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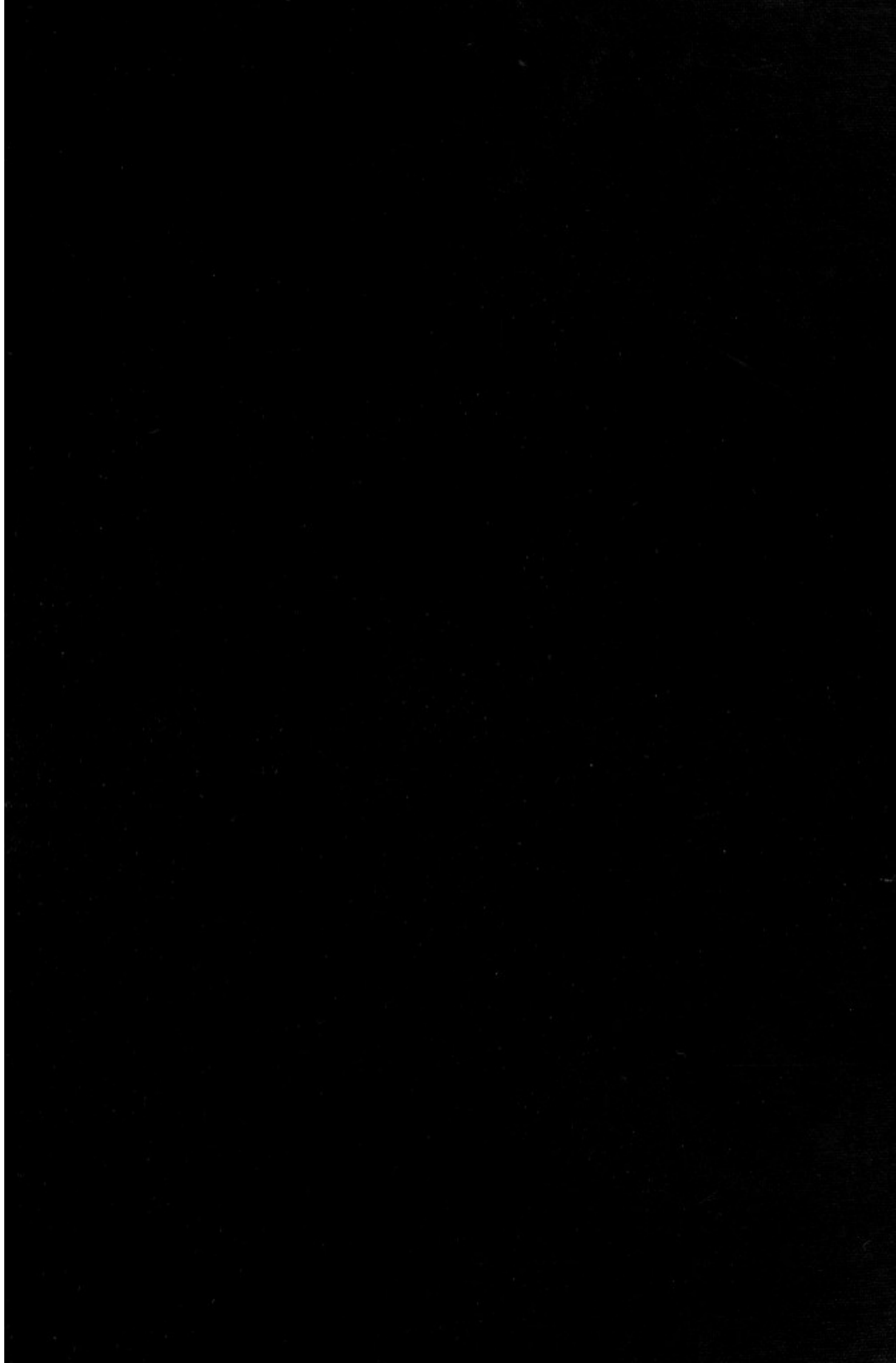
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To George Shand.

with grateful thanks

Yr. Obedt. Servant

July 1/06.

Charles John Macalister

M.B. CM. Edin. 1884 M.D. Hon. 1895

M.R.C.P. London 1892 F.R.C.P. 1909

A pioneer in endocrine therapy.

1884 Liverpool Childrens Inf^y and later
house physician at Pendlebury.

1892 Physician Stanley Hosp.

1900 — RSH

Retired to Bourton on Water



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The ORIGIN *and* HISTORY
OF THE
Liverpool
Royal Southern Hospital

WITH PERSONAL REMINISCENCES.



BY

CHARLES J. MACALISTER,
M.D., EDIN. ; F.R.C.P., LOND.

Honorary Consulting Physician to the Hospital.

LIVERPOOL:
W. B. JONES AND CO., LTD., 20, SOUTH CASTLE STREET.

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1936

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LIVERPOOL: Hospitals (Royal
Southern)

CAF.4488.C



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FOREWORD.

One of the most difficult tasks in connection with this History has been the search for information concerning the members of the committees of by-gone days. I am much indebted to Mr. G. T. Shaw, formerly Chief Librarian to the Municipal Libraries, for his valued help and also to my son who, with the kind permission of the authorities at the Athenæum and from other sources, has been enabled to gather a considerable amount of information. Several other friends and colleagues have been very helpful in many ways and to all of them I accord my sincere thanks.

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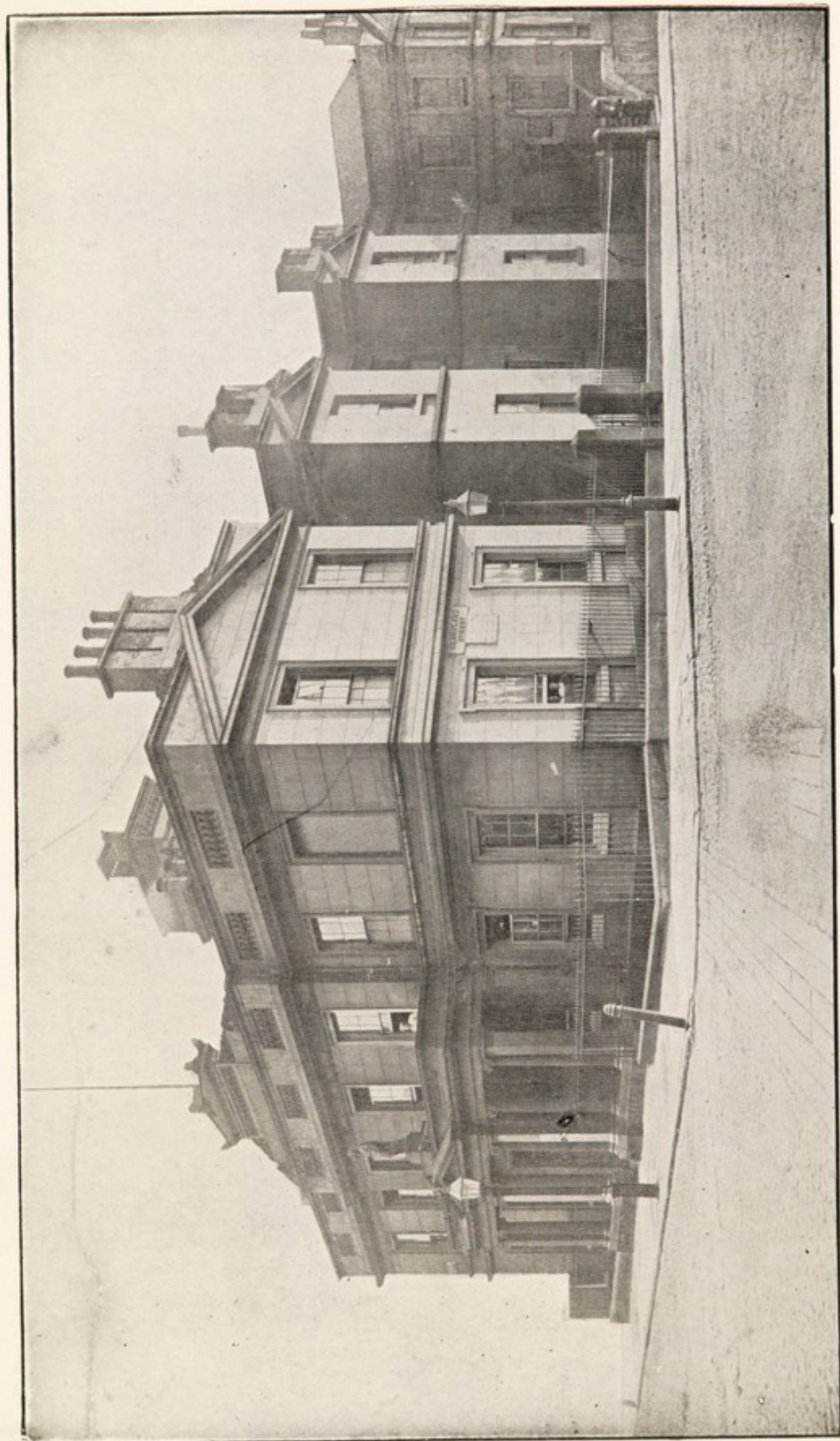
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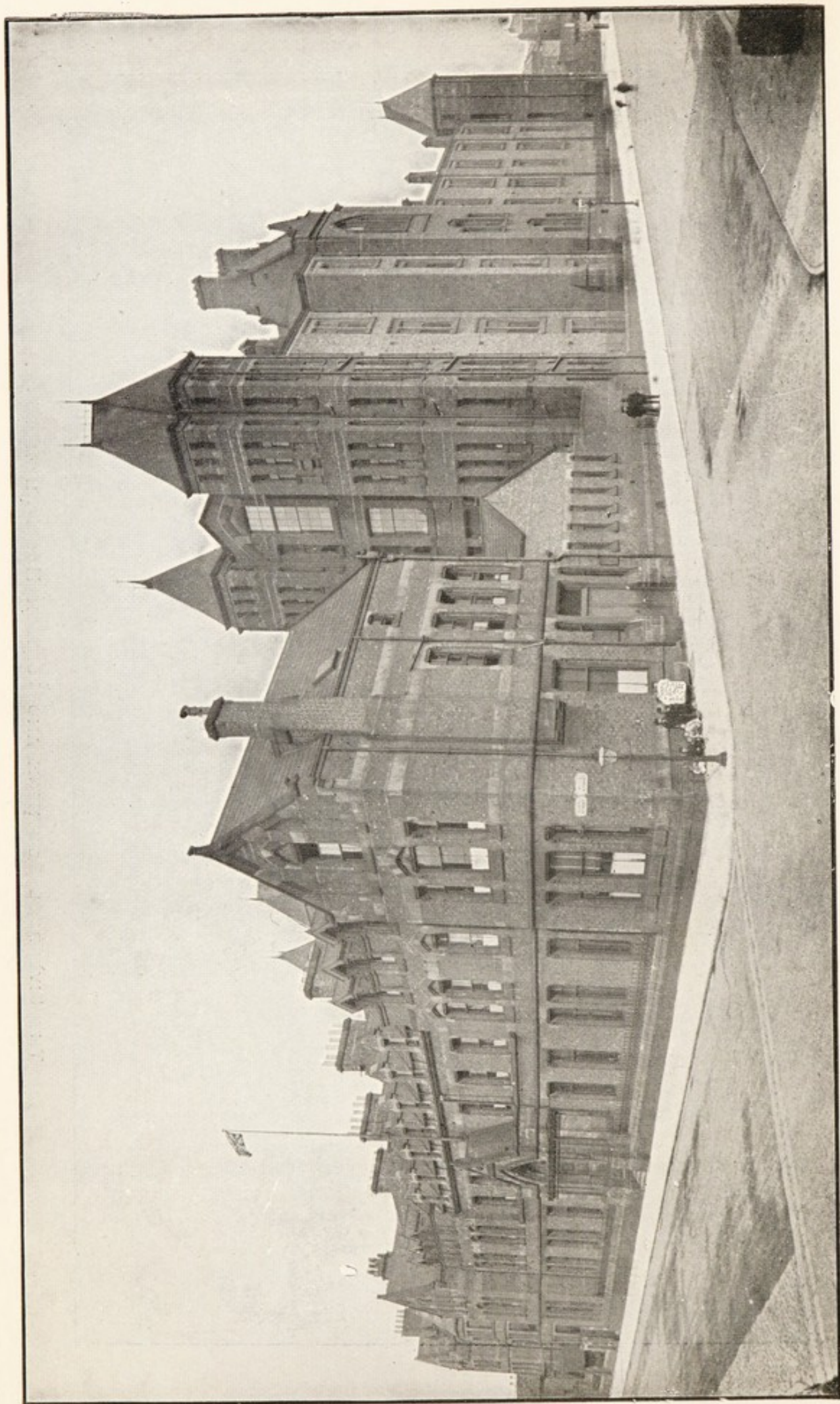
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THE LIVERPOOL SOUTHERN AND TOXTETH HOSPITAL IN 1842.



THE ROYAL SOUTHERN HOSPITAL AT THE PRESENT TIME.

INTRODUCTORY

THE memory of any community concerning the histories of its older institutions and the people connected with them in the past is apt to be very short-lived. There are not many citizens who know how such institutions originated, who it was that pointed out the need for them, or what circumstances aroused the public interest which enabled them to be established.

The object of this record is to provide a succinct account of the origin and history of the Liverpool Royal Southern Hospital, an institution which has been greatly trusted and revered by generations of patients and by the staffs and students who have laboured in its wards and laboratories.

The great hospitals may be regarded as indices of the evolution and growth of the city. The extensions of the districts of industry have taken place round centres which were served, in the beginning, by the Royal Infirmary, established in 1745. Then came the Northern (David Lewis) Hospital, opened in 1834, and it was the proved utility of this latter hospital in the north end of the town, combined with the extension of the docks and great increase of population in the south end, which led to the almost immediate inauguration of the Southern and Toxteth Hospital—by which name it was first known—the inception of which took place in 1838. In point of age, therefore, the Royal Southern Hospital is the youngest of the three sister institutions. It was the last of the primary series of general hospitals, and in the course of its almost completed century it has obtained a goodly reputation, both at home and abroad. The foundation of the Stanley Hospital 1867 (erected 1872) corresponded with the northward extension of the docks and the great growth of industrial concerns and population at that period. *in the Kirkdale area.*

In a short history of the hospital written in 1922 to commemorate the jubilee of the present buildings (opened in 1872), it was explained that the institution had been in existence for many years previously. It served a useful purpose in that it contributed to the success of an appeal for a Jubilee Commemoration fund which had the two-fold object: (1) of building and equipping the electro-therapeutic and massage departments which have since developed into an important training school; and (2) the provision of an endowment for adult after-care work which was one of the pioneer movements initiated in the institution. This short Jubilee Commemoration History is now out of print, and the purpose of this new edition is to provide a permanent and more detailed record of the story of the hospital and of some of those who have worked for it and in it.

ORIGIN AND EARLY HISTORY OF THE INSTITUTION

In the year 1837, or thereabouts, Mr. J. L. Minshull, a surgeon of repute, conceived the impression that a hospital was greatly needed at the south end of Liverpool. At that period, the building of the southern docks was undergoing considerable extension, and it was probably the number of accidents connected with their construction, combined with the consequent increase of the working-class population, which led him to consider that provision should be made to meet the requirements of the sick and hurt in the immediate neighbourhood. Dr. Minshull and his brother Samuel Minshull, who afterwards held the position of Honorary Secretary to the hospital for many years, obtained a considerable amount of support. Associated with them in their advocacy were Dr. John Grindrod, Mr. Joseph Churton and Dr. James Petrie, together with other unrecorded supporters.

Early in 1838 a preliminary meeting of those who had become interested in the movement was held, at which a Provisional Committee was appointed and the following resolution was passed, "That it is expedient that a sum of £1,000 be raised as a test of public opinion before the charity be proceeded with,"

and a collection of funds must have commenced almost immediately.

The Provisional Committee was modestly referred to in the report of the opening of the hospital on 17th January, 1842, as "The parties favourable to the formation of the institution." In all probability, the original records of this Committee, which would contain the names of its members and the details of its subsequent proceedings, were lost in a calamitous fire in the premises of the Treasurer in 1842. It was stated in the report for 1843 that some books and papers of the hospital were thus destroyed. It is known, however, that by the end of 1839, or the beginning of 1840, the £1,000 referred to having been acquired, the subscribers were called to a meeting at which the first permanent committee was elected, and their names are indicative of the influential support which was accorded to the movement.* It is recorded that the proceedings of this meeting left no doubt as to the ultimate foundation of the charity.

The Council of the Borough immediately granted 1,400 square yards of land of the estimated value of £2,500, and Mr. Cunningham, of the firm of Cunningham and Holme, gratuitously furnished the plans which were adopted. It was evidently determined at first to put up quite a small building, but so constructed as to allow of its expansion into a hospital which would be a credit to the town. A good deal of difficulty must have been experienced in raising the necessary funds during the ensuing year, and this was, no doubt, related to the fact that the country had recently passed through a harassing period of depression in trade, which began in the spring of 1837. There had been inflated paper currency, over trading and speculation, and reckless joint-stock schemes resulting in collapse and ruin. Conditions of panic had prevailed. Affairs in the town had evidently been so bad that the business men, following a meeting at the Town Hall, on April 6th, 1837, had

*President, Joseph Brooks Yates; Vice-President, William Kay; Treasurer, John Platt; Auditors, Matthew Gregson, Edward Cropper; Committee, James Aiken, William Barton, Rev. Thomas Bold, A.M., Joseph Brereton, Charles Chaloner, Roger Fisher, Duncan Gibb, James Ingram, Samuel Minshull, Rev. T. Nolan, A.M., Thomas Royden, Rev. J. R. Tetlow, A.M., S. H. Thompson, Rev. R. L. Townsend, A.M., William Watson.

sent a deputation to the Chancellor of the Exchequer praying for assistance. This was obtained through the Bank of England and the difficulties were tided over after causing serious disasters and failures in many quarters. The wonder is that the appeal for funds succeeded at all. Certainly it must have had a somewhat slow response, because in 1840 insufficient money had been raised to proceed with the building and the members of the Committee, in order to avoid further delay, guaranteed the deficiency, with the result that the foundation stone was laid by the Mayor, Mr. Thomas Bolton, on 2nd March, 1841. At this time a further appeal was launched which, although made to a community "still labouring under the weight of depressed trade" resulted in sufficient money being subscribed for the completion of the building, which was opened as the

LIVERPOOL SOUTHERN AND TOXTETH HOSPITAL

on 17th January, 1842, under the Presidency of Mr. Joseph Brooks Yates, who was a well known public spirited man and member of a public spirited family.

Possibly the success of this new appeal may have been in a measure reactionary to an improvement in prosperity and in part to influences connected with the Coronation (1838) and marriage (10 February, 1840) of Queen Victoria, which latter event probably dispersed a good deal of psychological depression. Some measure of prosperity must have returned to the town during the ensuing two years, because such debt as remained after the opening of the Hospital was subsequently liquified in the first year of its existence.

It would appear that in its initial years the number of beds must have been limited to about 30, but in 1845, apparently owing to the opening of wards hitherto unoccupied from lack of funds, the number of patients under treatment went up to a maximum of about 65, and the demand for accommodation was increasing so rapidly that the Committee determined to get out plans for adding another storey to the building. This involved an outlay of over £2,000, a sum difficult to realise

owing to the commercial embarrassments of the times. The Committee, evidently thinking of ways and means, at length sent a deputation to Mlle. Jenny Lind, who was in Leeds, to ask her to sing at Liverpool on behalf of the fund. To this request she willingly acceded, and a large audience assembled to hear her at the Liverpool Amphitheatre (afterwards the Royal Court), on 6th January, 1849. In the words of the Report, "the requirements of taste and fashion came in aid of the calls of humanity," with the result that £1,300 was added to the building fund. As a recognition of Madam Jenny Lind's kindness, a silver kettle and stand were presented to her, bearing the following inscription:

TO
MLLE. JENNY LIND
IN GRATEFUL TESTIMONY OF
THE MUNIFICENT SERVICES RENDERED TO THE
SOUTHERN AND TOXTETH HOSPITAL
OF LIVERPOOL
BY THE EXERCISE OF HER UNRIVALLED POWERS OF SONG.
PRESENTED BY HER ADMIRING FRIENDS,
AND THE FRIENDS OF THE INSTITUTION
VI JANUARY MDCCCXLIX.

Together with the presentation was a eulogy from the pen of Mr. Joseph Brooks Yates, the President of the Hospital, as follows:

Amphion's strains the builder's task performed;
Turrets uprose responsive to his lyre;
By Orpheus' dulcet music rocks were warmed,
And crouching tigers quench'd their savage fire.
In the fair *Swede* the powers of both conjoined,
Build—and to Mercy dedicate—the pile;
Unlock each gushing sympathy of mind,
Smooth each sick bed, each hour of pain beguile.
While Heavenward from her lips the strains ascend,
Admiring crowds their worldly cares postpone;
And from the spheres e'en listening seraphs bend,
To claim a harmony so like their own.

The most important and permanent appreciation of Mlle. Jenny Lind's kindness remains with us to this day; there being a ward bearing her name in the present hospital.

The balance of the required £2,000 was raised by the Mayor and Mayoress—Mr. and Mrs. Bramley Moore*—by means of a Bazaar and Fancy Fair held in Princes Park (lent by Mr. Richard Vaughan Yates), on August 8th, 9th, 10th, 1849. The proceeds of the Fair were to benefit the Infirmary, Northern and Southern and Toxteth Hospitals. No less than £9,593 6s. 2d. was realised and divided equally among these three charities. The apportionment of £3,197 was handed over to the Committee of the Southern and Toxteth Hospital, with the proviso that £2,000 should be permanently invested in Dock Bonds, drawn in favour of Mr. Bramley Moore, Mr. Yates, and Mr. E. Cropper, with annual interest payable to the Treasurer. Interesting items connected with this great Fair were that the kettle presented to Mlle. Jenny Lind was exhibited and no doubt earned some money, and it is recorded, also, that on the afternoon of the second day (Aug. 9th) a terrific thunderstorm took place, which caused a large amount of damage to wearing apparel, but it evidently did not damp the ardour of the vendors or vendees, indeed, it became the subject of much subsequent merriment.

During the work of extension, May to July, the patients were temporarily housed in a building in Stanhope Street which had been lent by the Royal Bank of Liverpool (opened in 1839, closed in 1865—the result of a financial crisis).

The work of extension was completed in three months, and the enlarged Hospital was opened with accommodation for 70 additional patients. There were two new spacious wards—"A gallery was constructed round the elegant and lofty corridor, which was lighted from above." The ventilation was considered complete and successful, and altogether the building was described as "a beautiful specimen of architecture." At first only 86 beds were occupied and, although a great effort was made almost immediately to increase this number to 100, in order to qualify the institution for teaching medical students, this was not accomplished until after the Crimean War, which gave rise to a great falling off in subscriptions owing to money being diverted to a "Patriotic

*Chairman of the Dock Board (1845-49) during his year of office.

Fund," which had been established to provide for those who fought our battles, and it also caused the price of provisions to be very high.

Apart altogether from this, however, the opening of the additional beds was delayed for several years by shortage of funds, and it was noted in the Report that many cases had to be sent to other institutions owing to the limitation of accommodation on this account. One of the reasons cited in 1855 for raising the qualification of the hospital as a Chartered Institution for the admission of pupils, was the difficulty of finding eligible candidates for the Resident posts, because the demand created by the war had led to the competition of more lucrative appointments. The House Surgeons were overworked, and it was felt that pupils might relieve them of some of their "irksome and laborious" duties. Mr. Joseph Brooks Yates—who had been President of the Hospital during the first nine years of its existence (1842-50)—had been very anxious that the hospital should rank as a School, for the reason among others that this would add to its dignity and bring it into line with other recognised institutions. He died in 1856. Had he lived for another couple of years, he would have seen his wishes fulfilled, since in 1857, when the name of the Hospital was changed to THE SOUTHERN HOSPITAL, its recognition was advanced a step by the opening of a new ward, exclusively for the reception of children. This was the first of its kind to be provided in a General Hospital. The motives for this innovation were to afford children suffering from burns and scalds, which were very numerous (averaging about 40 yearly), and other accidents, the undivided care of an experienced nurse, and to remove them, as a disturbing element, from the adult wards. By this addition, the required number of one hundred or more beds became available, but under the rules of the examining bodies this number had to be in operation for six months, at the end of which period the claim for equality of rank with other teaching hospitals was made. The first recognition for teaching came from the Royal College of Surgeons in 1858, but, there being only one physician on the staff, the corresponding recognition by the

George
Henry
Horsfall
Ward.

Colleges of Physicians and by the Society of Apothecaries (which was an important examining body at the time, whose diploma was required by the laws of the Hospital for every Resident) was delayed for economic reasons (*e.g.*, increase in the Resident staff) until 1870, when the late Dr. Carter was appointed in addition to Dr. Cameron, who had at that time been the only physician since his first appointment in 1848. The Hospital, with its 100 or more beds and two physicians, then became fully qualified to take articulated pupils for medical and surgical examinations. Two were immediately admitted, their fees being generously presented by the Hon. Staff to the New Hospital Building Fund, which was at this time being raised to construct the present building.

At about this period there are records of some items of information which have a historical bearing. One of these was a change in the method of election of the Hon. Medical Staff, consequent upon a communication from the Liverpool Medical Institution which had passed the following resolution and sent a copy of it to the Committee in 1856. "That this meeting of the Medical Profession, resident in Liverpool and its vicinities, believes that the election of Honorary Medical Officers to the public charities through means of canvassing, whether by personal application, circular, newspaper advertisements or organised agency of friends, is unworthy the members of a liberal profession, and cannot secure the election of the most worthy candidate, but only the most active canvasser."

On the retirement of Mr. J. T. Minshull in 1857, the Committee, with the approval of the Medical Institution, tried out a new method of election. They sent voting papers containing the names and qualifications of the candidates to the Trustees for their signatures, and prepaid return. When the votes were counted, Mr. Alfred Higginson was elected by a decided majority, but disappointment was expressed that less than a third of the Trustees had recorded their votes and that so little interest had been taken in the appointment of an officer so essential for the welfare of the patients. As a matter of fact, Mr. Higginson's appointment proved a very fortunate one.

Royal Southern Hospital.

12881

Whitehall

13. May 1872

Sir,

I am directed by Mr Secretary Bruce to inform you that he has had the honor to lay before the Queen the application, forwarded by you, with regard to the title of the New Southern Hospital at Liverpool, - and that Her Majesty has been graciously pleased to comply with the request of the Managers that the Institution may be styled the "Royal Southern Hospital."

I am,

Sir,

Your obedient Servant

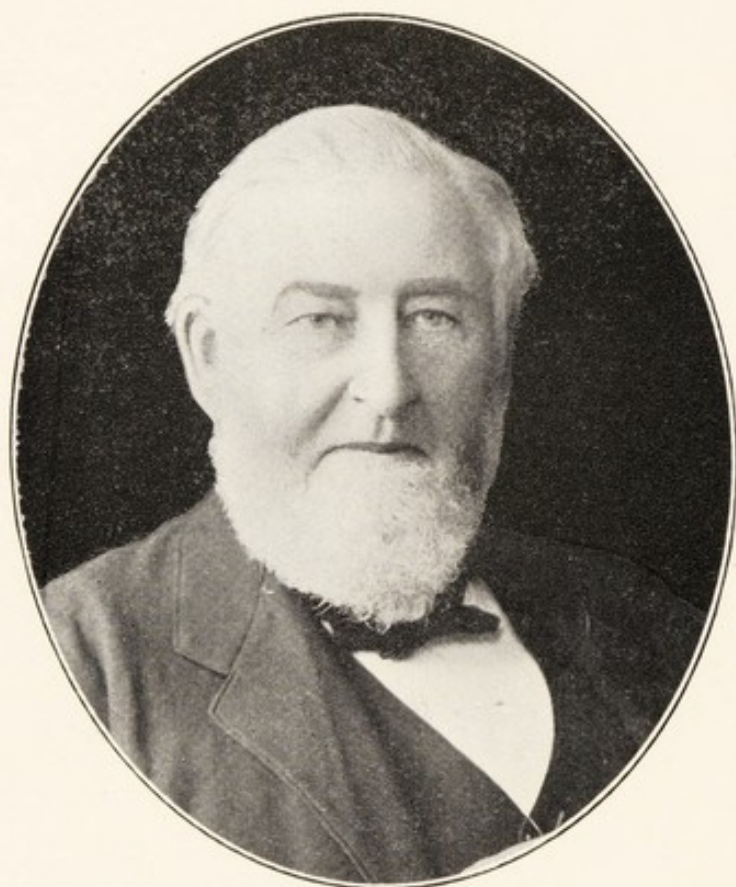
A. J. B. Liddell

J. R. Graves Esq.

M. D.

Warrick Grange

309¹ Liverpool



GEORGE HENRY HORSFALL.

MEMBER OF COMMITTEE—1857-1891.

PRESIDENT, 1864-1890.

(By courtesy of Mr. H. Sutton Timmis).

He became one of the most distinguished surgeons of the period.

Other minor items of interest worth mentioning were the introduction of gas into the wards in 1857, and the provision of a washing machine and a sewing machine as labour saving and economic measures in 1858; these latter indicating that some of the domestic arrangements in these early days must have been of a very primitive character. In this year also the Medical Board presented a gymnastic apparatus for the use of convalescent patients to accelerate the perfect use of their limbs and shorten the periods of recovery, this showing that active if not passive movements were in use in cases of injury at the time.

In 1860, only eleven years after completion of the extension, the Medical Staff and the Committee were evidently beginning to think that all was not well with the sanitary conditions of the Institution. They introduced drastic changes, and constructed something in the nature of sanitary blocks, with modernised self-acting appliances, to replace the offensive inside arrangements, and it was noted that the health of the patients and the nurses was greatly benefited by this improvement.

In 1861, however, the Hospital had to be entirely closed down from 26th March to 20th June, owing to a serious outbreak of "fever," which was introduced by the reception of 32 sailors from an Egyptian frigate in a state of filth and exhaustion, suffering from dysentery, frostbite, and the effects of exposure to cold. Eleven of them died (it was probably typhus or typhoid fever). Many members of the Staff became infected; both house surgeons, one nurse, and two porters took the fever and recovered. Mr. William Dooley, *locum tenens* for one of the House Surgeons during his illness, a clergyman (Rev. A. C. Halls), who visited with the chaplain, and one of the nurses (Eleanor Hurtz) died. The whole building was now thoroughly cleaned, whitewashed, and repaired, the systems of ventilation, warming and cooking rearranged, open fires were introduced in place of heated air, and measures generally taken to avoid risk of infection spreading in the future. The

state of affairs, however, cannot have been regarded as entirely satisfactory, for in 1864 the Committee came to the conclusion that an entirely new building was required owing to the crowded state of the wards, often requiring cases to remain in the operating rooms until beds could be found for them, its lack of accommodation for nurses and servants and for noisy or special cases requiring small wards for their treatment. In addition to this the out-patient accommodation was quite inadequate. It was therefore determined to build an entirely new hospital.

THE ROYAL SOUTHERN HOSPITAL

In 1865 the land was purchased, in the first instance at the corner of Warwick Street and Caryl Street but, although no reference appears in the Report, this site must have been changed very shortly for the present one, bounded by Hill Street, Grafton Street and Caryl Street, and on the north side by what afterwards became Cameron Street, which is now represented by the passage separating the main building from the Nurses' Home and the Pathological Department. On 19th December, 1866, at a meeting held in the Town Hall, it was resolved to start the building of the New Hospital and a large number of donations were promised towards the estimated sum of £40,000 required for its completion. The foundation stone was laid by the Earl of Derby, on October 23rd, 1867, and the building was formally opened on Tuesday, 21st May, 1872, by H.R.H. Prince Arthur of Connaught, who arrived at the Hospital after a drive through Liverpool which terminated by a visit to the North Fort. There he entered a specially-furnished omnibus and journeyed along the line of docks. In order to prevent jolting the 'bus was evidently driven along the railway lines on the dock road as far as the bottom of Hill Street, where it left the rails to negotiate the short hill leading up to the Hospital door, but owing to the weight of the vehicle and its load of passengers, the horses failed to manage the hill with its boulder pavement, and the Prince was obliged to alight and complete the journey in the Mayor's carriage. On

OPENING CEREMONY,

May 21st, 1872.

HIS ROYAL HIGHNESS PRINCE ARTHUR

IS EXPECTED TO ARRIVE AT THE

NEW SOUTHERN HOSPITAL,

CARYL STREET.

At Twelve o'clock, and will be received by the Committee.

After the National Anthem has been sung, the Address will be presented.

The Prince will then be conducted through Four of the principal Wards which he will be asked to name. On reaching the last of these the following Anthem will be sung:

LORD, for Thy tender mercies' sake, lay not our sins to our charge, but forgive us that is past, and give us grace to amend our sinful lives; to decline from sin, and incline to virtue; that we may walk in an upright heart before Thee now and evermore.

The Prince will be requested to declare the Hospital open.

The Bishop of Chester will then offer up a prayer.

HYMN.

The Bishop will pronounce the Benediction.

The Ceremony will then be concluded.

On leaving the Hospital the Prince will then be conducted through the Chapel, Operating Theatre and Accident Ward.

arriving at the Hospital, he was received by Mr. George Henry Horsfall, the President, accompanied by the Vice-Presidents, the Bishop of Chester, the members of the Reception Committee, the Medical Staff and the Hon. Chaplain. He was conducted to a dais at the end of the main corridor, and after the National Anthem had been sung by members of the Philharmonic Society's chorus, an address was read by the President expressing the deep sense of the Committee's gratitude for his kindness in consenting to open the building. The Prince was then conducted through the four principal wards, which he named "Arthur," "Victoria," "Albert," and "Alexandra" respectively, then, re-entering the "Albert" ward, he declared the Hospital open, conferring upon it the title "Royal" by the permission of Queen Victoria. The proceedings terminated by a prayer from the Bishop of Chester. Among those who witnessed the ceremony was Dr. J. L. Minshull, who was looked upon as the founder of the older hospital, and who must have regarded, with great pride, this fine outcome of his efforts to establish the original Institution. In the evening, a Fancy Dress Ball was held at St. George's Hall, and was very largely attended.

*Beds,
of debt.* The patients were transferred to the New Hospital on 17th September, 1872, and it may be mentioned that the Resident Staff included Dr. Henry Harvey, an old and respected Liverpool practitioner, who was the only connecting link between the old and the new buildings at the time of his death in April, 1932.

The continued interest of the Prince in the Hospital was shown when, in May 1886, he revisited it and named the "Margaret" ward and again in 1891 when he opened a new operating theatre. The portrait of the Prince, painted by William Tweedie, which hangs at the end of the main corridor, was presented by the President, the late Mr. George Henry Horsfall, in 1873.

On the day prior to the ceremony, the Prince had opened Sefton Park, and the Mayor—J. Pearson, Esq.—had brought about an arrangement, by request of a deputation from the Committee, whereby a great Fancy Fair was held in the Park

throughout the week for the purpose of raising a sufficient sum of money, wherewith, not only to replace the capital which had been realised in order to complete the building, but also to furnish the new hospital and start it on its career free from debt. This was a great fair. I remember going to it day after day, visiting the shows and witnessing the various money-making competitions. The events which made the most lasting impression on my youthful memory were the treacly bun contests. I suppose the treacly faces of those who endeavoured to catch the buns with their teeth must have promoted huge merriment among the young folks, as did also a wonderful contrivance in the nature of a penny peep show, which enabled the peeper to see through two policemen who stood on a little elevated platform in front of a spy glass arrangement. It was considered great fun to see through a policeman in those days.

Everybody entered into the spirit of the fair, old and young, rich and poor. It was the fashionable thing to go to it, and through its agency every class contributed to the funds. A good many youngsters who had not sufficient pennies to admit them through the turnstiles crept under the canvas surrounds and spent their little all inside.

Financially the fair was a great success. The amount hoped for was £13,000, which was regarded as an optimistic figure, but the total takings came to nearly double that sum. £25,035 was realised which, after deduction of expenses amounting to £4,984 left a net balance of £20,051, and this sum was subsequently augmented by bank interest which came to £311.

Thus it was that, in spite of many adverse conditions and vicissitudes, the Royal Southern Hospital came into being as a first-class Institution and, in the years which have elapsed since it was opened, it has maintained its high place. Many important advances in medicine and surgery have been pioneered by its Staffs within its walls, and it has acquired a goodly reputation throughout the length and breadth of our own land, in the Colonies and Dominions beyond the seas, and in many foreign countries.

APPEALS FOR FUNDS—OLD AND NEW

So much for the origin and growth of the Hospital, from the time of its inception in 1838, which is interesting in so much that it details the genesis of a great centre of practical and scientific work. It also demonstrates how an individual or a small group of people may influence a community to provide for the carrying out of a great social work.

The strictly professional aspects of hospital service cannot be separated from the social side of it if the institution is run on right lines. It is a social sentiment that prompts people to maintain the hospitals, a sentiment which in former days was regarded solely as a religious duty. All the older Annual Reports based their appeals almost entirely on the religious duty of charity, whereas the later ones stress the character of the work done and emphasise the practical utility of the Institution. The ancient appeals were probably drafted in great part by the Clergy, whereas the Business Committee men take charge of them to-day. This change has, in a measure, been connected with altered and modernised views as to what is meant by practical religion, the fact being that it really is a religious sentiment that prompts, or should prompt, benevolence, which is an inborn quality possessed by everybody, although it is often enough latent until stirred up by appeal or emotion, and the successful collector of funds is the man who can root it out of its dormancy and get it into the blood of the people. The charitable instinct, like love itself, has to do with the preservation of the species. If it did not exist, men, women and children would die or decay without pity and without help; but whenever threat of human disaster occurs, the floodgates of pity are opened, the instinct to preserve the species is aroused, and the people contribute to the help even of those who have been their enemies in the past or may become so in the future. If the hospitals were maintained solely by rates or by taxation the true sentiment of charitable benevolence would never be stimulated to action. The instinct of benevolence or charity in its proper sense must be cultivated and brought out for the good of humanity, but it cannot be

itself compelled with advantageous results to the individual or to the community.

Although it is seldom thought of, there is another side to this social aspect of the question of charity in its relation to the Hospitals, viz., that of self-preservation, for it must be remembered that whatever promotes the health and efficiency of the individual, and especially of the worker, also contributes towards the well-being of the community.

If we thread our way through the tangled web of a social problem of this kind, we find that it leads us to the knowledge that whereas in hospital work the sick and crippled are primarily and directly helped, there are indirect results whereby society is benefited, because it is in association with and in the hospitals that the principal advances in Medicine and Surgery are initiated, which lead to the saving of much life and health among people who have never been inside a hospital in their lives. On this account much efficiency of citizenship is promoted among all classes of people throughout the land. Hence it is that supporters of the hospitals and those who work for the benefit of the sick, although they little realise the fact, are social economists, and therefore also the story of a hospital's traditions and of the contributions it has afforded to medical and surgical science are of much more practical interest than are the more prosaic incidents connected with the origin and structure of the edifice in which they have been conceived and carried out.

The Royal Southern Hospital has had a peculiarly interesting career in these respects, and a short record of its traditions, of the changes which have taken place in its work as a General Hospital, and of the names of some of those who have created those traditions, should prove of interest.

It so happened that the passing of the old Southern and the birth of the new Royal Southern Hospital corresponded pretty nearly with the passing of an old and beginning of a new era in Medicine and Surgery which marked a complete revolution in the practice of those sciences. For some reasons it would have been advantageous if the building of the new institution had been delayed for a few years because it embodied certain

structural conditions which were essentially incompatible with the carrying out of the then new methods of Antiseptic Surgery.

The first few years of its work constituted a transition period, during which the old lines were in part adhered to. Then came a time when the new ones were more or less inadequately followed, and these together are of historic interest insomuch that they bring into relief the extraordinary improvement in results which took place as the new principles and their more perfected application became thoroughly understood.

There is much interesting reading in the earlier Reports of the Hospital which throws light on the results of treatment under the old régime as compared with those of to-day. It has to be remembered in this relation that numerous cases were in those days considered inoperable which are now commonly remedied by surgery. Appendicitis, peritonitis, intestinal obstructions and many other diseases which are perfectly remediable to-day by surgery were in the old days relegated to the care of the Physician, whose potentialities for doing good were often very limited. On the other hand, the Physician has now many additions to his possibilities of helping the sick, which were undreamed of in the days of which I speak.

We cannot better illustrate the attitude of the surgeon towards operations than by quoting from some of the Annual Reports. In 1844 we read: "Although many of the cases were of the most serious nature, yet few operations have been resorted to, and the mortality has not exceeded more than 6 per cent."

In all the early Reports the large number of deaths was referred to, and especially the proportions of those occurring within from three to twenty-four hours of admission. This was regarded as evidence of the serious character of the cases dealt with. The Report for 1864 states that "the nature of the accidents, the number brought in dead or who died within from one hour to twenty-four hours, and the hopeless cases when admitted indicates very significantly the kind of cases admitted, and the important duties discharged by the medical officers and others and the value of the Institution." The

Report for 1865 again directs attention to the large number of patients brought in dead or dying shortly after admission, indicating "in a very awful way the nature of many cases dealt with here." Over and over again the fewness and the avoidance of operations was referred to.

These were the kinds of appeals made to the public for support. Imagine asking for help on those lines to-day! What would be thought of an institution whose claims for support were based on the hopelessness of recovery of its patients?

During this, the transition period referred to (1872-1882), no major operation was ever undertaken without a consultation of the whole surgical staff, sometimes in collaboration with the physicians. Operations were feared by the medical man owing to the risks which they involved, and there is not a doubt that a large number of the diseases of those patients who died shortly after admission in the old days belonged to the category of the easily remedied disorders of to-day. In the pre-Listerian period the responsibility of undertaking the risk of operation was great, and often, if possible, shirked, whereas to-day conditions have so changed that the responsibility consists in *not* operating sometimes even when operation means simple exploration in a case of doubtful diagnosis. Bearing on this point, another matter frequently alluded to in the old Reports was the prevalence or otherwise of erysipelas in the wards, and the cases of pyæmia or blood-poisoning were so frequent that they were noted regularly in every report in the annual statistics of the diseases treated.

PERSONAL RECOLLECTIONS

The story of the Hospital up to the occupation of the new building has mainly been culled from the old Annual Reports, together with some other records which have been preserved. Although these may again have to be referred to in relating the further history of the Institution, I propose now to enter the realms of personal recollection, concerning what has happened since the new hospital was opened in 1872.

The Fancy Fair of 1872 and sundry visits paid to the Hospital between then and 1878 are well remembered. On one of these occasions I helped at a Bazaar held in order to raise funds for the Children's Ward. (In a vacant ward in Dec., 1876).

In 1877 I began to study chemistry with Mr. Edward Davies at his Royal Institution Laboratories in Colquitt Street, and afterwards went to the works of Messrs. Muspratt in Widnes. At this time the Residents in the Hospital were my personal friends—Milner Helme, Richard Wearing and Louis Davies were the first of them, and there were others later on. My visits to the Hospital were pretty frequent, and there is no doubt that they led to an interest in medicine and to a strong desire to enter that profession. Certain plans for becoming associated with a chemical works in Germany had fallen through, and this, I believe, influenced my desires in this respect. There was an interval between the termination of my career as a budding chemist and the commencement of medical studies when, in deference to the wishes of my father, who was anxious that I should follow his own calling, I was placed with a firm of ship-owners with a view to apprenticeship. Following a preliminary training in science, the work in an office proved uncongenial. Business was evidently not in my line and the desire to become a medical student finally materialised when, in the spring of 1879, I entered the University of Edinburgh, and later in the same year took a student's ticket for vacation work in the Royal Southern Hospital. Thus it was that destiny played its part in framing my life's work, and on the grounds of a practically uninterrupted acquaintance with the Hospital from that time until the present, one ventures to claim the qualification for relating some personal reminiscences.

THE TRANSITION TO ANTISEPTIC SURGERY

Although Lister had been advocating the principles of antiseptic surgery since 1865, and had already proved that putrefaction in wounds resulted from the introduction of germs into them, a certain amount of scepticism and doubt on

the part of the profession led to a very slow adoption of its practice, even after an account of the methods of its general application had been described and recommended about the year 1871.

At the time of the opening of the Royal Southern Hospital, and for eight or ten years afterwards there were many surgeons who did not believe that putrefaction could be prevented. They considered that the practice of antisepsis was ineffectual, the methods of its employment being too detailed and complicated to make it universally applicable. It was frequently alleged, for instance, that in many operation and other wounds, germs were unlikely to gain an entry because the blood and other discharges would wash them out; and furthermore that, when antiseptics were employed, the wounds afterwards went wrong in not a few cases. It was therefore concluded that the results were quite uncertain, and that the method was of limited value. Also, laudable pus was still regarded as a condition to be desired for the healthy healing of wounds. This attitude of mind was doubtless brought about partly by a half-hearted acceptance of the principles, and partly because they were not thoroughly understood. The methods certainly involved the bestowal of a great deal of care in the carrying out of details as compared with the old practices, which were by no means cleanly. Operations, and especially the minor ones such as are common in every outpatient department, had hitherto been performed without much attempt being made to purify the parts beforehand, and the instruments were not clean in the modern surgical sense of the word. They often had roughened ebony or ivory handles, and it was no uncommon thing to see dirt or dried blood or other discharges in the interstices of the roughenings. Neither were the surgeons themselves scrupulously particular as to the state of their hands and nails. They had been accustomed to deal with cases under conditions which were more or less septic, and to go to the other extreme, which required soaking of the hands and instruments in a solution of carbolic acid, the use of a lotion of the same for the washing of the wounds, and especially working in the damp irritating

atmosphere of a carbolic spray, meant opposition on the part of men accustomed to the old regime. Then came the dressings for the wounds. In place of the dry dressings or those consisting of oakum, containing a tarry substance (at one time used by Lister), the smell of which permeated the wards and out-patient departments of every hospital, there were the complicated applications firstly of a strip of oiled silk, the surface of which was covered with a soluble material (consisting of dextrin and starch) containing carbolic acid. This was called "protective," its function was to keep the acid in the dressing out of the wounds. Then came the dressing itself, made of eight folds of muslin gauze, impregnated with a combination of paraffin wax and resin containing carbolic acid. This waxy mixture, softening at the temperature of the body, liberated the acid in volatile form. Over all was placed jaconette or waterproof tissue (the freedom of which from pinholes was regarded as important), and the bandages. The *modus operandi* of this dressing was as follows: Every wound had a certain amount of blood or blood serum effused into it, which would wash all carbolic acid used at the time of operation into the dressings, and the "protective," acting as a kind of valvular covering, would prevent much of the antiseptic contained in the dressing from re-entering the wound and irritating it. In the muslin dressing the discharges would be prevented from putrefying by the contained carbolic acid, and the superficial jaconette served to diffuse the discharges to its edges and so economised material. Whenever any discharge reached its margins, or if, perchance, a pinhole in the waterproof allowed any to come through, a new dressing was immediately applied in a carbolic spray atmosphere, so that no contaminating germs from outside might find their way into the wounds.

