen's bills	...	...	...	82	19	4
						<u>£1,122 2 8</u>

Direct cash
payments to
School.

School buildings
and land.

Since the year 1865, the Hospital has expended on the School buildings and fittings the sum of £59,649. 18s. 6d.

The land occupied by the above-mentioned buildings belongs to the Hospital.

The Residential College occupied by the students of the School belongs to, and is maintained by, the Hospital. The Committee are informed that the Hospital has incurred a loss under this head averaging £86 13s. 0d. per annum during the last 34 years, without taking into consideration the letting value of the premises.

Maintenance of
laboratory by
Hospital.

The Hospital pays £300 to the pathologist, who also works for the School. The Hospital pays the cost of materials used by the pathologist in work done for the Hospital.

PAYMENTS BY SCHOOL TO HOSPITAL IN 1903.

The School pays to the Hospital £750 interest in respect of a sum of £50,787 expended by the Hospital on the School from 1878 to 1881, and £28 19s. 9d. in respect of £996 similarly expended in 1891-2, making a total payment of £778 19s. 9d.

ST. GEORGE'S HOSPITAL.

Direct cash
payments to
School.

The Hospital contributed to the School in 1903 :—

For general purposes	£1,200	0	0
Towards library	25	0	0
	<u>£1,225</u>	<u>0</u>	<u>0</u>

School buildings
and land.

The Hospital is the owner of the School Buildings and has advanced, or expended, various funds on additions and improvements. The annual rent and interest due from the School amounts to £359 17s. 1d., which was remitted in 1903.

Maintenance of
museum,
laboratories, etc.,
by Hospital.

The Hospital paid, in 1903, £226 5s. 10d. for the Museum, the remainder of the expenses being paid by the School.

The Hospital pays the following salaries :—

Bacteriologist	£350	per annum.
Assistant Bacteriologist	200	"
Pathologist	150	"

The following retaining fees are paid by the Hospital for examinations and reports to Physicians and Surgeons :—

To the School Lecturer on Chemistry	£75	per annum
To the School Lecturer on Physiology	75	"

PAYMENTS BY SCHOOL TO HOSPITAL IN 1903—Nil.

ST. MARY'S HOSPITAL.

Direct cash
payments to
School.

The Hospital contributed to the School in 1903 :—

Towards cost of maintaining the pathological and the pathological chemistry departments of the School, and to the salary of the Curator of the School museum	£450	0	0
For the rates and taxes of the School	202	1	3
	<u>£652</u>	<u>1</u>	<u>3</u>

The original accommodation provided in the Hospital for the School was paid for by the founders of the Hospital, who, as stated in the first annual report of the Hospital in 1852, were apprised that one of the objects of the founders was to provide a "theatre for the study and improvement of medical knowledge and practice, and a School for the education of youth in a profession of the highest utility to man." Since that time the accommodation originally provided by the School—or part of it—has been retaken by the Hospital, and a sum of £11,000 advanced to the School for new buildings. Up to, and including, the year 1900, the School paid interest on this sum at the rate of 4 per cent., and in 1901 and 1902 interest at the rate of about $3\frac{1}{2}$ per cent.; in 1903 no interest was received.

The Hospital pays £250 to the Pathologist, acting in his capacity as an official of the Hospital; but he receives payment in addition from the School as a Bacteriologist, so that only a part of his time is given to the Hospital as Pathologist.

School buildings
and land.

Maintenance of
laboratory by
Hospital.

PAYMENTS BY SCHOOL TO HOSPITAL IN 1903.

The Hospital has advanced to the Medical School, for the purpose of purchasing the furniture and fittings of the club, a sum of £700 at 4 per cent., the interest on which is duly paid.

ST. THOMAS'S HOSPITAL.

The Hospital paid for the School in 1903:—

For fuel and lighting	...	...	...	£567	8	7
For repairs	...	...	...	220	17	4
				<u>£788</u>	<u>5</u>	<u>11</u>

Direct cash
payments to
School.

The Hospital also paid the rates and taxes of the School buildings, which are included among the general rates and taxes of the Hospital and are not separately assessed.

The buildings originally allotted to the School, and which the School occupies rent free, belong to the Hospital.

The Hospital pays the cost of keeping the School buildings in repair.

The Hospital maintains a museum which is housed in the Medical School buildings and which, with its contents, is the property of the Hospital. The cost of maintaining this museum, including salaries, was, in 1903, £344 18s. 0d.

School buildings
and land.

Museum, library
and laboratory
maintained by
Hospital.

The Hospital partly maintains a library, which is housed in the Medical School buildings, but which, with its contents, is the property of the Hospital. The cost to the Hospital of this library was, in 1903, £120.

NOTE.—New books are bought by the Medical School with School funds and put in the library; they then become the property of the Governors.

The Hospital maintains a pathological laboratory to complete the work done in the post-mortem room. The expenses of this laboratory (apart from the post-mortem room itself), including the salary of the pathologist, amounted, in 1903, to £344 3s. 11d.

NOTE.—The post-mortem room is provided in the School building.

PAYMENTS BY SCHOOL TO HOSPITAL.

Additions to the original buildings allotted to the School by the Hospital have been made, and stand on land belonging to the Hospital. The cost of these buildings amounted to £15,656. 17s. 2d. This sum was lent to the School by the Hospital, and the School pays to the Hospital interest at the rate of 3 per cent. on the above-mentioned sum, viz.: £469. 14s. 0d.

In addition, the School also pays a sum of £320 per annum as a sinking fund, established with a view to repaying to the Hospital the above-mentioned capital sum of £15,656. 17s. 2d., so that if this sinking fund is maintained until the capital sum is paid off, the School, at its own expense, will have paid for the new buildings, which, being on Hospital land, are the property of the Hospital.

UNIVERSITY COLLEGE HOSPITAL.

School
accommodation in
Hospital.

The Hospital provides a lecture theatre which is used by students and nurses working in the Hospital; also a common room and cloak room for clerks and dressers. The expense of this accommodation is not separately ascertained.

Laboratories, etc.,
maintained by
Hospital.

The Hospital maintains a clinical chemical laboratory and a clinical bacteriological laboratory for completing the investigation of cases in the Hospital. The expenses of these laboratories are not separately ascertained. The salary of the pathologist is £150 per annum.

PAYMENTS BY SCHOOL TO HOSPITAL IN 1903.

The pharmacy fees of students are paid over by the School to the Hospital and the amount is divided equally between the Hospital and the pharmacist who instructs the students in the Hospital. These fees in 1903 amounted to £70 7s. 0d.

WESTMINSTER HOSPITAL.

Direct cash
payments to
School.

The Hospital contributed to the School in 1903 :—

For general purposes	...	...	...	£400	0	0
For museum	...	...	...	52	10	0
For prizes	...	...	...	20	0	0
				<hr/> £472 10 0 <hr/>		

School buildings
and land.

See below—Payments by School to Hospital.

Maintenance of
laboratory by
Hospital.

The cost, including salaries, of the clinical laboratory, was in 1903: £523 1s. 4d. (See note, page 121.)

PAYMENTS BY SCHOOL TO HOSPITAL.

The School buildings, which, with the land on which they stand, cost the sum of £13,836 9s. 7d., were built in part with the proceeds of an appeal to the public to provide money for building a new school and for adapting the space previously occupied by the old school in the Hospital to the purposes of the Hospital, and in part by the money of the Hospital. They are the property of the Hospital. The Committee are informed by the authorities of the Hospital that a rent of £160 per annum is paid by the School to the Hospital, such rent having been fixed by the Governors as a fair and just arrangement having regard to all the circumstances.