In Edinburgh, where Lister succeeded Syme as Professor of Clinical Surgery in 1869, the antiseptic system was carried out with great fidelity by men like Thomas Keith, John Chiene, Thomas Annandale and others, and the results were naturally excellent. Erysipelas and hospital gangrene disappeared from the wards and operations which had hitherto been regarded as extremely dangerous were undertaken with confidence.

Professor John Chiene has recorded that from 1869, when Lister went to Edinburgh, to 1878 he spent two hours daily in his wards, watching him elaborate his unperishable system and he stated that, when he knew Lister in those days, he could count his disciples on the fingers of both hands.*

Every surgeon had failures in those days, but this was not surprising when we remember that only the hands and arms of the operator, and the instruments and the skin of the patient were disinfected. There was plenty of opportunity of chance infection from surrounding sources, such as the garments of the surgeons and students and the coverings of the patients. One of the greatest pioneers of abdominal surgery whom I saw operating (Thomas Keith) had long hair, which fell like a veil from his head when he bent over his work, so that it certainly at times seemed to touch the parts being operated on. It was in a cloud of carbolic spray, however, and theoretically disinfected, and perhaps it served as a protection for his face and sight. To-day such a condition would be regarded as a serious flaw in technique; one almost certain to promote failure and danger.

In the Royal Southern Hospital for many years following 1879, when my personal experiences in it commenced, the mistakes in technique led to a considerable number of failures, and consequently to an amount of disregard for the Listerian practices. The surgeons had not at that time emerged from the older tradition and from an attitude of doubt concerning the merits of the new method. Some of them were half-hearted about it, and therefore not particular as to the carrying out of details. To illustrate this, I may relate what I actually witnessed at an operation for the removal of a growth from the abdomen of a patient, which was supposed to be performed under antiseptic precautions. Every member of the Staff was present, together with the nurses and students. There were no precautions taken with reference to the cleanliness of their garments. The surgeons wore old surtout coats bespattered with the blood and other discharges from previous operations. I believe that the bespattering added to the respectability of

**Vide* "Looking Back," Page 24.

the history of the garment. The sleeves, in some cases, were unbuttoned at the wrists and rolled up. The lapels of the coats were buttoned across to prevent soiling of the shirt and collar of the operator. It will be noted that it was the operator and not the patient for whom this solicitude was exercised. Then came the female staff. The matron was generally present at these major operations. She and the sisters wore stuff dresses long enough to trail on the floor of the theatre. The nurses wore their ordinary pink print uniforms. The students came direct from the wards, containing plenty of septic patients, or perhaps even from the postmortem room. Soon after the operation commenced, old Dr. Nottingham walked into the theatre wearing his very tall silk hat, which he did not remove. The patient was covered with a red blanket used for every operation, and not always washed between whiles. When a certain stage of the operation had been reached, each member of the staff, including Dr. Nottingham and some of the students, were invited to dip their hands in carbolic lotion and to examine the growth which was about to be removed. Thus numerous half-disinfected hands surrounded by dirty sleeves came in contact with a highly susceptible surface. While the operation was being completed, Dr. Nottingham requested the student who was attending to the spray to explain its workings, which were very effectively being carried out, in relation to a ring of backs surrounding the patient, but very little of the antiseptic vapour was getting into the vicinity of the seat of the operation. After the antiseptic dressings had been applied, the patient was placed in a side ward adjoining the theatre, where she died a few days later of blood-poisoning, thereby adding to the want of faith in the antiseptic system on the part of those who had so inadequately carried out its principles.

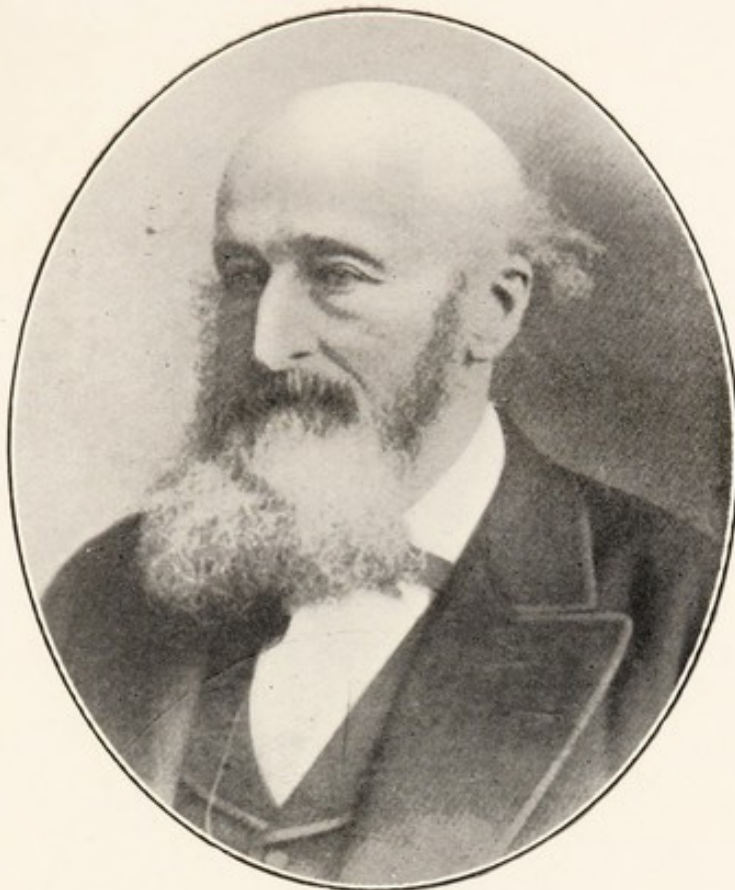
Another type of case impressed on the memory was an amputation of the leg, again supposed to be performed under antiseptic precautions. This time the patient was treated in a general ward. On the day following the operation the temperature was high, the wound tense, red and extremely painful. The surgeon removed the stitches and covered the wound with

a large linseed poultice. The poor man weathered the storm, however, after a prolonged illness, and was no doubt regarded as a triumphant case.

In those days the wards of the hospital contained mixed medical and surgical cases. There were patients suffering from typhoid fever, pneumonia, fractures, septic surgical conditions, primary operation cases, and many others all mixed up together. The Residents, each of whom was attached to both a physician and a surgeon, in making their rounds went from bed to bed, handling perhaps a typhoid or other infective patient one moment and a surgical one the next. They acted as carriers of sepsis and were a source of infection to any wounded surface. And what of their methods, and indeed those of the Honoraries when they made their visits? Over and over again has one witnessed the taking of a pocket scalpel, constructed on the principle of a penknife, or a probe or other instrument from a seldom cleaned leather pocket case, or direct from the waistcoat pocket and used after a perfunctory dip in carbolic acid, and often enough without this precaution. The sufferings of the patients were great in those days. The minor operations were often performed without anæsthetics, and the frequent use of the probe and the oft repeated dressings, always necessary where there is sepsis, made surgery no sinecure. There is little wonder that antiseptics came into disrepute in all the circumstances, or that surgeons, believing that they were carrying out the principles of their application, got uncertain results. There was one other source of sepsis which was long unsuspected, but which was an undoubted danger. When speaking of the opening of the Hospital, reference was made to some structural arrangements which were not compatible with the practice of antiseptic surgery. They conformed with the old ideas of convenience and of compactness of hospital construction and were an evidence of the fact that it was considered that, if sepsis existed, it, at all events, could be combated by the use of antiseptics. I refer to the positions of the mortuary and of the post-mortem room, which had been placed immediately below the operating theatre. This flaw was pointed out by

the late Dr. William Alexander in 1889. He and other surgeons, who by this time belonged to the modern school, then refused to operate in the theatre which was thrown out of action, and the Samuel Henry Thompson Ward was fitted up as a temporary operating room. Dr. Cameron then presented the present Pathological Laboratory, with its adjoining post-mortem room and mortuary, which is entirely separated from the main Hospital structure. I was Pathologist at the time and was frequently consulted over the plans of this new building. The old mortuary was converted into a lecture hall and the post-mortem room into a commodious splint room and engineers' workshop which, later on, after enlargement and suitable adaptation, became the present X-Ray Department. The operating theatre was, in the meantime, entirely reconstructed and has since then been kept up to date with every possible modern requirement.

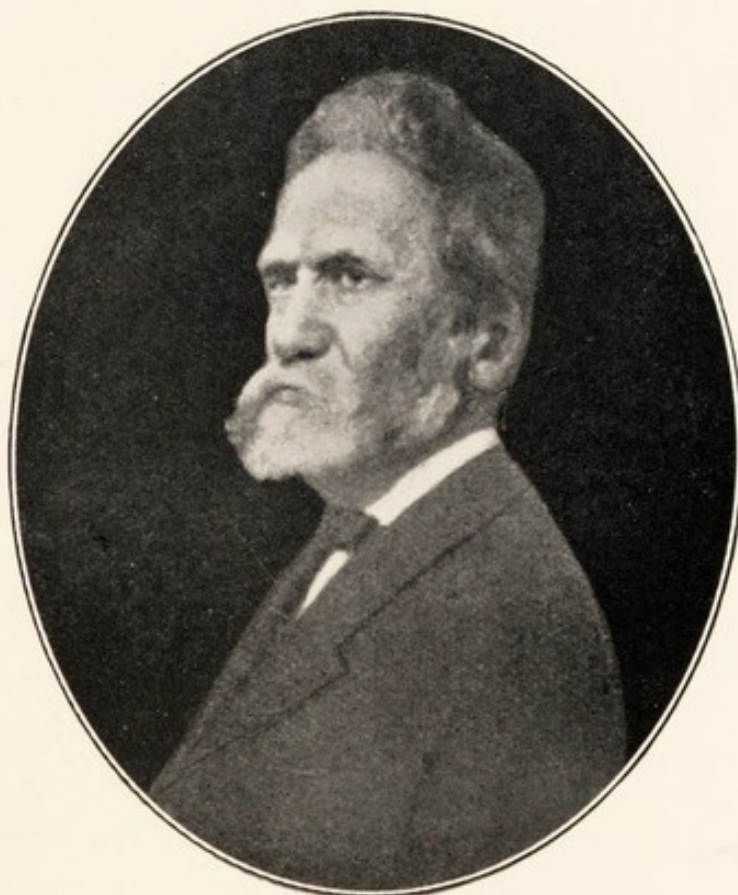
The mention of Dr. Alexander's name brings to mind the gradual emergence from the transition stage of antiseptic to that of thoroughgoing adherence to its principles, which took place as the surgeons of the old school retired, and their places were taken by more advanced men. The first of these was Mr. Ransford, who succeeded Dr. Wollaston in 1877. He had rather a difficult time of it when working with two of the surgeons who had inherited the traditions of the old Hospital. He knew his work well, and it was trying in the extreme for him, for instance, to be obliged to abide by an old bye-law, which necessitated a consultation of the entire staff before performing a major operation even in a case of emergency. I recollect seeing him sitting in the Medical Board Room (now the Hospital Office) for a long period, waiting for his colleagues to turn up and consult over a case of compound comminuted fracture of the leg. The man's limb was terribly smashed and there he was, with a tourniquet on to control the hæmorrhage, unable to have attention because the older surgeons, who would have resented anything being done without their opinions being taken, were not there to sanction the required amputation. These rules all went by the board when more modern surgeons were appointed.



DR. JOHN CAMERON.

HONORARY PHYSICIAN, 1848-1899.

HONORARY CONSULTING PHYSICIAN, 1899-1906.



DR. WILLIAM CARTER.

HONORARY PHYSICIAN, 1870-1907.

HONORARY CONSULTING PHYSICIAN, 1907-1912.

(From the original Oil Painting by Frank T. Copnall).



DR. CHARLES THURSTAN HOLLAND.

HONORARY RADIOLOGIST, 1896-1906.

(Photo. by Haines, London).

Thomas Ransford retired in 1881 and went to Bath, where he became a distinguished surgeon on the staff of the United Hospital, his place being taken by Mr. Frank Paul, who afterwards went to the Royal Infirmary. His reputation as a scientific practical surgeon became well-known throughout the country.

William Alexander, who was a very eminent surgeon, was a diehard so far as antiseptics were concerned. He held fast to some of the principles of the system, combining them with those of the modern aseptic surgery, which gradually displaced the Listerian antiseptic methods. It will perhaps be as well to explain that by antiseptic surgery was meant the disinfection of the instruments, hands, the sponges, towels and of the wounds themselves by means of lotions which would kill germs, whereas aseptic surgery in principle consists in the destruction of all organisms by means of steam or heat; all instruments and anything likely to be brought into contact with the patient being thus sterilized before use. The carbolic acid spray atmosphere is done away with, and irritating lotions used to a lesser extent. Everybody coming in contact with the patient is clothed in garments which have been sterilized: even the mouths and heads of the operators are thus covered. Sterile water takes the place of the lotions which were used for placing the instruments in and for washing the wounds, and sterile cotton dabs take the place of the former carbolised sponges. The operators wear sterilised gloves, which were at one time made of cotton, but now of rubber so thin as not to interfere with the sense of touch, thus protecting the wounds from contamination by organisms on the hands, which were always difficult to render safe by means of antiseptics; and, furthermore, they do away with the irritation and roughening of the operator's hands, which were so common in the days when lotions were depended on. The result of aseptic surgery has been that wounds almost invariably heal by first intention, and that the first dressing in a clean case is left *in situ* for many days. On its removal, healing has generally taken place and the stitches are ready to be taken

out. Laudable pus, formerly regarded as indicative of healthy healing, is now a thing of the past.

The surgical side of the hospital's history has been dealt with first because the advances in this branch of work have been so marked and have appealed so greatly to the public sentiment but, while Lister was teaching the danger of putrefaction in wounds, other researchers, following the works of Pasteur, began bit by bit to unravel the problems of disease, and it became gradually revealed that living germs were the causes of innumerable maladies, the pathogeny of which had hitherto remained unknown.

CHANGES IN MEDICAL TREATMENT

The then new sciences of bacteriology and parasitology became developed and, with their growth came many changes, not only in the way of accurate diagnosis of diseases but also in the methods of treating them. Bio-chemistry began to make great strides too, and the increase of knowledge concerning vitamins and the endocrine secretions have frequently thrown much light on other departments of therapeutics. These changes came more gradually and less dramatically than the surgical ones and, instead of displacing a good many of the old methods of treatment by drugs, they have, in many respects, added to their value by explaining on scientific grounds the way in which they act. Take Cinchona or Jesuits Bark for example, which had been known as a specific for malaria for more than two centuries before the malaria parasite was dreamed of, and there are many other drugs which are known to exert their influences on individual diseases, the true causes of which were unknown, until the organic, bio-chemical, or other conditions which give rise to them, were discovered.

With reference to many of these medical innovations, there was naturally a good deal of scepticism when they first came into use, which was not lessened by an over estimation of their virtues on the part of enthusiastic members of the profession. There was a striking example of this when Koch, who first demonstrated the tubercle bacillus (1882), introduced tuber-

culins for the treatment of consumption in 1890-91. They were going to cure the disease and to stamp it out. I heard it argued that they, and the open-air treatment of tuberculosis, would lead to a speedy subjugation of the disease which would render large institutions for their treatment unnecessary. The demand for the tuberculin on the part of the public as well as the profession was enormous. Then came the reaction, and the gradual settling down to a recognition of the limitations of this and many other forms of serum and vaccine-therapy. There was a somewhat amusing incident at a meeting in London in 1901 when Koch expounded his discovery that bovine and human tuberculosis were brought about by unidentical bacilli. The old Duke of Cambridge was in the Chair, and proposed a vote of thanks to Koch for his address. This was seconded by a distinguished foreigner who, in the course of his speech—which was in broken English—intimated that the audience had anticipated an important statement by the learned professor, and that their expectations (by which he meant their expectations) had been fully justified. This naturally evoked a good deal of mirth from the audience, which was not at first understood by the speaker. An applauding occupant of the gallery in his excitement dropped his umbrella over the balustrade which, falling endwise on the narrator's shoulder, served to impress the point of the joke very thoroughly.

The treatment of disease by serum, vaccines, antitoxins, and by organic preparations such as hormones, thyroid, and other glandular products, is of relatively recent origin, and to understand and appreciate the place which they have taken in medicine we must go back to the days when they were unknown, and witness what was done by the physicians of a former period. There were ample opportunities for this in the Royal Southern Hospital, both Dr. Cameron and Dr. Carter having been on the Staff for many years before the new hospital was built.

John Cameron, M.D., F.R.C.P., was a physician of the old school and a man of vast knowledge and experience in what was then more or less empirical medicine. He was

courtly and kindly in his bearing to all kinds and conditions of men, but possessed of a conservatism which rendered him slow to admit some of the changes which necessarily took place during the course of his long professional career. He was appointed to the old Southern and Toxteth Hospital in 1848 on the resignation of Dr. Grindrod. At that time the Honoraries held office for only fifteen years but, at the expiry of this period, in Dr. Cameron's case in 1864, although he duly sent in his resignation, he was reappointed at the Annual Meeting in 1865 for life, a new rule being framed to the effect that no physician or surgeon should be reappointed for more than ten years except those appointed prior to 1856. (This rule included Mr. Robert Hamilton, who came on the Staff in 1856 and retained his appointment until 1887.)

Dr. Cameron lived to be eighty-nine years of age, and only retired from the Hospital after about sixty years of service owing to failing health and strength. He was exceedingly punctilious in regard to the medical etiquette of consultations, and a story is told that in the course of his own last illness, when a second opinion was sought concerning him, he said, "Gentlemen, you will find paper and pen downstairs for your prescription when you have consulted." The prescription was afterwards carefully scrutinised by the old gentleman himself and, it is said, amended as he thought proper.

He had several nephews, two of whom for some time resided with him. One of these—the Rev. Donald Cameron—was for a time curate to the chaplain of the Hospital, and did a great deal of active work in the wards. The other was a source of great amusement to the patients. He sang comic songs for their benefit at the Christmas concerts in the early eighties, generally dressed up in some ridiculous costume. One of his songs, entitled "The Complaints," detailed a long list of troubles, medical, surgical, and imaginery, from which the singer, swathed in bandages and splints and supplied with medicine, etc., was supposed to be suffering, and it always brought the house down. He was a high-spirited youth, whose perpetual good humour and cheerfulness rendered him very popular. A story is told how, on one occasion, while the

doctor was away on holiday, his brougham had been repainted in readiness for the winter work. The nephew in question wanted to attend a funeral or a wedding, and thought he would like to do it in style in the brougham, so he persuaded the old coachman to drive him. In the course of the proceedings the procession was pulled up rather suddenly, with the result that the pole of a carriage in the rear went through the back of the brougham, and it took a great deal of pocket money to get repairs hastily completed before the doctor returned home.

Socially, one saw the doctor at his best in his own house. He spent his evenings at home with his sister, and always welcomed the writer, who called occasionally to have a medical chat or to make a fourth at a game of whist if the curate happened to be there. This youth, who was tall and frail, died of phthisis, and in 1885 the old lady also passed away, leaving the doctor a pathetically solitary man to the end of his days. His hobby was the Hospital and when, in the course of years, his large consulting practice waned, he devoted much time, not only to the wards, but also to the work and comfort of the nursing staff, in which he was much interested. He was almost invariably present at various Hospital functions (with the exception of the annual or bi-annual dinners). At the Christmas tree festivities, when everybody in the Institution, whether patients or staff, got a present, the President annually perpetrated the little joke of presenting the doctor with a petticoat, a "mistake" which he took in good part since it amused the patients very much. These personal recollections of Dr. Cameron are, perhaps, somewhat digressive, and we must return to others having to do more immediately with the Hospital.

Hospital consultations in those days were much more usual than they are now, and were carried out with great ceremony. They were summoned by means of a special form sent through the Secretary to all the Physicians or Surgeons or both, and to the Hon. Consulting Staff. The Residents were also sometimes invited to be present. After the history of the case had been detailed by the Honorary in charge, and the patient had been duly examined by everybody, the meeting adjourned,

either to the Sister's room or to the ward kitchen. The junior Honorary was then invited to give his opinion; then came the next in seniority and so on up to the senior. There were not infrequent differences of opinion, which depended sometimes upon the circumstance that Dr. Cameron did not approve of some of the new ideas in medicine. As an example of this, a case of rheumatic hyperpyrexia (very high temperature, perhaps 107° or over) might be under consideration. Sponging with cold water was admitted by all to be a judicious practice for the reduction of temperature, but the placing of the patient in a bath of cold water, or covering him for considerable periods with sheets wetted with iced water, was considered too drastic a measure by the senior physician, and so the battle of the baths began and continued for a very long time. These baths were much used at that period; sometimes a typhoid patient was kept in a bath, the water of which was maintained at a given temperature, for hours at a time. There was a bedside bath on wheels, really a tank, having a kind of canvas hammock arrangement suspended in it, whereon the patient lay surrounded by water. For the relief of rheumatic hyperpyrexia, which was relatively common, before the salicylates came into general use, about 1877, this reduction of temperature by baths was certainly useful and saved many lives.* The differences of opinion regarding treatment did not only apply to baths, however. They were numerous and many of the innovations, for the most part introduced by Dr. William Carter, who did much to advance the science of medicine, were met by opposition which, unfortunately, gave rise to a considerable amount of coolness between him and Dr. Cameron. Typhoid

* An interesting recollection in relation to cold sponging was an incident related to me by the late Dr. William Carter connected with a visit he paid to William Ewart Gladstone shortly before his death in 1898. The old gentleman, understanding that Dr. Carter came from Liverpool, initiated a conversation concerning Liverpool doctors and particularly mentioned the name of Dr. James Currie, because he remembered that he had advocated the use of cold water applications in the case of fevers. James Currie was well-known, not only as a practitioner from 1780 onwards, but also as an author. He wrote "Reports on the Effect of Water in Febrile Diseases" in 1797, and was the author of "Currie's Burns." He took part with William Roscoe and others in originating the Liverpool Library (now the Lyceum) about 1786, and the Athenæum in 1797.

fever, then seldom absent from the wards, was one of the bones of contention. Dr. Cameron had lived in the days when typhus was common and before it had been differentiated from typhoid, which had formerly been regarded as a variety of typhus, and was styled abdominal typhus. He continued to hold a lurking suspicion that they were co-related, for some years at all events after the Royal Southern Hospital was opened, and acting on the maxim of Graves of Dublin, who had requested that the epitaph "I fed fevers" might be placed on his gravestone, he fed some of his typhoids as he had done cases of typhus, with rather unfortunate results. Within the memory of the writer, some of the cases of typhoid in those days were simply horrible; or they seemed so compared with those in later years, and the method of dieting them had something to do with it. An example of old-fashioned treatment, as practised by Dr. Cameron, occurred in 1884, at the Children's Infirmary. A nurse was suffering from scarlet fever, and one evening she was so ill that the Resident sent for the physician on duty to see her. Neither he nor any of his colleagues being available, he sought the assistance of Dr. Cameron who, regarding the rash as being too scanty, ordered the application of large mustard plasters to bring it out. Whether *post hoc, propter hoc* little matters, but speedy improvement followed and the anxiety passed away.

Speaking of the Children's Infirmary brings to mind one more instance of Dr. Cameron's solicitude for the welfare of his patients. He had, in the Royal Southern Hospital, a little Greek boy, suffering from heart disease, who had been there for many weeks in excess of the time limit. Dr. Cameron sought his admission for a month or so to the Children's Infirmary (where I was Resident at the time), so that he could afterwards take him back under his own care as a new patient. The boy had been a bit spoiled at the Southern Hospital and did not like his new environment so, taking advantage of the temporary absence of the nurse from the ward, he got out of bed, and, inducing a boy suffering from rheumatism in an adjoining cot to accompany him, they escaped from the Hospital. Strangely enough, nobody challenged them as they

traversed the streets clad only in their nightshirts and dressing gowns. The rheumatic boy was discovered at his house, but the parents of the Greek lad had left the address recorded in the Hospital books and could not be traced. Several years later, when I was Pathologist to the Hospital, I was called upon to make a post-mortem examination on a lad who had been brought in dead. It was the little Greek boy, who had thus returned to the Royal Southern Hospital. Dr. Cameron was a munificent donor to the funds of the Hospital. When at the old Hospital, he caused some very important sanitary reconstructions to be made at his own expense and, as elsewhere recorded, he presented the new Pathological Laboratories in 1890. In addition to this he gave a tennis court for the use of the Staff, and contributed many other important gifts to the Institution.

DR. WILLIAM CARTER, M.D., F.R.C.P., B.Sc., LL.B. (LOND.), F.R.C.S. (IRELAND), came on the Staff of the Southern Hospital in 1870. Prior to this date, Dr. Cameron was the only Physician, and the increase of Staff was connected with the qualification of the Hospital to take articled pupils for the medical and surgical examinations. Dr. Cameron was a very tall man; Dr. Carter a small one, not more than five feet four inches in height, and the contrast between them was great.

During the course of his long period of office, which extended over thirty-six years, he did a great deal to advance the reputation of the Hospital, and became one of the most eminent physicians in the country. As in the case of Dr. Cameron when, under the rule that members of the Staff should retire at the age of sixty, he sent in his resignation, he was somewhat surprised to find that the Committee, on the proposal of the late Mr. George Holt, had framed a new rule in order to retain his services for an indefinite period.

Shortly after coming to Liverpool he was appointed Lecturer in Chemistry at the college in Shaw Street in succession to the late Dr. Birkbeck Nevins, and he often spoke with pleasure of the friends whom he had made and retained throughout life among the pupils. Later on, in 1867, the Chair of Chemistry

LIVERPOOL SCHOOL OF SCIENCE.

1867-8.

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The SEVENTH SESSION of the SCHOOL will commence on FRIDAY, 15th NOVEMBER, 1867, when it is proposed to open CLASSES in the following subjects :—

THEORETICAL MECHANICS	-	-	Wednesdays 7 p.m.
APPLIED MECHANICS	-	-	Wednesdays 7 p.m.
INORGANIC CHEMISTRY	-	-	Wednesdays 8-30 p.m.
MAGNETISM & ELECTRICITY	-		Fridays 7 p.m.
ZOOLOGY	-	-	Fridays 8 p.m.
VEGETABLE PHYSIOLOGY AND			
ECONOMIC BOTANY	-	-	Fridays 8-45 p.m.

Teacher: Dr. W. CARTER.

The Subjects will be treated in accordance with the Programme of the Government Department of Science and Art.

the Operative Classes, will also be found useful to those who are Preparing for the Learned Professions, the Universities, the Civil Service, etc.

They will be Illustrated by Experiments,
Diagrams, and Specimens.

became vacant at the School of Science by the death of Dr. Birkenhead, who contracted typhus fever during one of the great epidemics prevalent at the time, and Dr. Carter, succeeding him, added greatly to the already high type of work which had been instituted there. His pupils were largely drawn from the working classes of Liverpool, whom he described as intelligent and industrious. One of them, George Gordon, a blockmaker, who worked hard at his trade by day and at his scientific studies at night, was afterwards appointed Curator of the Fitzwilliam Museum, Cambridge, and subsequently assisted Lord Rayleigh in his research work. When he died, many years later, he left his books and scientific instruments to his old teacher Dr. Carter. A reference to the reprint of Syllabus (*p.* 41) of the subjects taught at the School of Science in 1867-8 indicates the versatility of Dr. Carter's knowledge at this period. It was Dr. Carter's skill as an analytical chemist which led to the knowledge that arsenic had been added to a bottle of Valentine's Meat Juice intended for administration to James Maybrick in May, 1889, and on this fact there hinged a very important element of evidence in the subsequent trial, linked as it was to a statement made in court by Mrs. Maybrick. Criminal poisoning had not been suspected either by Dr. Carter or by Dr. Richard Humphreys with whom he was attending the patient in consultation. The illness had been attributed to some irritant food poison, the nature of which was not clear to them, and it might have remained a mystery had not Mrs. Maybrick, on May 8th, entrusted a letter for the post to the children's nurse, who afterwards alleged that she had opened the letter to put it in a clean envelope because the baby had dropped it in the mud. She read part of the letter, which was couched in terms of passionate attachment to the addressee and spoke of her husband as being "sick unto death" and that all depended on how long his strength would hold out. Instead of posting the letter the nurse handed it to Mr. Maybrick's brother, who was staying in the house at the time. On the following day (May 9th) Dr. Carter had a dramatic interview with Mr. Maybrick's two brothers, evidently prompted by their perusal of the letter.

"Now what is the matter with my brother, Dr. Carter?" said Mr. Michael Maybrick.

Dr. Carter simply repeated an opinion which he and Dr. Humphreys had formerly expressed about an irritant food poison.

"But what is the cause of it?" said Mr. Maybrick, "That is, of the acute dyspepsia?"

"That is by no means clear to us," replied Dr. Carter, "the conclusion we formed was that your brother must have committed a grave error of diet by taking some irritant food or drink or both, and so have set up inflammation."

Turning then sharply to Dr. Humphreys, the questioner asked him if he had informed Dr. Carter of the subject of a conversation they had had on the previous night. Dr. Humphreys replied that he had said nothing about it. Dr. Carter, being very surprised and mystified, looked at the speaker, wondering what was coming next. Then came the suggestion of poisoning. It was made under the influence of very strong emotion, the speaker's mind evidently struggling under a conflicting sense of what was due to his brother on the one hand, and of possible injustice to that brother's wife on the other.

"God forbid that I should unjustly suspect anyone," he said in reply to an observation by Dr. Carter, "but do you not think, if I have serious grounds for fearing that all may not be right, that it is my duty to say so to you." Mr. Maybrick then recalled events in the course of his brother's recent ill-health which added to his suspicions, and so the light of suspicion led to special precautions being taken with reference to safeguarding the patient.

On the evening of this same 9th May came the well-known incident of the bottle of meat juice, handed to Dr. Carter on May 10th. I happened to be at his house when he arrived. Can I ever forget his serious agitation and the pallor of his features when he told me his fears concerning it. Later in the evening he found that it contained arsenic, and subsequently he explained his reasons for believing that the arsenic had been added in solution and not in the form of a powder,

as alleged by Mrs. Maybrick when she made her statement in court. My impression is that this statement was largely responsible for her condemnation. Carter was greatly perturbed by this trial, and came home night after night from the Assizes in a condition of considerable exhaustion. Together with other relics of the Maybrick case, a bottle of meat juice and the arsenic mirrors made from it, came into my keeping at the time of Dr. Carter's death in 1912. It was a somewhat dangerous possession which might easily, through some carelessness or as the result of a mistake, lead to another tragedy, so an early opportunity was taken of presenting these mementoes to the Museum of Scotland Yard, where they were glad to have them, as they possessed no other relics of the case.

In the wards of the Hospital, Carter did much of his original work. Every case was to him a problem to be solved, and he spent a great deal of time in working out the best means of helping his patients. Every now and then, when half way home after paying his visit, one has known him to turn back in order to set going some idea which had occurred to him in connection with a seriously ill patient. He was particularly interested in Bright's disease, on which he wrote a book, and his methods of differentiating the clinical varieties with reference to the means of treating them are well known. He delivered the Bradshaw lecture on Uræmia, which is related to these kidney diseases, in 1888, by invitation of the Royal College of Physicians, and in 1899 delivered an address to the Wigan Medical Society on Uræmia and Allied Disorders which was of great practical value. In it, among other matters, he dealt with cases presenting an aggregate of symptoms resembling those produced by opium, including pupillary contraction, which were benefited by administration of atropin. In another less common series, where the totality of the retained poisons produced dilatation of the pupils and other symptoms like those of atropin poisoning, morphia promoted relief. To give morphia to a case where the pupils were contracted or atropin or belladonna where they were dilated was to court disaster. He also referred to the danger of using

pilocarpin in comatose patients or those threatening to become so, a point not at that time referred to in the text books.

Although he was a strong advocate for temperance from the days when it was hardly thought respectable to be a teetotaler, and consistently fought for its principles both as a lecturer and in connection with his magisterial duties, Carter never withheld alcohol in a case when he thought it might be beneficial. On one occasion he surprised the Residents and Staff in the wards by appearing with a basket containing a number of bottles of some special brand of beer, which Sir Lauder Brunton had used in a case of diabetes with much benefit. They were administered to his patient and, I am afraid, created a certain amount of envy among the other occupants of the ward. The treatment did no good, however, and the experiment was not repeated.

He was very quick at picking up an idea and turning it to good account for the benefit of his patients. An extremely stout man consulted him on one occasion, and the doctor spoke to him about his excessive fatness, whereupon the man said, "We are all fat in our trade" (which was connected in some way with the preparation of lard and bacon). Dr. Carter visited the factory, and confirmed the man's statement. In wasting patients, thereafter, he used inunctions of lard and of bacon fat, sometimes with the most astonishing results, and this measure was carried out as a routine line of treatment for long afterwards, especially in cases of ill nourished or wasting children.

With regard to the investigation of the action of drugs, Dr. Carter bestowed the greatest care on the examination of new remedies which he thought might be valuable, and he critically experimented with them in his laboratory when by so doing their alleged virtues might be confirmed or otherwise. This happened with reference to a number of proprietary preparations containing pepsin, several of which he showed to be quite inert. The value of the organic glandular products in the treatment of disease is now well recognised but, when Brown-Sequard, in 1889, recommended the use of one of these secretions, the suggestion met with the greatest opposition,

more especially on the part of some of the public who did not consider it right to inject certain animal secretions into the human tissues. Some prominent citizens approached Carter and asked him to support this contention, but he promptly refused to do so and stated that he thought there might be something in the idea. Later on came the introduction by Murray of the treatment of myxœdema with extracts of thyroid gland and, following Brown-Sequard's practice, it was first administered hypodermically. Carter presently began to give extracts of the gland by mouth with good results and, telling of this at a medical meeting, his observations were met with much scepticism, for it was thought that the secretions would be destroyed in the stomach. He was right, however, and the preparations are now almost invariably given by oral administration.

I remember an incident connected with the introduction of cocaine as an ophthalmic local anæsthetic. Walking into the doctor's consulting room one evening, I was concerned to find him sitting before the fire examining one of his eyes with a hand mirror, and every now and then poking the handle of it into the eye, the pupil of which was dilated. He was, of course, making a personal experiment concerning the use of the drug.

One more example may be quoted illustrating the patient way in which he investigated these matters. There is a certain drug which has a very useful sedative effect upon the nervous system. When given in large doses it weakens the action of the muscles which raise the eyelids, this being a point beyond which it is not safe to push it. The method by which the maximum dosage was ascertained was by attaching a fine piece of silk to an eyelash by means of a particle of wax, and on this silk were attached small split shot, such as are used by anglers. He weighted the eyelid until the man was just able to raise it, and then gave the drug little by little until it was no longer possible to open the eye.

Another branch of work which was started in Liverpool was a Cancer Research, for which the funds were largely provided by the late Mr. Sutton Timmis, who chose Dr. Carter as the

medium through whom it should be administered. There is no doubt that he was the connecting link between the Hospital and many important organisations. One of these, which will be referred to later on, was the Royal Liverpool Country Hospital for Children at Heswall, which was founded by two members of the Royal Southern Hospital Staff (Sir Robert Jones and the writer), and it was Dr. Carter who was invited to take the Chair at the meeting when the need for such a hospital was advocated in 1898. We cannot pass over the active part which he took in the great social purity crusade initiated by the late Josephine Butler. The medical profession was at first opposed to her views, but men like Dr. Birkbeck Nevins and Dr. Carter, working for her cause, led to the formation of the National Medical Association for the repeal of the Contagious Diseases Acts in 1874, and it was greatly due to their efforts that the Acts were abrogated in 1886.

THE LIVERPOOL SCHOOL OF TROPICAL MEDICINE

The Royal Southern Hospital was, in a great measure, responsible for the inception and foundation of the Liverpool School of Tropical Medicine in 1898, and this cannot be dissociated from Dr. Carter's name. The disastrous influences of these diseases had been recognised for many years. They were so fatal to those whose callings took them to the West African coast and its neighbouring districts that they were popularly known as "The White Man's Grave." Apart altogether from any humane reasons, the interference with commerce in tropical countries, resulting from the illness and deaths among those who worked in them, greatly impeded the advancement of trade. Such considerations, and especially those having to do with the loss of life, were evidently impressed on the Rt. Hon. Joseph Chamberlain, who was Colonial Secretary in 1897, by Sir Patrick Manson—often spoken of as "the father of Tropical Medicine"—who was medical adviser to the Colonial Office at the time. This led Mr. Chamberlain to advocate, in 1898, that medical officers selected for appointments in the tropics should have special knowledge of such

diseases and, following a communication which he sent to the General Medical Council, that Body recommended that arrangements should forthwith be made with the Government for special instruction in Tropical Medicine, Hygiene, and Climatology to be afforded to duly qualified practitioners selected for colonial service or who otherwise proposed to practise in tropical countries. In a subsequent circular to the Governors of all the Colonies, Mr. Chamberlain pointed to the interest which had been taken in the matter by Sir Patrick Manson, who had directed his attention to the importance of scientific inquiry into the causes of malaria and of special education in Tropical Medicine being provided for medical officers of the Crown Colonies. The result of all this was the official formation of the London School of Tropical Medicine, which was opened on October 3rd, 1899.*

Thus it came about that the necessity for special study in Tropical Medicine became recognised by the Colonial Office, and it was doubtless in relation to this that the circumstance arose which influenced the Royal Southern Hospital to lead the way by the formation of the Liverpool School of Tropical Medicine, which anteceded the London School in the commencement of its activities by several months. The circumstance which led to the formation of the School and its associated ward and laboratories in the Hospital was the subject of a speech made by Dr. William Carter at a Royal Southern Hospital Students' Dinner (then an annual function), on November 12th, 1898. Dr. Carter had dilated upon the large number of cases of tropical diseases which, from the earliest days of the Hospital, were brought to its wards. They were so numerous that at least one of the Residents (Dr. James Milner Helme) wrote his thesis for the Doctorate of Medicine on malaria, for which he was awarded a gold medal in the year 1879, and another was known to have suspected that the little pigmented particles, found in the blood cells in these cases, might be parasites. The sufferers were mostly sailors arriving from tropical countries, the proximity of

**Vide* Historical Record of the Liverpool School of Tropical Medicine, 1898-1920.

the Hospital to the docks rendering it very convenient for their reception. The Hospital was known for its splendid work with reference to these diseases and Dr. Carter related that in connection with wars in tropical countries—*e.g.*, the Ashanti Campaign—the Government had, on more than one occasion, subsidised beds for soldiers coming home from the seat of war. The writer, who was present at the dinner, well remembers seeing Mr. Alfred L. Jones (afterwards Sir Alfred) the West African shipowner and merchant, run round to Dr. Carter at the conclusion of his speech and hold a short conversation with him, the purport of which was that he made an offer of £350 a year towards a school of Tropical Diseases to be established in connection with University College and the Royal Southern Hospital. This offer was submitted to Mr. William Adamson, the President of the Hospital, who was present at the dinner and he at once accepted it in the name of himself and his colleagues and confirmed this in a letter to Mr. A. L. Jones a couple of days later.

At a farewell banquet given to Dr. Carter on the occasion of his retirement in 1908, Sir Alfred Jones, in referring to the work of the Tropical School, stated that the School had started at this dinner of the Royal Southern Hospital and that it had set the world studying Tropical Diseases.

The subsequent formalities connected with the interrelationship of the Hospital and University College need not be detailed here. That they were expeditiously arranged was shown by the fact that the School was officially opened on April 22nd, 1899.

The opening ceremony—held at the Hospital—was in the nature of an "At Home" given by the President and Committee. It was attended by the Committee of the new School, and representatives of University College, the Royal Southern Hospital, the Chamber of Commerce, the Steamship Owners' and Shipowners' Associations, together with a number of distinguished visitors, including among them the Lord Mayor (Mr. W. Oulton) and Lady Mayoress, Mr. A. L. Jones, who was now the Chairman of the School of Tropical Medicine, Dr. Church, President of the Royal College of Physicians

(London), Professors Carter, Mitchell Banks, Paterson and Sherrington, Major Ross, and the members of the Medical and Surgical Staffs of the Hospital. Mr. William Adamson, speaking in the name of the Committee, requested Lord Lister to open the "Samuel Henry Thompson" Ward and its attached laboratories as the special department for the clinical work connected with the School. In the course of his speech, Mr. Adamson referred to the fact that ever since the Hospital had been opened, fifty-seven years previously, they had never been free from cases from the tropics, and it was an interesting fact that during the last few years four hundred and sixty cases had been under treatment. He said that the proximity to the docks no doubt accounted for so many patients being taken to this Hospital, where they had been admitted to the general wards, and the Committee was glad to think that the special department now set aside might lead to the ascertaining, so far as human research could go, the causes of the maladies. The ward was already full and its occupants represented the following nationalities:—China, India, U.S.A., Norway, Sweden, Russia, Finland, England and Ireland. The tropical diseases from which the patients suffered had been contracted in Java, India, Brazil, the Savannah, S. Carolina, Sierra Leone, Forcados, Old Calabar, Benin and Cape Coast Castle, etc. He referred to the hope of the Committee that nurses might be trained who could go abroad, provided not only with certificates of competency as fully qualified nurses, but also with a practical experience in the nursing of tropical diseases which would enable them to help the medical men in foreign parts. He alluded to the appointment of Major Ronald Ross to the Lectureship in Tropical Medicine, whose qualifications as a teacher of tropical diseases was so well known that he need not dwell upon them. He also stated that Dr. Annett had been appointed Demonstrator of Tropical Pathology and that he and Professor Boyce, acting in conjunction with Major Ross, might be proud to be among the pioneers of such a great work.

Lord Lister, in performing the opening ceremony, said that he felt it a peculiar privilege to be asked to declare the ward

open. He felt sure that Liverpool, in this matter, was doing what was of the greatest importance for the welfare of mankind. It was a satisfactory thing to know from what the Chairman had told them that the treatment of tropical diseases was no new thing in that Hospital, its vicinity to the docks having led to patients from various parts of the tropics being treated there for many years past. It might be supposed by some people that the treatment of tropical diseases there was a somewhat fictitious matter and that the patients were got together for the purpose of the School and for nothing else; but now they learnt that patients with tropical diseases had for a long time past been treated in that very Hospital. It was greatly to the advantage of the patients that there should be a Tropical Diseases School attached to the Hospital, because the welfare of the patients had a proportionate relationship to such an association which enabled the diseases to be earnestly studied in all their bearings, under the critical eyes of skilled observers.

People sometimes had the notion that a hospital attached to a medical school was not so good for the patients as a hospital which had no such relationship. There could be no more ridiculous mistake. It was where there was no School, no supervision or public criticism, and nothing to stimulate research with the view to teaching that the medical officers were apt to become sluggish and fail in their duty in the treatment of the patients and in the advancement of medical science. Mr Edward P. Thompson had given the sum required for fitting up the ward, and he felt that it was appropriate that it should be called after his father, Mr. Samuel Henry Thompson, another of whose sons (Rev. Samuel Ashton Thompson-Yates) had given the munificent bequest for the Thompson-Yates Laboratories at the University, which he (Lord Lister) had the privilege of opening last October. He had seen this hospital before, and it gave him great pleasure to see it again in its neatness and beauty, and to see what a very beautiful ward they had been able to set apart for so important an object as this School of Tropical Diseases. He could not avoid saying also that he thought the Hospital and

the School Committees were to be congratulated on having obtained the services of so distinguished a man as Major Ross whose observations had been of the highest importance and had received confirmation from France and Germany, in fact from everywhere. He also considered it fortunate that Prof. Boyce, head of the Pathological Department, would be associated with the School. This was a double security, ensuring that everything would be done to the best advantage. Therefore he repeated that he felt it a peculiar pleasure to be allowed to have the honour of declaring the ward open.

In the evening the Chairman and Committee of the Liverpool School of Tropical Medicine entertained to dinner a large number of distinguished guests at the Adelphi Hotel.

Mr. Alfred Jones, in proposing the toast of "The study of Tropical Diseases" said that he felt he voiced the thoughts of many when he stated that more knowledge of Tropical Diseases was essential to the medical profession. He went on to remark that not only would the School be benefiting humanity, but it would also be a great help commercially. Letters and telegrams had been received from many countries abroad in support of the scheme, and he, as a shipowner in Liverpool, must express his gratitude to the Southern Hospital for taking up this matter. Also, he added, that thanks were due to the Colonial Secretary, Mr. Chamberlain, for his assistance. In proposing the toast he coupled with it the names of that great benefactor to humanity, Lord Lister, and of Prof. Moore, President of the Royal College of Physicians of Ireland.

In response, Lord Lister said he was glad to bear testimony to the benefits of the study of Tropical Diseases from a greater authority than himself, in a letter from Sir Joseph Fayrer, who expressed regret at being unable to be present. The letter read: "I heartily wish all success to this admirable addition to the great Medical School of Liverpool. The advantages of an important seaport like that of Liverpool for furnishing opportunities for the study of Tropical Medicine will assure the success of the scheme which, I trust, will be carried on with unimpeded progress." In regard to the present necessity that students should go to London to study Tropical Medicine he

(Lord Lister) thought that, now the Colonial Secretary had seen what Liverpool could do, the arrangement could be made better in some way,. In Liverpool they had a very valuable combination of advantages. There was a well endowed and established hospital, together with a school of competent teachers and also clinical material which was second to none in the British Isles. He had seen the arrangements at the laboratories and the syllabus of the intended course of instruction and was convinced that these great advantages would be availed of to the utmost. Such being the case he confessed that he sympathised very deeply with Liverpool in feeling that it would be a hardship if the men who studied at her School under the best conceivable conditions should nevertheless be required to break away and go to London to study identically the same diseases. He felt that such an arrangement would act very prejudicially to the Liverpool School, since it would naturally occur to a man studying in Liverpool that there was no need for him to attend a course of Tropical Medicine at Liverpool if he was obliged to go to London and spend the requisite time there for the study of these complaints. He had placed this aspect of the case before Mr. Chamberlain, who had most cordially sympathised and had commissioned him (Lord Lister) to say that the arrangement about London had only been made for a single year and that at the end of that period he would reconsider the question. Mr. Chamberlain had then added significantly "We shall then see what Liverpool can do." Having seen what Liverpool would most assuredly do he had every confidence that, by the end of the year, that requirement of Mr. Chamberlain would no longer exist. Lord Lister concluded by expressing great satisfaction at seeing such a vast concourse of commercial men met together to promote a great scientific object, and he hoped that the time would come when the Liverpool School would act in co-operation with the London School of Tropical Diseases and that they would be associated together.

Professor Moore, President of the Royal College of Physicians, Ireland, laid stress on the important position of Liverpool as a centre for the study of Tropical Diseases. He

mentioned that hitherto there had been little chance of specialisation in this branch but now, with the establishment of the ward in the Royal Southern Hospital, that difficulty had been overcome.

The Lord Mayor (Mr. William Oulton) proposed the toast of "The Liverpool School of Tropical Diseases." He thought it right to mention that the movement was, in his opinion, the outcome of Liverpool's civic spirit, and had been made possible by the munificence of its wealthier citizens. He mentioned the dire effects of alcoholism on the subject races and its shameful-ness, but stated that efforts to look after the well-being of those in distant countries were destined to develop and succeed.

Professor Carter, in responding, referred to the origin of the scheme, and added that it seemed to him that the study of preventive medicine in relation to tropical diseases might be a link in combining universal brotherhood when nations, instead of engaging in successive struggles, would emulate each other in the saving of human life.

Professor Boyce also spoke concerning the success of the movement.

Principal Glazebrook, in proposing the toast of "The Medical Profession," referred to the number of distinguished representatives of the profession present. He had spoken previously about the necessity for studying Tropical Medicine and had expressed the hope that it might form a link between the Royal Southern Hospital and the University College. He trusted that now the two affiliated institutions would prove a help to all other medical institutions in the country and to all students of medicine. He coupled with the toast the names of Professors Church and Michael Foster.

Professor Church, President of the Royal College of Physicians, in response, said the Medical Profession was regarded as an honourable one because there were two moving principles which caused men to enter it. One was the desire for knowledge and the investigation of the mysteries of nature, and the other was the desire to alleviate in some way the sufferings of their fellow-creatures. These two principles were the safeguards of the medical profession, and he believed that cases

seldom arose in which men were influenced by what he might call lower motives in entering the profession. There was a time when the medical profession embraced within its circle all those who were interested in biological science, but nowadays science had, in a way, outstripped medicine and medical practitioners now turned to science to discover and work out points which it was impossible for those whose work was chiefly by the bedside to follow, and to unravel mysteries which the clinical practitioner had neither the means nor the time to do. He rejoiced to see that the philanthropic citizens of Liverpool had been the first to see that the endowment of science—especially science as connected with medicine—was a greater gift to humanity than the mere endowment of certain beds or wards or hospitals. Hospitals and beds were provided for the sick, suffering and the injured and were, of course, a necessity and of extreme value, but they touched only a limited locality in the case of each individual gift, whereas the knowledge obtained by such munificence, evidence of which he had seen that day, spread not only over their own country but all over the world. He believed that it was a current saying in Lancashire that "What Lancashire does one day, England does the next." He could only hope that another saying would become current in the country, and that was "What Liverpool does one year, England may do another."

Dr. Michael Foster, President Elect of the British Association, also responded and read a telegram, wishing the School success, from Professor Marchiafava of Rome, one of the foremost investigators of malaria in that country.

Mr. Charles W. Jones proposed the toast of "Our Guests," and H.E. the Governor of the Gold Coast (F. M. Hodgson, C.M.G.) responded with words to the effect that he, from experience, knew how important the stamping out of Tropical Disease was, and how much it pleased him that the movement had been inaugurated.

Mr. W. F. Lawrence also briefly responded remarking that, in the interests of the great men who had spread the Empire, it became those at home to show their sympathy to those who went abroad.

Lord Lister, in giving the toast of "The Chairman," directed attention to the medical world's indebtedness to Mr. A. L. Jones.

The Chairman, responding, wished to have recognition of the School from the Foreign Office, and that it should be put on the same footing as the London School. They—the Liverpool School—hoped in time to send an expedition out to Africa to arrange, if possible, better sanitation and consequently better health.

Such is the history of the relationship of the Royal Southern Hospital to the School of Tropical Medicine in which the clinical work of the school was carried out until the year 1911, when it was moved to specially built wards in the Royal Infirmary in order to be more approximate to the laboratories of the School situated in the University. This great work of progress, which has exerted so much influence in the way of extending possibilities of trade in West Africa and other tropical countries, is one of the most important connected with the Institution.

THE SPECIAL DEPARTMENTS

To those who have been acquainted with the Royal Southern Hospital for more than half a century, it is very interesting to look back upon the days when there were no special departments of any kind. The members of the Staff consisted of General Physicians and Surgeons. The Physicians, by the laws of the Hospital (dating back to 1842), were not permitted to practise surgery, pharmacy or midwifery. Many of the eminent Physicians, however, who were attached to the Hospital in those days, began their careers as general practitioners, usually without midwifery, and gradually merged into the restrictive work which qualified them for hospital rank.

On the other hand, there were no laws which imposed limitations in the case of Surgeons, beyond stating that they must hold the diplomas of the Royal College of Surgeons of England, Dublin, or Edinburgh, or of the Faculty of Phy-

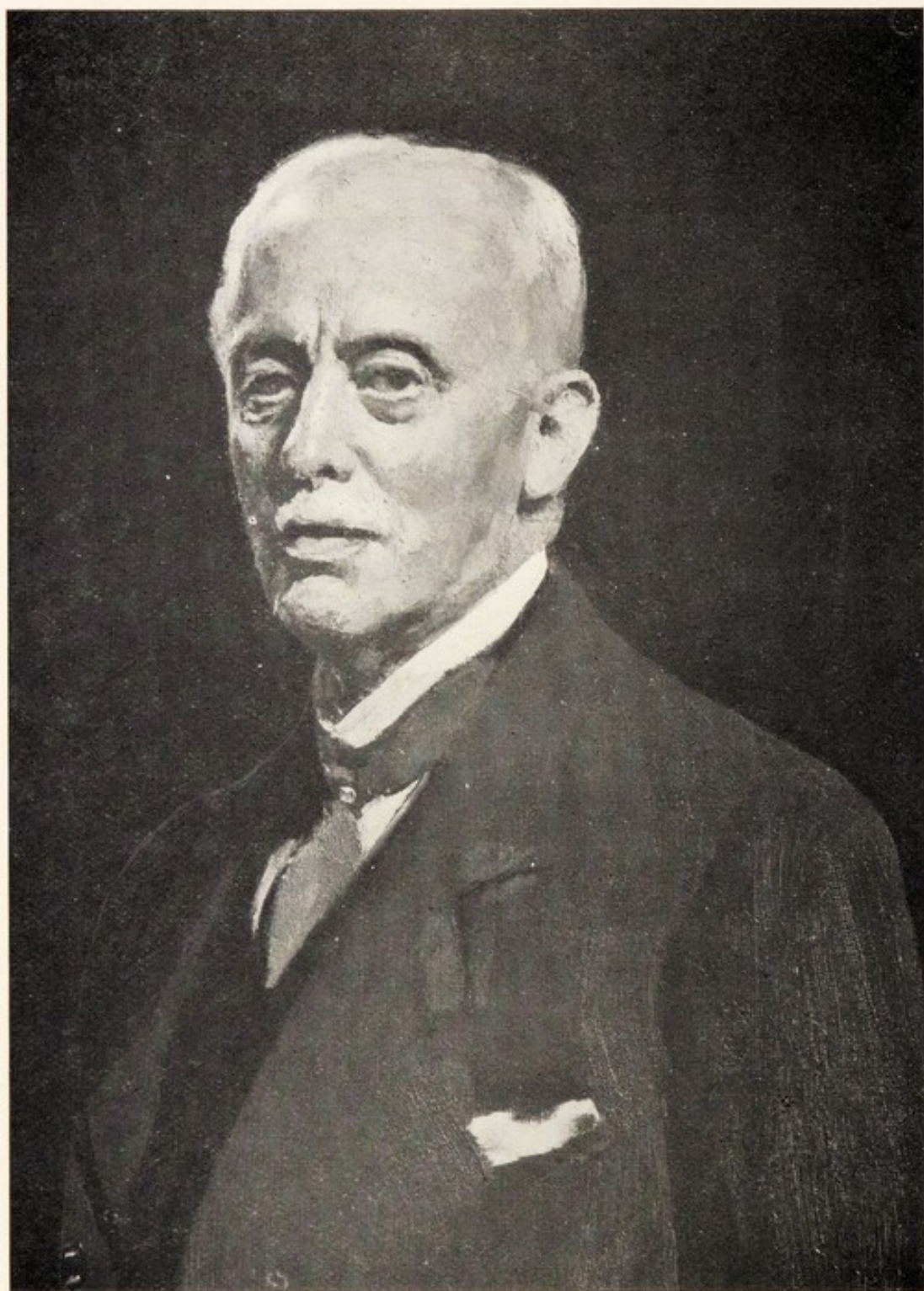


SIR ROBERT JONES, BART.

HONORARY SURGEON, 1889-1918.

HONORARY CONSULTING SURGEON, 1918-1933.

(By courtesy of Mrs. Frederick Watson).



DR. CHARLES MACALISTER.

HONORARY PHYSICIAN, 1900-1925.

HONORARY CONSULTING PHYSICIAN SINCE 1925.

(From the original Oil Painting by Frank T. Copnall.)

sicians and Surgeons of Glasgow. Those who were on the Staff of the Hospital, when I first knew it, were general practitioners, and some of them dispensed medicines. Such an eminent man as Edward Bickersteth, Senior Surgeon to the Royal Infirmary, had a high-class general practice, and so had William Alexander, of our own Hospital, until comparatively late in his career, when I recollect that he notified the profession, by a privately printed communication, that in the future he proposed to practise surgery only. As a matter of fact, it was perhaps an advantage to physicians and surgeons to have had experience of general work in early days, because it certainly taught them something of the by-paths of domestic life which render the doctor the friend, as well as the medical adviser, of the people among whom he works.

The first Liverpool surgeon I can recollect as having eschewed general work was Sir William Mitchell Banks, who confined himself to surgery for many years before the new Royal Infirmary came into existence in 1890. During the late eighties, as the older surgeons dropped out of their appointments—whether by death or age limit—it came to be understood that their successors should fall into line with the physicians and confine themselves to surgery. This would be essential as it became apparent that practice, bringing men into contact with fevers and septic diseases was incompatible with the anti-septic principles which were at that time being observed. I have no doubt that this had much to do with the change in the attitude of the surgeons, combined with the law of the Hospital introduced in 1898 requiring candidates for the post of Honorary Surgeon to be Fellows of the Royal Colleges of Surgeons of England, Ireland or Edinburgh, or of the Faculty of Physicians and Surgeons of Glasgow. The latter was omitted in 1910 and in 1912 it became essential that candidates for the post of Surgeon should be Fellows of the Royal College of Surgeons of England, or obtain that qualification within four years of their appointment. This rule did not apply to the Special Departments.

The earliest specialists were those physicians and surgeons whose reputations for treating certain classes of diseases

became recognised, and occasionally this led to their confining themselves to these particular maladies. Later on, with the extension of medical sciences, came the specialists proper and the subsequent granting of diplomas to those who added the study of particular departments of work to their professional qualifications.

In our own Hospital there have been many examples of men who had reputations for special skill in some particular branch of their general work. Dr. Nottingham (1856-1877), for instance, did eye work. Within my own recollection, Robert Hamilton and William Little, in the late seventies and early eighties, performed operations for cataract and squint, the latter of which was, curiously enough, regarded as a branch of what is now known as Orthopædics. Dr. William Carter, who was a master of therapeutics, was well-known for his knowledge of Bright's Disease, and later came Alexander, a general surgeon, whose reputation as a gynæcologist was well known. He was also interested in certain surgical aspects of epilepsy and was founder of the Epileptic Colony at Maghull.

The scope of the physicians in those days was very wide, and I call to mind that they sometimes resented the tendency to particularised specialisations when they were at their beginnings. A well-known London physician, who regarded this tendency as an importation from America, told me that a lady had asked him if he was a specialist for children over ten years old or under that age, and also if he was a specialist in children's livers. Another physician informed me that he had been consulted by a practitioner as to the advisability of his starting as a skin specialist. To this he made no objection, but said he would "stick to his skins" whether it became a speciality or not. He lived to see this branch of work pass out of his hands, and the young practitioner referred to become a distinguished Dermatologist.

When Robert Jones began his career, he was to all intents and purposes a general practitioner, working with Mr. H. O. Thomas who had a large general practice, not only among workers at the docks but in engineering and boiler-making

shops and other classes of occupation apt to be associated with serious accidents. Thomas had a wide-spread clientele among patients in every class of society, from the richest to the poorest. His reputation in the treatment of joint troubles and fractures brought him patients from all parts of the country. When he died in 1891, Robert Jones almost immediately took steps to establish his position as a pure surgeon by eliminating the general work from the practice which he had carried out in deference to the wishes of Mr. Thomas, even after his appointment to the Hospital in 1889.

The special departments, which are now essential to every large hospital, constitute important centres for clinical work and teaching. The following references to them are given as far as possible in the order of sequence of their initiation.

It is perhaps right to mention that, although there is no Dental Department attached to the Hospital, an Hon. Dental Surgeon was appointed in 1866, this being the first extra professional addition to the Honorary Staff.

THE ORTHOPÆDIC DEPARTMENT

The history of the Orthopædic Department of the Royal Southern Hospital forms part of the history of Sir Robert Jones, for it was he who created it and in it developed the principles and practice which led to Orthopædics becoming a specialised branch of Surgery. His clinic at the Hospital became famous throughout the world and, not only those immediately connected with the institution, but the Liverpool public generally are proud to think that their Royal Southern Hospital was the principal workshop of the creator of modern Orthopædic Surgery, the founder of the British School of Orthopædics, and a fellow citizen, recognised throughout the world as the greatest Orthopædic Surgeon of all time.

It would be inappropriate to relate here anything concerning the life of Sir Robert Jones beyond what concerns his connection with this Hospital—the details having been set forth in a biography written by Mr. Frederick Watson—but the incorporation of a few personal impressions and recollections

may perhaps be permitted. My first recollection of Robert Jones dates back to the period between 1872 and 1874 when he would be about fifteen years of age. I then knew him as a very lively type of boy, constantly smiling and happy, and his cheerful countenance was surmounted by the curliest of fair hair. It is amazing to think that he commenced his medical studies when only fifteen years old, and I have it from Dr. ~~Robert~~ Bark, who was his fellow student, that it was regarded as too bad that a boy like Jones should be admitted to the dissecting room. This sentiment was confirmed in a letter to Dr. Bark from another fellow student (Dr. William Thomas of Rhyl) who described Jones as a very young student, aged about fifteen, having a fair complexion and light hair, and as wearing a glengarry cap. He stated that some of the students treated him with derision on account of his youth.

Throughout his student days, Robert Jones must have seen a great deal of the work of Hugh Owen Thomas and he certainly would become acquainted with, and know the uses of, the formidable looking appliances which were in the surgery in those days. These had probably been made under the direction of Thomas and in his own workshop. They were designed for the reduction of dislocations and for dealing with other injuries. One of them reminded me of the Hippocratic ladder, not in structure but in principle. Then again Thomas designed his own splints and a great many of his instruments for dealing with fractures and diseases of bones. The splints in those days were made and completed on the premises. I have mentioned these details in order to explain my impression that while Jones was quite a young student, he learned a great deal about practical surgical work, in fact he may be said to have had a kind of double studentship, one of them consisting of the ordinary routine of academic education, whereby he would acquire the classic teachings of surgery and medicine; the other might be regarded as an apprenticeship to a man whose work was at the time looked upon with some scepticism by his professional colleagues because, far from following the classic teachings, he treated limbs which would have been amputated and joints which

would have been excised in ordinary course by conversative methods, by means of splints so constructed that rest of the desired parts could be ensured for long periods, during which many of the patients were able to get about in the fresh air. Thomas also took his principles into what would be termed the realms of medicine in his day.

In the course of such an apprenticeship, Robert Jones must have absorbed many of the doctrines and principles which constituted the foundation of his work in after life, and there is no doubt that, when he became legally qualified in 1878, aged just about twenty-one, he was already an experienced surgeon, possessing a practical training in specialised, as well as ordinary, types of work. It was probably this advanced practical skill which led to his being appointed Hon. Assist. Surgeon to the Stanley Hospital, in 1881, when only twenty-three years old, and he succeeded to the full surgery in 1886 when Mr. Bark gave up General Surgery to become Laryngologist to the Institution. Robert Jones laid the foundations of his reputation as a General Surgeon in this Hospital, but he only remained on the Staff until 1889, when he was elected to the Liverpool Royal Southern Hospital in succession to Mr. Frank Paul, whose resignation had been occasioned by his appointment to the Royal Infirmary. He continued to practise general surgery, and contributed to its literature until about 1905, when he began to devote the whole of his art to Orthopædics. In the Royal Southern Hospital, his magnetic influence attracted surgeons of distinction, not only from our own country, but perhaps more especially from America and the Continent. They came to learn his doctrines and methods of operation and bore back the lessons to their various countries. It was this large following that had to do with the fact that Robert Jones became recognised as a great surgeon in America and in many other countries, before being fully appreciated by his own.

Sir Robert Jones' out-patient clinic was organised in such a way that he got through an immensity of work, some of it group work, which enabled him to teach efficiently. He had round him a number of helpers, some of them medical men

glad of the opportunity to get experience, others consisting of a nursing staff trained in the application of splints and plaster-of-paris. He had also included the co-operation of the Invalid Children's Association, one of whose workers undertook the duty of arranging for the admission of suitable cases to the Children's Hospital at Heswall, or other institutions, while other workers who had received some training kept an eye on the home conditions of the patients with reference to their feeding and regular attendance for massage, or other special treatment, at the Hospital. Many of the children operated upon in the Out-patient theatre and able to be sent home benefited greatly by this arrangement. On the operation days at the Hospital, Sir Robert undertook a vast amount of work. It was no uncommon thing for him to operate on thirty or forty cases—this being rendered possible by the systematic preparation of the patients and by the work of the anæsthetists who had each successive patient ready by the time the operation on its predecessor had been completed. These operation clinics were almost invariably attended by numerous Surgeons—often very distinguished ones from England, the Colonies, America and other foreign countries—many of whom referred to their experiences in their writings.*

During the Great War, when Sir Robert was Director of Orthopædics to the Forces, the work of the Department was carried on by Mr. Armour. To the great regret of the Committee and Staff, Sir Robert felt it necessary to resign from the Hospital at the conclusion of the War in 1918, in order to direct his attention to a national organisation for dealing with cripples.

He was succeeded by Mr. Armour, who had been Assistant Surgeon to the Hospital since 1906. From 1918 Mr. Armour carried on the orthopædic work in connection with his duties as a General Surgeon until 1924, when it was made an independent post to which he was appointed. He retained it until his retirement from the Staff in 1935.

**Vide* "The Life of Sir Robert Jones," by Frederick Watson.

THE CHILDREN'S DEPARTMENT

Running parallel with the Orthopædic Clinic was the Children's Out-patient Department, which originated in the year 1901. Reference has already been made to the fact that the Southern Hospital was the first General Hospital to provide a ward for children. This was in 1857 when, by the addition of this ward, the Institution attained the number of 100 beds requisite for its recognition as a School of Practical Surgery. The corresponding Out-patient Department, which was started by the writer, began in a very small way in one of the side rooms off the old Out-patient Room in the main building. To begin with, there were not more than half a dozen new cases on the one day a week on which the Clinic was held. The numbers increased year by year, and at length outgrew the possibilities of conducting the Clinic single-handed. When the new Out-patient building was opened in 1910 the number of new cases had risen to over 1,400 annually with a correspondingly larger number of attendances. This involved the help of an Assistant Physician and several qualified Clinical Assistants who did excellent work.

It might be thought that this large Clinic would be unworkable, and that the cases requiring indoor treatment would be too numerous to be adequately accommodated, but this was not so, for the reason that the Clinic acted as a centre from which cases were distributed to many other Institutions affording specialised treatment for a great variety of cases. Many of the acute cases were taken into the Hospital wards. Others were sent to the Royal Liverpool Country Hospital for Children at Heswall, to the Children's Convalescent Homes, Defective Schools, Leasowe and other institutions for the treatment of Tuberculosis, and to the Baby Hospitals, etc. There was no question of treating cases as out-patients if they required in-patient care, and the out-patients were well looked after by the Home Care department of the Invalid Children's Association. The result of this was that all kinds of organisations sent children for advice, including many of the School Medical Officers and Health Visitors. It was an

ideal Child Welfare Clinic—a model which might with advantage be followed in other hospitals. How was all this managed? It was by the co-operation of the Invalid Children's Association, which acted as a clearing house. The Medical Officer in the clinic gave his instructions to a lady official of the Welfare organisation. She attended the Clinic and reported the cases to the central department, whence they were distributed in accordance with the recommendation of the Doctor. One cannot accord too much appreciation to the work and organisation of that excellent Association. Every case was indexed and it was watched throughout the course of its illness. Wandering from hospital to hospital—that great waster of energy—was reduced to a minimum, and relapses or failure to continue treatment were reported and dealt with. One great advantage of the organisation, from a teacher's point of view, was that if it was desired to see any particular child—or group of children—a week's notice insured their presence at the time of the clinic or lecture. The Annual Reports of the Hospital still indicate that the Children's Department is doing an excellent work.

From the time of its organisation, the Children's Clinic—together with its older sister, the Orthopædic Department—formed the principal feeding centre for the Royal Liverpool Country Hospital at Heswall, which was founded by the two colleagues who conducted these Departments. The Southern Hospital had, therefore, this close link of association with that Institution which was amalgamated with the Children's Infirmary in 1920 to become the Royal Liverpool Children's Hospital. There are still two members of the Staff of the Royal Southern Hospital, who are also on that of the Royal Liverpool Children's Hospital, to continue the link in the chain which united our hospital with the Royal Liverpool Country Hospital for Children.

THE HISTORY OF THE X-RAY DEPARTMENT

There is a quotation from a writing of the late Sir Robert Jones in the story of his life, written by Frederick Watson,

which reads as follows: "The first X-Ray in our country was, I think, taken by Dr. Holland and myself with a little tube, and we were able to develop a photograph of a small bullet which was embedded in a boy's wrist. With what enthusiasm we described this marvel to the Liverpool Medical Institution at its next meeting! It was very interesting to have this X-Ray referred to by Lord Lister, when he came down to Liverpool in 1896, to deliver the Presidential Address to the British Association."

Following this comes an extract from a memorial appreciation of Sir Robert Jones by Dr. Thurstan Holland in which he states: "It is fit that it should be known that he was an X-Ray pioneer. Probably he was one of the first men in England to hear of X-Rays. The information came from a private letter to a German lady residing in England. This was before any reference to the subject had been made in any paper in England. He immediately sensed the value of this discovery as applied to his own work. He ordered and paid for an apparatus and placed it in my hands. I should like to have it put on record that my start in X-Ray work was entirely due to my great friend. Whatever success I have achieved in my career is the direct result of his help and encouragement. He was an early member of the Röntgen Society, and, of course, became an expert in the use of X-Rays in the diagnosis of bone conditions."

These episodes probably occurred towards the end of 1895 and in the following year the Royal Southern Hospital established an X-Ray Department under the direction of Dr. Thurstan Holland, who was the pioneer in this branch of work, which has since developed into an absolutely essential speciality both for diagnostic and therapeutic purposes, and the Royal Southern Hospital was the first to have an apparatus installed. Dr. Holland, in the first instance, brought and made use of his own apparatus, which was erected in a semi-underground room placed under the stairs leading up to the wards. The first case which he recorded was under the care of Mr. Rawdon, on 25th June, 1896. In 1903, the Department was transferred to a small room adjacent to the Operating Theatre, and in

November, 1903, Mr. John W. Hughs, recognising the importance of the work, provided the funds for enlarging the department and fully equipping it with the latest types of instruments. At the public opening of this room in 1904 Dr. Holland gave a demonstration on X-Ray work and on Radium, which at that time was beginning to be made use of.

The science made rapid advances, and only three years later (1907) the whole department had to be removed to more spacious quarters. The Splint Room, Engineer's Workshop, and Bandage Room (originally the old Post-mortem Department of the Hospital), were altered and fitted with everything modern, at a cost of about £1,000, paid out of a legacy bequeathed by the late Dr. Cameron. At this time, Dr. David Morgan was in charge. Some of the earliest X-Ray treatment in England was done at the Royal Southern Hospital by Dr. Holland, who has written many papers. The first on "Foreign Bodies" (*Liverpool Medico-Chirurgical Journal*, 1898), was based on his successful work in the Institution.

The growth and scope of Radiology has been very rapid, and it is not surprising that entirely new plants, or additional apparatus, have been required from time to time. Shortly before 1922, an entirely new plant was installed, and in 1923 a "Potter Bucky" Diaphragm was provided, costing £112. In 1925, the work of the Department had increased so vastly that the accommodation had to be extended, and this was carried out at a cost of about £1,500 as a memorial, to which the subscribers donated very widely and liberally, in commemoration of the work of Mr. George Newbolt, the Hon. Surgeon, who died in 1924. Only five years later (1929) a further revision and extension of the whole Department and its equipment was found to be necessary, and in 1931 this work was completed at a cost of £753 for structural alterations and £1,604 for new instruments and appliances. Some idea of the increase in the amount of work may be realised from the statistics which show that the attendances had risen from 7,756 in 1925 to 10,231 in 1933.

On Dr. Holland's transference to the Royal Infirmary in

1905, Dr. David Morgan undertook the work for some years, in conjunction with trained women assistants.

At the present time a large staff, presided over by a specially trained Sister and her assistants, together with a qualified Registrar, acts under the guidance of Dr. Mather, and the Department forms part of the Clinical School in the University which grants a diploma in Radiology.

THE ACTINO-THERAPEUTIC (ARTIFICIAL SUNLIGHT) DEPARTMENT

In 1913-1914, the narrator was conducting a research concerning the action of certain constituents obtained from malignant growths, which, it was thought, might possess a controlling influence if administered to the sufferers from these diseases in the form of a serum. The work was carried out in the laboratory of the late Dr. Benjamin Moore, who was at that time Johnston Professor of Bio-Chemistry in the University of Liverpool. It was essential that the serum preparations should be absolutely sterile before being administered. There was great difficulty in effecting this, since, after certain periods of incubation, they could not be rendered free from organisms. It was impossible to use heat for this purpose because it would have destroyed their activity. An endeavour was made to remove the organisms by filtration through porcelain, but this was not found to be satisfactory and it was not at that time considered desirable to add antiseptics. Professor Moore happened to be working at photosynthesis in connection with some experiments which he was making as to the action of sunlight in the production of chlorophyll and the relation of this substance to other cell constituents in the formation of energy containing bodies. He was using for this purpose a mercury vapour lamp, which at that time was occasionally employed for illuminating purposes in large buildings. Some observers had already published papers referring to the therapeutic uses of the rays from these lamps and, that they were certainly potent was amply demonstrated by the sunburnt appearance of the Professor and of his laboratory assistants,

some of whom suffered considerably from injection of the conjunctivæ and from headache. Remembering that sunlight was inimical to tubercle germs and also having discovered that there was a literature concerning the use of ultra-violet rays for tuberculosis and some other conditions, it seemed reasonable that these rays might help in the sterilization of my preparations. A number of experiments were therefore made by exposing cultures of various organisms, grown in silicon tubes, to the rays. The results were so satisfactory that I was able to proceed with the research which I had in hand. This action of the ultra-violet rays on living organisms naturally led to the supposition that there might be some truth in their reputed therapeutic value and one was led to hope also that other septic conditions, such as sinuses, in available situations, might be amenable to their influences. In February, 1915, I bought two lamps and installed one of them in a room situated in the basement of the Out-patient Department of the Royal Southern Hospital. The other lamp was set up in my private laboratory in Rodney Street and it was observed that they undoubtedly helped such types of cases as superficial tubercle and tuberculous sinuses. I passed silicon rods and tubes into these and other infected sinuses hoping that they would convey the rays to the deeper parts of them. The results were very promising, and this led me to install another lamp at the Royal Liverpool Country Hospital for Children at Heswall for use in suitable cases. The Out-patient Lamp Clinic, as it was called, became very large, and so many cases were sent to it from outside sources that the Clinic had to be opened on two days in the week. There were no accurate means of measuring the exposures in these early days and reddened skins were often caused, until experience taught the length of the exposures which could be employed with avoidance of this effect. The attitude of the profession towards this experimental Clinic was at first one of considerable scepticism. The tendency was to attribute the action of the rays to counter-irritation pure and simple, and it was a long time before other institutions took the matter up. My friends with good-natured chaff nicknamed me "Aladdin" and my Clinic in the basement was dubbed

"Aladdin's Cave." During the Great War, when numbers of cases presented themselves week after week, many of them soldiers suffering from sinuses and unhealing wounds, ample evidence was forthcoming that the rays had a decided therapeutic value. During the ensuing two or three years, the further value of this treatment was demonstrated in cases of tuberculous joints and in tuberculous peritonitis and a number of other non-tubercular diseases. After the influence of sunshine, both natural and artificial, in the production of Vitamin "D" was assured, the treatment of rickets with the lamp became common, and many hospitals introduced departments for artificial sunlight treatment. In the Southern Hospital, the work continued in the Out-patient basement room until 1929, by which time it had become recognised as an essential addition to the Electro-Therapeutic and Massage Department, and the original mercury vapour lamp was moved into a specially constructed building and supplemented by the addition of new ones and of Carbon Arc, Tungsten and Kromayer Lamps. Recent statistics of attendances for treatment indicate that they numbered 4,637 in 1933, compared with 3,772 in 1929. The Clinic is now in charge of an Hon. Medical Officer assisted by a qualified staff from the Massage Department. As "Light" treatment is now included in the examination subjects of the massage student, this department has become essential for teaching purposes.

The original lamp is still doing good work and shows no signs of deterioration. The department has now several Mercury-vapour Lamps in addition to the other varieties above mentioned.

THE MASSAGE AND ELECTRO-THERAPEUTIC DEPARTMENT

It has already been recorded that as far back as the year 1858, Gymnastics played a part in the treatment of surgical cases. The Medical Board in that year provided a Gymnastic Apparatus to "accelerate the perfect use of the patient's limbs, and shorten the period of their recovery" in convalescent cases.

Another interesting item connected with the Hospital was the provision of Turkish baths, together with medicated baths, douches, sprays, and other varieties, in 1875. My recollection is that they were mainly utilised by the Residents for their personal ablutions, and were very little employed for the patients, with the result that they were ultimately abolished. From the earliest days "rubbing" was employed and its value realised, and this was carried out, in an amateur way, by members of the nursing staff until professional massage began to take its place in the late seventies. Somewhat later, Swedish Massage, conducted on scientific principles, began to be recognised, and many medical men referred their private patients to those who dealt with this particular branch of work. In 1906, Miss Ada Pike was appointed Hon. Masseuse, and this was probably the beginning of a Massage and Exercise Department, which is mentioned occasionally in the Reports from 1917 onwards as having done valuable work for some considerable period.

Miss Pike's work was augmented in 1908 when Mr. ~~Golje~~^{Golgi}, a Swedish Masseur, doing a large practice in the city, offered to take on some work in the Hospital, and he was appointed in an honorary capacity, assisted by a salaried Masseuse. This had resulted from the advent of Orthopædics, and it initiated the organisation of a special Department in the Hospital. In the first year after Mr. Golje's appointment, 113 patients, involving 788 attendances, were treated. It is not remembered exactly how long this arrangement lasted, but a proportion of the ordinary nursing staff was afterwards trained in massage and, on receiving certificates, did the work under the instruction of the Medical Staff. For many years the Department grew, and eventually became so large that in 1922, the Committee of the Hospital decided, under the guidance of the Medical Board, that the accommodation and equipment for carrying out of massage and kindred treatment, more especially in Orthopædic work, Neurological medicine, and many other types of cases, was quite inefficient. They determined that a fund should be raised for the building of a new and thoroughly up to date department equipped with the

latest modern requirements. For this purpose they issued the Jubilee Commemoration Appeal in 1922, and hoped that, if a sufficiency of funds was subscribed a portion might be devoted to the endowment of an Adult After-Care Fund. The success of this appeal was phenomenal, for it brought in no less than £4,126 14s. 9d. The building was immediately put in hand, and was completed in 1924 at a cost of £3,873 14s. 2d., the equipment for the department being provided by the late Sir Alex. and Lady Bicket, at a cost of £1,000. It was replete with all the most modern appliances both for electro-therapeutic treatment and massage, and was formally opened by the Rt. Hon. the Earl of Derby on October 24th, 1924. In the same year a School of Massage, Medical Gymnastics and Medical Electricity was established in connection with the Department, in which Students are trained for the examinations for the Chartered Society of Massage and Medical Gymnastics. At this time the Chartered Society of Massage and Medical Gymnastics required its students to take the Conjoint and the Medical Electricity Courses. The former includes Anatomy, Physiology, Pathology, the Theory of Massage and Movement, Practical Massage and Medical and Educational Gymnastics. Lectures are also given by the Hon. Medical Staff of the Hospital on Orthopædics and on the Pathology of Diseases capable of being treated by Physio-Therapy. There are Clinical Demonstrations, and a course of Anatomical Demonstrations is given at the Liverpool University. This part of the training was originally completed in fifteen months.

The Medical Electricity Course, which covers an additional period of four months, embodies the study of the Theory and Practice of treatment by Galvanic, Faradic and Sinusoidal Currents and by Radiant Heat. The combined conjoint and medical electricity courses then required nineteen months for their completion.

In 1933, the Chartered Society found it necessary to prolong the period of study for the Conjoint Course to eighteen months and they also incorporated a three months' course in Electro-therapy, and on treatment by Light. This includes the theory

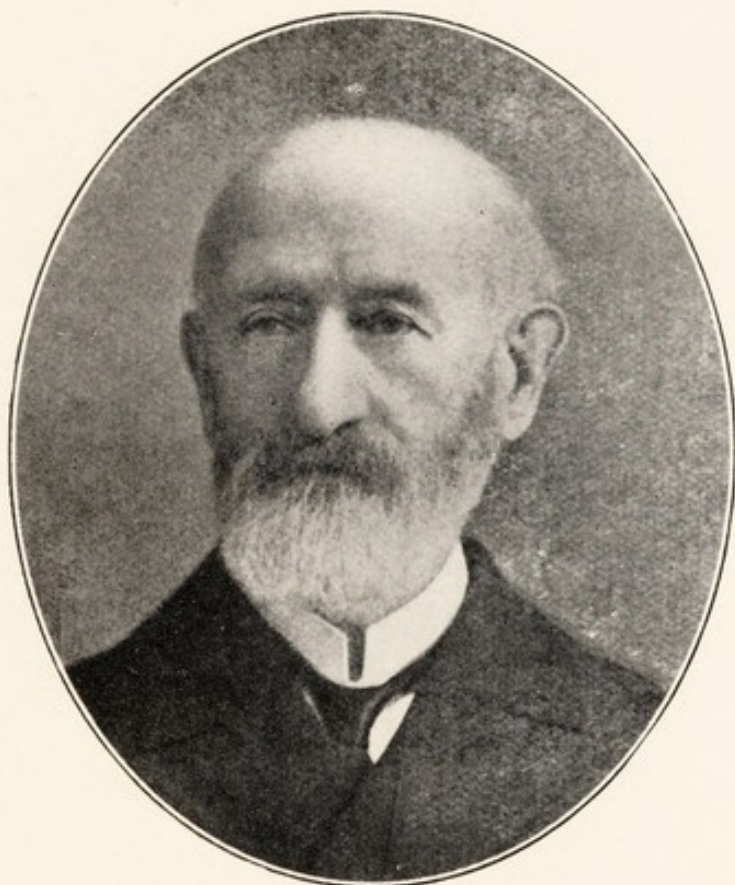
and practice of High Frequency, Diathermy, and Light Therapy. The complete course, therefore, now requires just over two years for its fulfilment. Honorary Medical Officers are in charge of the Massage, Medical Gymnastics and Medical Electricity Sections and of the Actino-Therapeutic Section, and in addition there is a Lecturer on Actino-Therapy and Electro-Therapy.

Besides theoretical work, Students do practical work in the Wards and Out-patient Departments under the supervision of trained Teachers. Since the inception of the School, which is the only one of its kind attached to any Liverpool Hospital, the number of Students in training has been up to its full capacity, and the examination results in each year have been most satisfactory. The School is under the supervision of a qualified Lady, assisted by a staff of Teachers and Masseuses, and both the remedial work for the patients and the tutorial work of the School are carried out with a maximum of efficiency. The total attendances of patients treated in 1933 amounted to 47,180. There were 999 new cases.

After completion of training, Students usually take posts in Hospitals or Clinical Massage Departments; some set up in private practice and others take further training for the Chartered Society's Teacher's Certificates.

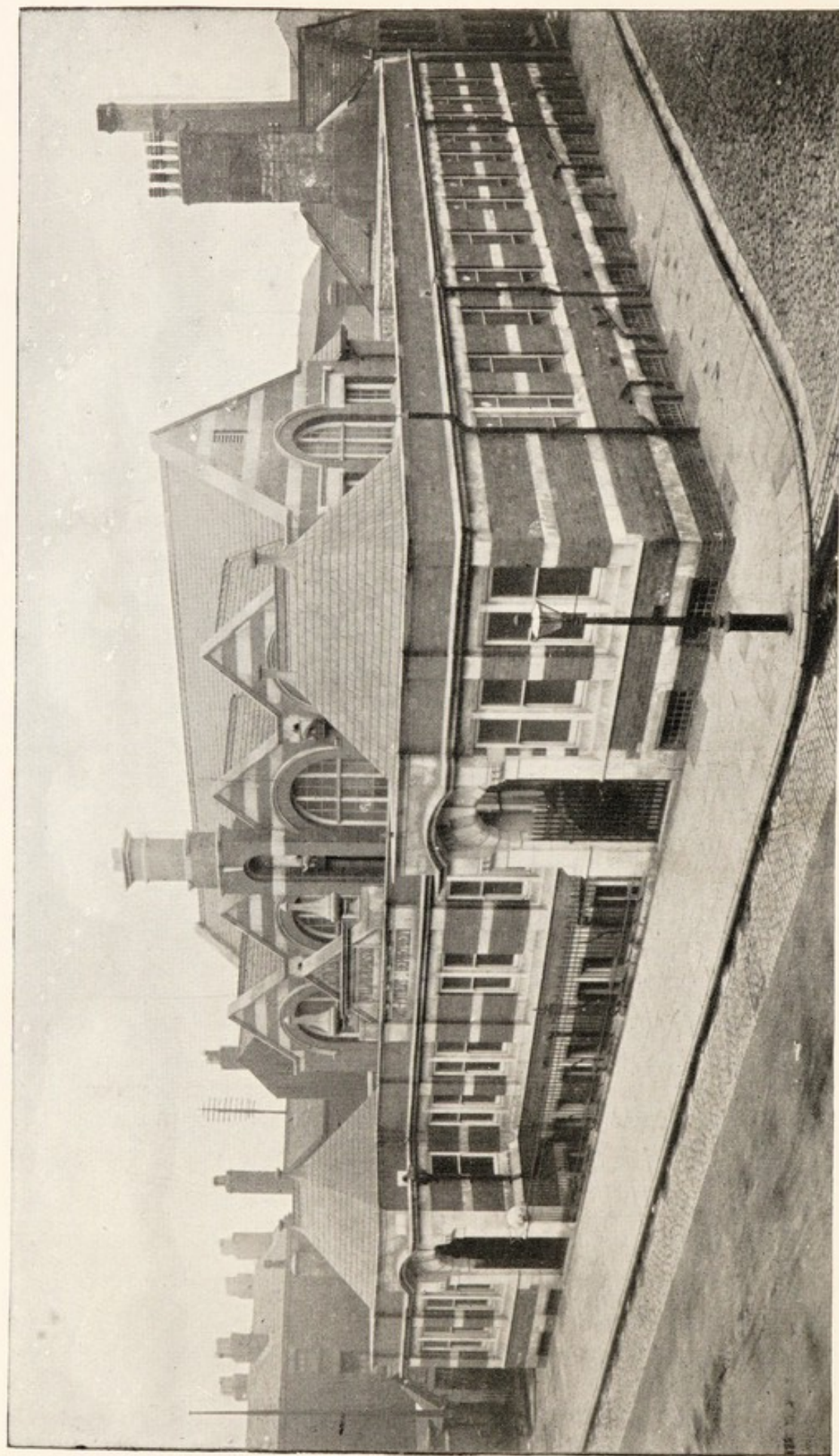
THE EAR AND THROAT DEPARTMENT

The first mention of an Hon. Aural Surgeon was the appointment of Mr. C. G. Lee as Hon. Consulting Aural Surgeon in 1893, and in 1895 Dr. William Permewan was appointed Hon. Laryngologist, so that the two branches of work were under separate supervision. Up to the time of Mr. Lee's death, in 1912, the opinions of these officers were only sought on the requisition of members of the Hon. Staff and no regular clinic was established until about 1912, when Dr. Permewan became Hon. Surgeon in charge of the whole Department. The work became greatly extended when the late Mr. William Sanderson became his colleague in 1916.



WILLIAM ADAMSON.

WHO JOINED THE COMMITTEE IN 1864, WAS PRESIDENT FROM 1891-1911,
AND WHOSE LIFE'S WORK WAS THE INTERESTS OF THE HOSPITAL AND
THE WELFARE OF THE PATIENTS.



WILLIAM ADAMSON OUT-PATIENT DEPARTMENT (OPENED 21ST NOVEMBER, 1910).

An Hon. Clinical Assistant has been attached to the Clinic since 1933.

The Department is a very busy and up-to-date one—embodying all the most recent resources of Endoscopy and Radium treatment.

DISEASES OF THE EYE

Mr. Richard Williams was appointed Hon. Consulting Ophthalmic Surgeon in 1893, simultaneously with Mr. Lee, who was his colleague at the Eye and Ear Infirmary. His opinion was available to the Physicians and Surgeons, but no operative work was done in the Hospital until the late Mr. Robert Hamilton was appointed in 1908 and it was he who developed the first Ophthalmic Clinic.

Robert Hamilton, Junior, was a man of literary culture in addition to possessing high professional attainments. He was also on the staff of the Central Hospital, at Liscard, and the Southport Infirmary.

THE GYNÆCOLOGICAL DEPARTMENT

The Gynæcological work in the Hospital was carried out by the late Dr. William Alexander between the years 1888 and 1910 as a branch of general Surgery. It will be remembered that his name became associated with an operation which marked a considerable advance in this department of surgery. When Alexander retired in 1910 no members of the staff remained who practised this special work. In 1912, Dr. A. J. Wallace, who was a distinguished gynæcologist, was appointed as Hon. Consultant, but, unfortunately, he died in the next year. Following his demise, no further appointment was made until that of Prof. A. Leyland Robinson in 1924, and from then onwards a regular clinic has been held. An Hon. Assistant Gynæcologist was added to the Staff in 1933.

THE DERMATOLOGICAL DEPARTMENT

The Dermatological Department had its beginning on the appointment of Dr. Frank Barendt, M.D., Lond., F.R.C.S., in 1900. Like other of the earlier special departments, it was primarily confined to consultative work. In 1910, when the new out-patient building was opened, Dr. Barendt initiated an Out-patient Clinic, with a few attached beds, and the department has since then progressively grown.

ded in
363 In 1928, the St. George's Skin Hospital in Grenville Street, which was also under the professional administration of Dr. Barendt, had its work transferred to the Royal Southern Hospital by arrangement with the Charity Commissioners.

Under powers of the scheme, the premises of that hospital were sold and the funds so realised invested and held on trust, together with other securities in the "St. George's Skin Hospital Trust Fund," the income from which is devoted to the upkeep of the Department.

THE KILLICK WARDS

In 1916, when the Government instituted measures for the treatment of certain contagious diseases, through the Municipal Sanitary Authorities, a Clinic was established at the Royal Southern Hospital under the direction of the Honorary Specialist in charge of the Dermatological Department. For this work the Killick Wards were allocated for the treatment of in-patients.

In 1934 this arrangement between the Liverpool Corporation and the Hospital terminated and the Killick Wards, originally constructed for the accommodation of special and observation cases in 1912, are now used for convalescent patients awaiting discharge. By this arrangement beds are liberated in the general wards for the admission of urgent cases.

THE NEUROLOGICAL DEPARTMENT

The Neurological Department came into being in 1921 following the appointment of Dr. William Johnson to the

*Liverpool Skin Hospital was founded in 1899 at
Pembroke Place by G. Stopford-Taylor. In 1903 it
was transferred to 59 P. Place. It closed in June 1919 - lack of funds.
It was then transferred to the Killick Wards in 1917. It was then the
Dermatological Department.*

Honorary Staff in that year. Since then it has developed greatly and its utility has been enhanced by the work of the Electro-therapeutic Department since its extension in 1922. Neurological work embraces the treatment of many complaints which are functional or border-line in nature, and modern conceptions of these types of nervous diseases require the provision of specialised psychological treatment. These cases are numerous and in 1930 the services of an assistant psychotherapist were added to the department.

The utility of this special branch of work has been fully demonstrated, and an Honorary Medical Psychologist was appointed in 1934 to take charge of it. As an additional and separate clinic this has involved the arrangement of an additional out-patient day for the purpose.

THE CARDIOLOGICAL DEPARTMENT

This Department was inaugurated after the installation of an Electro-Cardiograph in 1924. In 1925 Dr. Noble E. Chamberlain was appointed Assistant Physician and the Medical Board made him responsible for the taking of the Electro-Cardiograms and reports concerning them, and they gave him permission to develop a heart clinic. This involved the examination of the patients before they were Electro-Cardiographed and the establishment of an out-patient department where they could be seen from time to time in co-operation with their own doctors. This Clinic gradually grew and became a very valuable adjunct to the work of the physicians. In 1932 a portable Electro-Cardiograph was provided for use in the cases of patients unable to leave the wards for examination. Under the ægis of the Teaching and Research Fund Committee facilities for research by means of radio-cardiograms were provided in 1932, and the Department is fully equipped both for clinical and teaching purposes.

THE OUT-PATIENT DEPARTMENT

In the course of the years which have passed since the opening of the Royal Southern Hospital, it is only natural that

The first psychotherapeutic clinic in England opened in May 1912 at Maryland St. In 1914 it removed to large premises at 12 St. James' Road (opposite 111 R.B. # 12).

many structural alterations and additions should have been found necessary to keep the Institution up to date in modern requirements. The Committee long ago anticipated the probability that outside extensions might be required and they secured some of the surrounding land. The houses facing the Hospital in Caryl Street, together with a number of others in Pleasant Hill Street, were bought for about £2,860. Mr. Adamson, with his usual energy and foresight, collected the major portion of this sum, and he himself bought the first house, which he presented to the Hospital by way of starting the scheme. The houses were in great part demolished, and for some time their places were taken by a railed-in grass enclosure. In 1907, in order to provide an Out-patient Department, entirely separate from the main building, the Treasurer, Mr. J. O. Strafford, approached the Corporation of Liverpool with reference to their making a grant towards the cost of a new building, with the result that the Corporation sought and obtained the requisite Parliamentary powers to expend £4,000 for this purpose. The balance of the amount required to complete it and cover the cost of furnishing was raised by public subscription, and the fine Department with its large waiting hall and connected consulting and dressing rooms in series, together with an operating room and rooms for special purposes, was opened on 1st November, 1910, by Mrs. Adamson. It was called "The William Adamson Out-patient Department," in recognition of the untiring zeal and interest which Mr. Adamson had expended on the Hospital over a period of nearly fifty years, during seventeen of which he had been President.

In 1912, the space vacated in the main building by transference of the Out-patient Department was in great part converted into wards for special cases and into observation wards, considerable portions being reserved as a waiting hall for patient's friends and as a patients' admission room. The accommodation thus provided included two small wards for four and three beds respectively, two single-bedded isolation rooms, and a surgical dressing room. The cost of these alterations was defrayed by the late Mrs. Killick as a memorial

to her husband, who was a Vice-President and for many years a member of the Committee. The new department was named the "W. G. Killick Wards."

THE PATHOLOGICAL DEPARTMENT

Prior to the year 1890, the pathological work of the Hospital was carried out in the post-mortem room and an annexe situated within the main building. The adjacent mortuary, as explained elsewhere, was immediately below the operating theatre. The door of this department was in the main transverse corridor. The work, including the post-mortem examinations, preparation of microscopic sections, and the writing of reports, was carried out by the House Surgeons; it was no uncommon thing for them to attend surgical cases immediately after making a post-mortem examination without any further precautions than the washing of the hands. Their garments, which had only been protected with a dissecting apron, must have been very dangerous as carriers of sepsis. This must have been in the minds of the Medical Board, for in 1887 they appointed an Hon. Pathologist to undertake the whole of the duties. He retired within twelve months, and in 1888 the writer succeeded him and retained the position until 1892. The work in those days was very arduous, the only assistant being one of the hospital porters. In addition to the duties already rehearsed was the examination of specimens sent from the wards and operating theatre. It was during my term of office that the insanitary conditions connected with the situation of the department led the surgeons to refuse to use the super adjacent operating theatre; this necessitated the subsequent erection of entirely independent buildings, which were presented in 1889 by Dr. Cameron, who frequently consulted me about their inside arrangements. This building still constitutes the main structure of the present department which has undergone considerable changes to meet modern requirements for work and teaching. In 1900 a Resident Pathologist and a Laboratory Assistant were appointed and this arrangement went on until 1908, when the post became a non-resident

one and continued so until an interregnum in 1917 when the whole of the histological and bacteriological work was transferred to the University in conjunction with part time officials at the hospital. In 1930 the arrangements were entirely revised and placed under the direction of a professional pathologist and in the following year, on the recommendation of the Medical Board, plans were got out for extension of the departments and its being modernised to meet the requirements of the clinical school.

The extended buildings were occupied in 1932. They provided ample accommodation for demonstration and lecture purposes and for every branch of pathological and bio-chemical work. Requisite new equipment, including an epidiascope, lantern projector and a micro-photographic camera, was installed. The Bio-chemical Department, which had been housed in a room adjacent to the "Sefton" ward was transferred to its new quarters to enable this branch of work to be conducted in a properly equipped laboratory, by a qualified assistant under the supervision of the Head of the Pathological Department.

The department is now second to none in its arrangements for scientific work and teaching purposes.

There are no details in any of the departments of the Institution which have not been kept thoroughly up to date, whether connected with the administrative or the professional sides of the work, with the result that the modern and up to date Institution of 1872 is a modern and up to date one of 1936. The "H" type of construction, having blocks connected by cross-corridors, has not been improved upon, as may be gathered from the fact that when the plans of the Royal Liverpool Country Hospital at Heswall were under consideration (c. 1900), it was determined to adopt the same principles of architecture as being very efficient and economical to administer.

THE TEACHING AND RESEARCH FUND.

It may be well to mention that in 1931 the Committee agreed to the establishment of a Teaching and Research Fund, to be controlled by a small Committee composed of medical and lay members. It was opened by a donation of £250 from the Medical Board, supplemented by a grant of £750 from the Committee and the equipment of the new Pathological extension was provided from this source. The estimates for the extension of the department and its fittings amounted to £3,405.

Each year since its inauguration, the utility of this fund has been demonstrated. In 1932, it provided equipment at a cost of £124 7s. 6d. and paid hiring charges for Radium Emanation Apparatus amounting to £29 5s. 6d. and for the purchase of other equipment for teaching and therapeutic purposes amounting to £10 9s. 10d. New apparatus and facilities for treatment are constantly in request and the fund is proving indispensable for these purposes.

CLINICAL TEACHING.

It has already been recorded that the Hospital became qualified for recognition as a Chartered Institution for the admission of pupils in 1858, six months after it came to have accommodation for one hundred in-patients. The Royal College of Surgeons then recognised it as a Teaching Institution. That at least one pupil became attached in that year is indicated in a letter from Sir Dyce Duckworth (a native of Liverpool), dated January 5th, 1924, in which he said "I was a pupil there for some time in 1858-59 and learned much." It will be remembered that Sir Dyce became distinguished and was physician to King Edward VII when Prince of Wales. He was also Treasurer of the Royal College of Physicians for many years. When he was a student at the Hospital it would only be possible to obtain certificates for surgical teaching. There being only one physician on the staff the corresponding recognition from the Royal College of Physicians and from the

Society of Apothecaries was not granted until 1870 when Dr. Carter joined the staff. Following this two articled pupils were immediately enrolled and were succeeded by others in subsequent years. In the late seventies there were several senior students "walking the Hospital" as it was styled, among them Walter Steeves and Alfred Meeson, who afterwards became well known practitioners in the town. The former subsequently retired to London where he became known for his interests in the works of Bacon. The Hospital was seldom without such students, although the work was at that period less well organised than in Hospitals directly attached to the Medical Schools. There were, however, opportunities for practical experience in a way which was impossible in the great Teaching Institutions, having wards crowded with clerks and dressers. The students had generally been in such hospitals and were ripe for taking advantage of the practical work and the teaching of men like Cameron and Carter. They specially gained surgical experience by working under the supervision of the House Surgeons. So far as I remember they did not generally attach themselves to particular Honoraries as clerks and dressers, but went the rounds of the wards with the various members of the staff on the days of their official visits. The wards were common to the Physicians and Surgeons so that every Honorary had cases in every ward, and instead of having independent Residents each House Man was shared by a Physician and a Surgeon, a most inconvenient arrangement, especially for the Physician who had to make his visits unattended if his Resident was required to assist at a surgical operation. This type of teaching gave place to an organised system of clinical instruction corresponding closely to the Edinburgh methods about 1880. The students then became attached to individual Physicians and Surgeons as clerks and dressers and in 1886 a combined medical and surgical tutor was appointed to supervise their work and teach them elementary principles. In 1888, probable owing to an influx of students while the new Royal Infirmary was under construction, independent medical and surgical tutors were installed and, two years later, Mr. Robert Jones was appointed Dean to further

the interests of the students. The Hospital had by this time become recognised as a clinical school in which many students of University College took their full course, and there were also a certain number of resident students from other places. This teaching activity of the Hospital was threatened with an abrupt limitation in 1891, when an announcement was received from the Secretary of the Conjoint Board of the Royal Colleges to the effect that the Hospital Staff was entitled to give certificates for one year's practice only, and not at all for clinical lectures. This led to a lengthy correspondence, the outcome of which was that the Colleges were convinced of the efficiency of the practical teaching, and passed a special resolution recognising the Hospital as a complete school of clinical medicine and surgery. To the text of the resolution was appended the statement that the Hospital stood in exactly the same relation to University College as did the Royal Infirmary (vide B.M.J., February, 1892). This served to accentuate the work of the clinical school which was further advanced in our own and many other cities having Medical Faculties, by the inclusion of the principal General and Special Hospitals to form one great clinical school connected with the Faculty of Medicine of the University. At the present time every facility for organised teaching exists in the Hospital, and no stone has been left unturned to keep the requisite accommodation and equipment thoroughly up-to-date.

Each term sees an influx of students in the earlier stages of their hospital work, who have applied for the position of clinical clerk or surgical dresser to one or other of the members of the Honorary Staff. For three months the clinical clerk is actively associated with the work of the medical wards and out-patient clinics. He writes the records of patients who have been allotted to him and, at the same time receives instruction from the physician to whom he is attached. Similarly the surgical dresser, during his three months of duty, assists in the work of the surgical wards and attends operations. A medical and a surgical Clinical Lecture illustrated by actual cases are given each week in the Hospital lecture theatre. In addition, demonstrations are held by the medical officers in

charge of the Eye, Nose, Throat and Ear, Physio-Therapy and other special departments.

A valued link with the students' more theoretical work at the University is provided by the demonstrations of the Pathologist in a department which is admirably equipped for teaching purposes.

For the senior student nearing his final examination, special ward visits and revision classes are held by the Assistant Physicians and Surgeons. Increasing use is being made of the facilities provided by the Hospital for advanced study.

Graduates preparing to take the Diploma in Psychological Medicine attend the Neurological Clinic and instruction in Radiology is given in the X-Ray Department to candidates for the Diploma in Medical Radiology and Electrology. The Orthopædic Clinics still maintain that teaching tradition which will ever be associated with the name of Sir Robert Jones.

The following table indicates the number of medical students attending the work of the Hospital during the past ten years:—

1925	...	...	48	1930	...	...	29
1926	...	...	52	1931	...	...	44
1927	...	...	37	1932	...	...	34
1928	...	...	34	1933	...	...	34
1929	...	...	52	1934	...	...	69

In connection with the Clinical teaching the Council of the University of Liverpool accepted a Report from the faculty of medicine dealing with the establishment of a ~~Clinical~~ Board of Studies in June, 1906, and this Board became established in October of that year. I think Liverpool at that period must have led the way in widening the scope of clinical teaching by incorporation of the principal general and special hospitals. I have a distinct recollection that the University of Glasgow sent a deputation to Liverpool at about that period, which was probably to investigate the matter. This deputation included Principal Sir Donald MacAlister, the Lord Provost, and other representatives. It was evidently in the nature of a private enquiry and was followed by a Dinner at one of the Hotels by invitation of the deputation.

The principle of utilising the General and Special Hospitals

and their staffs for teaching purposes soon after this became pretty universally adopted in the provincial University Towns.

THE ANNUAL STUDENTS' DINNER.

A social function connected with the clinical school which took place regularly for many years was the annual or sometimes biennial students' dinner, which was attended not only by the students past and present and their friends but by members of the Committee and medical staff. The after-dinner speeches were full of merriment and wit combined with considerations which sometimes had important issues. We had an example of this in the speech which led to the materialisation of the School of Tropical Medicine in 1898. At these dinners the members of the Committee were brought into contact with the students, whose representatives sometimes took occasion to make suggestions for improvements in matters of accommodation and convenience. There were occasions too when the members of the staff came in for a little good natured banter, and some times fun was made out of little incidents which lent themselves to it. An example of this occurred at a dinner following the publication of a brief epitome of events in the history of the Institution in 1904, and which afterwards appeared in the annual reports for a number of years. Whoever wrote that epitome had, or had not, a sense of humour when he inserted a paragraph to the effect that "In the year — Mr. John O. Strafford being Treasurer, it became necessary to put new boilers into the Hospital." One of the speakers commented very humourously on the double function of the Treasurer who had to exert pounds pressure to raise pounds sterling for the Institution. These dinners were always largely attended and greatly enjoyed by all concerned.

THE NURSING CRAFT AND ITS ADVANCEMENT.

Many years ago, Dr. Richard Caton, discussing the changes which had taken place in the nursing of the sick in his time, referred to a period when he was House Surgeon at a Children's

Hospital, where it was part of his duty to go round at night, not only to inspect his patients, but also to regard the conditions of the nurses. In other words, they were occasionally found to be under the influence of alcohol. This state of affairs was encouraged by the fact that every little patient had upon the shelf over the bed a ration of sherry, which at that time, in common with all alcohol, was regarded as an important article of diet, especially for the sick.

For many years, even when the writer was acting House Surgeon for a period in the Royal Southern Hospital in 1885, every patient, on admission, was ordered alcohol in some form, unless he happened, as was rare, to be a teetotaller. They got beer, brandy, or port wine, according to the taste and fancy of the resident or doctor in attendance. It was not surprising that Dr. Caton, in the continuance of his story, indicated that the ration of sherry was not infrequently removed from the bottle on the bed shelf, and tea, which looked like it, was substituted for it.

This gives some idea as to the types of some, but by no means all, of the women who acted as hospital nurses in these early days.

In the Report of 1857 there is a note throwing light upon this subject, for it is stated that the Committee had increasing difficulty in procuring competent and trustworthy nurses, a difficulty constantly expressed by similar institutions all over the country. It was earnestly desired that Florence Nightingale's efforts to establish an institution for raising a superior class of nurse should be successful, because nurses were required who would carry out their important labours with something of that spirit of self-sacrifice and conscientious devotion to duty so admirably characteristic of the Sisters of Charity in Continental hospitals and of Miss Nightingale herself and her associates during the Crimean war. Ladies were invited to introduce suitable applicants to the matron. The training of nurses at this period was very indifferent. The night nurses in particular seem sometimes to have been women of the charwoman type.

In 1858 surgical nurses were placed under the supervision of

a superior nurse responsible to the matron, this being probably the first step in the development of the ward sister.

An evidence of improvement in the status of nurses took place in 1860 when, by their own desire, the allowance of beer hitherto given to nurses and female servants in the Hospital, was replaced by an extra allowance of tea, and the comment on this was that "it was a change, not merely economical in itself, but a favourable indication of their disposition and habits."

In discussing the work of the nurses in those early days, the late Dr. Henry Harvey, who was House Surgeon 1871-73, had much to say concerning the real efficiency of the born nurses who took the greatest interest in their patients, compared with others whose sobriety was not always beyond reproach. The above plan of nursing organisation seems to have gone on until 1870, when a number of lady deaconesses, from an institution lately founded in Liverpool, were permitted to receive some training at fixed hours, and under fixed regulations, in the Hospital. This led in 1872 to an entirely new system of nursing being started, *i.e.*, when the new Hospital was opened. By way of an experiment the council of the Deaconess' Institution in Chatham Street was asked to undertake the organisation of the nursing of the Hospital for a period of six months, and it was noted in the Report of the succeeding year that a great improvement had taken place in the tone of the wards.

In 1874, however, it was discovered that the nursing plans were not quite satisfactory, and the arrangement with the Deaconess' Institution was terminated, a system of trained sisters and nurses being introduced in 1875. This was found to work satisfactorily and, in the course of a few years, the Institution had attained so much success in the training of nurses that they became much in request throughout the whole country, both for Hospitals and private cases. From this time onwards the whole system of the training of nurses advanced. Women came to the Institution in a missionary spirit, taking up the avocation largely on religious and charitable grounds, and the whole nursing ideal reached a very high level. Lady

probationers, who paid for their training, came in large numbers from 1879 onwards for many years, and at that period six other institutions sent their nurses to the Hospital to have their training completed. The result of all this was that Ward Sisters were much in demand as matrons of other institutions. In 1880, the Royal Southern Hospital Nursing Institution was established in a house in Grafton Street for supplying private cases with thoroughly reliable and competent women. These nurses were in constant demand, not only by the doctors and patients in the city, but by those in a very wide radius outside it, and the Institution became self-supporting.

The expenses connected with the provision of this new Institution were defrayed by a few members of the Committee and by the Hon. Staff. In 1891, the present detached Nurses' Home, to accommodate the entire nursing staff, including those from Grafton Street, was opened free from debt by Mrs. George Henry Horsfall, and at the opening ceremony the President read a telegram which he had received from Florence Nightingale. It read:

God speed the Nurses' home, to be opened to-day, and all its dear nurses and probationers and matron and house sister; and God bless their quiet, steady and loving progress towards the best, year after year; and God guide their good President and Committee and officers is the fervent prayer of

FLORENCE NIGHTINGALE, London.

The Sisters now vacated the bed-sitting rooms adjacent to the wards, which were converted into Sisters' rest rooms and subsequently into clinical side rooms. This Home is complete with every comfort, including a library of general and nursing literature and provision is made for recreation during off-duty times. Since it was originally built, the Home has been considerably extended from time to time to accommodate the increased number of nurses who have been required as the work of the Institution has grown and advanced.

The first of these was in 1911 when, partly owing to an increase in the general nursing staff and to a greater demand for private nurses, 18 bedrooms were added to the Hostel.

For two or three years prior to 1918, the question of lessening the hours of duty of the nursing staff had occupied the serious attention of the Committee. The working hours of a nurse or probationer had, at all times, been excessive, and the determination was come to that this should immediately be remedied. This, of course, involved a considerable increase in staff and a consequent further extension of the Home for the accommodation of 21 additional nurses. This was accomplished in 1919, with the result that working hours were immediately shortened and holiday periods increased.

In 1921, it was again found necessary to increase the number of nurses in order that the Hospital might be efficiently staffed, and the need was made still more pressing in view of the revision of the time-tables of work and of off-duty periods and holiday leave. It was impossible to add to the present buildings, there being no land available. A house was therefore purchased at No. 44 Upper Parliament Street, and furnished for the reception of 16 nurses, together with a domestic staff, under the supervision of a Sister in Charge. The purchase price and the cost of furnishing was paid out of a donation from the Trustees of the Will of the late Mr. Frank Rigby and, in compliance with their wish, it was named the Royal Southern Hospital "Frank Rigby" Hostel. One of the results of the absorption of accommodation by the augmented staff required for administering the nursing of the Hospital was the impossibility of maintaining the Out-door Private Staff which was practically in abeyance for some years until 1925, when, in order to make provision for the re-establishment of a private nursing service, the Rigby Hostel was extended by the purchase of the next door house, the furnishing of which was accomplished by a gift of £500 from an anonymous donor together with £50 from the White Star Line Charities Fund.

It should be added that the night nurses are housed in the "Rigby" Hostel, in order to ensure quietude and freedom from disturbance liable to occur in the building immediately attached to the Hospital.

In the early days of training the course of instruction was determined by the Honorary Medical Staff and Lady Superin-

tendent and it was both practical and theoretical in character. The Honorary Staff gave systematic lectures, and the practical work was taught in the wards. That the training was very completely organised both in its theoretical and practical bearings was shown by the high professional reputation of the Nurses. This systematic training probably began about the year 1875. Before the standardisation of education was brought into force every training Hospital made its own arrangements and the probationers after passing their examination held the certificates of the particular Institutions in which they had been taught. Sometimes however Institutions which had no facilities for general training granted certificates and it was difficult sometimes for the public and even for the profession to know a well trained nurse from one having indifferent experience. In very early days much trouble arose on this account which was greatly overcome however by the fact that private nursing institutions were very careful in the selection of their staffs. Doctors depended largely on these institutions and on the private nursing staffs of the Hospitals when they wanted reliable nurses and so did the public. There were certainly plenty of women wearing nurses uniforms at the time of which I speak possessed of very elementary experience and who were sometimes dangerous if they were called upon to nurse cases of Typhoid and other diseases requiring efficient skill. The education of the professional nurse is now standardised, and our Hospital, in common with others, is recognised as a teaching centre which conforms to a standard of education required for the State examinations and recognised by the Colleges of Nursing. A Sister Tutor now superintends this work.

In the Royal Southern Hospital all candidates selected for training are required to pass a preliminary general knowledge examination on the lines of the Binet Simon Test which is set by the Sister Tutor. Having passed this and a Medical Examination as to her physical fitness the Probationer enters upon a three years' course of training which is usually followed by a further year of practical experience in the Wards.

During the first year to eighteen months she is grounded in

the Ethics and Theory of Nursing and receives instruction in bandaging and splint padding, theatre technique, (Rules for preparation of the patient, etc.), lessons and demonstrations in Nursing, lectures on Elementary Anatomy, Physiology, Chemical Testing, First Aid, and Hygiene. This instruction is all given by the Matron, Sister Tutor and Theatre Sister and is followed by the Junior State examination.

During six months of the second year there are further practical demonstrations on the Theory and Practice of Nursing by the Sister Tutor, and lectures by the Honorary Staff on Diseases of the Ear, Nose and Throat; Ophthalmology, Dermatology and Bacteriology.

In the third year the Honorary Staff Lecture on Children's Diseases, Dietetics, Medicine, Surgery, Orthopædics, Anæsthetics, Gynæcology, and other subjects. The Theatre Sister holds Senior Theatre Classes and the Sister Tutor gives a course of instruction in Cookery, and six lectures on infectious fevers. In this year probationers are also afforded the opportunity of visiting the School of Hygiene, the Co-operative Dairies, and the Sewage Farms. Then comes the Senior State examination and their qualification as certified professional nurses when they have passed it.

There are numerous book prizes awarded during each year. A silver medal for the highest marks in the second year, which must include those for Anatomy and Physiology, and a gold medal with Midwifery grant goes to the best third year Student who has received a stated average of marks and was the recipient of the Junior Silver Medal. If she was not the winner of the Junior Silver Medal, she receives a Silver Medal and the Grant.

The Lecture Room is fully equipped with charts and diagrams, a skeleton, a projector and numerous lantern slides, and the Class Room contains many anatomical models, a Bed and Chase model and other modern appliances for practical demonstration purposes. There is also a library of books on nursing and allied subjects for reference.

The whole of the Nursing Administration including the arrangements for examinations and the selection of staff is

managed, with the assistance of the Matron, by a nursing committee which was constituted in 1916 to supervise the entire nursing economy of the Hospital.

The following table shows the increase of Staff which has taken place since the Royal Southern Hospital was opened.

In 1874 the Staff included 17 Nurses and Sisters, 2 House Surgeons, 3 Resident Pupils, 1 Housekeeper.

In 1936 the Staff included 108 Nurses and Sisters, 6 Resident Physicians and Surgeons and one Casualty Officer.

The Committee have under consideration the question of appointing a Senior Resident Medical Officer, who would be responsible for the treatment of emergency cases, and for administrative duties connected with the care of patients.

THE NURSES' HOLIDAY AND REST FUND.

(JOHN RANKIN FUND.)

It has to be remembered that the Nursing Staff of a hospital is a resident one. The quarters in which they live constitute their home, so that apart from their professional work, it is essential to make what may be termed their domestic life, a thoroughly happy one. This is accomplished by the provision of a well equipped library, and other amenities, including a tennis court.

In 1917, a Nurses' Holiday and Rest Fund was inaugurated by Mr. Herbert W. Rowe. It was afterwards generously endowed by Mr. John Rankin, at first anonymously, and later the fund was named after this great benefactor. This fund provides educational and social benefits for the nursing staff. Grants are made from time to time towards maternity training, and every year provision is made for outings, excursions on the river, and many other means of adding to the happiness and well-being of the staff.

LIST OF MATRONS FROM 1842 WITH TERMS OF OFFICE.

1842—1850.	Miss Elizabeth Jackson.
1851—1859.	Mrs. Mary Chalmers.
1860—1863.	Miss Louisa Mathews.
1864—1873.	Miss Ellen Symonds.
1874—1878.	Miss E. M. Hannan.
1879—1880.	Mrs. Carter.
1881—1883.	Miss Blower.
1884—1902.	Miss Mary Gordon.
1903—1905.	Miss Ernesta Sproule.
1906—1910.	Miss Mary Williams.
1911—1918.	Miss L. E. Jolley.
*1919—	Miss Agnes Bagnall (to date).

The following article presents some of the guiding principles having to do with the selection, education, and training of nurses.

THE PSYCHOLOGY OF NURSING.

By courtesy of the Editor of the "Cripples' Journal (1928)."

The psychology of nursing has to do with the attitude of the mind of the nurse towards her patient and with the bearing which her personal characteristics have in the way of influencing his or her comfort and well-being.

Nursing is a profession which pre-eminently belongs to women, and the psychology of the nurse is essentially that of woman who, throughout the ages, has been regarded as the possessor of inborn gifts and attributes which render her the natural tender of the weak and sick and of the maimed and hurt. She has always had childhood in her care in health and in sickness, and her nursing capabilities are no doubt related to the maternal instincts which are present, although they may be dormant, in a greater or less degree, in every woman. These instincts are concerned not only with the propagation of the race but also with its preservation, and the woman's attitude

*Miss Bagnall was Acting Matron of the Hospital from 1915 to 1918 during the absence on War service of Miss Jolley.

towards the sick is nothing more or less than an expression of her motherly intuition to preserve life or restore health. The experiences which woman acquired in prehistoric times regarding the care of her offspring during childhood and beyond, probably led to some knowledge concerning the care of the sick and of the uses of simple remedies. This would be handed on from mother to daughter and so it would happen that adults appealed to woman—as to a mother—when smitten with illness. It would become recognised that they, or some of them, were the holders of specialised knowledge and—as suggested by Ian Ferguson in his “Philosophy of Witchcraft”—this probably led to the cultivation of the wise woman or witch who soothed by her potions, cured by suggestion, or killed by dread.*

Witchcraft was honoured in those days and it was not until much later—when the Church denounced and persecuted the witch as being in league with the devil or other evil spirits—that she fell from her pinnacle as a priestess of medicine.

The possession of secrets whereby life might be saved was often associated with the belief that the men or women holding them had intrigues with spirits, good or evil (more especially the latter), until well on in the centuries of civilisation. We have an example of this recorded by De la Motte in his “*Traité complet de Chirurgie*,” who tells an anecdote about a case to which he was called at a cookshop one evening in March, 1696. He found that the patient was a soldier who was on the point of death owing to a wound in the front of the chest. The padre was with him when the doctor arrived, but he had refused to administer the Sacrament for the reason that he had hesitated to confess a secret (remedy for bleeding into the chest) which, according to doctors, operated only by magic and which it was necessary for him to renounce as pertaining to Satan, otherwise he could have no salvation.

The word “witch” is of Anglo-Saxon origin. It means one who knows—a woman who knows—and we doubtless have the same sentiment implied in the *sage femme* or maternity nurse of the French.

**Vide* “The Philosophy of Witchcraft,” by Ian Ferguson.

Thus we have the suggestion that the wisdom of woman—related, as I have said, to the maternal instinct—has been associated with help to the distressed and one has heard patients of to-day speak of the clever and resourceful nurse as being—like her ancestress—a witch.

Those who have had to do with the education of nurses, whether they be matrons of hospitals, ward sisters or medical men, recognise that there are two principal types of women who present themselves for training, and that they vary in their psychology very considerably. There are born nurses and there are others who acquire the art and become well-trained women, although they lack the truly psychological instincts which make for perfection.

The difficulty of moulding a girl to a profession for which she has not a true calling is often enough experienced in the case of a nurse. This accounts for the fact that the girl who enters the field because she loves the work and has a sympathetic interest in people who are ill greatly helps her patients by her personality. The other type may become an efficient nursing machine, having less capacity for understanding the patient from the patient's point of view. The psychology of the two types is, therefore, essentially different.

Whatever may be said concerning the attitude of the present day nurse towards the suffering person, it is quite certain that the patient of to-day is much more dependent on her educated capabilities than was the case many years ago. A calling can only be regarded as a profession when it is associated with training and education, and the emergence of the nurse from the condition of handy woman, and her rise to a truly professional status, was a very slow process. In the old days, when there was practically no systematized training, nurses must have been a very mixed lot. There were certainly a number of excellent women who did good service according to their lights, but there must have been many who were not only incapable but untrustworthy. We get some evidence of this from the report of the Southern Hospital for the year 1857, in which the Committee appealed to ladies to introduce suitable candidates for the work owing to their difficulty in

obtaining competent and trustworthy women to nurse the patients. Some light is thrown on the nature of these difficulties by a statement in the report of a later year which records, as a manifest of improvement in the tone of the nurses, that they had by their own desire requested that their allowance of beer should be replaced by tea, "a change not merely economical in itself but a favourable indication of their dispositions and habits." Some of the nurses at that period, especially those on night duty, appear to have been charwomen. The late Dr. Henry Harvey discussing the qualities of the nurses when he was a House Surgeon in 1871, informed me that there were splendid women among them who were instrumental in saving many lives by their devoted services, but there were certainly others of a very inefficient type. Early in my own career some of the less advanced hospitals, even large ones, had trained nurses in charge of the wards assisted by a number of women many of whom were elderly and quite uneducated. A rather amusing incident which exemplified this fact occurred when I was acting as temporary house surgeon at a large Poor Law Hospital. I remember that I had just helped my chief into his coat and was bidding him farewell, when one of these elderly assistant nurses, having curtsied to me, which seemed to be a proper proceeding at the time, requested me to go and see an old lady who was "in particular notice." I found the poor old soul nearing her end, but why should she be described as having particular notice to depart hence? It dawned on me later that the nurse had probably heard of a dying patient as being "in articulo mortis" and hence her somewhat phonetic interpretation of it.

The actual era when those having a decided calling for the profession of nursing to replace the more or less handy woman class of worker, dates from the time when Florence Nightingale advocated the establishment of an institution for raising a superior class of nurse who would carry out her labours in a spirit of self-sacrifice and conscientious devotion to duty. By degrees the religious and missionary spirit was awakened. Women of the right sort came forward, and gradually a high tone began to characterise the nursing staffs of the larger

hospitals. It took a good many years to discover how best to organise these institutions as training schools, indeed it was not until the seventies that systematic training began to constitute part of the functions of the hospitals. The missionary spirit to which allusion has been made was at this time much in evidence, and many will recollect the devoted way in which these women laboured for the patients. Their work was arduous, and they had long hours, notwithstanding which it was often with reluctance, when their hours of duty ended, that they handed over cases which they were endeavouring to nurse through some critical condition, to their colleagues who relieved them. In the early days of private work, when often enough one nurse had charge of a seriously ill patient, helped perhaps by anxious members of the family, she quite frequently remained on duty almost all day and night. One was often amazed at the powers of endurance of these women, reflecting a spirit of enthusiasm which was associated with a psychological sense of duty and responsibility. It must not be imagined that this spirit has gone. We come across many of the type both in hospital and among private workers. I will go so far as to say that the majority of our nurses possess it. It is part of their womanly nature, and even if it is not very marked in some of them, they frequently acquire it or have it awakened under the stimulus of example by their teachers and leaders and through the *esprit de corps* of the school in which they are trained.

I have already explained that a calling can only be regarded as a profession when it is associated with training and education, and in that sense the profession of nursing has been raised to one of much importance. The examinations by the hospitals which grant certificates, and by the colleges of nursing, are becoming more and more standardised; they involve the acquisition of highly technical skill and the attendance on courses of lectures on many subjects which were considered quite unnecessary for the nurse of former days. There are authorities who question whether all this education in elementary medical, surgical and scientific subjects, tends to make really good practical nurses of the students, and whether

it would not be better for them to devote more of their energies to the practical aspects of their work. It is true they have to study very hard under the guidance of the sisters and the sister tutors, both in the wards and in the periods after their duties in the wards are ended. The mental strain occasioned by the thought of approaching examinations tells upon many of them, but my feeling is that, having this training, they become better equipped to take an intelligent interest in the work in which many of them ultimately become associated with specialists in every department of medicine and surgery. After such a good all-round training, a woman may become a general nurse or may, owing to opportunity, become attached to physicians or surgeons who rely on her as having experience in nursing cases of specialised types. So it comes about that, in addition to the general nurses, there are those having special knowledge of the management, for instance, of orthopædic cases or of gynæcological ones, of fever, children, eye and ear cases and many others, not to mention the very competent women, now a class by themselves, who practise massage and medical gymnastics. There are many physicians and surgeons who regard the nurses who work for them in the light of being trustworthy members of a permanent staff, and they rely on them as much as they do on the services of the ever changing hospital residents who assist them. As a matter of fact, the young resident may learn a good deal from an experienced ward sister if he avails himself of his opportunities.

One of the points I want to make in connection with this educational standardisation of the nurse is that it may, and possibly does, lead to the inclusion of some members in the profession who enter it purely *as* a profession and who do not always combine a sympathetic understanding of the patients with their technical efficiency. This type of woman does not tend to be popular. Patients of every class and age vary greatly in their susceptibilities and they require to be handled and dealt with by those in attendance on them, not as cases alone, but as individuals. Some patients are nervous, highly strung and apprehensive, others much more stoical and matter of fact. Some may be optimistic, others pessimistic. There are those

who complain and think themselves neglected (*e.g.*, in nursing homes) if the nurse makes infrequent visits, others prefer to be left alone as much as possible and not to be fussed over. The psychology of the nurse is dominant among her personal qualities and renders her a good hand or a bad one, as the case may be, in dealing with the idiosyncrasies of the individual, and each and all of them should realise that the man, woman or child has to be properly handled and treated as well as the maladies from which they may be suffering. An understanding of the mentality of the patient is often of real importance. If a nurse learns to put herself in the place of the patient and to appreciate how things done or said to or about him may suggest good or evil, and how things left undone may promote mental upset, she will greatly add to her efficiency.

Many examples may be cited illustrative of this fact. By pure coincidence the author, while writing this article, received two letters from the friends of patients who were seriously ill, and the qualities of the nurses in attendance were referred to in each case. First came a letter from a daughter who regretfully stated that they had been obliged to part with a nurse (whom she described as being excellent at her work) because the patient had gained an impression which had upset his confidence in her. The other was from a husband who wrote, "We have the best nurse in the world; human, clever, good—never tiring and devoted to . . ." There is no doubt that the question of getting on with a patient, or with the relatives, often depends as much on their characters as it does on that of the nurse, and one has frequently felt sorry for a girl who has been doing her best, with tact and judgment, to maintain the confidence of, or to ameliorate, a hostile or suspicious attitude on the part of those for whom she is working. In each of the cases which I have quoted, the people of the household are of the kindest natures and the unsuitability of the nurse in the first of them depended entirely on a want of sympathetic understanding of the condition of her patient.

A story told by Mrs. Conrad in the *Cripples' Journal* (Oct. 1928) affords another example of the way in which a mistake may arise. The nurses assumed that their patient was mentally

obfuscated, and they verbally insisted that she was not yet conscious. Even if a patient is only partly conscious, it should be remembered that what is said will, quite probably, be understood or perhaps misunderstood. A misinterpreted impression is quite likely to become a fixed one when consciousness is restored, and so accounts for dislike of or want of confidence in the nurse. Let me warn nurses not to discuss matters within earshot of an apparently unconscious person. They are sometimes quite mentally alert although unable to move or speak. I recollect being horrified, many years ago, by hearing that a nurse and relative had discussed the probabilities of life and death at the bedside of an old gentleman who, although paralysed in limbs and speech, was perfectly conscious and able to understand all that were saying about him.

People who are ill are often not only good listeners but also good hands at forming their own conclusions from the way things are said and from the expression or manner of the speaker. One has known a man who had a perfectly simple trouble conclude that it was a malignant one, owing to a hesitancy in the way the surgeon told him it was innocent. The same kind of influence may arise in the case of the nurse who, being more or less constantly with the patient, should be careful to combine frankness with discretion. The psychological effects of optimism and pessimism may have far-reaching results. Professor Osler used to comment on the fact that an optimistic doctor may prolong the life of a patient who may be suffering from a serious malady. I have myself seen life shortened by mental shock on patients being told that their diseases would be fatal, and I have certainly seen life saved through purely psychological influences in the case of a man who would have otherwise died. He was a friend of my own who had undergone a serious operation, and my visit was prompted by the news that he was unlikely to live. The surgeon in attendance had informed me that recovery was problematical and the man himself was evidently of the same opinion. The faces and the whispering voices about him were certainly not calculated to inspire hope. He was so weak and exhausted that I had difficulty in hearing him when he asked me to do some service for a

relative when he had gone. This request I kindly but firmly objected to comply with on the grounds that he should get well and attend to his own affairs. Instead of depressing him, my refusal inspired the spirit of hope which, I am certain, influenced his ultimate restoration to health. And so a nurse by cheerful optimism may do much good, and *per contra*, by pessimism or mysterious talk or gesture she may retard progress. It is the personal factor which tells in the nursing, as in many other professions, and which makes for success, or the reverse, in the work.

It is common knowledge and experience that the surgical wards of hospitals and nursing homes have much more cheerful bustle going on in them than we find in medical wards. Sixty years ago, surgical operations were undertaken with no light heart, owing to the ever-present danger of sepsis, whereas to-day a surgeon expects every case to do well, so far as recovery from operation is concerned, and the psychological atmosphere of confidence is consequently more easily maintained. It is in the serious medical case, or the chronic one of any denomination, that so much depends upon the skill and personality of the nurse in the steering of the patient into channels of comfort of the mind and body. "She is human, clever, good—never tiring and devoted" wrote my correspondent of his wife's nurse; and happy would be the charges and their relatives if all nurses were possessed of such qualities. In my own experience most nurses do possess them and they rise to the occasion splendidly. Why, then, do we hear of nurses getting on the nerves of their patients? I believe it is in the convalescent stages of disease and when the patient is bedridden, perhaps without much inconvenience to general health, that boredom between nurse and patient is most apt to arise, and it is in such conditions that the discretion of the nurse is liable to be put to the test. If a patient is a bore, and sometimes they are impatient, grouching and growling, forbearance and good-nature will be required in his management; but if the nurse is the bore, there may be little opportunity for redress.

It is not to be surprised at that nurses are less interested in

chronic cases than they are in surgical or acute cases, because the latter keep them constantly employed, are of relatively short duration, and the immediate results are so much more obvious. The chronic case, however, is very dependent not only on the technical skill of the nurse, but also on her personal and psychological influences. If she indulges, for instance, in a pouring out of her own, and especially of her love, affairs, as I have known to be the case, to unwilling ears, or in any stupid gossip which is likely enough to convey the impression that the patient and his affairs may become the subject of talk at the next case at which she is employed, then our nurse must not be surprised if her professional career become marred or stultified. The troubles of the patient and any family on other affairs which come to the knowledge of a nurse, are strictly private matters which, as a professional woman, she must respect and never repeat.

One might quote other examples of the ways in which nurses irritate or worry the people they are looking after, but it is unnecessary to do this; it would involve a dissertation on the ethics of the profession. Common sense and reasoning, combined with a cheerful heart and a light hand, are assets to be carefully acquired. I have just one particular "don't" to recommend to the notice of nurses in general, which will remind them that they have a psychology. It is this: Don't be a nursing machine, but make use of the witchcraft that is in you, and include wits and wisdom of deportment among the armaments of your profession.

THE AMBULANCE SERVICE.

1887—1919.

As in the cases of many municipal services having to do with the welfare of the sick, the ambulance system, which is now so efficiently administered by the Corporation, began as a voluntary organisation connected with the Northern Hospital. This hospital started a Horse Ambulance some time prior to the year 1886 and it proved so beneficial in the way of securing speedy and skilled help in the cases of accident at the North End that

the Committee of the Royal Southern Hospital determined to provide one for service in the Southern District. It was the more necessary to do this because a hope that the Police Ambulance would institute such service for the City had not materialised.

In 1886 an Ambulance Wagon was presented by one friend and a horse by another, and a fund was instituted and liberally subscribed to for maintenance purposes. This enabled the new Ambulance Department to commence work in 1887. The horse was always in readiness, a slip-harness being arranged which enabled it to get out within a very few minutes of being summoned. The driver was in close attendance and one of the residents was at call to accompany it. At first the wheels had plain iron rims but, in 1889 a friend provided rubber tyres which added materially to the comfort of the patients. The number of calls attended to naturally varied from year to year in a range between 344 to 490.

By 1889 the calls had increased so considerably that it became necessary to appoint two ambulance officers, and up to this period 44,175 cases had been attended to.

In 1900, the Ambulance Service of the Hospital was partially taken over by the Corporation, and a new Ambulance shed and stable were erected opposite the Hospital in Caryl Street at a cost of £477/4s., which was collected by the President. This meant that the upkeep of the Ambulance and provision of a horse and driver was paid for by the Corporation but it was still officered by the resident staff.

In 1916 the Horse Ambulance was replaced by a motor one, and in the following year a resident casualty officer had to be appointed to cope with the increased work of the department. In 1919 the Corporation took over the entire Ambulance Service of the City, and the Hospital was no longer required to staff the Ambulance with medical men. The fund was closed and the subscriptions were diverted to the Out-Patient Maintenance Fund.

The ambulance shed was converted into an engineers' shop in 1923 to replace one which was absorbed by the building of the new electro therapeutic department.

At the end of 1918, when the work of the Ambulance terminated, 12,428 cases had been attended to since the department was opened in 1887, this being an average of about 400 cases annually.

THE ALMONER'S DEPARTMENT.

The addition of an Almoner's Department to the Hospital took place in 1920, when Mr. John Rankin generously transferred £700 Victory Bonds to guarantee the salary of an almoner for a trial period, and a Lady Almoner was then appointed. Her primary duties consisted in the interviewing of patients and their friends with reference to their ability to contribute towards the cost of their maintenance or treatment. As a result of these inquiries many cases of need and distress were discovered and the provision of aid for such cases was arranged for.

The work soon passed the experimental stage and its economic bearings in various directions led to permanency of its adoption as an essential element in hospital administration.

Shortly after the department was established a scheme was initiated for the After Care of adult patients after their discharge from the hospital. This was a pioneer movement which was partially financed from the proceeds of an appeal for a Jubilee Commemoration Fund in 1922. The following is a short account of the development of this work:—

AFTER CARE AGENCIES.

The preventive aspects of disease are now considered very greatly, and in the cases of ameliorated patients some steps are taken, through After Care agencies, to maintain them and to prevent relapses, which are uneconomical in that they waste the time, energy and money expended on them while in Hospital. This new departure in hospital administration became extended and developed with the aid of voluntary social workers under the supervision of the Almoner.

Trained social workers are important officers connected with

some of the larger hospitals. They keep an eye on discharged patients, try to teach them how to avoid recurrence of symptoms, and encourage them to continue treatment as out-patients. They even go to the length of helping them to get employments which are compatible with their crippled capabilities. This solicitude for the continued welfare of the patient is, of course, related to the question of making the best use of his efficiency as a citizen, and has a very important economic bearing. It is a departure in hospital work well worthy of serious consideration; one which will certainly take an important place in the future. It has, for many years, been in activity in the Children's Department, through the agency of the Child Welfare Association, and has proved of the greatest value.

Systematic After Care of adult patients was brought into operation as a pioneer work in 1920. It has for its object the fulfilment of the economic principles to which reference has been made, and it is worked in conjunction with the Lady Almoner, whose inquiries often reveal the necessity for auxiliary help for patients who have been treated in the Hospital. Examples of the kinds of assistance provided are found in additional or special articles of diet (*e.g.*, in diabetic cases), advances of money for surgical appliances to enable patients to resume work, and in course of time to refund the cost of them. Some cases require warm clothes, others convalescent treatment, and so forth. Another important function of the workers is to give advice concerning the home conditions of the patient, for instance, with reference to sanitary matters, the lessening of worries or of other domestic difficulties, and to call in the assistance of one or other of the social organisations in the City when they can be utilised. This applies, for instance, to the conditions under which work is done, and the avoidance of anything likely to tax the individual beyond his or her capabilities of usefulness. These social service organisations are very numerous and their functions have covered practically every branch of utility. By 1925 the work of the department had extended greatly, 210 cases, involving a total of 378 visits, were attended by the voluntary workers, and during the next two years there was a still further increase which had been

greatly brought about by the close co-operation of the Resident Staff and the Ward Sisters. The patients were very materially helped to carry out prescribed treatment, often in face of great difficulties, and many of them were enabled to re-establish themselves after the dislocation of their affairs consequent on illness or accident.

In 1928 came a suggestion that much additional good would result from an organised system of communication between the Hospital Clinic and the homes of the patients, and the hope was expressed that a proposal of the University Council for Social Services to co-operate in a scheme to provide Hospital Social Service Training for their students would become effective. In 1929 this project had evidently materialised, because three students from the Liverpool School of Social Science came to the Almoner's office for part of their training and subsequently the Fund for running the department became considerably relieved by the help afforded by the Merseyside Hospitals' Council and the Personal Service Society. These bodies, however, did not at once take over all the responsibilities, there being many cases for whom assistance was required which was not available from these sources.

In 1933, the auxiliary After Care services of the Merseyside Hospitals' Council and the Personal Service Committee had taken over much of the work, and now these organisations carry out many of the functions of the voluntary workers who so admirably administered relief before this arrangement was effected.

SOCIAL WELFARE AND CHANGES IN TYPES OF PATIENTS.

When speaking of the ancestral buildings, reference was made to the insistence, year after year, in the Annual Reports, that acute cases alone were admitted, and it is interesting to take the memory back to the early days and to realise what was then meant by an acute case. Any very ill patient was considered an acute case. Not only did diseases such as pneumonia, typhoid and so on come into this category, but also

people suffering from advanced heart disease, renal disease and a host of others who, often enough, came in to die. Phthisis was invariably present, and the number of beds allotted for its treatment had to be limited. To-day the interpretation of an acute case is somewhat different, the early conditions of disease being preferred to the later ones, whereas phthisis, long since recognised as an infective trouble, has been banished. An early heart case which was able to be about was formerly treated as an out-patient, whereas an old case was admitted and patched up.

A remarkable change which has taken place since the old days is found in the altered type of patient which we see in the wards and out-patient department. It is a distinctly better type and, since it is representative of the same class which came to the Hospital fifty years ago, it indicates that their social conditions have improved and that there has been an uplift in their standard of life. One of the Hospital sisters, in the eighties, once remarked upon the degraded class to which many of the patients belonged, and there is no doubt that the education of the children and the influences which generations of social workers and organisations and of teachers have had upon them, together with considerably improved habits as to sobriety, have been rewarded by making better parents of the present generation and consequently better children.

The district in which the Hospital is situated was hardly considered safe after dark in those days. Murders, drunken quarrels and assaults were comparatively common. This was impressed very forcibly on the writer in the earlier days of his career, by the first post-mortem examination which he ever saw, which was on the body of a girl who had been stabbed in the neck. The tragedy was known as the Prince William Street murder, and the perpetrator of it was hanged. There were a good many such cases about that time, and many of the streets and courts in the vicinity had evil names. They were, in many cases, demolished in later years, better houses built and their names changed so that their new careers might be commenced under more hopeful auspices.

At that time the Residents had to stay up till the small hours

every morning to attend to the casualties among the denizens of the district who had quarrelled, mostly under the influence of alcohol. In some of the Reports, reference was made to the large number of cases of this description and of those who had been poisoned by alcohol. For example, in 1858, there were recorded 42 cases of poisoning, of which 32 were alcoholic.

In the Annual Report for 1861 comment is made concerning a decrease in cases of wounds to the head and face, etc., and Mr. Batty, the House Surgeon, is quoted thus:—"I may perhaps observe that injuries to the head generally occur in consequence of street rows late at night and it is remarkable that since the destruction by fire of a low public house near the Hospital we have experienced a striking diminution in these cases."

This prevalence of alcoholism is, however, referred to again in 1862 and 1865, when the large number of out-patients treated for drunkenness was recorded. Occasional mention is made in the old Reports of the large number of cases of submersion and drowning, and it seems likely that many of these were related to the same cause. This state of affairs has vastly changed for the better, with the result that a very considerable difference has taken place in the type of patient requiring treatment. It is now to be regarded as a more respectable and deserving class. The stimulant bill in the Hospital is in itself an object lesson with reference to the alteration in the customs of the times. The "old time" average was about £350 per annum, whereas, notwithstanding the greatly increased cost, the present average is under £50 per annum.

The present-day resident, student, or nurse can have little conception of the conditions of dirt and degradation of the patients among whom some of the senior members of the profession had to work, especially in the Out-patient Department, when they commenced their careers. The children who come to the Hospital to-day are nearly always clean and cleanly dressed, and the adults too are respectable.

Some idea of the state of affairs at the time I speak of may be gleaned from the fact that the wooden stethoscopes used in the Out-patient Department were made with shafts eighteen

inches long in order to interpose a respectable distance between the examiner and examinee, for obvious reasons. Habits of cleanliness and respectability have certainly made progressive strides, and there are manifest indications that the energies of social workers of all kinds have not been put forth in vain.

There have been many organisations for carrying out social work in the hospitals. One of these was the Flower Mission, started in 1875 and for many years conducted, during the summer months, by the ladies of the town who took or sent a flower, together with an appropriate message, to every hospital patient once a week. It did much good and constituted one of the minor bridges which have been set up, from time to time, to bring the classes into touch with one another. Nowadays these bridges are much more substantial structures, and the existence of such organisations as the Hospital Saturday Fund indicates the way in which people are doing something to help one another. Much can be done through the hospitals in this way and by cultivating the spirit of personal service and of goodwill among all the classes. Those who work in the hospitals see it, or the possibilities of it, every day. By getting to know the people and by their getting to know those who are about them, the barriers get broken down, and it becomes easier to bring about the kinds of influences which make for mutual respect and goodwill. Endless cases might be quoted indicative of the confidence placed in the hospitals by the people. Sometimes they are pathetic and sometimes not without their humour. A poor woman, a good long time ago, called on one of the Honoraries at his house to ask him to take her husband into the Hospital. He was in a workhouse infirmary in the South of England. She stated that he was incurably paralysed, but thought he might get better if brought to the Southern Hospital. It seemed useless to bring an incurable man all the way to Liverpool, whence he would probably be returned to his "Union," and the request was refused. In about a month the woman called again, and again her appeal was refused. The persistence of her hope, however, was irrepressible and, after a few weeks, she called to say she had brought the invalid to Liverpool and begged

for his admission. This time the plea could not be refused, so in he came, and fortunately the poor man's trouble proved amenable to treatment for he ultimately got well and fit for his work. He was a sailor, and when going away he offered the Honorary a canary by way of thank-offering, but the gentleman in question did not feel justified in accepting even so trivial a gift from a man whose exchequer was low and who required all he could raise for his devoted wife. The question was put to him, "I suppose you will be getting a ship from Liverpool now?" "Oh no, sir," said he, "I'm going to —" (mentioning the port from the workhouse of which he had been brought). "My good man," said the doctor, "why go all the way to — for a ship when there are lots to be had sailing from Liverpool?" "Well, sir," he replied, "it isn't exactly that, but I want to go to — to show the beggars what you can do with an incurable patient at the Southern Hospital,"—only he did not put it in quite such polite language. The triumph of the wife was great, the triumph of the man was greater, and the triumph of the Hospital was greatest. Hospital stories are not without their humours sometimes, nor are they without interest in regard to the way in which they throw light on character. We had an instance of this in the case of an old man who had been very ill and who was consequently in a weak condition for some time. Shortly before being discharged we were rather anxious as to whether he would get care and nourishment at his house and, with due delicacy, the inquiry was made,—“Have you got an old-age pension?” “Oh yes,” was the very indifferent reply. “Well you don't seem very enthusiastic about it, do you?” “Oh dear, yes,” he said, “it's all right, but I'd have thought so much more of it if the right party had brought it in.” He was a politician, placing his party before his politics and just, so to speak putting up with an advantage which his political party, in his opinion, should have initiated.

We occasionally see the seamy side in people who do not look seamy, and sometimes a man who does not look one of the best shows up to considerable advantage. More years ago than one cares to think of, a man who had recently left the

Hospital, and who had the face of an angel, called at my house and informed me that I had entirely gained his confidence. This seemed at first very gratifying, and one felt rather elated at having made so good an impression, until it turned out that, having obtained his confidence, he wanted mine together with £5 by way of return. I did not feel justified, however, in increasing his high opinion of me. But this is not the end of the story. About ten years passed when there appeared in one of my beds the man with the angel face, and the following conversation took place. "I think you were in the Hospital before, my man, weren't you?" "No, sir." "Surely I have seen your face before. I think so." "Well, sir, I was here a long time ago when I was young." I do not exactly know why this answer should have brought to mind another incident, but it did, and I related it to the students and others who were with me at the bedside. It was as follows. Some time previously I had been asked to see a well known judge who was very ill and somewhat out of his bearings mentally. He was sitting up in bed when I was taken into the room, and was evidently under the impression that he was at work in his court. "Who is this?" he asked rather abruptly of the doctor who had introduced me. "It is Dr. M—, sir." "H'm. Prisoner states that his name is Dr. M—," and he went through the performance of imagining that he was writing down this fact. "Have I ever seen you before?" he asked, turning towards the rather uncomfortable consultant. "No sir, I have never had that pleasure." This reply was duly noted. "Well," said he, "that may be your opinion, but I have mine." The man with the angel face listened intently to my story, his eyes betokening that he was intensely interested, and almost immediately, to my great humiliation and to the joy of those about me, he said, "Perhaps, sir, you was young when you appeared before him."

The reverse of the above picture occurred in the case of a man with Bardolphian features, one whose face did not betoken paramount virtues. One thing which was very noticeable concerning him was that a very small boy patient, occupying a contiguous bed, took every opportunity of

slipping in beside this man, and spent much of his time sitting on his pillow in close proximity to the said features. I saw him once, his eyes wide open and his face bearing signs of vast interest listening to the talk of this sailor, who manifestly knew how to get at the heart of a child by telling thrilling stories in which he always figured in some adventurous capacity. He was a pirate, or he fought with pirates, and had yarns of desert islands which would have rivalled those of the masters of fiction. His stories were told with such seriousness and so much descriptive force that one felt sometimes that he might have made more out of them than out of his legitimate profession. I was unaware of the cause of the friendship which existed between the man and the child until the tail end of a story came to my ears while I was behind a screen examining another patient. In low but distinct and tragic tones came, "and I was hard pressed by a whole ship's company of blood-thirsty Chinese pirates off a junk, and they was nearly overcoming me, and my left arm was slashed and useless and bleeding dreadful, and only my right one workin', and my three mates, they stood behind, sharpenin' swords and knives, and they handed them to me as the others were blunted or broken, and I drove them all away an' killed most, an' here I am in consequence, lying beside you to tell you all about it."

It was then that I learned from the ward sister about his prowess as a story teller and of the readiness with which he depicted yarns of the imagination. I never saw the man himself smile or look other than Bardolphian.

THE CHAPEL.

The Hospital Chapel which has seating accommodation for about 100 was provided for in the original plans for the building. It is situated centrally on the first floor transverse corridor which connects the male and female ward blocks.

In the days of the old Southern and Toxteth Hospital the Parish Church of St. Barnabas at the bottom of Parliament Street was very close at hand. It was opened on July 18th, 1841, just six months before the original hospital was opened

and it ministered to the wants of the staff and the patients until 1872. The incumbents of this church acted as chaplains to the Hospital (old and new) until 1894 when the church was pulled down. From the time of the opening of the present building until well on in the nineties it was part of the function of the house surgeon on duty to read evening prayers in the Chapel for the nursing and other members of the resident administrative staff. It was sometimes difficult for young residents to recite the prayers especially if, as often happened, they belonged to communions other than the Episcopal Church. This, together with the fact that occasionally a Roman Catholic resident held office, led to the termination of the practice.

The Chapel has been greatly improved by the gifts of a number of memorial stained glass windows replacing some of the original plain diamond panes.

In 1905 the late Mr. William Moss and his sisters inserted three such windows over the altar and five smaller ones on each side of it in memory of their mother Mary J. Moss, who died on October 18th, 1905.

The Florence Nightingale window was provided out of the chapel fund "In Memory of those who lived and died in the ministry of nursing."

The St. Cecilia window (after Sir Edward Burne Jones), was presented by the late President, Mr. A. A. Paton, "In Memory of all those who have brought music into the lives of others." This window was dedicated to the memory of Percy Edward Rimmer in token of his devotion to the general interests of the Hospital for a period of fifteen years.

Another window was erected out of the chapel funds "In Grateful Memory of John Rankin, born February, 1843—died December 23rd, 1928."

In addition to the windows there are a number of mural decorations and in 1933 Dr. David Smart presented an organ to replace an American Organ which had done duty for many years.

THE HOSPITAL CHAPLAINS.

- Rev. T. Nolan, A.M., 1843.
Rev. G. Dover, A.M., 1851.
Rev. D. T. Barry, 1854.
Rev. Wilfred Leveson, 1858.
Rev. C. D. Winslow, M.A., 1873.
Rev. Richard Postance, 1880.
Rev. George Peters, 1894.
Rev. C. O'Connor Fenton, 1908.
Rev. Dr. H. D. Morgan, 1914.
Rev. H. S. Broadbent, 1920.

HOSPITALLERS.

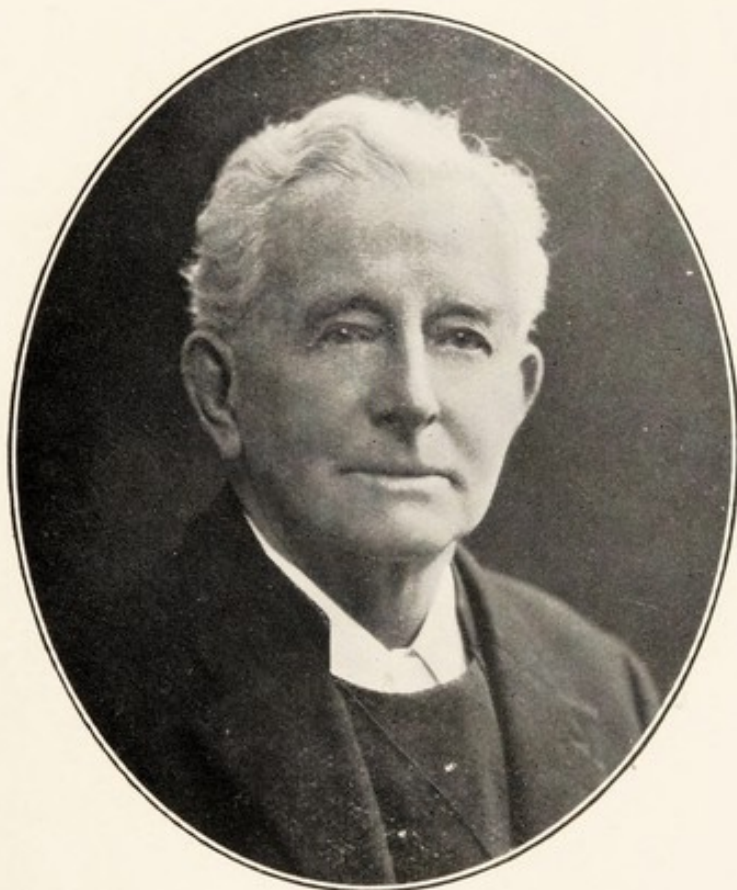
- Ven. Archdeacon Howson, 1925-34; afterwards Hon. Hospitalier.*
Rev. C. T. Weston, 1934.

THE DISPENSARY.

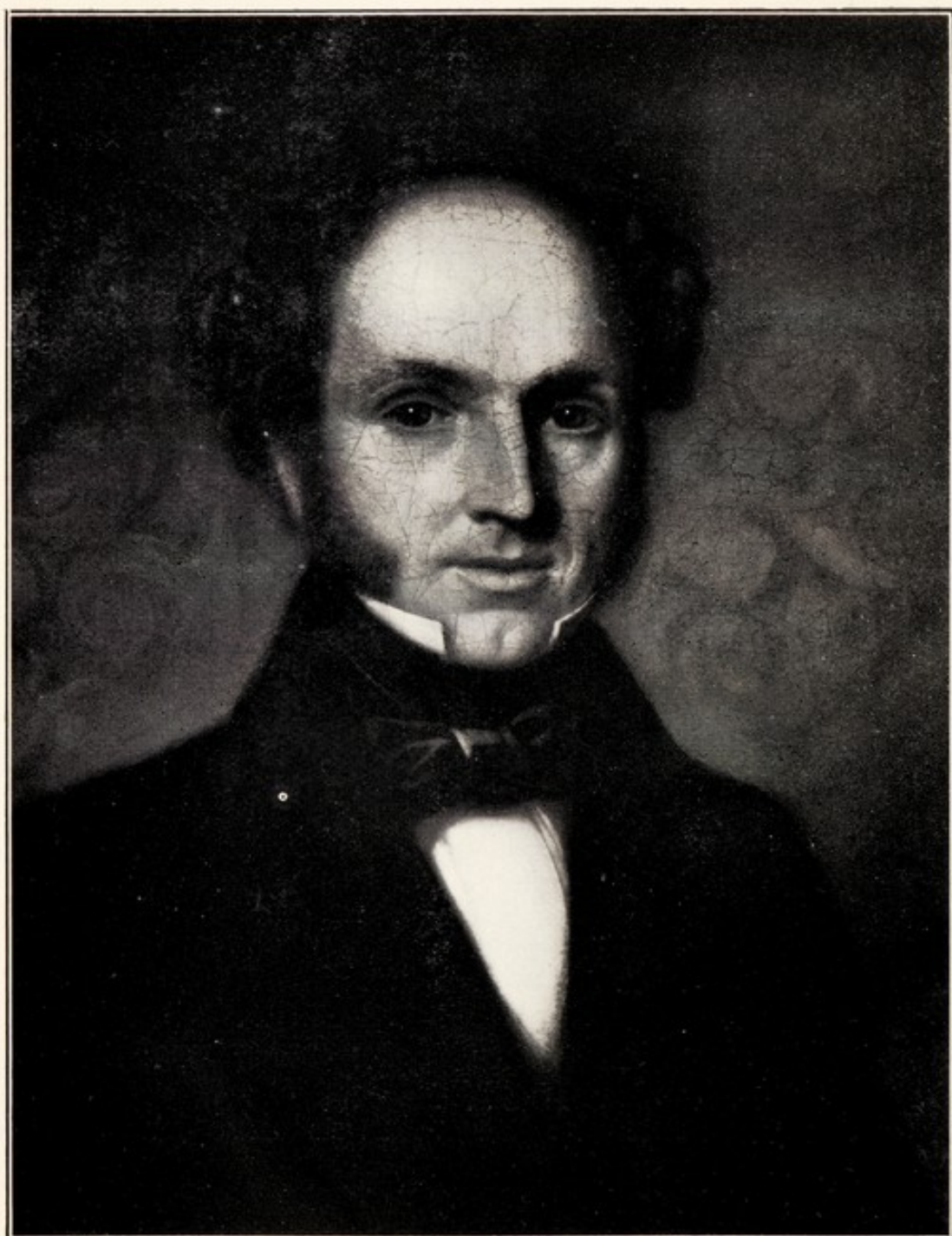
The original plans of the Hospital provided for a very large Dispensary Department in which the medicines, both for the In and Out Patients, were prepared until 1910, when a separate Dispensary was constructed in the new Out-Patient buildings. The original Dispensary has since then been gradually encroached upon by the repeated extensions of the X-Ray Department and, in 1931, the most recent of these entirely absorbed what remained of it. The central indoor Dispensary was then removed to specially built and modernly equipped accommodation connected with the south ground floor corridor. The Dispensary in the Out-patient buildings is a very busy one owing to the large number of Out-patients receiving treatment at the various Clinics. They are both under the direction of a full time Dispenser.

Among those who have been long associated with this branch of work Mr. Samuel Thomas Sugden's name should be

**Vide* biographical note under John Wakefield Cropper.



VENERABLE ARCHDEACON HOWSON.
HOSPITALER, 1925-1934;
BECAME HONORARY HOSPITALER ON HIS RETIREMENT.



JOHN LONSDALE MINSHULL.

A FOUNDER OF THE HOSPITAL.

HON. SURGEON, 1842-1857.

HON. CONSULTING SURGEON, 1857-1882.

(From an Oil Painting in the Hospital).

mentioned. He was appointed Dispenser in 1883 and retired on the completion of 50 years' service in 1933, when he received a presentation from the Committee in recognition of his long services. He taught practical pharmacy to many generations of students in the days when they studied that subject in the Hospital Dispensaries and received Certificates of practical instruction for examination purposes.

THE SOCIAL ASPECTS OF HOSPITAL LIFE.

There is one more aspect of the Hospital concerning which I venture to say a few words in concluding this narrative. I refer to the influences it has exerted on those who have worked within its walls. Quite recently a distinguished Surgeon, writing to the author, recalled the happy days spent in the hospital when he was a Resident in 1902. This kind of sentiment has been expressed many times by those who have been associated with it during the last half century. It applies not only to the Honorary and Resident medical and surgical staffs, but also to the Nurses and to the domestics in every department. This is greatly due to the fact that a kind of "home life" environment characterises the atmosphere of its activities. This is partly the result of the policy of the Committees, who have done everything to encourage home-like conditions for those who live in the Hospital. The nurses and resident staff, for instance, have occasional dances in the winter, and the nurses have excursions in the summer—made possible by the generosity of the late Mr. John Rankin. For the recreation of the nurses, in addition to the tennis court within the precincts of the Hospital, there is another well made court attached to the Nurses' Hostel in Upper Parliament Street. They have table tennis and other games. Recently a sports club has been instituted, which will cover many activities, embodying among others dramatic and entertainment sections.

At Christmas time no member of the staff, down to the humblest scrubber, is omitted from a personal greeting which reminds them that they are members of a large household. It is this spirit that contributes to the happiness of all concerned,

a spirit of fellowship which exerts its influence in every direction. It is extended to the patients through the kindly attitude of the doctors and nurses who make them feel that they are not merely "cases" but human beings needing personal sympathy and care. This friendly spirit it is that has made the Hospital popular among the people of the neighbourhood—and further afield—who regard it as a refuge when they are overtaken by sickness or suffering.

Finally, it is to the Hospital as an "Alma Mater" that thanks are due. The friendships which have been started within its walls have, in many cases, remained when direct associations with the Hospital have been long discontinued. Distance has separated many of the old Students, Residents and Nurses whose friendships began in the Hospital, but it can never destroy the feelings of gratitude and loyalty that the Hospital exerts over those who work, or have worked, within its buildings, nor the bond which draws together those who have, under its ægis, achieved honour at home and abroad, in mutual fellowship and service for mankind.

THE APPEAL COMMITTEE.

At the end of February, 1932, the Hospital bankers directed the attention of the Committee to the large overdraft of £36,732 14s. 10d., which had accumulated. To reduce this, the Committee was obliged to sell the Free Securities of the Hospital at disastrously low prices. In order that the Hospital might be saved and maintained, the Committee launched an Appeal which was officially inaugurated by the Lord Mayor at a ceremony on the Liverpool Exchange Flags on September 28th, 1932.

This Appeal was initiated under the Chairmanship of Mr. T. R. W. Armour with a very active Committee, which was decentralised into a number of Sectional Committees, each of which directed its activities to some special variety of classified appeals. The Committee instituted the "Southern Savers' Club" which, during the first year of its existence, numbered 3,482 Fellows and Members.

The results of the Appeal were phenomenal and, at the end of 1933, the overdraft at the bank was paid off. All sections of the community rallied with vigour and enthusiasm, and contributed sums ranging from 2d. to £1,000. The General Committee has now appointed a Maintenance Committee, to which most of the members of the Appeal Committee volunteered for service, and it is sincerely hoped that all who have assisted the appeal will continue to give their loyal co-operation and support to keep the Royal Southern Hospital free from debt year by year. In recognition of his services Mr. Armour was appointed a Vice-President of the Hospital in 1934.

BIOGRAPHICAL NOTES
OF
PAST MEMBERS
OF THE
MEDICAL AND SURGICAL STAFFS.
(IN ORDER OF THEIR PERIODS OF APPOINTMENT)

JOHN LONSDALE MINSHULL was born in 1800. He studied medicine at Guys' and St. Thomas' Hospitals, and qualified M.R.C.S. and L.S.A. in 1823. In 1853 he obtained the F.R.C.S.

We read of Minshull that he was a benevolent man who took much interest in charitable institutions, and it was probably this spirit which led to his becoming interested in the workers and poorer people at the south end of the town, and to the efforts which he successfully made to provide the Southern and Toxteth Hospital for their benefit. He was the accredited originator of the hospital, and also one of those who started the School for the Blind in Liverpool. At the beginning of his career he resided in Great George Square, where he developed a large surgical practice, and later on he moved to 24 Abercromby Square. He was the first surgeon appointed to the Southern and Toxteth Hospital in 1842, and resigned in 1857 under the fifteen year rule for period of service, after which he remained Consulting Surgeon until January 22nd, 1882, when he died aged eighty-two years. In addition to his appointment to the Southern and Toxteth Hospital, he was Surgeon to the Dispensaries and Referee to some Insurance Societies. There are very few records concerning his professional writings, but he was one of the earliest members of the Medical Institution.

JAMES PETRIE, L.R.C.S. Edin., 1815, M.D., Ed., 1827, was a contemporary of Mr. Minshull's, and evidently supported him in his plea for the promotion of the south end hospital, to which he was appointed Hon. Surgeon at the same time as his friend. There is not much recorded concerning his professional work in Liverpool, but among his writings is an article concerning the prevention of accidents from inhalation of chloroform, and another referred to the use of the laryngoscope in a case where a penny had been impacted in the larynx for six years. He practised at 13 Upper Parliament Street, and died in 1876, when the Committee of the Hospital expressed "their deep sense of the value of the services rendered to the Institution by one who joined it shortly after its foundation and ever took a lively interest in its success."

JOSEPH CHURTON, M.R.C.S., 1921. There are no records available concerning this surgeon who was also one of the first three to be appointed to the Hospital in 1842. He retired after fifteen years' service and remained on the Consulting Staff until 1860 when he died. An interesting note in the Medical Directory for 1861 states that the annual circular was not returned in that year, and also that Mr. Churton was not registered under the Medical Act of 1857.

Dr. JOHN GRINDROD, M.D. Edin., 1825, was the only Hon. Physician to the Hospital at its beginning in 1842, and he was a Consulting Physician to the Dispensaries and to the Toxteth Park Hospital. He was born on December 16th, 1800, and died in 1856. He lived in St. James' Road and later at Seaforth.

It may seem a remarkable fact that, with the single exception of Alfred Higginson, the writer has personal recollections of every member of the Hon. Staff following the original four Honoraries appointed in 1842. Drs. John Cameron (1848-1906) and William Carter (1870-1912) have already been mentioned in connection with the History of the Hospital, and the succeeding biographical notes of other Honoraries are made in order of their appointments to the Staff.

JOHN NOTTINGHAM, L.R.C.P., 1844, F.R.C.S. Eng., 1846, M.R.C.P., 1854, a very distinguished surgeon of the Hospital from 1856-1877, and on the Consulting Staff until his death in 1895. He came from Yorkshire and was apprenticed to Dr. Wheelhouse (father of Mr. G. C. Wheelhouse), studied at Guy's Hospital and later in Paris under Dupuytren and Velpeau. Dr. Nottingham was a contemporary and friend of Dr. Cameron, who recalled many occasions when they worked together, sometimes in the early hours of the morning, at the Liverpool Infirmary when Nottingham was House Surgeon there in 1837. Like a good many of the old school of practitioners, he began work in the early morning and continued to do this throughout the active period of his professional life. Dr. Nottingham was a very cultured man, having a vast knowledge of literature. He was an accomplished linguist, an omnivorous reader and had an immense library comprising books in most European languages. He also had a museum of surgical instruments of British and foreign makes. The library was arranged and managed by a resident polyglot reader. With the late Mr. J. Penn Harris and other friends he founded the St. Anne's Infirmary, now the East Dispensary. There he studied diseases of the eye and ear, upon which he published several works. He was, in his day and generation, one of Liverpool's most cultured and able surgeons. He did a large general practice (without midwifery) in the then fashionable and wealthy district of Everton, and resided in Roscommon Street, which became practically a slum long before he left it about 1880 to live in his country retreat at Whitchurch, where he died in 1895, in his eighty-fifth year. During the last twenty years of his life he was blind and bronchitic, but his mental clearness was maintained for most of this period.

Writing in 1923, the late Dr. Henry Harvey, who was resident at the Hospital in Dr. Nottingham's day, said of him "It was quite a liberal education in surgery to have known Dr. Nottingham. His surgical luck, if one might use such a phrase, was extraordinary. Surgical cases that came into Hospital during his week always got better however serious the injury or operation." It was evident, too, according to Dr. Harvey

that the consultations of the Staff, before major operations were undertaken, were certainly of use in that Dr. Nottingham's judgment sometimes outweighed the opinions of the others who thought them advisable. He quoted a very striking example, which he himself had witnessed, where the majority of those present had insisted that a serious operation was advisable, whereas Dr. Nottingham emphatically protested that the case was one which would clear up without it and his prognosis was justified by recovery of the patient without surgical interference.

Dr. Nottingham wrote on many subjects, both medical and surgical, among others a treatise on stone in the bladder. He was an authority on Sydenham's writings and quoted them freely.*

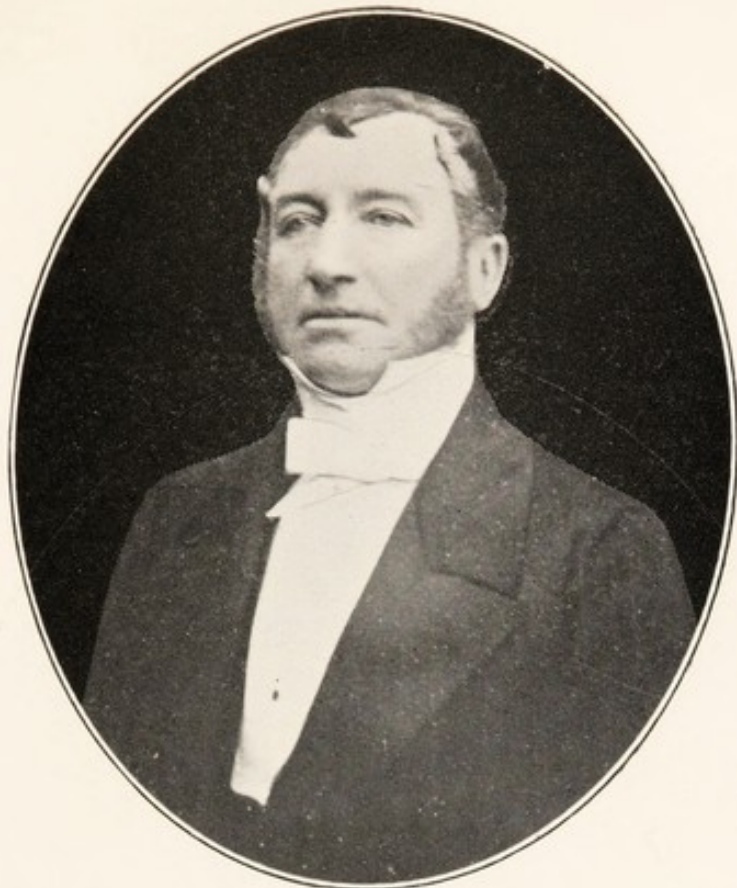
ROBERT HAMILTON was born in 1827. He was the son of Robert Hamilton, M.R.C.S., who was a Liverpool obstetric physician. He qualified M.R.C.S. and L.S.A. in 1849, and F.R.C.S. in 1861. Before joining the Staff of the Southern Hospital in 1856, he had been in practice for some years in Liverpool, and had been Surgeon to the Northern Dispensary and Assistant Surgeon to the Liverpool Eye and Ear Infirmary since 1854. Mr. Hamilton saw the transition from the old methods of surgery to those of Lister and endeavoured to carry out the principles of antisepsis in their initial stages. He lived in the days when the dangers connected with surgical operations and even with wounds of the scalp and face, compound fractures etc., were very apt to be infected with erysipelas and other forms of septic poisoning. This led him to be very conservative and cautious in relation to operative work which, on account of its dangers, was avoided as much as possible. The writer well remembers the anxieties connected with operations in the Hospital in the early '80s, and the occasional cases of erysipelas and septicæmia which were removed into a side ward when they occurred. Mr. Hamilton was well acquainted with matters concerning the public health, and was Chairman of the Health Committee of the City

*Sir Dyce Duckworth's memoirs of the Medical Profession in Liverpool 1913.

Council when the present Fever Hospitals were planned and built. It is recollected that he installed a telephone from his house to the Hospital before the old Telephone Company made this means of communication more generally available. It was regarded as somewhat of a curiosity at a time when the surgeons and physicians were summoned to see cases of urgent accident and illness by messages conveyed by a porter, generally on foot but occasionally in a hansom cab. Mr. Hamilton was a valued member of the active Staff for a period of thirty-two years. At the time of his appointment, the rule of the Hospital had just been altered, exempting those who had been appointed prior to 1856 from the fifteen year rule. There was, therefore, no limit attached to his period of service, but he retired in 1888 and, for twenty years before his death on August 28th, 1914, he lived at Portrush, Co. Antrim. He contributed a good deal to professional literature, including articles connected with diseases of the eye, and with the use of carbolic acid in surgery. His son, Robert Hamilton, Jun., became Honorary Ophthalmic Surgeon in 1908.

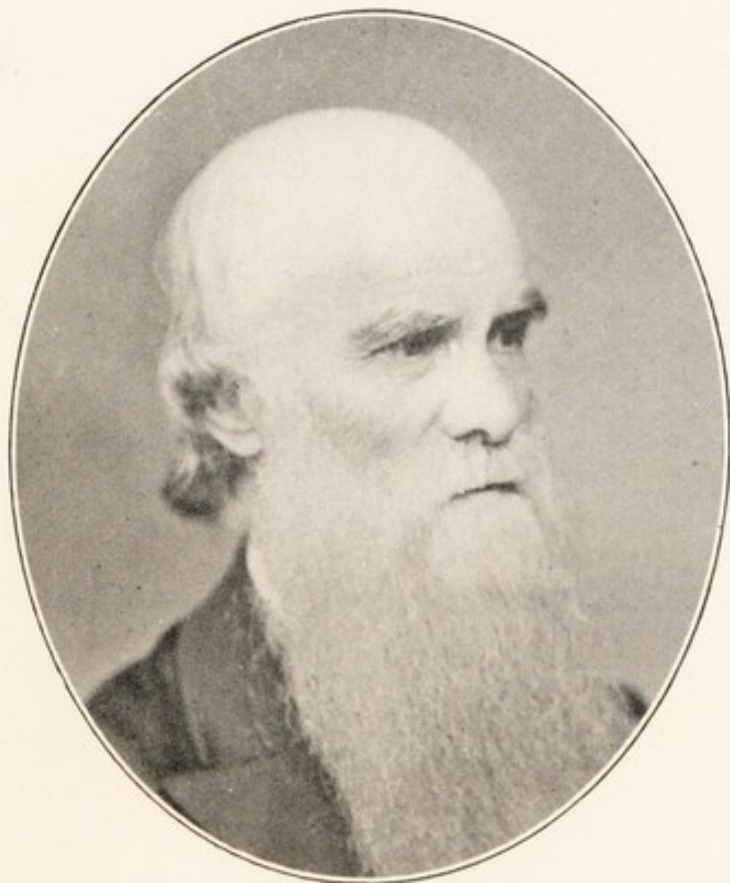
ALFRED HIGGINSON was a distinguished member of Staff from 1857-1867, and afterwards Consulting Surgeon until his death in 1884. His name is well known the world over by the syringe which he invented.

For an account of Mr. Higginson's antecedents, I cannot do better than quote from a letter from his nephew, Dr. Charles Gaskell Higginson, written to me on March 26th, 1924 in which he says "Alfred Higginson was the second son of the Rev. Edward and Sarah Higginson of Heaton Norris, near Stockport. He studied at Dublin and at the Derby Infirmary; qualified M.R.C.S. and L.S.A. (1832), and settled down to private practice in Liverpool. He applied for registration as a medical practitioner in 1847. He was born at Heaton Norris in May, 1808, and died at Tulse Hill, London, in 1884, having retired there in 1878. He was buried in Lower Norwood Cemetery, London. He was long on the Staffs of the Liverpool Southern Hospital and the Liverpool Children's Infirmary. He married Ellen, the youngest daughter of Robert Martineau



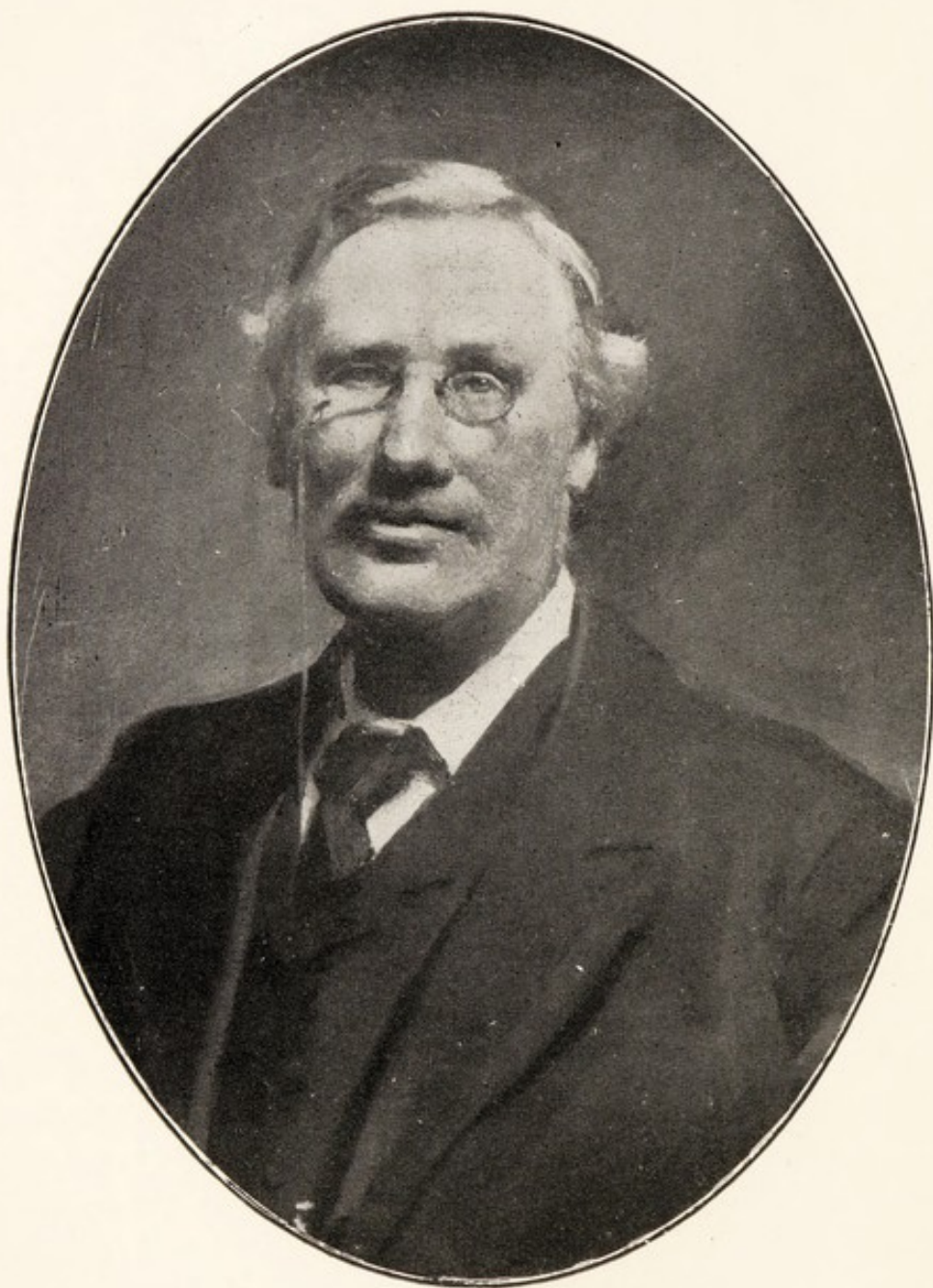
DR. JOHN GRINDROD.

FIRST HON. PHYSICIAN, 1842-1848.
HON. CONSULTING PHYSICIAN, 1848-1856.



MR. ALFRED HIGGINSON.

HON. SURGEON, 1857-1867.
HON. CONSULTING SURGEON, 1867-1884.



DR. WILLIAM ALEXANDER.

HON. SURGEON, 1888-1910.

HON. CONSULTING SURGEON, 1910-1919.

(From the Original Oil Painting by Frank T. Copnall).

who was sister of Harriet and the Rev. James Martineau. . . The enclosed photograph was obviously taken in old age. I have also a painting of him at perhaps the age of 40, with professional "mutton chop" whiskers but otherwise shaven. Both this photograph and Mr. Higginson himself were constantly mistaken for Charles Darwin." . . .

Higginson's personality is well depicted in a communication which I received from the late Dr. Henry Harvey who came across him when he was House Surgeon to the old Hospital in 1871 and afterwards in the new building in 1872. Dr. Harvey's description of Mr. Higginson was as follows, "He is quite a living memory to me and I knew him well if not intimately. When I came to be senior House Surgeon at the Royal Southern Hospital, I was much struck by his personality. A man decidedly below the average height, massive overhanging eyebrows, with keen eyesight and still keener insight. Nothing escaped him. He was so like the portraits and busts one has seen of Darwin that I fancy the one might have easily impersonated the other. This resemblance had, I understood, been brought to Darwin's notice and he had recognised the truth of the marvellous resemblance. The type of mind was very similar also. I think the word "meticulous" in all things best sums up Higginson. He was absolutely thorough, going into the minute details of every case and of everything on which he was called upon to form or base an opinion. As one of his colleagues expressed it to me "he had a reason for even the minutest quantity of what he had put into a prescription." He was one of the Hon. Consulting Surgeons to the Royal Southern Hospital at the time I was transferred to it from the old Hospital in 1872. I do not think he ever once missed attending both consultation and operation when he was summoned, and it was at that time the rule to send out a summons to the whole Staff, including the Hon. Consulting Staff for every major or likely-to-be major operation. He was extremely critical and could be very witty not to say sarcastic." . . . "Higginson did not quite appreciate, at its full value, Lister's newly introduced methods. We were then in the carbolic spray stage of development of the Listerian

revolution in surgery. I, fresh from Edinburgh, was in charge of the spray part of the performance. Suddenly I heard Higginson's quiet accents, "Gentlemen, we seem to be doing this operation through a Scotch mist." Higginson was no boaster. He never, if it could be avoided, mentioned the syringe that he had invented, an instrument practically unknown outside Liverpool at that time. Only once did I hear him say, "The syringe which is associated with my name." He never received a penny for his invention, the use of which quickly became general throughout England. . . .

The celebrated syringe invented by Higginson was cylindrical in shape and he described it as an "elastic barrel." Quoting Dr. Dan McKenzie's words from a paper on "Alfred Higginson and his Syringe, with a side glance at the Clyster"*

"A further point of interest in Higginson's medical life is that in 1857 he reported in the 'Liverpool Medico-Chirurgical Journal' seven cases of blood-transfusion, the blood being propelled through a syringe valved like his enema syringe; an early example of vein to vein transfusion. Further instances of his ingenuity are manifested in an ether inhaler, a stomach pump and an enema syringe without valves or stopcocks."

I heard from Dr. Harvey that he had invented other very interesting and beautifully constructed scientific, astronomical and horological instruments for demonstration or teaching purposes. From what has been said, Alfred Higginson may certainly be regarded as one of the distinguished members of the staff, one indeed whose name in connection with his invention is universally known.

THOMAS GULSTON WOLLASTON, 1867-1877, M.D., St. And., 1861, and in the same year M.R.C.S. and L.S.A. England. He was Prosector of Anatomy for some time at the Royal College of Surgeons. From 1863-1867, he was House Surgeon at the Southern Hospital and was almost immediately afterwards appointed Hon. Surgeon. He was the author of several valuable papers which were mainly contributed to the "Liverpool Medical and Surgical Reports" about 1869 and to

*Proc. of Roy. Soc. of Med., February 3rd, 1932.

the "British Medical Journal" in later years. He retired in 1877, in order to have more time for his professional practice.

WILLIAM CARTER, 1870-1907. As an addendum to what has already been said concerning Dr. William Carter, it should be recorded that he was prominently associated with many of the professional and social organisations connected with the city of Liverpool. He was Professor of Materia Medica and Therapeutics at the University and, prior to the formation of the University, was Lecturer on the same subjects in the old Royal Infirmary School of Medicine, which constituted practically the ancestor of the University. He was Chairman of the Professional Committee of the Liverpool School of Tropical Diseases and was awarded the Mary Kingsley Medal of the school in 1910. He was also Chairman of the Liverpool Cancer Research Committee; Lecturer on Clinical Medicine at the University; Consulting Physician to the Hospital for Epileptics at Maghull, to the Eye and Ear Infirmary, and to the Liverpool Hospital for Skin Diseases. During his career he was President of the Liverpool Medical Institution, of the Liverpool Literary and Philosophical Society, and other learned bodies. He was Examiner in Materia at the Royal College of Physicians of London, and in 1888 delivered the Bradshaw lecture at the Royal College of Physicians. After retirement from Liverpool he became member of Council of the University of North Wales. Dr. Carter was a Justice of the Peace, and he worked unceasingly as a temperance reformer; in this connection he did much work on the licensing bench. He was a consistent supporter of, and worker for, the Liberal cause, both in Liverpool and North Wales, where he had a country residence. He wrote numerous papers on medical and social subjects, and was a munificent donor to many medical and professional funds connected with the University and the Royal Southern Hospital, and to a large number of philanthropic institutions.

FAREWELL DINNER TO Dr. CARTER.

1908.

Some estimate of the influences which Dr. Carter brought to bear upon the city and of his character was well brought out in a farewell dinner given to him on January 27th 1908, just before he left Liverpool, on which occasion he was presented with his portrait painted by Mr. Copnall. His old friend Dr. Richard Caton, then Lord Mayor of Liverpool, was in the Chair and the large attendance was representative of Liverpool's leading citizens.

Dr. Carter was described as one of the most eminent men in the Medical Profession, greatly beloved by the people and by his professional brethren and his retirement was universally regretted.

It is impossible to recite the speeches which were made on this occasion in their entirety and only the salient points referred to by those who proposed the various toasts are here mentioned, but Dr. Carter's own speech is recorded in full on account of its interesting references to his own history, especially in its relationship to the Royal Southern Hospital.

MR. WILLIAM CROSFIELD, proposing "The Royal Southern Hospital and Tropical School" said that he was unwilling to give way to anybody in his interest and admiration for the character of the guest of that evening. The history of the Royal Southern Hospital, dating from 1839, was really an epitome of the history of Liverpool, and the names of gentlemen who had been identified with it throughout its career included some of the greatest names in Liverpool.

The Hospital had a splendid record of work and would always be identified with the research which had brought about so much that was beneficial in tropical countries. The promoters and workers in connection with it had the privilege of being identified with a practice which had done more in that direction than anything else. The School had accomplished valuable work in the direction of making tropical climes healthier.

MR. W. G. KILLICK, responding on behalf of the Royal Southern Hospital, paid high tribute to the labours of its President, Mr. William Adamson, and expressed the Committee's regret at the loss of Dr. Carter. He complained of the lack of public support of hospitals and regretted that the Royal Southern Hospital should have to look to the generosity of a few good friends for help in its financial difficulties when so many citizens subscribed nothing at all. The hospital should be self supporting, but was actually heavily in debt.

SIR ALFRED JONES, responding on behalf of The Tropical School, said that they were there to do honour to a man to whom Liverpool was very much indebted and the debt of the Tropical School to Professor Carter could not be greater. Liverpool people would miss him and could not forget his devotion to humanity.

The Liverpool Tropical School was one of the greatest instances of what might be done by progress. The School started at a meeting of the Royal Southern Hospital and it had set the world studying tropical diseases and medicine. Liverpool had spent £80,000 in that investment and had never made a better one. It had saved thousands of people and had brought the death rate in Africa down from 30% to 2%. That was marvellous and would be still more so.

Its work had enabled Europeans to live in Africa in safety and enabled that country to get a better class of Europeans. It protected the native from disease and his health was one of the British Empire's principal assets. The School was investigating sleeping sickness with satisfactory results.

In conclusion Sir Alfred said that although Dr. Carter was going away they would not accept his resignation and they hoped that the Doctor's efforts on behalf of humanity would not be relaxed.

THE LORD MAYOR (Dr. Richard Caton) gave "Dr. Carter, our Guest" and said that he approached the task of offering that toast with a good deal of personal feeling since, for about forty years Dr. Carter had been his dear friend. His departure

was a matter of the deepest regret, only modified by the hope that he would very frequently revisit the city.

Before coming to Liverpool Dr. Carter had not only high degrees in Medicine but was also a graduate of law and science. His professional brethren learned to esteem him and his great ability. They owed him a very great deal for his labours in connection with the Medical School. He had worked for it, in its various stages over a period of forty years and was one of those who had endeavoured to mould and to direct its course so that they might bring up their young medical students wisely and well, and so that the School should develop into a great University, as it had.

Referring to Dr. Carter's connection with the Royal Southern Hospital he believed that this city had never had a more devoted hospital physician than the Royal Southern had in Dr. Carter. The work he had done during that long series of years was a record of which any man and any city might be proud.

As a teacher Dr. Carter had earned their deepest gratitude, both in the University in its various stages and in the hospital. One could not forget too, what his social influence had been in Liverpool. He had always been on the side of right and of social purity, and had striven against the national and civic sin of drunkenness. His earnestness as a temperance advocate would always command the respect of all who loved their city and desired to see it great, prosperous and good.

They would remember his association with cancer research and his work in connection with the Tropical School and how sincere, earnest and unremitting his labours had been in carrying out this latter. There were not many people who would know how very generous Dr. Carter had been in his dealings with the poor, needy and sick. It was only natural that they should feel sore at heart that such a man was leaving them and that they should wish to send him away with "God speed" though with bitter regrets.

THE BISHOP OF LIVERPOOL (Dr. Chavasse) voiced the opinion of the general public outside the medical profession regarding their friend Dr. Carter. They all sympathised most deeply in the mingled feelings with which he must regard his resignation and his leaving Liverpool. His patients loved him as a man and honoured him as a physician and there was nothing but the deepest regret throughout the city at the thought of losing Dr. Carter. Liverpool was not only losing a good doctor but, what they felt more, a good man—one who had been a distinct moral force, and the moral force of Liverpool would be weaker on the day Dr. Carter left them.

He left Liverpool a more sober city than he found it and it was due to his brave and persistent outspoken words, that in no small degree, the advance in temperance had been made. The people of Liverpool wished him every blessing in his retirement and that his last days might be the happiest of his life. Dr. Carter's was a unique personality and it might be said of him what Hamlet said of his father "He was a man; take him for all in all, we shall not look upon his like again."

PROFESSOR T. R. GLYNN, speaking on behalf of the Medical School of the University said it was only fitting that Dr. Carter's services to the Medical School and to the Royal Infirmary should be referred to.

It was as Professor of Materia Medica that Dr. Carter's name would be associated. All Dr. Carter's colleagues and students could say how well he discharged the duties and with what facility he brought to bear his knowledge and experience upon those duties. Dr. Carter must have been a power for good in the lives of hundreds of students who had passed through the School. He had lived to see many schemes which he had advocated carried out. Dr. Carter was a man respected and esteemed by hosts of friends. They wished him happiness in his future welfare and let them not forget Miss Carter, his future companion.

DR. BICKERTON, (President of the Medical Institution), said the eulogies passed by the Lord Mayor, himself a medical man, and by the Bishop, the distinguished son of a distin-

guished medical man and by Professor Glynn on their guest of that evening must have given rise to feelings of the keenest pleasure to all who knew Dr. Carter. To few was such testimony given: by none was it more merited. Their honoured guest had a distinguished career as a medical student and as a medical man and he now brought his purely professional career to a close.

Physically and intellectually Dr. Carter was the compeer of anyone present that night. The relinquishing of a successful consulting practice, when in full possession of mental and physical powers and when ripe experience rendered him a much sought colleague, was a sacrifice which few men in any rank of life would elect to face, but Dr. Carter was a man of commanding courage. To all questions he brought a highly-trained and balanced mind and for his judgment were brought many affairs of medicine, of conduct, of public health, of social reform and of municipal and of national improvement. Dr. Carter had the courage of his convictions. No one was left in doubt as to what he meant. Action with him meant decision and questions of expediency did not weigh. He took an unflinching stand in the cause of total abstinence and had maintained it in the face of all opposition. Great as was that opposition even to-day, no one but a man who had passed through it could know the full extent of the obloquy and contempt which faced a man at the time when Dr. Carter openly nailed his colours to the mast on that momentous question. His labours in the cause of public health had been no less constant and beneficial. His long connection with the Royal Southern Hospital and with the Liverpool Dispensaries, taken in connection with the other matters, gave him a wide experience such as few medical men possessed, in all matters connected with the health and housing of the masses in Liverpool. That range of observation led him to definite ideas upon reform. His very last act before leaving Liverpool was to draw up a resolution which, largely signed by the medical profession, would be presented to the members of the City Council praying them to maintain the high reputation of the City as a pioneer in sanitary improvements, by insisting that the public slaughter

of animals should be carried on far enough from the city not to prejudice the public health. As a magistrate he did not need instruction upon the lives of the people. He went to the bench well-informed and his decisions, founded upon accurate knowledge, arrived at by a judicial mind and prompted and controlled by a benevolent nature, made his utterances of great value to the community.

He was warmly attached to his church life, the friend of all creeds and ready at public meetings to lift up his voice with fervent speech or to wield the pen of a ready writer when called upon in the interests of charity or the public weal.

His generosity had been great and he had not let his left hand know what his right had given. In his long connection with the Liverpool Medical Institution he had been honoured by every position his medical brethren could bestow. He was, perhaps for quarter of a century, the most regular attendant at its meetings and the files of its "Journal" attested the keen interest he took in its discussions.

DR. WILLIAM ALEXANDER, in supporting the toast, said that the relationship between Dr. Carter and his patients seemed to be rather that of a brother or a father than patient and physician. Dr. Carter always held his opinions very strongly but he was invariably fair and open-minded and open to conviction. Though himself a total abstainer, Dr. Carter recognised the value of alcohol in the treatment of disease and used it whenever it was necessary. The list of lives he was privileged to save and to prolong was a very numerous one. In his retirement they all wished him health and happiness.

The toast was pledged with musical honours.

THE LCDR MAYOR, before calling upon Dr. Carter to reply, asked his acceptance of the portrait that a number of friends had had painted and which they wished to offer him as a very small token of their sincere affection, regard and respect for him. He considered that the portrait represented the strength, the strenuousness and the sincerity of his character, and he hoped that in the seclusion of his new home Dr. Carter would

remember that it bore with it the very kind affection and wishes of very many well-wishers.

DR. CARTER was received with enthusiastic cheers on rising to respond. Addressing the audience as "my dear friends," he assured them that, had he not taken the precaution of writing a few heads down, he was sure he would not have been able to respond to the excessively kind statements made by everyone who had spoken at that gathering. Those who looked upon the impassive face of the individual represented by the portrait before them would never think that he was one of the most emotional of men, and that he was obliged to put on a mask of steel to prevent a display of his emotions. He would not go back to his birth, parentage and education but he would begin with his coming to Liverpool and would supplement a few of those statements which he had found, to his great surprise, in that day's "Daily Post and Mercury." In November of 1866 his old friend and fellow student Edgar Browne, hearing that he was not quite settled in his abode in Dublin, wrote and persuaded him to come to Liverpool. He said "Come and stop for a while and look round and see how you would like it." He came, looked round, took a house and had never left Liverpool except for his holidays. Only a fortnight ago he was described as an Irishman. He was an Englishman, married to an Irish wife, and if any young man who contemplated matrimony ever met a warm-hearted, domesticated Irish girl his advice was—never leave her but make her your wife. His long experience qualified him to speak on that topic with some degree of emphasis. As to the date of his birth, the "Daily Post and Mercury" made him born about 1840. He had looked up the family register—he was born before the registration of births, marriages and deaths came into vogue—and he found, as he had always believed, that he was born on the 29th August, 1836, so that last August he entered upon his seventy-second year of his youth.

He had been associated with the Royal Southern Hospital for over thirty-six years. It was a longish period of service and it might be asked why he remained so long. He would

tell them. It was because he had been treated with uniform kindness and consideration. Every President from George Henry Horsfall to Mr. Adamson and all the officers had always treated him with more than kindness. When he was approached to leave the Southern Hospital and take service in the Royal Infirmary he declined. He would not listen to the proposal. When the time came when, according to rule, his term of service at the Southern Hospital should terminate; that was, when he reached his sixtieth birthday, he sent in his resignation. He was surprised that the Committee refused to accept it and he heard afterwards that Mr. George Holt had proposed a new rule in order, if possible, to retain him. That was why he had remained on the Staff for such a long period of time. He came to Liverpool determined to devote himself to any work that was honest, without any hesitation whatever. Many years ago, when the late Dr. Birkbeck Nevins resigned the lectureship in chemistry at the Liverpool College, Shaw Street, he (Dr. Carter) succeeded him and retained the post for many years. There he made many friends. Some of his students were now white-haired and many were well-known men such as Mr. Austin Taylor and Mr. Justice Pickford. There were a great many others, some had passed away and there were others who were still his friends.

Some time previously, the Liverpool School of Science was established and Dr. Birkenhead, who was a Doctor of Science occupying the Chair in the Royal Infirmary School of Medicine and Chemistry, had conducted it with great ability and success for many years. In one of those terrible epidemics of typhus which were so common in Liverpool in those days, he was swept away, and in 1867 he (Dr. Carter) was asked if he would undertake the duties of the position for a time. He did this and found it very congenial work. He continued, not temporarily, but for a good number of years to do the duty and there he met working-men of Liverpool—intelligent, industrious men who devoted their evenings to scientific pursuit. One was George Gordon, a Scottish block maker, who was distinguished for the intensity with which he pursued his studies. He earned his living by the sweat of his brow and

pursued his scientific studies far into the night. Dr. Carter then related how, some years later, George Gordon, leaving his trade, was appointed, chiefly on his recommendation, to be curator of the Fitzwilliam Museum, Cambridge, and how he subsequently assisted Lord Rayleigh in research work. The strongest expressions of gratitude were paid by Lord Rayleigh to his work. Some months ago poor George Gordon died. It touched him beyond measure. He got a letter from Gordon's niece stating that it was her uncle's last wish that he (Dr. Carter) should get his books and scientific instruments for the kindness he had received. They came so recently that they had only been unpacked "since we went down to Deganwy." Dr. Carter then explained how it was that he had held the post of Medical Officer of Health to the West Derby Union for so many years. It was because of the pressure brought upon him to remain, the kindness he received and the cordial consideration always shown him.

Referring to public controversies, Dr. Carter spoke of the Contagious Diseases Act, as it was called, which degraded the manhood and womanhood of the country. He rose in indignation against it. Dr. Birkbeck Nevins, whose name he could never mention without reverence, came heartily into concurrence with him and never did he relinquish his devotion to the cause. He travelled half over Europe with reference to the matter and was largely instrumental in bringing about the abrogation of the Act in 1886.

Another public controversy that came on shortly afterwards was the Compulsory Notification of Infectious Diseases Act. He never had any objections to the principle but objected to being obliged, under penalty of imprisonment, to notify such at once without any discretion whatever.

There was one matter upon which he thought he could congratulate Liverpool and himself. About this time Dr. Hope, thinking that he was losing time and that his energies might be more advantageously employed in another sphere, wanted to leave Liverpool. Dr. Hope came to him and told him about it. He used every persuasion possible and induced him to stay. He knew his fine qualities and how great a loss it would

be if he were to go away. The improvement that had come over Liverpool since then had been due to Dr. Hope. Dr. Carter said that it was with feelings of intense regret which he could hardly express, that he left the city. He felt, however, that he ought to leave. A friend of his there that night told him some time ago that, when he had mentioned to a medical man that he was about to leave, the reply was—"Carter going to retire. Why! He doesn't golf, he doesn't smoke and he doesn't drink. Whatever will he do?" That friend would have felt a little more filled with regret for him, indeed he would have felt the profoundest pity, if he had only known that he (Carter) had never been in a theatre in his life. He was not saying that from any spirit of compliment; it might be a great misfortune from which, however, his children did not suffer. He had never been to a theatre, he had never seen a race and knew as much about cards as an English ploughman about Greek. As a matter of fact he was brought up in a Puritan home. Many people thought that a home of that description was a very dismal place, but he (Dr. Carter) could say it was the happiest of homes that any man could have been brought up in. He felt the most heartfelt gratitude towards all his kind friends and his loyal comrades at the Royal Southern Hospital; never were men more loyal to each other than the men connected with the hospital and this applied also to his friends on the bench with whom he had often had to fight in one direction, when the general body of magistrates fought in another. He left all his friends with the profoundest feeling of thankfulness to Almighty God for having brought him here and kept him here. He was doubly blest. He took with him faithful servants, one of whom had been in his service thirty years, therefore he would not have strange faces around him. He would also have round him some warm-hearted Welsh friends amongst whom he had for eighteen consecutive years spent his holidays and who had arranged a banquet in his honour on St. David's Day, which they were careful to tell him was neither sectarian nor political. He thanked them all from his heart.

Dr. WILLIAM LITTLE qualified M.R.C.S. Eng., L.R.C.P., L.M. and L.S.A. in 1868 and afterwards added the M.D. (Erlangen) in 1871. He was an Associate of King's College, London, and was evidently a capable man and interested in his profession. He was House Surgeon to the Southern and Toxteth Hospital from 1869 to 1871 and after resigning this post became Senior Hon. Surgeon to the Liverpool South Dispensary in Parliament Street and Surgeon Accoucheur to the Toxteth Park Lying-in Charity. This was probably soon after starting a general practice at 478 Park Road, then a residential district quite near to the Dingle and its fine houses. The South Dispensary at that time was one of three (North, South, and East) which were among Liverpool's oldest medical charities (founded 1778). They were staffed by Resident Medical Officers, who visited patients at their homes and an Hon. Staff having out-patient days, who only visited home patients when requested by the resident officers. Dr. Little reported several cases of interest in the "Medical Times and Gazette" and in the "Liverpool Medical and Surgical Reports" when he was a House Surgeon. In 1878 he was appointed Hon. Surgeon to the Royal Southern Hospital and I remember him from 1879 onwards as a somewhat lean, wiry looking man who was by no means a gentle surgeon. He was one of the transition types, having a good technical knowledge of operative work, but his results were perhaps indifferent because he more or less played with antiseptics and evidently had no very strong belief in them.

Dr. WILLIAM WILLIAMS was M.D., M.R.C.S., M.R.C.P. when he was House Surgeon to the Royal Southern Hospital, 1874-1875, and in 1878 he was appointed Hon. Physician. He does not appear to have done any general practice, probably because he had independent means. Professionally, he was a very sound and interesting man, having very definite and original views concerning the treatment of typhoid fever and gastric ulcers, both of which were very prevalent in the '70's and '80's. There were always cases of them in the wards. He held that, since food constituted an

irritant in such cases, it was best to starve the patients and his maximum diet amounted to one or rarely two pints of milk in 24 hours. His results were quite good and contrasted favourably at all events with those of his senior colleague, Dr. Cameron, who "fed his fevers." He considered that tight lacing, then the vogue, had much to do with the causation of Gastric Ulcer and he wrote a paper on the subject in the Royal Southern Hospital Reports which were published in 1902 and 1903.

Dr. Williams was a great fisherman and was frequently away for periods during the fishing season. In the transverse corridor on the upper floor of the Hospital, there were two large all glass tank aquaria, on handsome stands and they were supplied with running water. In them were not only the conventional gold fish, but specimens of many others such as trout, grayling, etc., the fruits of the doctor's sport. On occasions, a small pike was introduced and he was very interested in studying the habits of this cannibal from whose depredations the other unfortunate fish suffered considerably. On his professional visits to the Hospital the doctor frequently inspected the tanks, sometimes before going to the wards, sometimes afterwards. This habit was of course well known to his Residents, who soon learned that they could wean him away from the wards by conducting him to them by way of the aquaria in which he was apt to become so engrossed as to forget all about the patients and depart without visiting them, thereby enabling the Residents to secure an off-afternoon. Start a conversation with Dr. Williams on fish and fishing and you immediately secured his undivided attention. Williams was a bachelor and not particularly interested in children. He seldom took any interest in the children of his professional brethren in Rodney Street, so that, when on one occasion he remarked to a mutual friend, that Macalister's little girl was very pretty and had beautiful hair, I felt surprisedly elated. I took occasion to tell him one day that I had heard about his comment and then discovered that the "beautiful, fair, and glinting hair" had attracted him only because he thought it would make splendid salmon flies. Hence his interest in the

child. There are many stories told about this eccentric colleague. He seldom wore a silk hat, then essential to the raiment of the physician, but carried it in his hand. Gloves too, he despised even in the coldest weather and once reproved me for wearing them, but I did not know that in other respects he preferred to be lightly clad until I heard from one of his friends an account of a holiday which they had taken together, when circumstances had arisen requiring them to occupy a bedroom containing two single beds. The friend told me that when Williams unpacked his portmanteau, he took from it a length of rope, one end of which he attached to the top bed rail, and the other to the bottom one of his bed and, when he retired, he made a kind of tent of the bedclothes by hanging them over the rope. By this means, he insured that there was no contact between the bedclothes and himself. I do not know whether he always slept under this rather cold sort of covering.

Williams was undoubtedly a clever man, and knew his professional work thoroughly. Furthermore, he was a keen observer of clinical signs and symptoms. A glance at the patient was sometimes sufficient to enable him to form the basis of a diagnosis; for instance, I saw him once spot a case of tetanus by observing that the patient had a hardly appreciable risus sardonicus. He retired from the Hospital in 1903 and devoted himself to the cultivation of a lovely garden and to his beloved fishing, until he died in 1931. By his colleagues he was regarded as a beloved oddity.

THOMAS D. RANSFORD was the son of an officer in the Army, and was born at Cawnpore in 1850. He never returned to India after being sent home to be educated in England when quite a young child. He studied medicine at Guys' Hospital and took his F.R.C.S. in 1876. Ransford succeeded Dr. Wollaston on the surgical staff in 1877. He was the first of the Hon. Surgeons to endeavour to carry out the Listerian principles in their minutest details, and succeeded to a great extent in cases not requiring the assistance of his colleagues. In operative work, the rule requiring consultations of the

staff greatly hampered the procedure of the Junior Hon. Surgeon, as he then was, because they acted in the capacity of assistants and it became practically impossible to carry out the details laid down by Lister when a number of men, some of whom were not enthusiastic as to adherence to the principles, interposed themselves between the spray and the patient and, often enough, did not adequately disinfect their hands. Furthermore there were many flaws in technique, which were unrecognised by all surgeons, for instance, the clothes of the operators and assistants were very apt to be carriers of trouble. His results, on the whole, were satisfactory, and he certainly was a sound and careful surgeon. In common with some of his colleagues, Ransford had a good class general practice and was much interested in medical as well as surgical work. I heard a discussion between him and a friend concerning (what they both regarded as a probability) the extinction of rheumatic fever and consequently a great diminution in the number of cases of heart disease, as a result of the introduction of the salicylates. This hope, like many of its kind, was doomed to disappointment for, although the course of a case of rheumatic fever to-day is very different from that of the pre-salicylate days, when it was known as a "six weeks' fever," the results of the heart infections have not been correspondingly abated.

Ransford retired from the Hospital in 1881, and went to Bath, where he became a trusted surgeon on the Staff of the Bath United Hospital. He was a robust type of man, of large physique, and very active in his habits. It was quite a usual thing for him to walk several miles, on to the heights surrounding Bath, before his breakfast, thereafter commencing a strenuous day's work. His practice involved much driving and his morning exercise was taken to counteract the effects of this sedentary method of locomotion. He died at Limpley Stoke on January 15th, 1915.

FRANK THOMAS PAUL, F.R.C.S., came to the Royal Southern Hospital in 1881 on the retirement of Thomas Ransford. He was one of the earlier advanced surgeons who,

in conjunction with William Alexander, laid the foundations of the real era of surgical advancement in the Hospital. Mr. Paul was not only a skilful operator whose technique was highly educative but his work was founded on his knowledge of surgical pathology and on his original observations concerning it. Then again, his experiences of the results of operations, both immediate and remote, placed him in a position of authority as to the wisdom of procedure and on this account his consultative work was peculiarly valuable and widely availed of. He retired on appointment to the Royal Infirmary in 1889.

In the days of his activity he was (and still is) regarded as an eminent authority whose writings are among the classics of surgery. His "Selected Papers, Surgical and Pathological" were reproduced and presented to him by the surgeons of Liverpool in August, 1925, as a mark of admiration for his work on the occasion of his seventy-fifth birthday, which coincided with the celebration of the fiftieth year of his membership of the Liverpool Medical Institution.

Mr. Paul was a student of Guy's Hospital where he was an exhibitor in 1870 and 1872. He is Emeritus Professor of Medical Jurisprudence in the University of Liverpool and was President of the Medical Institution in 1906-07. The University conferred on him the hon. degrees of Ch.M. in 1907 and the D.Sc. in 1912.

HENRY GREENWOOD RAWDON was Honorary Surgeon to the Hospital from 1887-97 and afterwards on the Consulting Staff until his death in December, 1900, aged sixty-four. He had previously been honorary surgeon to the Children's Infirmary where he had acquired a great reputation for his skill in the performance of plastic operations for the relief of congenital deficiencies. In cases of hare lip and cleft palate he was peculiarly adept. He had the art of leaving almost imperceptible residual cicatrices. He continued this work in the Royal Southern Hospital and, in addition, proved his ability as a general surgeon. In his day abdominal surgery was approached with some misgiving but he tackled very

difficult cases with great success. One case is particularly remembered where the removal of a growth involved excision of part of the stomach. The man made an excellent recovery and lived for some years during which his health and capacity for work remained good.

Rawdon was a cultured gentleman, perhaps a little fussy in his manner but of great courtesy. He was interested in children and their diseases and was for some time Honorary Medical Officer to the Bluecoat Hospital when it was in the old building in School Lane. He seldom took part in medical or surgical debates at the Societies and contributed little to medical literature, but his practical knowledge and experience were recognised and appreciated by his friends and colleagues.

He belonged to an old Yorkshire family whose members served with distinction in the Parliamentary army during the Civil War. His wife was connected with the family of the great Sir Robert Christison,* who will be remembered in relation to the evidence which he gave in the Madelaine Smith case of poisoning with arsenic in 1856.

WILLIAM ALEXANDER, M.D. (R.U.I.), F.R.C.S., was, in his day and generation, well known for his technical ability as a surgeon and as an originator of operative procedures based on a sound knowledge of anatomy and physiology. He was awarded the Jacksonian Prize in 1881 on the Pathology and Surgical Treatment of Diseases of the Hip Joint. In 1833 he won the Sir Astley Cooper Prize at Guy's Hospital for an Essay on "The Pathology and Pathological Relations of Chronic Rheumatic Arthritis." Examples of his original practical work are found in his operation for shortening the round ligaments for the correction of uterine displacement, which he initiated in 1881 and in his attempt to relieve certain cases of epilepsy by ligature of the cervical artery and later, in 1899, by removal of the superior sympathetic ganglia. The results of the uterine operations were satisfactory and this treatment is still practised; those in the

*Physician in Scotland to Queen Victoria 1848.

epileptic cases did not prove satisfactory and the operation was abandoned.

Dr. Alexander was much interested in epilepsy and was founder of the epileptic colony at Maghull, where much was done to improve the condition of the sufferers.

It has already been explained that he was one of the last of the old school of general practitioner surgeons and this accounted for observations concerning the actions of drugs in which he was well versed. At a very early period he concluded that the routine use of potassium bromide in epilepsy was inadvisable and often harmful and he limited its employment considerably.

Alexander has been spoken of as a "tower of clinical experience" and so he was. This experience was acquired not only from a large general practice but also from his work at the Poor Law Hospital in Brownhill Hill of which he had charge. He was an extraordinary worker both physically and mentally. He paid very early visits to his Poor Law Hospital and might be seen any morning walking homewards from it at about 8-30. Then began his day's work and, since at the beginning of his career it included midwifery, it will be realised that he was possessed of a very strong physical make up. This general work was continued for some years after he joined the staff of the Hospital in 1888, but he finally abandoned it and notified the profession by means of a privately printed communication. He had a deservedly high reputation as a gynæcologist and in the hospital combined this work with his general surgery. His women's beds were however largely occupied by gynæcological cases. He was a man of kindly nature and very sympathetic to the sufferings of his patients. On operation days he frequently revisited them at night to assure himself as to their welfare and to see that the dressings (antiseptic) were in order. He lived through the periods of septic and antiseptic treatment and finally emerged into that of aseptic surgery, with leanings nevertheless towards some of the antiseptic practices in which he had learned to place reliance.

Sir ROBERT JONES, Bart., K.B.E., C.B., D.L. (Lancs.), F.R.C.S., Hon. D.Sc., LL.D., Knight of Grace, St. John of Jerusalem and formerly Major General A.M.S. and Director of Orthopædics during the war.

(The following extract was published in the "British Medical Journal" on the occasion of Sir Robert Jones' death in January, 1933).

The passing of Sir Robert Jones, who was my friend and colleague for more than half a century, has led to the opening of the book of memory concerning him. Its tablets tell the story of a remarkable life, serenely happy in itself, and radiating that happiness among all with whom he was brought in contact. Although I knew him as a vivacious, curly-haired boy, it was not until we were recently qualified that the intimate friendship began which prompts me to add some personal reminiscences to those which others have recorded concerning his career. When a student, his versatile capabilities were demonstrated at a very early period. He had a knowledge of literature far beyond that of his academic work, and this led to a capacity for debate which became cultivated in a small society, consisting of four students, which met at weekly intervals at the house of his uncle, Mr. H. O. Thomas. Matters medical, it is true, were primarily discussed mainly as a means of revising the week's work, but when these were completed papers were read and debated on literary, political and social questions, concerning which he in particular had very definite opinions. After qualification these four men invited other members of the profession and a number of layman to join them and thus, in 1884, the progenitor of the Liverpool Medical and Literary Society, now approaching its jubilee, became formally constituted.

One of the rules was: "The Society shall exist for the purpose of enabling its members to learn the art of speaking in public," and there is no doubt that this object was, and still is, fulfilled. The membership of this Society has included most of the leading members of the profession in Liverpool, and many eminent in other work. Lord Justice Greer and Mr. Justice Rigby Swift were both on its roll. Sir Robert's library and his

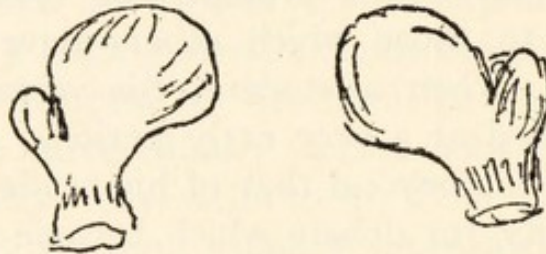
collection of pictures, which were both begun at the period of which I speak, bear testimony to his wide interests in literature and art. I must not conclude my mention of the Society without referring to what were termed the "after-meetings," limited to a few enthusiasts who adjourned to a room in the basement and expended their pent-up physical energy in boxing, concerning which Robert Jones was both an adept and an authority. He had great physical strength, which could be

FROM MR. ROBERT JONES,

22, CL GEORGE SQUARE, LIVERPOOL.

March 2nd 1887.

My Dear Charlie



at 9.30 to-morrow
Saturday.

Bring slippers with you

R. J.

noted when he bent metal splints with his hands or over his knee to adapt them to a limb.

Sir Robert began his career as a general surgeon and, at a very early age, was on the Staff of the Liverpool Stanley Hospital, which he left in 1889 on appointment to the Royal Southern Hospital. It was here that he developed his orthopaedic work to which, from 1905 onwards, he devoted his whole

attention. He enlisted the interest of many workers in the Out-patient Department, and also at his free Sunday morning clinics, to which poor people flocked from far and wide. His reputation as an original thinker and teacher brought surgeons from all over the world to his clinics and operations, which were always attended by large numbers of them. In connection with his out-patient work he adopted the co-operation of the Child Welfare Association, whose workers, after some training, kept an eye on the home conditions and feeding of the children. His interest in cripples and crippling led to a co-operation in the work of Dame Agnes Hunt, who instituted her extraordinary hospital at Baschurch about 1900. At first she brought the patients periodically to see Mr. Jones (as he then was) at the Royal Southern Hospital, to which they were conveyed from the station on trucks after a journey which must have involved a great deal of trouble to the railway servants. This was ended by a reversal of the procedure when Robert Jones made periodic visits to the hospital. In 1918, when the war had ended, he resigned his appointment to the Royal Southern Hospital and devoted much of his attention to the establishment of a national endeavour to deal with the cripple problem, an endeavour which had Dame Agnes Hunt's hospital as its nucleus.

Another great and interesting work with which he was associated was the foundation of the Royal Liverpool Country Hospital for Children at Heswall. It originated between the years 1895 and 1898 in conversations with the writer concerning the difficulties of maintaining continuity of treatment for children suffering from chronic diseases, and materialised in the latter year when wards were opened for a limited number of children as an independent institution in the convalescent home at West Kirby. A building committee, under the Chairmanship of Mr. Andrew Gibson, was immediately appointed and the hospital at Heswall was opened for patients in 1905. It is now, in association with the Liverpool Infirmary for Children, one of the largest children's hospitals in the kingdom. Sir Robert Jones was Hon. Surgeon to it from the time of its

inception. One of the wards bears his name and another that of Lady Jones, in whose memory it was built.

In concluding these recollections, one must refer to Sir Robert's gracious social attributes. At his home he gathered round him men and women representing all kinds of interests. There one met surgeons and physicians of all nationalities, distinguished politicians, authors, judges, lawyers, artists, actors, and literary men of every description, in addition to his immediate friends and intimates. He had a profound love of humanity, and an especial love for the working classes and for their children, to whom he was everlastingly kind. I remember that year by year he sent every child that could be moved from his hospitals to the pantomime, and in many other ways demonstrated the kindness and generosity which were essential features of his character. Sir Robert created a great work which will live in the history of surgery and it, in association with his name, will ever remain the "monument of a vanished mind."

GEORGE PALMERSTON NEWBOLT was the son of a naval officer who, from all accounts, carried the disciplinary conditions of the Service into his domestic life and I gather that the son had come under their influence and had, to a certain extent inherited them. He was a student of St. Bartholemew's Hospital and took the Fellowship of the English College of Surgeons at the early age of twenty-three.

Newbolt came to Liverpool as House Surgeon to the Stanley Hospital in 1887 and later on was appointed surgeon to the Ellesmere Port Hospital of the Manchester Ship Canal, where he worked in conjunction with Sir Robert Jones. He was appointed surgeon to the Stanley Hospital in 1889 and it was there that I made his acquaintance, in 1892, when I joined the staff as Hon. Physician. In 1897 he succeeded Mr. Henry Rawdon as Hon. Surgeon to the Royal Southern Hospital. Here his reputation became established. To all matters pertaining to the welfare of this hospital he gave his time unstintingly and his untiring efforts to promote the efficiency of the Nursing Staff and the furtherance of their comfort can

never be forgotten. The fact that Newbolt was a thoroughly good surgeon became recognised early in his career and the soundness of his judgment was appreciated by those who knew him and his work.

Newbolt was a tall, well-built man of somewhat stately appearance but he had a pallid countenance related to a tendency to rheumatism which had, unfortunately, damaged his heart. This accounted for his taking no active part in sports. He had been a good horseman but had abandoned this form of exercise for the same reason. His rather deliberate habits and dependance on walking by way of exercise were no doubt related to the conservation of his heart. Although he became a busy man he made much less use of his motor car than many of his younger colleagues and very generally walked to and from his nursing homes and his hospitals. Although rather ponderous in appearance and possessed of large hands, he was the gentlest manipulator imaginable and his patients often spoke of his gentle adroitness in the dressing of their wounds and in the handling of children. He was by nature a shy individual, so much so that his reserve might be mistaken for coldness or indifference, but when he did become animated or interested in conversation he was very good company.

One has often heard descriptions of the "strong, silent man," and Newbolt was certainly this type of individual. He was my patient through two serious illnesses, one of them an attack of rheumatism, the other typhoid fever, and when I visited him he rarely spoke. Indeed during the typhoid he lay with his eyes closed and said almost nothing from beginning to end of the illness.

When Newbolt first started in practice he occupied his time while waiting for patients by adding to his experience and, for several years, spent the mornings at Sir Robert Jones' rooms in Nelson Street where he made careful notes of the cases and their progress and frequently helped Sir Robert, then a general surgeon, with operative and other work. On Sundays he also attended the Clinic which Sir Robert held for very many years at Nelson Street. He and Robert Jones were friends and kindred spirits so far as their appetite for

work was concerned. A sketch portrait of Newbolt painted by Copnall, on Sir Robert's commission, had a place in the studio by which name his office was known.

Newbolt was a general surgeon and was very cautious and conservative in the management of his cases. He did not like anybody to share or interfere with the conduct of his cases in any way. He certainly might be regarded as a safe surgeon, judging by the pains he took to safeguard the interests of those under his care. This was well recognised by many members of the profession who looked upon him as their guardian angel when they themselves or their families required surgical help.

One of the characteristics of Newbolt's professional writings was his way of grouping results obtained from the methods of operations which he employed. They were good clinical expositions which did much to establish his reputation as a surgeon whose operative ability was based on very sound principles of procedure.

During the War the condition of his heart precluded his going abroad or the undertaking of strenuous duties in military affairs. He was, however, an *à la suite* officer in the R.A.M.C. and had charge of the officers' hospital at Croxteth Hall and also of two other large military hospitals in the city and his beds at the Royal Southern Hospital which were almost exclusively used for wounded soldiers. He worked incessantly at these institutions and, at the end of the War, was made C.B.E. for his services.

Newbolt died with absolute suddenness on the ninth of March, 1924, just as he was about to leave his house to visit one of his nursing homes. At the time of his death he was President of the Liverpool Medical Institution. Thus passed a man who was a tower of strength to his friends and to his patients and, if any testimony was wanted as to the affection in which he was held by working men and others whom he had treated at the hospital, it was manifested by the crowds of them who attended the funeral or stood outside the church as a token of their appreciation of one who had been a very sound friend to them.

In commemoration of all that he did for the hospital and the nursing staff an appeal was issued and largely subscribed to for the purpose of building the extension to the X-Ray department (opened in 1925), which bears his name.

Mr. McCrae Aitken, who was resident in the Hospital in 1902/3 has summarised his impressions of it and of some members of the staff at his period in so interesting a way that I venture to quote him at some length (from a letter January 14th, 1935).

"I wonder if you ever realised what a wonderful system of education the Southern Hospital provided in those old days! In medicine William Carter rooted to pharmacology; one of the older school already suspect by those of us fresh from the schools of medicine. Yourself a transition between the school to which Carter belonged and the newer school to come, and William Williams who was of no school—a law unto himself."

Dr. Aitken, after speaking of Dr. Williams' comments, concerning the impotence of the physician in the treatment of many diseases, and a statement by him that if such patients recovered it is good nursing which saves them, goes on:—

"Williams could never have been a successful teacher of students, for such people require to be spoon fed. To those of us who were seeking he was a great stimulant for he shook the comfortable foundation from under our feet and made us walk delicately with Agag of old and seek for firm ground on which to stand. You were a priceless team of teachers for young men to work with and under. On the surgical side, Newbolt, who was framing a school of Urological surgery, Robert Jones *sui generis*, and Alexander, that tower of clinical experience, a survivor from the days of septic surgery who lived through the antiseptic era and learned to be aseptic when most men, by reason of age, become hide bound and unresponsive.

Has it ever struck you that your use of tincture of myrrh in certain intestinal disorders of infants was in effect an anticipation of the treatment of cholera by aromatic oils? Of the seven years I spent in residence in hospitals only some

fifteen or eighteen months were at the Royal Southern Hospital, yet when I find myself face to face with a difficulty my mind goes back to the Southern, to search for a clue which may lead to a solution . . . Thinking of you takes my mind to a period which did more than any other . . . to lay the foundation of general principles and practice on which alone a sound specialised practice can be built."

JOHN LLOYD ROBERTS was a man of academic distinction in science, medicine and surgery. He not only held the Doctorate of Medicine of London but was B.A., B.Sc. and B.S. (1st class honours) of the same University, M.R.C.P London and F.R.C.S. Eng. He was a student of Guy's Hospital where he was house physician and resident obstetric assistant after graduation. He was for some time clinical editor of "Guy's Hospital Gazette." With these antecedents it is not surprising that he was elected physician to the Stanley Hospital soon after settling in Liverpool and that this was followed by his appointment to the Royal Southern Hospital in 1903, on the retirement of Dr. William Williams. He soon acquired a reputation as a clinical teacher and attracted many students who often referred to his teaching concerning the methods of reasoning out the differential diagnosis of disease.

Lloyd Roberts was a patriotic Welshman whose literary attainments were recognised when he was chaired as a Bard at a National Eisteddfod. His Bardic name was Maenan. During his student career in the eighties he played association football for Guy's Hospital. About 1908 he joined the Freemasons and in 1912 became Master of the Cecil Lodge. A few years later he was appointed Provincial Grand Director of Ceremonies for West Lancashire.

Lloyd Roberts' health began to fail about 1921 and, in the following year, he had a serious illness from which he ultimately recovered but it left him crippled as to his capacity for sustained effort. After struggling against this adversity for nearly two years he finally retired from practice and from the Hospital in 1923. After this he continued his interest in

literature and sport and was frequently to be seen watching the football matches but ultimately his health again failed and he died in 1932.

DOUGLAS D. CRAWFORD, after graduating in Edinburgh in 1887, devoted his attention during the first part of his career to anatomy. He first went to Dundee as demonstrator to the late Professor Melville Paterson. Next came a period of study at Berlin and at University College Hospital, London and he obtained his F.R.C.S. In the meantime Professor Paterson had been appointed Professor of Anatomy in Liverpool and Crawford joined him there as Assistant Demonstrator. As a coach, he taught anatomy in its relation to surgery, both general and dental and combined this with surgical teaching. In 1895 he commenced his surgical career as assistant surgeon to the Stanley Hospital. He was promoted full surgeon in 1898 and a progressive advance in his reputation as a teacher ensued. In 1903 he was appointed Lecturer in Surgical and Applied Anatomy and in 1907 came the lectureship in Clinical Surgery in connection with his hospital appointment. He was appointed Lecturer in Surgery for dental students in 1912.

Crawford's connection with the Royal Southern Hospital began in 1910 when he was appointed surgeon in succession to the late Dr. William Alexander and it was in association with this institution that the bulk of his surgical work was carried out until his death in 1927.

Throughout the period of his association with the University of Liverpool Crawford took a remarkable interest in medical and dental students who came in large numbers to his clinics. He was a genial man possessed of a faculty for good natured chaff which, far from offending those who came in for it, rather pleased them and it probably helped to impress the right teaching when it referred to errors. He was essentially kind and good natured and universally popular among his colleagues. In 1912 he was Vice-President of the Section of Anatomy at the Liverpool Annual Meeting of the British Medical Association and in 1925-26 Chairman of the Faculty

of Medicine. He had consultative appointments to the Liverpool Dental Hospital, Hoylake and West Kirby Cottage Hospital and the Druid's Cross Hospital and, during the War, he served with the first Western General Hospital (territorial) in Liverpool and overseas and was also surgeon in charge of the Arrowe Hall Auxiliary Hospital. Apart from professional work he was interested in the Drama. His many kindnesses to people who were in distress and to students requiring a helping hand were known only to the recipients as he was absolutely secretive in the giving of kindly advice and material help.

CHARLES G. LEE. I knew Charles Lee when I was student of medicine. He had recently married and had started practice in Bedford Street as an Ophthalmic Surgeon. He was one of the gentlest of men, of a rather melancholic temperament fostered by an illness of his wife which began shortly after his marriage. She developed an acute rheumatoid condition which rapidly crippled and invalided her for the rest of her life.

I visualise Lee as a tall, thinnish man, having somewhat "spirituelle" features. He was always immaculately dressed, and possessed a refinement of speech and manners which was reflected in his relationships with his professional brethren and all with whom he came in contact. He had been brought up under the guidance of an austere father, a Wesleyan who ruled his family on rigid puritanical principles which had evidently excluded dancing, theatres, and suchlike contributions to the gladder side of life. Much of this had been rubbed off Lee's character during his student days, but that he observed them in the letter, if not in the spirit, was exemplified by his telling me that when a student at Guy's he often accompanied his student friends to the door of a theatre in London, but did not enter its portals. He was very fond of poetry, and his contributions at family gatherings of the Victorian period consisted of recitations from Tennyson and sometimes from Bret Harte. His religious spirit tintured even his views with reference to biological matters, for I

remember at a meeting of the Medical and Literary Society—of which he was a member, when I was speaking of the immortality of the cell as exemplified by the transmission of life, from individual to individual, by the sperm, he was a trifle shocked at what he regarded as levity concerning a sacred subject.

Charles Lee spent much of his time reading sound literature, and he was certainly an asset to the membership of the Medical and Literary Society, where he read interesting papers on a variety of subjects. He was not, however, facile of speech, and therefore not a good hand at debate. It must be pointed out that this was, to some extent, the result of his kindly disposition which led to an unwillingness to express his differences in opinion lest it should hurt the susceptibilities of his friends. I do not wish, however, to give the opinion that Lee was a weak man, for he stoutly upheld his views concerning professional matters, and was a contributor of sound scientific work to the Medical Institution.

In his day, the diseases of the eye were frequently subjects of papers and of opinions expressed at the medical societies, and they were often very controversial. There was seldom a session in which discussion did not arise concerning them and Lee upheld his views very strongly. He was appointed Hon. Surgeon to the Eye and Ear Infirmary early in his career and, beyond the circumstance that his somewhat melancholic temperament often led to his expressing depressing views concerning the outlook as to the retention of sight in cases where there might still be hope, his opinions were sound, and his skill as an operator was undisputed.

He joined the Southern Hospital as its first Hon. Consulting Aural Surgeon in 1893.

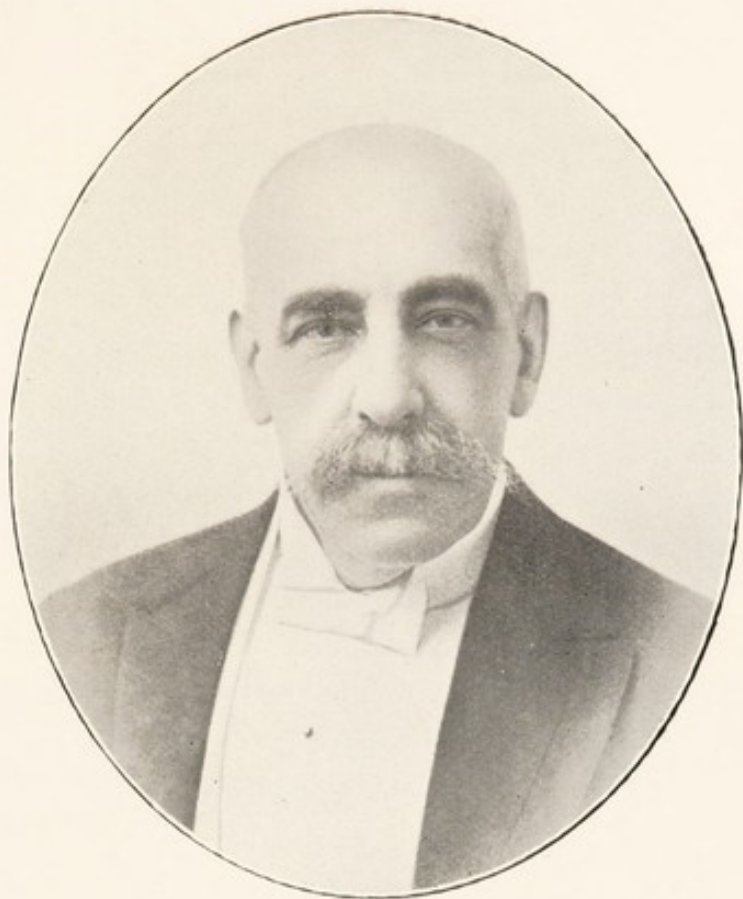
RICHARD WILLIAMS was a friend and colleague of Charles Lee of whom he was the very antithesis, so far as personal characteristics were concerned. He was a short, darkish man whose features and eyes betokened a vigorous personality. He was appointed to the Royal Southern

simultaneously with Lee, and it was interesting to observe how these two friends were so opposite in their dispositions.

Richard Williams was a masterful man who made no bones about expressing his differences of opinion ~~with~~ those with^{from} whom he might be in controversy, but he could not stand anything in the way of direct contradiction which, if expressed aggressively, led to the opening of the vials of his wrath in terms of sarcasm or irony. He was courteous and kindly and impressed and inspired his patients' confidence by the unhesitating way in which he dealt with them. A point which can never be forgotten was his stout loyalty to his friends, concerning whom he would not brook criticism which he regarded as unworthy or derogatory.

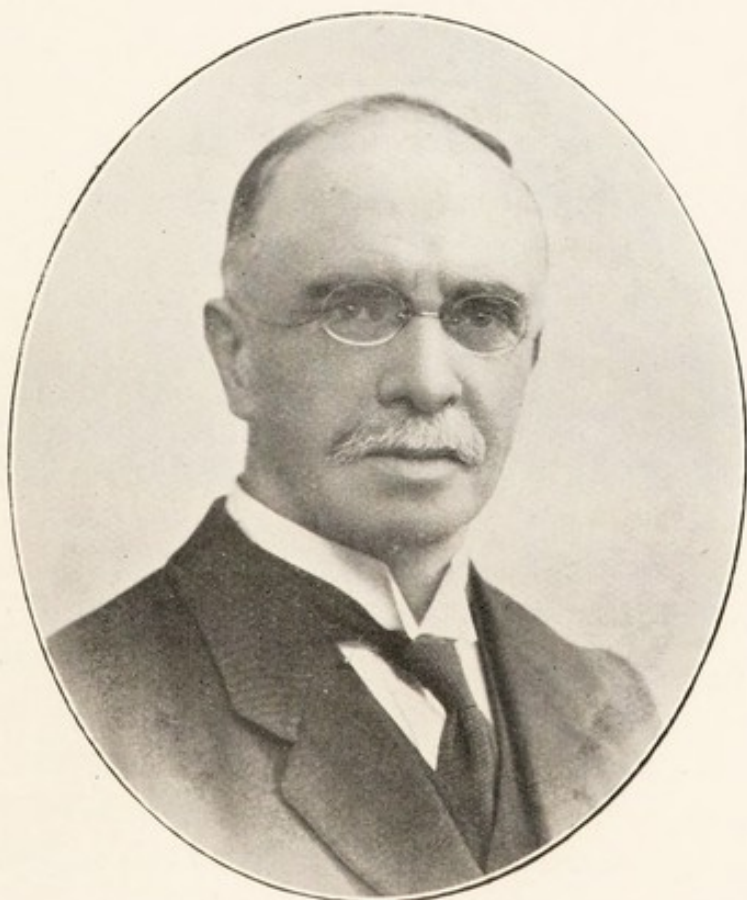
Williams was a very skilled aural and ophthalmic surgeon and he had a wide reputation, especially for the treatment of strabismus, for which he had originated a method of operation. At the meetings—to which reference has been made in Mr. Lee's biography—when eye diseases were under discussion, he frequently reserved any remarks he might have to make until a late period in the proceedings when, with orderliness of mind, he summed up the situation by expressing his own views for and against those of the speakers.

I have referred to his somewhat masterful nature, general courtesy and kindness but, if he thought that any discourtesy tinged the attitude of others towards him, he met it with great emphasis. This was exemplified in the course of a railway journey to Bangor, where he had a consulting room to which he paid weekly visits. He unwittingly took a vacant seat in a carriage the occupants of which had gone to lunch. When they returned, if they had explained the situation politely, he would have immediately apologised and gone elsewhere, but unfortunately they demanded their rights in aggressive terms and the doctor refused to budge. This ended, not only in verbal conflict, but in his ejection from the carriage when the train stopped at a wayside station. The railway officials, thinking that he had hurriedly got out at the last moment because he had just discovered that it was



DR. GEORGE P. NEWBOLT.
HON. SURGEON, 1897-1924.

(From Photo. by Bacon & Sons, Liverpool, 1.)



DR. JOHN LLOYD ROBERTS.

HON. PHYSICIAN, 1903-1923.

HON. CONSULTING PHYSICIAN, 1923-1932.

(From Photo. by Bacon & Sons, Liverpool, 1.)



SIR RONALD ROSS.

PHYSICIAN, TROPICAL DISEASES DEPARTMENT, 1899-1910.

By courtesy of the Ross Institute of Tropical Hygiene).

the goal of his journey, allowed the train to proceed without him. I never heard the sequel to this outrage.

Sir RONALD ROSS, K.C.B., M.S., D.Sc., LL.D., F.R.C.S., I.M.S. (Retired). Ronald Ross joined the staff of the Hospital in 1899, shortly before the Tropical Diseases Ward was opened in that year. This was soon after the fulfilment of the research whereby the completed cycle of the life history of the malarial parasite in the body of the mosquito took place in 1898. This discovery was announced by Sir Patrick Manson at a meeting of the British Medical Association on July 28th, 1898, and it was quickly published in every centre of medical learning. It was a discovery which completely revolutionised the possibilities concerning the maintenance of health by Europeans working in the Tropics and afterwards led to consequent commercial expansions in these countries. Lord Lister, when opening the Tropical Diseases Ward in 1899, congratulated the Committee on having secured Major Ronald Ross as Lecturer in Tropical Medicine and he referred to the confirmation which had been accorded to his work in France and Germany and, in fact, everywhere.

Ross was a son of General Sir Campbell Ross of the Bengal Staff Corps and was born at Almora in India on May 13th, 1857. He was educated at St. Bartholemew's Hospital where it was apparently recognised that he was as much interested in literature, poetry and mathematics as he was in medicine, perhaps even more so for, although he passed his M.R.C.S., he failed in the examination for the L.S.A. This characteristic stamped the early days of his professional life and his true qualities, which were those of a genius seem to have become developed when the solution of the problem of the malarial parasite came to his notice. Laveran had described the malaria parasite in 1880 but Ross seems to have had some doubt as to its identity until 1894 when Manson, whom he saw then for the first time, when on his second leave, convinced him by personal demonstration of the parasite. At that time Manson had concluded that the mosquito was

concerned in the developmental cycle of the parasite and he evidently pointed out to Ross that a research in this direction might lead to important results. Ross was greatly impressed by Manson's hypothesis and, on his return to India in 1895, he commenced the research at first on human malaria and later on bird malaria, and it was a mark of his genius that his methods of investigation were entirely original. His first step was to acquaint himself thoroughly with the anatomy and physiology of the mosquito and the subsequent sequence of events was somewhat as follows.

In 1895 he noted the flagellation of the male crescents in the stomach wall of the mosquito. In 1897 came the discovery, in the stomach wall of the insect, of certain rounded cysts containing pigment granules derived from the malarial parasites which the mosquito had ingested from the blood of infected patients. These cysts were found to increase progressively in size after ingestion. Towards the end of 1897 Ross had learned from Manson, with whom he was in regular correspondence, that MacCallum had discovered the function of certain flagellating bodies and flagella and this added to his conviction that the pigmented cysts which he had observed were derived from malarial parasites. In other words they were zygotes produced by penetration into the tissues by the verminules resulting from the fertilisation of the female by the male gamete in the mosquito's stomach.

In subsequent work conducted on bird malaria, owing to the difficulty in getting patients with malaria to submit to having their fingers pricked to obtain a drop of blood for examination, (plague was rampant in India at the time), Ross discovered that the cysts ruptured and the liberated germinal rods, which had developed within the cysts in the body cavity of the mosquito, thence made their way to the thorax. They then entered the salivary glands of which the ducts conveyed them to the head and proboscis through which they were finally injected into the host by the feeding mosquito. This completed the cycle.*

*This account of Ross's scientific work is summarised from an excellent Memoir in the Transactions of the Royal Society of Tropical Medicine and Hygiene, Vol XXVI 1932-33.

After the publication of his discovery Ross had numerous honours crowded upon him, among them the Nobel Prize in 1902.

Although Ross was experienced in the treatment of malaria, he was less interested in the clinical than in the scientific and hygienic aspects of the disease and, when he first joined the staff of the Hospital in 1899, he devoted himself almost entirely to the laboratory side of his work, thus acting in conjunction with physicians in charge of the cases. His teaching work at the University and his long absences, when on expeditions to tropical countries, left very little time for the carrying out of purely hospital duties. It was in consequence of this that he agitated for the building of a clinical department in the Royal Infirmary in order that the patients might be in propinquity to the Tropical Diseases Laboratories in the University where the teaching of tropical pathology and ætiology was mainly carried out. These wards were completed in 1911 when the clinical work was transferred to them. Although the School was, and still is, largely taken advantage of Ross became restless and thought to improve his position by removing to London in 1912. There he embarked on consulting practice, at first in central chambers, but this was interrupted by the war, when he became Consultant in Malaria to the War Office. Eventually he went to Putney as Director in Chief of the Ross Institute which was built by subscription to perpetuate his work and opened by the Prince of Wales on July 25th, 1926. There he remained and worked although in his later years crippled to some extent as a result of a cerebral hæmorrhage. He died on September 17th, 1932, aged seventy-five.

Although Ross jealously safeguarded his righteous claims to priority of credit for his malarial and other scientific work and sometimes actively resented anything which savoured of an infringement of them, he was essentially a good-hearted man. It must be said of him that he was as emphatic in the upholding of the credits of other people as he was of his own. He had some bitter quarrels, one especially with Grassi who had evidently founded his work concerning the life cycle of

the human parasite on Ross's work and discovery in bird and human malaria. Ross had a faculty for losing his sense of resentment very completely and for becoming as friendly as ever with those whom he imagined to have alienated his rights. He was very fond of fishing and made a good fishing companion. He was a voluminous writer on tropical diseases and tropical hygiene but apart from this he was, from his earliest days, a thinker and an author in the realms of poetry, prose and mathematics to which he reverted in the later years of his life*

It is very gratifying to those connected with the Royal Southern Hospital to have had this distinguished man as a member of its professional staff in connection with the Tropical Diseases Ward.

Dr. FRANK BARENDT, M.D. (London), F.R.C.S. (Eng.). My recollections of Frank Barendt go back to the time when he was a student (1879-1885), and at that period he presented characteristics which stamped him as being somewhat apart in his mental attributes from those round about him. There were elements of simplicity, combined with a kind of contradictoriness, which tended to make his fellow-students raise questions simply for the sake of getting him to argue about them. His simplicity was displayed by his failure to recognise that he was being exploited in this way. As an example of this, if questions of religion arose, as they sometimes did, he would dilate in terms of theology indicative that he had read a good deal about the subject, and he almost invariably adopted a strongly atheistic attitude. This was evidently only skin deep because, in later years he was not only orthodox in his beliefs, but put them into practice both in his domestic life and in his relationships with his friends.

*Among others he wrote the following (1) Poetry :—Edgar or the New Pygmalion, 1883. The Deformed Transformed, 1892. In Exile, 1906, and expanded 1931. Fables, 1907. Philosophies, 1910. Lyre Modulata, in phonetic spelling 1911; in ordinary spelling 1931. The Setting Sun, 1912. The Indian Shepherds, 1913. Psychologies, 1919. Poems, 1878-1928 (including some of the above). (2) Prose :—The Child of the Ocean, 1899. The Spirit of Storm, 1896. The Revels of Orsera, 1920. Memoirs, 1923, and a number of unpublished works. See Trans. Roy. Soc. Trop. Med., Vol. XXVI, 1932-33.

Barendt was very argumentative and very apt to take the opposite view, his wide reading furnishing material in support of his contentions which not infrequently "floored" those who knew much less about them. He gave me the impression that in his debates, he sometimes raised all the points against a problem really to convince himself that he was wrong. It was exceedingly interesting to watch Barendt when some of his friends suddenly raised a matter of argument. Immediately one could see that he mentally marshalled his facts behind his spectacles and then he would proceed, in a very orderly way, to give a dissertation on the subject in hand. I recollect a University function at which visitors from at home and abroad were present, when I was in conversation with a number of visitors that Barendt joined the circle and, in introducing him, I jokingly said, "Dr. Barendt can tell us all about the Penny Post." I really meant to imply that he was an informative kind of man. He immediately took off his spectacles, polished and replaced them, and then proceeded to tell the story of Rowland Hill with great accuracy of detail. This was characteristic of him. He had an encyclopædic knowledge, a long memory and a great capacity for including a certain amount of humour, both in his conversation and in the papers which he read at various societies.

Barendt had command of several languages, including French, German and Russian, and was much interested in etymology based on a knowledge of the ancient classics. I heard it averred that he got up enough Russian to take part in a dermatological conference in that country. Regarding the literature of his speciality, he seemed to know most things and could give chapter and verse on a variety of subjects.

Theoretically, he was master of his dermatology but, when he came to put his knowledge into practice, sometimes things became complicated. I recollect a patient speaking to me about the cost of a lotion he had prescribed which amounted to 13/6 per bottle. Barendt knew all about the drugs in it but did not realise that he had included several grains of pilocarpine at 2/6 per grain, and was very surprised when the matter was brought to his notice.

One of his hobbies was that the skin should be wetted as little as possible, and he believed in using oily preparations for cleansing purposes. There may be a good deal of truth in this, but he did not succeed in convincing people that soap and water had its demerits.

Barendt was a strikingly clever man, somewhat of a genius. From what I have said it may be seen that he had an individuality that delighted in controversy, and a professional capacity which led to his being respected for the honesty of his opinions and as a learned member of the profession. His academic career was a distinguished one and was followed by study in French, German and Austrian Universities. He was born in Liverpool in 1861 and died on October 28th 1926.

WILLIAM PERMEWAN, M.D. (London), F.R.C.S. (Eng.), D.P.H., as his name betokened was a Cornish Celt. He was dark eyed, dark haired and of goodly appearance. He combined his professional activities with political work being a pronounced liberal if not radical in his views until, in his later years, he became convinced that the drift towards socialism demanded the upholding of strong conservative measures. He made two attempts to enter Parliament, one of these being in the election of 1910 when, as a Home-ruler, he opposed Mr. F. E. Smith (the late Lord Birkenhead). At times of parliamentary elections he was frequently to the fore on behalf of his party. Municipally he represented the Abercromby Ward as a City Councillor and did very good work in various branches of city administration. He was on the Tramways Committee and devoted some attention to extension of the services to the southern residential districts. He was also a Justice of the Peace.

Permewan had a fine speaking and singing voice. As a vocalist he was much sought after at social gatherings and as an after dinner speaker he was in frequent request whether the function was professional, political or otherwise. He was perfectly able to adapt himself to almost any type of speeches, which were characterised by their fluency and by the wit and humour which he introduced into them.

Permewan was a member of the Medical and Literary Society, where his fine abilities as a speaker were probably cultivated in the earlier days of his membership, but latterly he seldom put in an appearance. As time went on he devoted more and more attention to political, municipal and literary work, combining this with a gradual lessening in his professional activities. His literary work and also that of his talented daughter Philippa, is well illustrated in a collection of reviews and essays published by Mrs. Permewan in 1929. They display a wide knowledge of sound literature and a capacity for reviewing somewhat reminiscent of the days of the "Edinburgh Review" when exhaustive criticism was very enlightening. It was sadly tragic that he and his daughter passed hence within seven weeks of one another in 1926 and their passing deprived us of two citizens whose literary attainments were of a high order.

Professionally, Permewan was a man of sound judgment and he did much to develop the department for the diseases of the throat during his long period of office (1895-1912). He was lecturer in laryngology at the University from 1914 onwards and, during his career, wrote many papers for the medical societies and journals.

WILLIAM SANDERSON joined the Staff as Dr. Permewan's colleague in the department for Diseases of the Ear and Throat in 1916. He was educated at Edinburgh where he graduated in 1903 and won the Chiene Medal for surgery. Soon after qualifying he held resident appointments at the Stanley Hospital and at the Southport Infirmary, eventually beginning general practice in Southport in 1907. Here he began to specialise in diseases of the ear, nose and throat. During the War he continued his speciality at the Myrtle Street V.A.D. Auxiliary Hospital and for two and a half years was similarly occupied in the R.A.M.C. In addition to his Royal Southern Hospital appointment he was honorary laryngologist and aurist to the Southport Infirmary and senior honorary aurist to the Liverpool Eye and Ear Infirmary and several other clinics.

Sanderson was a man entirely devoted to his work and was responsible for many advances in the utility of the department at our Hospital. He unfortunately developed a serious illness which for some time crippled and eventually incapacitated him until he died on April 13th, 1934.

STUDENTS AND RESIDENTS OF THE PAST,

It would be no easy matter to trace and make references to the many medical men who were students and residents in the Hospital in bygone days. They are scattered the world over and many of them have distinguished themselves professionally in various departments of medical and surgical work. In the appended list of residents there are the names of many university professors and teachers, physicians and surgeons, pathologists and bacteriologists, orthopædic surgeons, medical officers of health, army men, colonial medical officers, radiologists and specialists of every description. Some of them are or were attached to our own and other hospitals in the city and to those in the surrounding towns and districts.

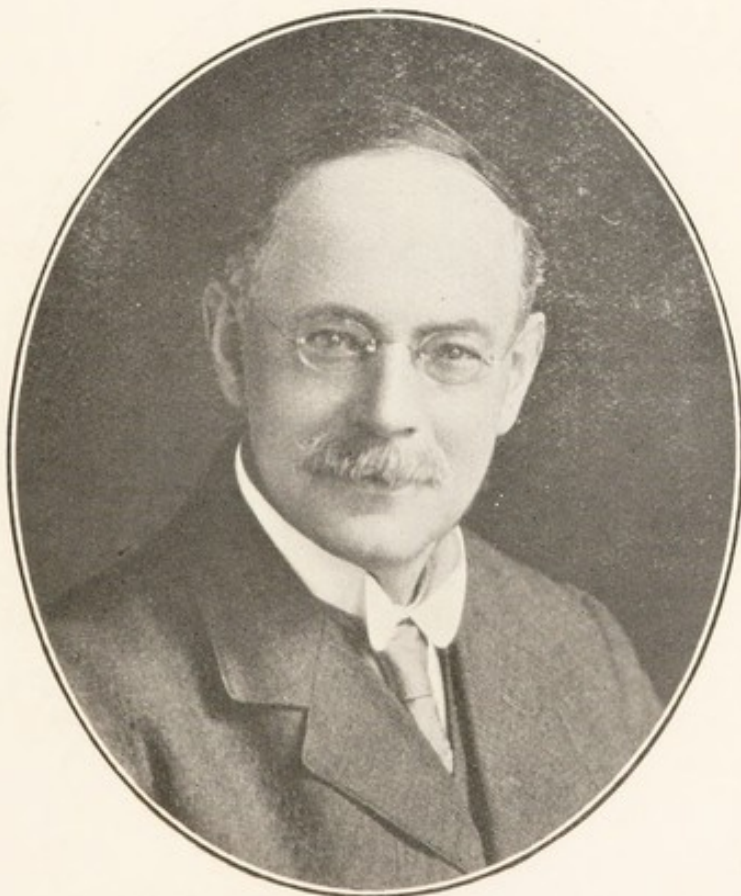
A glance at the list will also bring to mind numerous general practitioners whose names have been household words among every class of citizen. It is not only the medical men themselves who will look back with pleasure to their association with the Hospital, for this sentiment may, perhaps, be extended to those who have benefited by their services. This should be a very strong incentive to the extension of support and interest in the Mother Institution which has helped to train the doctors whose work and friendship have done so much for the people.

What has been said of past residents applies also to students who were not on the resident staff after graduation. There are hosts of them who have distinguished themselves in every realm of work in every part of the Empire and in foreign lands. They have ministered to every section of society from



MR. DOUGLAS CRAWFORD.
HON. SURGEON, 1910-1927.

(From a Photo. by Medrington's, Ltd., Liverpool)



DR. FRANK BARENDT.
HON. DERMATOLOGIST, 1900-1926.

(From a Photo. by Messrs. Lafayette, Ltd.)



DR. WILLIAM PERMEWAN.
EAR AND THROAT DEPARTMENT, 1895-1923.
HON. CONSULTING TO 1926
(From Photo. by Messrs. Lafayette, Ltd.)



CAPT. NOEL GODFREY CHAVASSE, V.C.
STUDENT, AND AFTERWARDS RESIDENT, 1913-1914.
(From Photo. by Medrington, Liverpool).

the highest to the most humble and have contributed much to the widespread reputation of the Hospital. To attempt to give particulars concerning the careers of past students and residents is not possible, and it would be invidious to refer to some and not to others. I am venturing to make two exceptions, however, by referring to Dr. Henry Harvey who, up to the time of his death in 1932, was the only connecting link between the old Southern Hospital and the present building and to Noel Godfrey Chavasse who, after being a student in the Hospital, was House-Surgeon in 1913-1914. He left us to accompany the Liverpool Scottish Regiment to the War and his conspicuous bravery has rendered him worthy of special mention.

Dr. HENRY HARVEY, of Wavertree, died in his eighty-fifth year on April 13th, 1932, and his passing severed the last human link of association between the old Southern and the present Royal Southern Hospital. He was house surgeon at the old Hospital in 1871 and, when the new building was opened in 1872, he was transferred to it and superintended the removal of the patients from the one to the other. He continued his residency in the Royal Southern Hospital until 1873 when he settled as a general practitioner in Wavertree to which district and to the Urban District Council of Childwall he was in succession Medical Officer of Health. An interest attached to Harvey in connection with the Hospital was his intimate acquaintance with the members of the honorary staffs. He knew most of them and particularly some of those early members who, although retired from the active staff, were consulting surgeons and in that capacity, in those days, attended the consultations which were frequently called concerning serious cases. His experiences ranged from the pre-Listerian period, through the transition phases of Listerism into the time of thorough going antiseptic surgery and thence into the present day practice of aseptic methods.

In various letters and conversations he gave vivid descriptions of old-time surgery and often compared it with that of the more advanced schools. He spoke of the luck of

Dr. Nottingham, for instance and how his cases almost invariably did well which probably meant that in his day and generation he was a relatively clean surgeon and probably a quick operator. He referred to the scientific acumen of Higginson which has already been mentioned in the biographical notes concerning him. Dr. Carter and Dr. Cameron were on the staff in his time and of them and their work he had a very high opinion. It was not only the members of our own hospital that he knew and told anecdotes about however, and one often wishes that he had written sketches of them all to place in the archives of the Medical Institution.

Harvey had much to say about the nursing arrangements in the old days and he commented on the excellence of those whom he styled born nurses compared with others of a type whose sobriety was not always beyond reproach. It was always interesting to meet Dr. Harvey because his knowledge embodied the best of the old methods of therapeutics, many of which have been forgotten or remain untaught, together with the modern methods of treatment in which he was well versed. He was a man of literary and artistic tastes which had been broadened by residence and study in Italian and other centres. He belonged to the old type of family practitioner whose advice was sought on many matters besides those appertaining to his profession. His kindly, thoughtful face and gentleness of manner, together with his keen personal interest in his patients were in themselves assets which promoted their well-being.

Dr. Harvey was Vice-President of the Section of Medical Sociology when the British Medical Association held its Annual Meeting at Liverpool in 1912; and on two occasions he was a member of the Representative Body.

NOEL GODFREY CHAVASSE was known to me from his boyhood and he was one of our students at the Hospital.

After taking a first class degree at Oxford he was successively appointed house physician and house surgeon, the latter to Sir Robert Jones in 1913. He was a twin son of the Bishop of Liverpool, the other brother being the Rev. C. M.

Chavasse now Master of St. Peter's Hall, Oxford. As school boys at the Liverpool College they were both known for their athletic prowess and when they went to Oxford they both got their "Blues." When Noel Chavasse was at Oxford in 1908 he wrote me a letter concerning our relationships as pupil and teacher which I greatly cherish. While a student he became interested in the boys of Grafton Street Industrial School for whom he ran a club and his influence on them was a very happy one.

On my transference to the T.F. Reserve in June, 1913, Chavasse, who had joined the R.A.M.C. (territorial) became attached to the Liverpool Scottish Regiment as my successor and it was in association with that unit that his distinguished services took place during the Great War. For conspicuous bravery at the engagement at Hooze in June, 1915, he was awarded the Military Cross, and in October, 1916, he won the Victoria Cross for most conspicuous bravery and devotion to duty. On August 3rd, 1917, after being severely wounded, he managed to struggle out of his dugout, all the occupants of which had been killed or wounded, and succeeded in obtaining assistance, after which he was taken to a casualty clearing station in Belgium, where he died on August 4th. For his bravery during the whole of this action he was posthumously awarded a bar to his Victoria Cross. A brass tablet to the memory of this distinguished member of the Resident Staff has been placed in the main corridor of the Hospital.

As stated by Canon Lancelot in a memorial service in remembrance of the men who had fallen in the engagement, there was no wonder that the King (as expressed in a letter to the Bishop) felt that the whole army would mourn the loss of so brave a brother; that the Brigadier had declared him as being the most gallant and modest man he had ever met, or that the Major General commanding the division had said that his devotion was magnificent and that the whole battalion, smothered in mud as they were and ready to drop from exhaustion, had insisted on parading for his funeral. A private soldier wrote of him as being the bravest man in the world.

Personally I feel that I cannot add anything to an appreciation of Chavasse which I wrote at the time of the memorial service and I venture to reproduce it *in extenso* because it expresses an estimate of his character apart from and yet including his soldierly qualities.

At a Memorial Service held at St. Peter's Church, on Wednesday, August 29th, 1917, Canon Lancelot paid an eloquent tribute to the memory of Captain Noel Chavasse and the fallen officers and men of the regiment to which he was attached. It has not often happened that the Medical Officer of a battalion has had his name bracketed in this way with those of his comrades, but in this particular regiment the men worshipped their doctor and he them. To those intimately acquainted with the relationship that existed between them it is quite evident that Captain Chavasse and the men would not have liked their names and memories to have been separated after death any more than they would not have tolerated such a distinction during life. Hence it comes that although conspicuous bravery in saving life and in ministering to the wounded has marked out the name of our beloved Doctor, a memorial must unite his name with those of the men for whom he sacrificed himself and among whose mortal remains the vessel of his life now rests in Belgium.

As one who was an intimate friend of Chavasse from the days of his boyhood and throughout his academic career, and who subsequently became associated with him in his professional work and as a comrade in the regiment, I venture to add a few words of affectionate reminiscence. Before me lies a letter, written on November 2nd, 1916, referring to the Victoria Cross which had just been conferred upon him. In it he refers, with characteristic modesty, to his work among the boys of the Grafton Street Industrial School and to the influence which this social work had exerted upon his own life. He said, "I look back on . . . the work in the Industrial School . . . as a great turning point in my life. It made me realise how well off I was and what others suffered cheerfully." And so through all this letter he spoke of the influence of others upon himself, never realising that it was his own

character and example, and the charm of his modest personality that created the magnetic qualities which bound him so closely to those among whom he moved and worked. His relationship with the Industrial School boys was precisely similar to that which endeared him to his regiment. He became one of them; he lived among them during their annual camp at Hightown; he taught them the principles of sport and how to comport themselves in a gentlemanly way towards their rivals. They learnt from him how to run, how to play, how to fight if need be, and all this was combined with religious instruction and with the inculcation of principles of a high standard of morality. He founded a society among the boys which set the tone of the school and the result has been that high ideals of purity, truth, integrity and morality have impressed them in a way which has led those who have left the school to take honourable places in the industrial world. One of the results of this has been that the school has become popular as a centre from which reliable boys may be obtained.

The result of Captain Chavasse's work illustrated the principle that the influence of environment will overthrow the preconceived notions of heredity which have led many to think disparagingly of this type of work.

Regimentally, Captain Chavasse was looked upon as having a charmed life. He knew no fear and was never away from the thickest of the fighting or when the wounded required help. He never spared himself either during or after an action and his bravery inspired confidence in the men. They knew that, if wounded, they would never under any circumstances be left on the field unsought and unaided. It was not only in a professional respect, however, that he gained their regard. His ministrations for their health and comfort took other forms. For instance, he organised clubs and canteens for their benefit; on one occasion he was seen washing the socks and shirts of the men who were in the trenches. His discipline was strict and he was firm in his judgment as to who should be allowed to go to the trenches and who should not. He quickly recognised a "scrimshank" and dealt as justly

with him as with an ineffective enthusiast. The men themselves were always content to abide by his opinion as to their capabilities for field or for trench work. His personal influence among them was great and, as in the case of the school boys, so here, his standard of morality became the one around which his comrades gathered. A well-known General spoke of him as being the bravest and whitest man he had ever known. The regiment is proud to have owned him for those qualities and his name will stand as an example of all that is Christian, chivalrous, gallant and soldierly in this War. He was a dear friend to many a man and boy in every class of society from the highest to the lowest and his loss is irreparable.

HOSPITAL ADMINISTRATION.

A perusal of what has been written points to the fact that the work of administration in a modern hospital is vastly greater and more complicated to-day than it was in the hospitals of half a century ago. This has resulted partly from the separation of many specialised units from the general medicine and surgery of former times and, in part, from the introduction of numerous additional methods of diagnosis and treatment. Fifty years ago the annual cost per bed was about £40 including everything, whereas the recent Reports indicate that about £140 per bed is expended on in-patients alone and to this must be added the cost of the out-patient clinics making a total of about £40,000 annually. The body responsible for the provision of this large sum and for the economic control of its expenditure is the General Committee, from which a Board of Management, a Nursing Committee, a Finance Committee and a Maintenance Committee with co-opted members, are appointed. The Medical Board confines its attention to professional matters, but representatives from it are appointed to the General Committee and its sub-sections.

A complete list of those who have served on the General Committees from the inception of the Hospital in 1838 to the present time is appended and it presents an interesting survey, indicating that from first to last the management has been in the hands of well known business men, many of whose names have been intimately associated with the history of the City. The repetition of some of these names through several generations shows that a hereditary or familial interest has been displayed and the long periods of service of a considerable number of individual members is also noteworthy.

This has applied in the cases of several of the Presidents. Mr. Joseph Yates, the first of them, retained office for about nine years probably to insure continuity of leadership during the infancy of the Institution. He was followed by Messrs. Sandbach and Edward Cropper, two years each. Then the post became an annual one until 1864 when Mr. George Henry Horsfall began his tenure of office for 26 years. He was succeeded by Mr. William Adamson, 1891 to 1911, Mr. Thomas Woodsend, 1912-1925, and by Mr. Allan Paton from 1925 to 1934.

The names Sandbach, Cropper and Horsfall are illustrative of the familial interest in the hospital referred to. Members of the firm of Sandbach, Tinne & Co. have served on the Committee since 1844, beginning with Mr. William R. Sandbach in that year and thereafter came a succession of Sandbach Parkers and Tinnes, ending with Mr. Ian Parker, the present Hon. Treasurer. The Cropper family have their representative in the Ven. Archdeacon Howson who is now the Hon. Hospitaler, and the senior member of the present committee is Mr. H. Sutton Timmis, son-in-law of the late George Henry Horsfall whom he succeeded on his retirement from the Presidency in 1890. Their combined periods of service now amount to 80 years.

Following this biographical section a short history of the internal administrative arrangements has been added, together with a reference to the structural alterations which were effected to provide Office accommodation.

**BIOGRAPHICAL NOTES OF
MEMBERS OF THE COMMITTEE.**

1842—1936.*

James Aikin, 1842-1846. Born in Dumfries 1792. Died July 5th, 1878.

His father, a solicitor, was an intimate friend of Robert Burns whom James also knew.

From 1840 to 1849 he represented Castle Street Ward on the Town Council. A founder of the Philomathic Society and of the Royal Institution. An originator and founder of the Sailors' Home and a promotor of the Liverpool Shipwreck and Humane Society. Interested in the School for the Blind, the Female Orphanage and other charities. Supported the Reform Bill 1832 and took a prominent part in the Parliamentary election when Mr. Ewart (Liberal) was elected, 1856, and when Mr. T. B. Horsfall was returned (Conservative) in 1865. He unveiled the statue of William Rathbone in Sefton Park in 1877.

John Aikin, 1847-1858. Vice-President 1858.

Son of James Aikin.

Was chosen with Mr. T. B. Horsfall to present an address to Queen Victoria when she visited Liverpool in 1851.

Thomas Avison, 1855-1856.

An attorney (Messrs. Avison & Boulton).

A leading Reformer. Was signatory to a notice to hold a public meeting to petition the Prince Regent and Houses of Parliament against further suspension of the Habeas Corpus Act, June 28th, 1817. Resolutions were passed condemning the restrictive measures of the Government and petitions adopted praying for their repeal. He died in 1865.

Thomas D. Anderson, 1858-1864. Vice-Pres. 1859. Pres. 1860. (Glen & Anderson, Merchants).

When Mayor, 1859, he presided at the first public demonstration with reference to the formation of the first corps of Artillery Volunteers. The members of the corps were sworn in. This meeting followed a communication from the Government relative to the formation of Volunteer Rifle and Artillery Corps and Companies in maritime towns in which there were forts and batteries. The volunteer movement seems to have originated in Liverpool in 1853 by the formation of a club for military drill.

While Mayor he defrayed the entire cost of erection of Emmanuel Church, consecrated 1867.

*Arranged alphabetically in chronological order.

William Hollis Anthony, 1859-1860. Born 1808. Died 1890.
(Anthony & Robinson, Timber Merchants).
Town Council 1856.

James Andrew, 1859-1862.
Manager of St. Helens Smelting Co.

Thos. Addison, 1860-1861. Born 3rd Nov., 1814. Died 6th Sept., 1863. Stock and Share Broker (Horsfall & Addison). Robert Horsfall (partner) was brother of George Henry and William Joseph Horsfall (*vide infra*).

William Adamson, 1864-1911. Pres. 1891-1911.
Father was a banker and lawyer. Born in Dumfries 1834. Educated at Dumfries Academy and Wallace Hall Academy. Apprenticed to J. H. Rayner & Co., Liverpool. Started business as Produce Broker 1855. Founded the firm of Laird & Adamson with Mr. Macgregor Laird 1859. Several times Pres. of General Brokers' Association. Vice-Pres. Chamber of Commerce 1881-1883. Member of Mersey Docks and Harbour Board.

His work at the Royal Southern Hospital was unprecedented. He devoted his life to it and was a munificent donor to its funds. He influenced many others to contribute to the costs of its major improvements and requirements. He visited the wards every Sunday afternoon and took much interest in the patients and in the well being of the administrative staff. His work connected with the School of Tropical Medicine and its associated ward is recorded elsewhere. He was first Vice-President of the School. He died in Liverpool, September 5th, 1911.

Robert G. Allan, 1879-1913.
Principal of the Allan Line of Steamships.
Member of Mersey Docks and Harbour Board 1884-1904.
Chairman of Seamen's Orphanage. Died July 1915.

George H. Ashton, 1896-1906.
Messrs. Ashton Tod & Noble.
One of the originators of the Hospital Saturday Fund.
Member of Transvaal War Committee. Died in Rock Ferry 1906.

Frank G. Ager, D.S.O. (Lieut-Col.), 1925-1932.
Agent for Bank of England, Castle Street. Chairman of Board of Management for several years.

Theo. R. W. Armour, 1932 to 1935. Vice-Pres. 1934.
Hon. Surgeon to the Hospital. Chairman of the Appeal Committee formed in 1932. This committee raised over £36,000 wherewith a large overdraft at the bank, which had threatened the future welfare of the Institution, was paid off. A maintenance

committee was then appointed under Mr. Armour's chairmanship in 1934 which promotes measures for increasing the annual income. Mr. Armour was appointed Vice-Pres. in recognition of his services. He retired from the post of Hon. Orthopædic Surgeon in 1935 after a period of professional service as (1) Hon. Assistant Surgeon. (2) Hon. Surgeon and (3) Hon. Orthopædic Surgeon amounting in all to 31 years. He was Resident in 1903. All this and his valued administrative work have been greatly appreciated.

William Barton, 1842-1843. Born 1780. Died June 9th, 1848.
William Barton & Son, Iron and Steel Merchants.

Rev. Thomas Bold, A.M. 1842-1848. Born 1764. Died July 21st, 1859.

Minister of St. Catherine's Church, Temple Court, to 1820.

A member of the Bold family, owners of lands at the top of Bold Street, including the site of St. Luke's Church. Bold Street dating from about 1785 derived its name from this family. It consisted of dwellings of merchants whose counting houses were at the back facing Wood Street. Rev. Thomas Bold was the first incumbent with the Rev R. K. Milner of St. Catherine's Church (originally a historic Chapel 1763), near Temple Court. It was taken down in 1820. At this time Mr. Bold had been incumbent for twenty-eight years and his stipend was continued afterwards for thirty-nine years, *i.e.*, sixty-seven years in all.

Joseph Brereton, 1842-1846.

Brereton, Jones & Co.

Probably member of an old Liverpool family, which took much interest in the town in 1722 and afterwards.

He resided at Speke Hall. The Hall was in the possession of the Watt's family at this time and possibly this gentleman was a relation.

Rev. W. D. Blundell, 1843-1845.

Probably descended from Brian Blundell, identified with origin of Bluecoat Hospital, completed 1718.

No information available (Crockford).

William Beckwith, 1844-1845. Died at St. Michael's.
Gentleman.

Harmood Banner, 1846-1865. Pres. 1861.

Founder of the well-known firm of Harmood Banner & Son. Born 1783. Died April 21st, 1865, in Liverpool. His name in his day was a household word. He was identified with the building of the boys' portion of the Orphan Asylum 1854 (the girls' portion was built by the efforts and contributions of Mrs. James Aikin).

He erected the Holy Innocents' Church, consecrated at the same time as the opening of the Boy's Orphanage, March 13th, 1854. He was Chairman of the Exchange Buildings Company and of Harrington Waterworks Company. Father of Edward Banner, the Rev. T. B. Banner (Holy Innocents) and Rev. G. T. Banner. Was on the Town Council from 1861 for six years.

H. T. Browne, 1847-1850.

Messrs Browne, Hunter & Co., Cotton Brokers.
Resided at 4 Catherine Street.

John Bald, 1849-1852.

Commission Merchant, Fenwick Court. Swedish and Norwegian Consul.

James Bland, 1856-1861.

Founded a firm of Timber Merchants with Roger Lyon Jones. He was born in Kirkcudbrightshire 1817. Died 7th April, 1884, at Cannes. He was a Director of the L. & N.W. Railway Company, a member of the Town Council 1867, and a Justice of the Peace.

Christopher Bushell, 1857-1858.

Wine and Spirit Merchant. Born 1810 in Kent. Died February 18th, 1887.

He was a prominent member and first Chairman of the Liverpool School Board in 1870. Helped to found the Liverpool Bishopric Fund and was a promoter of University College, in the management of which he took a distinguished part. He was a member of the Dock Board. Interested in railway companies, including the Mersey Railway scheme. He was on the Town Council 1839 and J.P. 1859. His statue, unveiled by the Archbishop of York in 1886, was afterwards transferred to University College.

W. S. Bird, 1858-1859.

Bird, Gilliman & Co.
Resided at Ivyhurst, Holmfield, Aigburth.

Alexander Gordon Brown, 1874-1901. Born at Fraserburgh 1827. Died April 1st, 1901.

(A. & A. G. Brown & Co., Merchants).

Son of Lieutenant Brown of the 42nd Highlanders, who fought at Waterloo. Manager of the North-Western Bank 1884-1898.

Sir W. B. Bowring, Bt., 1878-1916. Born at St. John's, Newfoundland 1837. Died 20th October 1916.

(Messrs. C. T. Bowring & Co.).

Created Baronet 1909. Entered City Council 1884. Alderman 1892. Lord Mayor 1893-1894. Member of Mersey Docks and Harbour Board.

Stewart Henry Brown, 1890-1902. Born at New York 1831. Died Liverpool, 17th March, 1905.

Son of Stewart Brown of New York. (Messrs. Brown Shipley & Co., Bankers—1850).

He was Director of the Liverpool Union Bank and Royal Insurance Company. He was a Justice of the Peace.

H. Brocklebank, 1890-1892. Born 15th August 1803. Died 2nd February 1892.

(Messrs. T. & J. Brocklebank, Ship Owners).

Married a daughter of Richard Moon. Father of Ralph, Thomas and Richard Brocklebank. Member of Dock Board 1851. Director of Royal Insurance Company. Member of the Committees of Sailors' Home and Mercantile Marine Service Association.

E. Gladstone Buckley, 1899-1924. Born 1859. Died January 19th 1926.

(Edmund Buckley & Co., Wool Brokers).

Chairman of the Board of Management of the Hospital, for eleven years and for many years of the Liverpool Adult Deaf and Dumb Benevolent Society.

Henry Brooke, 1903-

Rope Manufacturer. (Messrs. J. Aspinall, Son & Brook), Lancelot's Hey and Lodge Lane.

Harold D. Bateson, 1905-1908. Born 1855. Died October 30th 1927.

Son of William C. Bateson, Solicitor.

Educated at Rugby and Oxford. Justice of the Peace 1903. President of Liverpool Incorporated Law Society 1901.

Frank H. Bowring (Major), 1912-1918.

(Messrs. H. E. Rensburg & Co., Stockbrokers).

Killed in action September 1918.

Alphonso Daniel Beer, 1926-1935. Died December 5th, 1935. (Messrs. Beer, Cowell & Co.).

Sir Alexander Bicket, K.B.E. 1921, 1925-1931. Born 1853 at Kirkoswald. Died 16th March, 1931.

(Messrs. Bicket & Co., Ship Brokers).

Trustee of the Blue Coat Hospital. Chairman of Bootle Liberal Association. Donor of House occupied by Royal Liverpool Babies' Hospital. A munificent donor to the Royal Southern

Hospital. He and Lady Bicket equipped the massage and electro therapeutic department at a cost of £1000.

W. Lyon Blease, 1929-1935. Born Liverpool 1884.
Barrister.

Queen Victoria Professor of Law, University of Liverpool.

Charles Chaloner, 1842-1849.

Timber Merchant (Charles Chaloner & Co.), Warwick Street.

Edward Cropper, 1842-1860. Auditor 1842. Vice-President 1846. President 1851-2. Born April 19th, 1799. Died May 23rd, 1877, in Kent.

While in Liverpool lived at Dingle Bank. J.P. of the Borough 1849. Left Dingle Bank in 1859. His house was taken by the Howson family and subsequently by the Willinks. The Croppers were closely associated with the Anti-Slavery agitation.

Charles Challinor, 1843-1858. Born August 16th, 1791. Died June 2nd, 1865. Married (1) Elizabeth Wright, of Didsbury (2) Maria Jane Parker, of Lancaster.

Merchant, 13 Cable Street.

John Irvine Currie, 1844-1848.

(Read, Irvine & Co., Merchants).

Resided at Breck Lodge, Walton Breck.

Rev. James Crook, 1848-1851.

No information available. (Crockford).

R.C. Priest at St. Patrick's Chapel, Park Place.

Robert Christie, 1852-1855.

Vide Robert Christie, Junior.

Robert Christie, Jr., 1857-1859. Died at Bath.

Broker.

Resided at 85 Renshaw Street with offices at 1, India Buildings

John Clowes, 1854-1855. Died at The Castle, Aigburth.

(Rennie, Clowes & Co., Royal Bank Buildings, Dale Street).

Daniel Clarke, 1858-1886. Vice-Pres. 1865. Born July 8th, 1813, at Bewdley. Died May 31st, 1886.

(Ingram & Clarke, Wine Merchants & Commission Agents)

Herbert Campbell, 1862-1904. Born 1830. Died December 7th, 1903 (in the R.S. Hospital).

(Messrs. Colin Campbell & Co., Cotton Brokers).

Son of Colin Campbell. City Council 1886. Alderman 1898.

J.P. 1892.

- John Wakefield Cropper**, 1862-1865. Born March 24th, 1830.
Died June 3rd, 1892, at Dingle Bank, Liverpool.
He married Miss Arnold, daughter of Dr. Matthew Arnold of Rugby. He was the second son of John Cropper, a prominent Liverpool merchant. His daughter married Dr. Howson, Dean of Chester and formerly Principal of Liverpool College, who was afterwards Archdeacon of Liverpool Cathedral and Hospitaller of the R.S. Hospital, 1925-1934, when he became Hon. Hospitaller. John Cropper was J.P. from 1860.
- David Campbell**, 1866-1876. Died after 1882 in Grove Street.
Seed Merchant (Messrs. Edward Clarke & Co., Parr Street)
- Robert Coltart**, 1874-1889. Died in 1889.
Timber Merchant (Robert Coltart, Smith & Co.,
7 Tithebarn Street and 13 Canada Dock).
- William Crosfield**, 1875-1881. Vice-Pres. 1881. Born 1838, in Liverpool. Died May 17th, 1909.
(George Crosfield & Co.).
City Council 1883. J.P. 1888. M.P. for Lincoln 1892.
Member of the Mersey Docks and Harbour Board and of the Liverpool Select Vestry.
- Walter C. Clark**, 1885-1903. Died in 1929.
A Stock and Share Broker.
Became one of the two Hon. Freemen of Bournemouth, the other being Earl Beatty. Member of Committee Ladies' Charity.
- E. H. Cookson**, 1889-1922. Vice-Pres. many times. Born Liverpool 1837. Died March 26th, 1922.
(Holton & Cookson, Ship Owners and African Merchants).
Chairman of the Maritime Insurance Company and of the Liverpool Ladies' Institution. Trustee of Blue Coat Hospital.
City Council 1884. Mayor 1888. J.P. 1889.
- Percy S. Cox**, 1897-1898.
(Cox Bros., 6 Crosby Square, London, E.C.).
- John H. Clayton**, 1898-1911. Born 1848. Died March 21st, 1924.
(Messrs. Newall & Clayton, Cotton Brokers).
Educated at Rugby Grammar School. Trustee of Blue Coat Hospital. President of Cotton Association, 1906-1907. Chairman of London & Lancashire Fire Insurance Co. Director of Standard Marine Insurance Co., Lloyds Bank, Law Union and Rock Insurance Co. and Thames & Mersey Marine Insurance Co.

R. Cunningham, 1921-1925.

Cotton Broker (Kearsley & Cunningham), 36 Exchange Street East.

Lived at Hartford.

F. H. Cave, 1932 to date.

Nominee of the Merseyside Hospitals' Council.

Henry Duckworth, 1860-1870. Died January 14th, 1921.

(Messrs. Bennett & Co., Commission and General Merchants).

Educated at the Royal Institution. Fellow of the Geological and Linnæan Societies. J.P. 1864-1913. President of the Chamber of Commerce 1870. Was appointed one of sub-committee for the establishment of an independent University in the city, and to prepare a draft scheme for it, May 24th, 1878.

William T. Dixon, 1866-1875. Died August 16th, 1882.

Merchant. (Agent to David Corsar & Sons, Sail Cloth Manufacturers, Arbroath.

John Arthur Davies, 1909 to date.

Solicitor. (Batesons & Co.).

Has helped the hospital greatly by his long and practical interest in its administration.

H. Chaloner Dowdall, K.C., M.A., B.C.L., 1910-1911. Born 1868.

Married the Hon. Frances Harriet Borthwick.

Judge of the County Court of Lancashire. Chancellor of the Dioceses of Liverpool and Bristol. Member of the City Council. Lord Mayor 1908-1909. Former lecturer on Law of Evidence and Procedure and on Criminal Law, University of Manchester. Deputy Chairman of Parliamentary Committee. First Chairman of the Liverpool Council of Social Service 1909-1917. First Chairman of the Legal Board of the National Assembly of the Church of England 1923-1928. President of the Society of Public Teachers of Law in England and Wales 1929.

Publications—Local Development, Law 1919. Estatification, 1930, etc.

A. MacD. Doughty, 1915-1919.

Merchant. (Doughty, Drysdale & Co., Redcross Street).

Removed to London in 1919.

G. Downie, 1920-1932. Born *circa* 1854. Died June 20th, 1933.

Chief Accountant of Martins Bank.

Treasurer of the Liverpool Y.M.C.A., of the Presbyterian Home, Everton and of the Liverpool Temperance Union.

Chairman of the Seaforth District Nursing Association. Member of Committee Bootle Hospital. Leader of the Sunday School Union.

William A. Davidson, 1920-1925.

(Messrs. Davidson, Cookson & Co., 6 Castle Street).

S. Dickinson, 1921-1927.

Representative of the Hospital Saturday Fund.

W. R. Davies, 1925-

(W. R. Davies & Co., Railway Wagon Builders).

G. W. Ewing, 1855-1861. Died *circa* 1894 at Malvern.

Timber Merchant. (Duncan Ewing & Co., Brunswick Dock).

Resided in Aigburth Road.

Burton W. Eills, 1921-1924. Born at Liverpool.

(Messrs. Eills & Co., General Merchants).

City Council 1901. Lord Mayor 1919-1920. Alderman 1930. Member of the Mersey Tunnel Committee. Chairman of Governors, Liverpool Institute.

Roger Fisher, 1842-1858. Born 1773. Died in Hardy Street, October 13th, 1858.

(Fisher & Co., Merchants, Salt House Dock).

John Fletcher, 1844-1847. Born *circa* 1825. Died March 14th, 1898.

General Broker.

Vice-President General Brokers' Association 1884.

William Fisher, Jr., 1846-1857. Treasurer 1853. Vice-Pres. 1856.

(William Fisher & Son, Merchants, Shipowners & Brokers, 5 Redcross Street).

John Farnworth, 1852-1858. Vice-Pres. 1856. Pres. 1857. Born 1809. Died December 5th, 1869. Timber Merchant.

Mayor in 1866. Entertained the Duke of Edinburgh to dinner at the Town Hall in June 1866. Presented address in the afternoon on behalf of the Corporation. The Atlantic telegraph cable was completed in this year.

Arthur P. Fletcher, 1853-1869. Born 1824. Died July 3rd, 1899.

Chairman of the Runcorn Soap and Alkali Company. Treasurer of the Royal Infirmary and of the Blue Coat Hospital. Town Councillor 1866-1869. Director of the Liverpool & London & Globe Insurance Co.

John Otto Fabert, 1861-1869.

(J. Fabert & Co., Export Merchants).
Resided at 3 St. James' Walk.

James C. Fraser, 1877-1891. Died September 8th, 1905.

Merchant. (Saunders, Needham & Co., 6 Water Street).
Chairman of the North-Western Bank. Removed to London
1891.

Robert B. Forman, 1902-1914. Born 1845. Died July 1st, 1914,
at Leeds.

(Balfour, Williamson & Co.).

He lived in San Francisco for 20-25 years. He was interested
in the Mersey Mission to Seamen, in Mrs. Birt's Home and the
Liverpool Consumption Hospital.

James B. Fortune, 1902-1916. Died May 1920 at Stoke Poges,
Bucks.

(Balfour, Williamson & Co.).

Resided for many years at Palmerston Road, Mossley Hill.

Duncan Gibb, 1842-1846. Born 1792. Died November 8th, 1867.
Merchant.

A supporter of the Reform Party in 1832, when Mr. Ewart
(the Reform Conservative) defeated Mr. Denison (the Con-
servative Candidate).

Matthew Gregson, 1842-1876. Auditor 1842. Pres. 1853 and
1859.

Son of Matthew Gregson, Editor of the Portfolio of Frag-
ments relating to the History of Lancashire.

Adam S. Gladstone, 1850-1853.

(Ogilvy Gladstone & Co., Merchants).

Was an enthusiastic volunteer and took leading part in the
Volunteer Movement of 1860.

Charles Grayson, 1852-1855. Born 1816. Died March 5th, 1882.
(H. & C. Grayson, Ship Builders).

The firm dates back apparently to the eighteenth century and
descendants of the founder are still associated with it. Grayson
Street was named after the founder about 1747. Charles Grayson
was one of the promoters of the Hospital Sunday Movement.

Thomas Grundy, 1853-1854.

Gentleman, St. Ann's Lane, Aigburth.

John C. Gale, 1875-1905. Vice-Pres. for many years. Born 1821. Died September 28th, 1906.

(J. C. Gale & Co., Leather Merchants).

Was a vigorous member of the Hospital Committee.

Alexander Garnett, 1876-1903. Born 1826. Died March 28th, 1903, in the R.S. Hospital.

(Alexander Garnett & Co., Merchants).

Was Hon. Treasurer of the Hospital for 21 years.

When he took over the Treasurership the invested funds of the Hospital amounted to £15,000. When he relinquished office they had risen to £52,000. He succeeded James Houghton as Treasurer.

He was Town Councillor 1877. Alderman 1883. J.P. for Liverpool.

David Grainger, 1878-1896. Vice-Pres. many times. Born 1837, at Whiteabbey, Co. Antrim. Died May 10th, 1896.

(Grainger & Co., Belfast Steamship Co.).

Was well known for his handsome presence, dignified manner and high intelligence. Was very popular in commercial circles. Much interested in philanthropic works.

Neil Gossage, 1904-1909.

(Chemical Manufacturer (Soap)).

He removed to Guildford in 1909.

Sir J. Crosland Graham, 1921-1930. Born 1866 at Huddersfield. (Graham, Son & Hay, Sugar Merchants).

Director Union Marine Insurance Company and of the Birkenhead Brewery Co. Chairman and Director of the English Sugar Beet Co.

Hugh Hornby, 1843-1844. Born December 26th, 1792. Died December 9th, 1875.

(H. & J. Hornby & Co., Merchants).

Mayor in 1838. Was a prominent citizen. Took an active part in parliamentary elections in 1847 and 1852.

In 1832 presided over a meeting which led to reform in the management of the Dock Estate by the Corporation, then the Trustees. He was a well known philanthropist.

Rev. William Hesketh, 1844-1848.

Vicar of St. Michael's from 1822. Last appeared in "Crockford" 1858.

Rev. Henry Hampton, 1848-1855.

Ordained Deacon 1828. Priest 1829 Lichfield.

P.C. of St. James', Toxteth Park, 1842, and of St. Luke's, Holloway, 1855-1862. Vicar of St. John's, Wolverhampton, 1862

Gilbert Harrison, 1848-1854.

(Gilbert Harrison & Bros., Timber Merchants).

Thomas Hunter Holderness, 1848-1854.

(Holderness & Chiltern, Merchants, Shipowners and Ship Builders).

Robert Hindley, 1852-1853.

Brewer, at 76 Stanhope Street.

Wm. Joseph Horsfall, 1854-1855.

Son of Charles Horsfall, of Everton, and brother of Thomas Berry Horsfall, M.P., of Robert and of George Henry Horsfall. The family built Christ Church, Everton, in memory of their father in 1848.

James Houghton, 1854-1875. Treas. 1855, for many years. Died February 6th, 1907.

(Timber and Mahogany Broker and Measurer).

Hilton Halhead, 1855-1868. Born June 30th, 1805. Died January 29th, 1868, at 2 Princes Road.

(Bearing Bros. & Co., Merchants and Bankers).

William B. Halhead, 1868-1873.

Son of Hilton Halhead. Was a Town Councillor.

George Henry Horsfall, 1857-1891. Pres. from 1864-1890. Born 1824 at Everton. Died June 14th, 1900.

(Horsfall & Sons, African Merchants).

Son of Charles Horsfall who was Mayor in 1832.

He was President when the old Southern Hospital, in Greenland Street, was closed and the new Royal Southern Hospital opened in 1872. The Horsfall Ward was named after him. He presided at the opening of the Hospital by Prince Arthur of Connaught. Presented the portrait of the Prince (in the corridor) 1873. He did much to promote the advancement of the Institution and devoted himself to its welfare. He was a philanthropist in other directions and like other members of his family was interested in ecclesiastical expansion. He built Christ Church, Linnet Lane, in 1870. Entered Town Council 1846. After his death his widow took an active interest in the Institution.

E. C. Hindley, 1857-1868. Born 1806. Died May 30th, 1875, at Southport.

(E. C. Hindley & Co., Tea and Coffee Merchants, Roe Street).

James Holme, 1860-1861. Born 1808. Died October 21st, 1871.
Contractor.

Active member of Dock Board and City Council. Director of Lancashire and Yorkshire Railway and of Royal Insurance Co.

Bernard Hall, 1861-1862. Born 1812. Died at Cannes May 31st, 1890.

West India Merchant.

Mayor 1879-1880. On July 21st, 1880, presided over a great public meeting to promote funds for establishing the University College. £80,000 was promised at the meeting. He was a Councillor in 1849, Alderman in 1869. He gave the Florence Institute in Mill Street for the benefit of working boys in memory of his daughter. It cost about £15,000.

Joseph Harrison, 1861-1877. Died about 1877.

Broker, 52 South Castle Street.

Joseph Hubback, 1856-1857, 1866-1873. Born in 1814. Died September 6th, 1883.

Alderman 1862-1880. Mayor 1869-1870. Chairman of the Watch Committee and member of the Dock Board.

Thomas Harrison, 1874-1879.

(T. & J. Harrison, Merchants and Shipowners, 18 Chapel Street).

Thomas Hughes, 1892-1912. Born *circa* 1850. Died November 14th, 1912.

(T. & J. Harrison, Shipowners).

Chairman of the Liverpool Steamship Owners' Association. Member of Ship Brokers' Benevolent Association 1910. Member of Committee of Lloyds and of Seamen's Orphanage.

George Holt, 1894-1896. Born September 1825, in Liverpool. Died April 8th, 1896.

(Lampert & Holt, Merchants and Shipowners).

Second son of George Holt who died February 16th, 1861, aged 71. Well known for his benevolence. He founded Blackburn House Girls' School in memory of his daughter, and was interested in the Mechanics' Institute, afterwards the Liverpool Institute, Mount Street. Like his father, George Holt was a philanthropist and munificent donor to educational and charitable objects. He founded the firm of Lampert & Holt and was a founder of University College. Member of the Dock Board in 1885. He took a marked interest in the Royal Southern Hospital during his two years of office.

R. Hughes-Jones, 1908-1918. Died *circa* 1927.
(R. Hughes-Jones & Co., Ship Owners).

T. Rowland Hughes, 1912 to date.

Manager of North & South Wales Bank (Retired).

J.P. High Sheriff for Carnarvonshire 1914. Member of the Mersey Docks and Harbour Board. Director London City and Midland Bank and of The African and Eastern Trading Corp. Vice-President and member of Council Univ. College of North Wales.

James Ingram, 1842-1857. Vice-Pres. 1855. Pres. 1856.
(Ingram & Clark, Lime Burners).

Thomas Irvine, 1877-1884. Born 1818 at Aberdeen. Died Oct. 22nd, 1907.
Stockbroker.

J.P. Chairman of the Exchange 1887-1890.

Roger Lyon Jones, 1843-1875. Vice-Pres. 1857. Pres. 1858.
Born November 17th, 1806. Died January 1st, 1875.
A wealthy Liverpool Merchant.

He left a large fortune. In 1881 his Trustees (Mr. Edward Whitley and others) assigned £10,000 to the School of Medicine to endow the Lyon Jones chair of experimental physics. The first Professor was Sir Oliver Lodge. The Chair passed to the Liverpool University. The Lyon Jones' scholarships were founded in 1878 with £2,000 under the will of Roger Lyon Jones.

John Job, 1847-1858. Vice-Pres. 1852. Born 1808. Died *circa* 1856.

(Job. Bros., Merchants, Importers of Fish Oils, etc.
Founded 1800).

The Job brothers were known for their benevolence. They were members and supporters of Great George Street Congregational Chapel in the days of the great Dr. Thomas Raffles, who was its minister from 1811 to 1861.

Samuel Job, 1852-1865. Pres. 1855. Born 1802. Died February 21st, 1866.

(Job Bros, Merchants, see John Job).

Walter P. Jeffreys, 1855-1857. Born in Carmarthenshire.
(Jeffreys & Davis, Woollen Warehousemen).

Member of the Select Vestry. Town Councillor 1850.

Thomas Raffles Job, 1866-1867. Born 1837 at St. John's Newfoundland. Died 1917 at Blundellsands.

(Job Bros., Merchants, see John Job).

Member of the Dock Board 1885-1894.

He was named after Dr. Thomas Raffles.

Sir Alfred Lewis Jones, K.C., M.G., 1896-1909. Vice-Pres. 1906.
Born at Carmarthen 1845. Died 13th December 1909.
(Elder Dempster & Co., Ship Owners and West African Merchants).

Founder of the British Cotton Growing Association and of the Liverpool School of Tropical Medicine in 1898, which led to better health and advancement of trade in the Tropics.

He was knighted as founder of the School and for his work in advancing Empire interests. He was probably the first to introduce bananas commercially into the country. A story is told that, not finding a market for his first cargo of bananas, he assembled all the wheelbarrow fruit sellers he could get hold of, loaded their barrows with bananas and instructed them to sell them for their own profit. They were sold at very cheap rates and so spread the news of the arrival of the banana. Since then the trade has become a very large one.

There is a memorial to Sir Alfred Jones on the George Pierhead overlooking the river Mersey. It is inscribed as follows:—

1845-1909.

IN MEMORY OF

SIR ALFRED LEWIS JONES, K.C.M.G.

A SHIPOWNER STRENUOUS IN BUSINESS HE ENLARGED THE COMMERCE
OF HIS COUNTRY BY HIS MERCANTILE ENTERPRISE AND AS FOUNDER
OF THE LIVERPOOL SCHOOL OF TROPICAL MEDICINE MADE SCIENCE
TRIBUTARY TO CIVILIZATION IN WESTERN AFRICA AND THE COLONIES
OF THE BRITISH EMPIRE

South side—RESEARCH

East side—ENTERPRISE

UNVEILED BY THE RIGHT HON.

THE EARL OF DERBY

5TH JULY 1913

ERECTED BY HIS FELLOW CITIZENS

North side—FRUITS OF INDUSTRY

John Japp, 1901-1911. Born 1845 at Montrose. Died March 1911 at Liverpool.

Ship Owner.

He was Lord Mayor in 1906.

Russell Japp, 1910-1918.

(Japp & Kirby, Ship Brokers & Owners, Chapel Street).

A. M. Jackson, 1915-1926. Born 1847. Died November 1931.
(Penwarden & Jackson, General Produce Brokers).

Was on the Board of Management and took a very active part in the administration of the Hospital. Actively interested in the Red Cross during the war.

David Jones, J.P., 1925-1928.

(David Jones & Co., West African Merchants).

William Kay, 1842-1846. Vice-Pres. 1842. Died December 18th, 1846.

Gentleman.

Thomas Kendall, 1856-1857. Born 1830. Died 1864.

(Kendall Bros., Tower Chambers, Merchants).

T. Keeling, 1932 to date.

(Liverpool & District Carters & Motorists Union).

Representative of Merseyside Hospitals Council.

William G. Killick, 1876-1911. Vice-Pres.. Died December 9th, 1911. (W. G. Killick & Co). Chairman of Board of Management for many years.

During his long period of office took a keen interest in the Hospital. In 1912 Mrs. Killick defrayed the expenses connected with the construction of the special and observation wards, which were named "The William G. Killick Wards" in memory of her husband and of his work for the Hospital.

James Lawrence, 1843-1848. Born 1806. Died *circa* 1870.

Town Council 1835. Mayor in 1844. J.P. 1845.

Crawford Logan, 1843-1844. Born *circa* 1771. Died November 11th, 1844.

Anchor and Chain Cable Manufacturer.

He lived near the seashore in the neighbourhood of Pinfold Lane (now Vauxhall Road) in Blackfield House, which was an imposing mansion standing in extensive grounds.

John Lawrence, 1844-1849.

Brewer. (John Lawrence & Co., 53 St. James' Street).

William James Lamport, 1858-1859. Born January 18th, 1815, at Lancaster. Died November 14th, 1874, at Yellow Noses, New Brighton.

(Lamport & Holt, Steamship Owners. He was one of the founders of the Company with Mr. George Holt).

J.P. He was spoken of as the Nestor of the Shipping trade. He was a very able man and author of the first Shipping Bill.

William Laird, 1859-1860. Born 1831. Died February 7th, 1899.

(Laird Bros., Ship Builders).

Son of John Laird, the first M.P. for Birkenhead.

Sir Edward Lawrence, 1864-1909. Vice-Pres. 1867 and for many years. Born 1825. Died May 31st, 1909.
(General Merchant).

When Mayor 1864-1865 was recipient of a silver cradle Nov. 7th, 1865.

S. Leigh-Gregson, 1869-1884. Born 1838. Died April 4th, 1884.
Hon. Registrar the Liverpool School of Science. President of the Liverpool Association of Science and Arts. Fellow of the Royal Geographical Society. C.O. from 1880.

John Lea, 1904-1925.

Agent Bank of England. Chairman Board of Management. Trustee for Investments.

R. Cyril Lockett, 1910-1911. Born *circa* 1877.
(William & John Lockett, Merchants).

J.P. Fellow of the Society of Antiquaries. Said to have had the finest collection of coins in England.

Hector Langdon, 1919-1924. Born 1875. Died 1923.
Brewer. (Cain & Sons).

William Lewis, 1929-1934. Born 1868. Died 1934.
General Manager of Royal Mail Line and Pacific Steam Navigation Co.

Member of Liverpool Committee of Lloyds Register and of the Committee of the Liverpool and London Steamship Protection and Indemnity Association. Audit Commission of Mersey Docks and Harbour Board.

H. W. G. Lewis, 1932 to date.
(Pacific Steam Navigation Co.).

W. F. Leather, 1934 to date.
Member of the firm of Ashton Tod & Noble, Stock Brokers.

Samuel Minshull, 1842-1850. Born *circa* 1801. Died September 29th, 1852.
Attorney.

Brother of Mr. J. L. Minshull who was a founder of the Southern and Toxteth Hospital. He was Hon. Secretary to the Hospital from the time of its opening to about 1850.

Studley Martin, 1843-1888. Vice-Pres. 1883. Born December 18th, 1811. Died December 7th, 1888.
Cotton Broker. Secretary of the Liverpool Cotton Brokers' Association, 1841-1842.

He was nephew of Lady Smith of Norfolk who lived to be 104 years old.

James McMurdo, 1850-1851.

(James McMurdo & Co., Timber Merchants, Brokers and Measurers, Brunswick Dock).

William J. Marrow, 1854-1855. Born 1813. Died 1895.

Corn Merchant.

Director of Royal Insurance Company.

Robert Andrew McFie, 1856-1857. Born 1811. Died 1871 at Dreghorn Castle, near Edinburgh.

(McFie & Son, Sugar Refiners).

In 1853 he purchased the building of St. John the Evangelist, which was originally built for a revivalist preacher in 1837. He converted it into a place for meetings and lectures under the name of Hope Hall in Hope Street. He was a Trustee of the Liverpool Exchange and Director of the Liverpool Chamber of Commerce.

Rev. Hugh McNeile, 1856-1857. Born 1795 at Bally Castle, near Belfast. Died January 28th, 1878.

Minister of St. Paul's, Belvidere Road.

Married a daughter of Dr. Mayer, Archbishop of Dublin. He was Dean of Ripon 1868-1875. Formerly Incumbent of St. Jude's Church. Hon. Canon of Chester 1845 and Vicar of St. Paul's, Princes Park, 1848-1878.

William Mountfield, 1857-1859. Died in Shrewsbury.

Brewer, at 32 Brick Street.

Gilbert W. Moss, 1861-1862. Born March 31st, 1828. Died July 6th, 1899.

Banker.

Son of John Moss of Aigburth. J.P. 1850. Director of North Western Bank and of the Alexandra Towing Co. On the Committees of the Children's Shelter and the Home for Female Incurables. He was much interested in work among children and devoted himself to the Children's Ward in the Hospital for many years after he left the Committee.

David Malcolmson, 1866-1867.

Merchant. (J. & D. Malcolmson & Co.).

James Maxwell, 1867-1898.

Was seventh and youngest son of Archibald Maxwell of Threave and Kelton in the Stewartry of Kirkcudbright, who was one of the founders, with his two brothers, of the firm of A. F. & R. Maxwell. They were originally corn merchants and later general merchants in Brunswick Street, Liverpool. He was born on December 11th, 1832, at his father's house in Duke

Street, Liverpool, and died at Carlisle on September 19th, 1898. As a young man he went to Australia, where he was sheep farming and later on returned to England to join the family business. He was the last member of the family to remain in the business until he retired some years before his death. He married (1) Elizabeth, daughter of John Owen Johnson of Liverpool, by whom he had no issue and, (2) Mabel Louise, daughter of William Gardner of Cheltenham, by whom he had three sons and four daughters. At the time of his death his residence was at 3 Fulwood Park, Liverpool.

Edward Moon, 1867-1880. Vice-Pres. for several years. Died *circa* 1880.

Chairman of the London and N.W. Rly. Is said to have relined the entire system with steel rails.

C. S. Mills, 1870-1877. Vice-Pres. 1877. Died *circa* 1884.
(C. Stewart Mills & Co., Merchants, The Albany).

J. Grant Morris, 1871-1878. Born 1811. Died January 22nd, 1897. With his father owned the Innes Hall, Rose Bridge and Douglas Bank Steam and Household Collieries, Wigan. Town Council 1846. Alderman 1862-1874.

Alexander Maxwell, 1892-1903. Died at Hoylake, September 17th, 1903.
(Maxwell & Co. Tobacco Importers).

Son of Welwood H. Maxwell. Partner in the firm of W. A. & G. Maxwell & Co. Was member of the Board of Management and was very energetic in his work for the hospital.

William Miles Moss, 1896-1920. Born 1864. Died November 9th, 1927.
Ship Owner.

Founder of the Thomas Moss Fund for distressed persons. Governor of Blue Coat School. Chairman of Liverpool Orphan Asylum. Member of Mersey Docks and Harbour Board. With his sisters presented windows in the Hospital Chapel in memory of their mother.

Lyon Maxwell, 1903-1931. Treasurer from 1911 until his retirement from Committee. Vice-Pres. 1931 to date.

Younger son of Maxwell Hyslop Maxwell who died in 1904. He seldom missed a day in his visits to the Hospital, concerning the administration of which he was perpetually interested. The Hospital owes much to him and his wife for matters concerning its welfare. . Mr. Sutton Timmis and he are the oldest serving members of the Committee.

Roger J. Marsh, 1907-1933.

Engineer.

Representative of Hospital Saturday Fund.

Lawrence MacLaren, 1912-1928. Vice-Pres. 1916 and after.

(Messrs. Farnworth & Jardine, Timber Brokers).

J.P. He was known for many acts of kindness and benevolence in connection with the Hospital and other charities.

Harry P. Mounsey, 1927 to date.

(Messrs. Lewis & Mounsey, Chartered Accountants).

Charles Macalister, M.D., F.R.C.P., 1925 to date. Born 1860.

In succession Student, Clinical Tutor, Lecturer in Practical Medicine, Pathologist, Hon. Physician and Consulting Physician. Chairman of the Nursing Committee for many years. Member of the Board of Management. Author of Histories of the Liverpool Royal Southern Hospital, and of the Royal Liverpool Country Hospital for Children, etc., etc.

Henry Morley Miller, 1930-1931. Born in Clifton 1867.

Engineering Department L. & N.W. Rly. Co.

City Council 1912. Alderman. Lord Mayor 1928-1929. J.P.

Rev. Thomas Nolan, 1842-1848.

Curate of St. Barnabas (near the Hospital) 1841. Became Vicar of Acton, Cheshire, 1854.

W. H. Nott, 1868-1877.

(W. H. Nott & Co., 1 Rumford Place, Forwarding Agents)

Henry Heywood Noble, 1899-1934. Born 1861 at Hongkong.

Died September 11th, 1934.

(Ashton, Todd & Noble, Stockbrokers).

J.P. 1918. Was on the Committee of the Liverpool Cathedral

John Platt, 1842-1851. First Treasurer 1842-1851. Vice-Pres.

Died *circa* 1851.

(Platt, Son & Casson, Turpentine Distillers).

Benjamin Platt, 1846-1866. Treasurer. Died *circa* 1866.

(Platt, Son & Casson, Turpentine Distillers).

In 1842 the Distillery was burned involving damages amounting to £15,000.

Rev. W. Parker, 1843-1847.

Rev. Frederick Parry, 1847-1848.

Graduate of St. John's College, Cambridge. Curate of St. Clement's, Windsor Street, Liverpool, 1853-1858. Author of "The Messiah's Coming with Power."

Samuel Sandbach Parker, 1863-1865. Born 1837. Died October 30th, 1905.

(Sandbach, Tinne & Co., Merchants and Ship Owners).

J.P. 1885. Director of Liverpool & London & Globe Ins. Co. and of Thames and Mersey Marine Ins. Co. Member of the Mersey Docks and Harbour Board. President of the News Boys' Home.

Alfred Traill Parker, 1865-1876. Born 1837. Died January 26th, 1900.

(Sandbach, Tinne & Co.).

Director of Bank of Liverpool. Trustee of Blue Coat Hospital. Member of Committee of Seamen's Orphanage and of Sailors' Home. Hon. Secretary the School Ship "Conway."

John Parratt, 1869-1873. Born 1807. Died March 16th, 1873. Gentlemen.

George R. Paton, 1870-1871. Died *circa* 1889 at Aigburth. Merchant. (Geo. Paton & Co., 1 Rumford Street).

Charles Sandbach Parker, 1896-1920. Born 1864. Died 1920, in London.

(Sandbach, Tinne & Co.).

William Seeds Patterson, 1898-1912. Born March 19th, 1854. (W. S. Patterson & Co.).

A well known cricketer, at Uppingham and for Cambridge and Lancashire.

Edward Paul, Sen., 1900-1901. Born 1828. Died May 17th, 1901.

(Ross T. Smyth & Co., Corn Merchants).

Director of Grain Transit & Storage Company.

Henry Pattinson, O.B.E., 1904-1914. Born 1866. Died Feb. 21st, 1934.

(J. R. Pattinson & Co., Produce Brokers).

Alex. Allan Paton, C.B., 1910-1934. Pres. 1924-1934. Died June 27th, 1934.

Cotton Merchant.

Attached to the British Embassy at Washington 1915-1918, To Mr. Balfour's Mission to the U.S.A. 1917, to the Paris Peace Conference 1919. He was Chairman of the Royal Insurance Co. and of Martins Bank Ltd. Director of the Liverpool, London & Globe Insurance Co., of the British Cotton Growing Association and other commercial organisations. After serving on the Committee for fifteen years, during which period he contributed much

both financially and otherwise to the Institution, he succeeded the late Mr. Thomas Woodsend as President and retained the position until his death in 1934. He presented a window in the Chapel and anonymously conferred other substantial gifts. He endeavoured to organise a scheme for co-ordinating the services of the General Hospitals in 1932.

George Parker, 1911-1921.

Retired to Bournemouth 1920.

J. H. G. Pattinson, 1927-1934.

(John R. Pattinson & Co.).

Chairman Royal Insurance Co.

Ian R. Parker, 1927 to date. Treasurer 1931 to date. Born 1902.

(Sandbach, Tinne & Co.).

Chairman of the West India Association of Liverpool. Member of Committee of Shipwreck and Humane Society. Hon. Secretary Liverpool General Hospitals Co-ordination Committee.

C. E. Peverley, 1929-1932.

Representative of Merseyside Hospitals' Council.

H. O. Pugh, 1929-1931.

Representative of Merseyside Hospitals' Council.

Justice of the Peace.

Thomas Royden, 1842-1846. Born February 16th, 1792. Died September 15th, 1868.

Ship Builder. His yard was at 8 Baffin Street.

His eldest son was Sir Thomas B. Royden, Bart., who joined the Committee in 1874.

Rev. John Robberds, 1847-1867. Pres. 1862. Born at Norwick.

Minister of the Ancient Chapel of Toxteth. He resided at 58 High Park Street, at the time of his death in 1867.

Thomas Robinson, 1849-1851.

Identity uncertain. *Vide* Index Card in Secretary's office.

Joseph Russell, 1849-1855.

Attorney. 14 South John Street.

William Benson Rathbone (6th), 1851-1852. Born February 11th, 1819, at Corn Hill, Liverpool. Died March 6th, 1902.

(Rathbone Bros. until 1868).

Resided at Greenbank. Son of Wm. Rathbone (5th) who was Mayor of Liverpool 1837. He was M.P. (Liberal) for Liverpool 1865-80 and for the Devon division of Carnarvonshire from 1881-96 when he resigned. Deeply interested in district nursing, was instrumental in getting this founded in 1860. The scheme

was taken up in London and elsewhere, and eventually became nationally organised. His statue was unveiled 26th July, 1901, by Mr. Arthur Crosthwaite (Lord Mayor). He was President of University College of North Wales. In 1867 became member of Select Vestry of Parish of Liverpool. In 1862, during the cotton famine, established fund (with Charles Melly) to relieve operatives out of work. With a balance from this fund he inaugurated the foundation of the Woolton Convalescent Institution.

John Rogers, 1885-1861. Born 1825. Died January 1st, 1895. Superintendent Registrar of the Parish of Liverpool.

Educated at the original Dotheboys Hall in Yorkshire and was school fellow of the original Smike in Dicken's "Nicholas Nickleby." Was formerly Superintendent Collector of Rates, 1849-1880, when he became Superintendent Registrar of the Parish.

Charles E. Rawlins, 1855-1860. Died June 21st, 1884.

In 1839, after a visit to U.S.A., became greatly interested in the Corn Law struggle. He took an active part in the Slave Owning question in America. President of the Chamber of Commerce in 1867. He was instrumental in raising the testimonial to Sir Rowland Hill for his services in connection with the Penny Post. He entertained Louis Kossuth, the Hungarian patriot at his home in Princes Park.

Samuel Greg Rathbone, 1858-1860. Born 1821. Died March 13th, 1903.

(Rathbone Bros.).

J.P. for forty years. Liberal in politics and interested in Licensing Reform. Entered Town Council 1862, and was a member of it for fifteen years. Greatly interested in Elementary education. Member of the Liverpool School Board 1873, and was Chairman until he retired in 1893.

John Park Robinson, 1863-1864. Died January 11th, 1881.

Attorney. (Bateson & Robinson, 26 Castle Street).

Edward Rimmer, 1861-1873. Born 1826. Died August 1875.

(Thomas Rimmer & Son, Timber Merchants).

He had seven sons. (*Vide* Percy Rimmer).

Sir Thomas Bland Royden, Bart., D.L., J.P., 1874-1917. Vice-Pres. 1912. Born February 20th, 1831. Died 1917.

(Thomas Royden & Sons, Shipbuilders).

Eldest son of Thomas Roydon (see above).

Mayor of Liverpool 1878-1879. M.P. for West Toxteth, Liverpool, 1885-1892. Represented Gt. George's Ward in Town Council 1845-1849. In 1903 re-entered Council as member for

Kensington Ward. Alderman 1904. High Sheriff of Cheshire 1903. Gore's Directory for 1847 states that he was member of the Dock Committee.

William Radcliffe, 1875-1914. Vice-Pres. 1912. Born August 8th, 1825, at Atherton, nr. Bolton. Died December 18th, 1914.

(Wm. Radcliffe & Smith, Solicitors).

Town Council 1876. J.P. 1880. Mayor 1882-1883.

Charles G. Rowe, 1881-1886. Born *circa* 1850. Died June 1932.

(Messrs. Graham Rowe & Co., South American Merchants)

Chairman of the Dingle Homes founded by his father. Chairman of the Turner Memorial Home of Rest. For many years on Committee of Seamen's Orphanage. Was well known for his many philanthropies.

John Rankin, LL.D., 1895-1928. Vice-Pres. many times. Pres. 1911-1912. Born 1843. Died December 23rd, 1928.

(Rankin, Gilmour & Co.).

His many gifts to the Hospital were anonymous. He created and endowed the John Rankin Fund for Nurses (see pages 90 and 102). On Council of Liverpool University. Vice-Pres. of Seamen's Orphanage and Trustee of the Blue Coat School.

John Robertson, 1894-1895. Born 1825. Died 1908.

Served with the 78th Highlanders and 35th Royal Sussex Regiment in the Indian Mutiny and Persian War. He was Bursar of Rossall School, Fleetwood, for 25 years.

John Graham Rodger, 1899-1919. Born in Beunos Ayres, and came to Liverpool in 1853. Died March 16th, 1921.

(Ronald & Rodger, Wool Brokers).

Elective member of Mersey Docks and Harbour Board and was on Committees of Blue Coat Hospital and Mersey Mission to Seamen.

Percy Rimmer, 1910-1925. Born June 1857. Died June 19th, 1925. Son of Edward Rimmer (see above).

(Thomas Rimmer & Son, Timber Merchants).

Succeeded Mr. W. G. Killick as Chairman of Board of Management in 1911 and remained so until his death. He was also on the Nursing Committee and was a very keen and hard worker in the interests of the hospital.

A window in the Chapel was dedicated to his memory.

He married Miss Wilson, daughter of Dr. Charles B. Wilson of Abercromby Square. Two of his sons (C. P. R. & A. E. R.) subsequently joined the Committee and represented the third generation of the family on it.

William Gair Rathbone, 1915-1918. Born at New Brighton 1849. Died April 9th, 1919, at Cadogan Gardens, Sloane Square, London.

For over 20 years Hon. Sec. of the Queen Victoria Institute for Nurses. District nursing was founded by his father in Liverpool 1860. Director of Royal Exchange and of London County & Westminster, and of Hong Kong and Shanghai Banks; also of P. & O. Steamship Co.

John Ritchie, Lt.-Col., 1916-1923. Born 1857 in New Brunswick. Died in Liverpool December 19th, 1923.

(Ritchie Bros., Shipowners and Timber Brokers).

City Council 1915. Lt.-Col. 2nd Lancs. Vol. Artillery. Lord Mayor 1919 (the year of the Police strike). Hon. Sec. of the Liverpool Prisoners of War Committee. Trustee of the Liverpool Blue Coat Hospital.

David M. Ritchie, M.C., 1925-

M.A. Oxford. City Council 1923. Ex-Capt. Liverpool Cricket Club.

Charles P. Rimmer, 1926-1927.

Son of Mr. Percy Rimmer. Major 89th (3rd W. Lancs.) Field Brigade R.A. (T.A.).

Arthur E. Rimmer, 1929-1930.

Son of Mr. Percy Rimmer and took the place of his brother Charles P. Rimmer on his retirement.

Captain Gordon Robertson, R.N., 1931 to date.

William R. Sandbach, 1844-1856. Pres. 1850-1852. Born 1813. Died 1891.

(Sandbach, Tinne & Co.).

Director of the Bank of Liverpool.

James Smith, 1850-1856.

(Houghton, Smith & Co., Timber Merchants, Sefton St.).

Rev. David Dale Stewart, 1850-1851. Born 1817. Died July 31st, 1900, at Limpsfield.

Rector of Davenham 1841. Incumbent of St. Bride's, Liverpool, for eight years, and of St. Peter's, Croydon. Rector of Coulsdon, Surrey, 1878-1896.

Henry Sharples, 1857-1861.

(Sharples, Jones & Co., Timber Merchants, Sefton Street).

James Smith, Jun., 1857-1858.

Merchant and Ship Broker, 11 Tower Chambers.

Barkeley
James Barclay Smith, 1858-1859. Born 1829. Died May 30th, 1898.

(Houghton, Smith & Co., Timber Merchants).

Vice-Pres. Chamber of Commerce 1876-1877. Town Council 1878. Chairman of the Health Committee, on resignation of Sir Arthur Forwood. Member of the Mersey Docks and Harbour Board.

Rev. Gilbert Sandbach, 1861-1875. Vice-Pres. for many years. Pres. 1863. Born 1817. Died 1882.
Minister in Church of England.

Joseph Steele, 1862-1873.

Merchant and Ship Owner, 4 Rumford Place.

William Digby Smith, 1863-1865. Born 1826. Died 1898.
A Press man.

He was a keen Liberal, a Leader writer on foreign questions and a fine linguist. President of the Liverpool Library.

Samuel Smith, Jun., 1878-1907.

Cotton Broker. (D'Arbigny, Smith & Co.).

Son of Samuel Smith, Banker. A great coin collector.

John O. Strafford, 1878-1915. Treas ¹⁸⁹⁷⁻~~1857~~-1910. Vice-Pres. 1910. Born 1831. Died May 30th, 1915.

Vice-President of the General Brokers' Association 1885 and President 1886. First Hon. Treasurer of Liverpool School of Tropical Medicine. Hon. Treasurer the Liverpool Preventive Home. One of the original guarantors of the Liverpool Conservative Club.

Douglas Quintin Steel. 1885-1894. Born June 1856. Died December, 1933.

Solicitor. (Radcliffe, Layton & Steel).

Married a daughter of Judge Collier. Well known as a cricketer at Uppingham, Cambridge and Lancashire.

Elisha Smith, 1893-1899. Born at Little Eaton, Derbyshire, 1833. Died May 14th, 1899.

(Henry Nash & Co., Merchants and Exporters of Tin Plates and Metals).

President of the Philomathic Society and of the Chamber of Commerce. J.P. 1886. For about 50 years prominently associated with Gt. George Street Chapel.

Robert Smith, 1905-1913. Died January 27th, 1914.

(J. & R. Smith, Williamson Square).

Took practical interest in the economic working of the Hospital. For many years Treasurer of Wesleyan Trust.

Andrew Thomas Smith, 1920-1925. Died April 1st, 1926.

(Castner, Kellner, Alkali Co. Ltd.).

Director of Brunner Mond & Co., and of Synthetic Ammonia and Nitrates Ltd. J.P. and County Councillor for County of Chester. Chairman Urban District Council of Runcorn.

Alfred Stott, 1925 to date.

(Goodlass Wall & Co., Marine Department).

Number
Rt. Hon. the Earl of Sefton, President, 1935 and 1936.

Rev. T. B. Tetlow, 1842-1843.

No information available (Crockford). In 1843 resided at 1, Audley Street, Everton. Church not known.

Samuel Henry Thompson, D.L., J.P., 1842-1847. Born March 22nd, 1807. Died December 17th, 1892 at Thingwall, Liverpool.

(Messrs. Arthur Heywood & Sons, Bankers).

Was in partnership with Mr. John Heywood (now Heywood's Branch of Martins Bank). He was member of the first Committee in 1842, and he and his sons retained their interest in the hospital throughout their lives.

He married Elizabeth, daughter of Joseph Brooks Yates, January 24th, 1837. Their second son, Rev. Samuel Ashton Thompson, took the name of Thompson-Yates and it was he who endowed the Thompson Yates Laboratories in the University of Liverpool. Their youngest son, Edward Phillip Thompson, equipped the ward attached to the School of Tropical Medicine, which was named the Samuel Henry Thompson Ward in memory of his father. (See Joseph Brooks Yates).

Rev. Richard Lakeward Townsend, 1842-1846.

Ordained Deacon 1827. Priest 1828 Chester. Vicar of All Saints, Wandsworth Common, from 1850.

John Abraham Tinne, 1850-1851. Born 1807. Died 1883.

(Sandbach, Tinne & Co.).

John Bethune Thompson, 1871-1895.

(John B. Thompson & Co., General Brokers, 24 Hackins Hey.

Residence, Fulwood Park, Aigburth.

James Capellen Tinne, 1877-1878. Born April 7th, 1847. Died February 1st, 1925.

(Messrs. Garnett, Tarbert & Tinne).

Hon. Secretary Fox Terrier Club 1891-1923. President Oxford University Boat Club 1869. Rowed in three winning

aces against Cambridge 1867-8-9. Captain of the Oxford four-oar which won race with Harvard, U.S.A., in 1869. Graduated B.A. 1869. M.A. 1873. Verderer of the New Forest.

H. Sutton Timmis, 1890 to date. Vice-President.

B.A. Trinity College, Cambridge. J.P. County of Lancs.

Married daughter of George Henry Horsfall. When Mr. Horsfall retired from the Presidency in 1890 Mr. Timmis joined the Committee, of which he is now the oldest serving member. He never accepted the Presidency excepting temporarily in the interim between the death of Mr. Allan Paton in 1934 and the succession of the Rt. Hon. The Earl of Sefton in 1935. He has been an active and generous supporter of the Hospital. Is member of Mersey Docks and Harbour Board; Commissioner of Upper Mersey Navigation, Chairman of Queen Victoria District Nursing Association and Deputy Chairman Liverpool Cathedral Building Committee. His father endowed the University Cancer Research.

Edward Phillips Thompson, 1894-1895. Born September 9th, 1856. Died September 16th, 1924.

Director of the Liverpool Gas Company and of the Leeds & Liverpool Canal Company. Worked for many years with Canon Postan in the interests of the Grafton Street Industrial Schools. Member of the Whitchurch Board of Guardians 1895. J.P. 1903. He equipped the Samuel Henry Thompson Ward (the Tropical Ward) in memory of his father. He left £1,000 to the Hospital. At Whitchurch he was noted as a collector of coins, medals and books and endowed the free Library and public Museum in that town.

John Abraham Tinne, 1914-1933. Vice-Pres. Born November 1877. Died September 1933.
(Sandbach, Tinne & Co.).

M.P. for Wavertree Division of Liverpool 1924-1931. J.P. for County of Cheshire. Director of the Liverpool Gas Company. Hon. Treasurer of the Liverpool School of Tropical Medicine.

John Tunnicliffe, 1921-1925.

Director of African and Eastern Trading Corporation. Retired 1925. For some time in the Cameroons Colony.

W. B. Turner, 1928 to date.

L.M.S. Railway Hospital Fund.

T. B. Tod, 1929 to date.

(Hughes & Patterson, Wool Brokers).

A. C. Turner, 1934 to date.

Agent of Bank of England, Liverpool.

William Watson, 1842-1850.

(Watson & Co., Merchants, 22 Fenwick Street).

Roger Waterhouse, 1851-1852.

(Nicholas Waterhouse & Sons, Merchants and Brokers,
1 Old Hall Street).

Thomas Wagstaff, 1862-1863.

No definite information.

John William Wilson, 1862-1863. Born 1829. Died September
5th, 1904.

(J. A. Bencke & Co.).

R. A. Watson, 1874-1877.

Timber Merchant and Saw Mill Proprietor. (Watson &
Todd, Crosshall Street).

Horace Walker, F.R.G.S., 1880-1907. Born *circa* 1838. Died
January 2nd, 1908.

(Walker, Parker & Co., Lead Merchants).

Chairman of the Metal Trades Section, Chamber of Commerce
1885-1886. Trustee of the Liverpool Savings Bank. Member of
the Alpine Club.

Ernest Taylor Woodward, 1887-1889. Died October 31st, 1916.
Corn Merchant.

Married August 14th, 1872, to Anita Wilhelmina, daughter
of Robert Macalister of Liverpool.

F. Newall Watson, 1904-1910.

South American Merchant, Mersey Chambers, Old
Churchyard.

O. Harrison Williams, 1905-1906. Died December 1st, 1934,
aged 69.

Cotton Broker (O. H. Williams & Co.).

Married Florence M. Pinnock, niece of Sir Alfred Jones. Was
Director of Elder, Dempster & Co. and Associated Companies.
Also of the Bank of British West Africa.

Thomas Woodsend, 1907-1926. Pres. 1912-25. Born September
21st, 1847 at Nottingham. Died January 1927.

(Senior Partner of Duncan Fox & Co.).

In 1872 was appointed sub-manager of the Lima Office of
London Bank of Mexico. Joined staff of D. F. & Co. in 1874.

Director of the Royal Insurance Co., of the British and Foreign Marine Insurance Co. and the Anglo South American Bank Ltd. J.P. 1914. He was a generous donor to the hospital.

Frank C. Wilson, 1921-1923.

(Director of the North Shore Mills Co. Ltd.).

Lord Mayor 1922-1923. Alderman 1927 and 1931. Elected Life Member of the City of Liverpool Branch of the British Legion 1929. Chairman of the Electric Power and Lighting Committee of the Corporation.

Henry L. Wrathall, 1921-1927. Died November 19th, 1927, aged 65.

(Wrathall & Co., Chemical Brokers).

Member of the Exchange News Room for over 40 years. Treasurer of Coronation Masonic Lodge. Chairman of the Board of Management of the Hospital.

L. W. Wethered, 1925-1931.

(Forgan Clover & Co., Stockbrokers).

Ex-Captain of the Liverpool Cricket Club.

R. Watson, 1932 to date.

Representative L.M.S. Rly. Hospitals Fund.

On staff of L.M.S. Railway Co.

Joseph Brooks Yates, 1842-1850. Pres. 1842-1850. Born Jan. 21st, 1780. Died December 12th, 1855.

Banker. (J. B. Yates & Co.).

The first President of the Southern and Toxteth Hospital. Son of the Rev. John Yates (Grandfather of Wm. Rathbone, M.P.). His brother, Richard Vaughan Yates, founded Princes Park in 1843 and another brother, James Yates, was a Fellow of the Royal Society. Educated at Eton. Art Collector and Patron of Letters. Pres. of Royal Institution and of Lit. and Phil. Society and others. His daughter, Elizabeth, married Samuel Henry Thompson. (See Samuel Henry Thompson).

Richard Vaughan Yates, 1856. Born July 4th, 1785. Died November 30th, 1856.

Merchant (Yates, Cox & Co., Brunswick Street).

Third son of the Rev. John Yates. It was he who laid out Princes Park in 1843 to the designs of Sir Joseph Paxton. An obelisk to his memory was erected in the Park by public subscription in 1858. Philanthropist of great benevolence and liberality, especially in the cause of education. Princes Park was the first of the great open air spaces provided for the public in the city.

Rudolph Zwilchenbart, 1861-1862. Born in Liestal (Basle) in 1795. Died in Childwall February 24th, 1879.

He came to Liverpool with his brother Emil about 1818-20 and founded the Firm of R. Zwilchenbart & Co. which later became Z. Blessig & Co. and afterwards Z. Forrer & Co. when Mr. Blessig joined the firm of Blessig Braun & Co. in 1854.

One of his daughters was married to Alderman Joseph Livingstone. His brother Emil was Swiss Consul in Liverpool for many years. Emil's daughter Eliza married Mr. Gilbert Moss.

THE ADMINISTRATIVE STAFF.

When the plans of the Hospital were completed in 1870 or thereabouts it was considered that a perfect building had been arranged and little provision was made for possible alterations and extensions in the future. Reference to the histories of the various departments will show how little the advancement of hospital administration and the changes in the clinical and scientific departments had been anticipated. Many of the consequent requirements have been met by erection of new buildings, others by structural alterations in the main building and some by adaptations corresponding with the introduction of administrative innovations.

THE MEDICAL BOARD ROOM CONVERTED INTO THE HOSPITAL OFFICE

The Honorary Medical Staff from the very beginning has constituted a Board for the consideration of "All professional matters connected with the Hospital and for such other matters as may be referred to them by the Committee to report thereon." Their deliberations took place at an afternoon meeting held once a week in a specially provided room which was a counterpart of the present Committee Room. The former was on the right, the latter, as at present, on the left of the entrance hall. There were primarily only six members of

the Board, to whom the inconvenience of having to attend the meetings was sometimes very obvious. The meetings involved special visits from some of the members and often interruptions in the ward work of those who were paying their official rounds. There were occasions when the Chairman was the only member present. He solemnly read the minutes and signed them and then proceeded to do his best with any routine business.

About 1906-07, a period when the members of the staff were mostly very busy men, the difficulty of getting the Board together became acute and, to overcome this, the staff arranged to hold evening meetings at the house of the Chairman for the time being. So it came about that the Medical Board Room, having lost its original function, became available for reconstruction and conversion into the Hospital Office.

The Medical Board Room was a remarkably fine one. On its walls were portraits of some of the past members of the staff. It was furnished with heavy library furniture, including large mahogany bookcases containing medical books, both ancient and modern. The keys were in the custody of the Senior House Surgeon. There were also two handsome mahogany instrument cabinets, having drawers and sliding open shelves lined with green baize. A remembrance of the instruments of these early days is quite interesting. There were the knives, saws, etc., with their rough black ebony or ivory handles, and lancets and small bistuories (constructed on the principle of a penknife) with tortoiseshell handles. Some of the all metal instruments were engine-turned or ornamentally engraved. It is really a pity that these old appliances were not retained as a museum of the early Listerian period and that which preceded it. Among the antiques were seton needles and scarifiers used for wet cupping. I distinctly remember seeing patients with seton tapes inserted into the napes of their necks. The operation of wet cupping must have been abandoned by the 70's, but it was not uncommon to see scars from the scarifiers on patients who had been wet cupped in former days, and the warning was still mentioned about not marking the skin in such a way that

the patient might be mistaken for a convict later on. From this it would appear that the scars might resemble some form of branding employed in the convict stations.

The advent of the antiseptic era by no means led to the immediate banishment of these old-fashioned knives and other instruments, which were so difficult to clean in the surgical sense of the term, or even to render safe by immersion in the 5% carbolic lotion generally relied upon.

It is difficult to say how the business of the hospital was administered in its earliest days or who acted as the executive. One of the committee acted as hon secretary, the first of them being Mr. Samuel Minshul, but I rather think his main duty must have been the taking of minutes at the meetings. It seems probable that the President, Vice-President and Treasurer may have conducted executive business perhaps at their private offices with the assistance of their clerks. One or other of these officers kept the keys of "an iron chest" in which the "deeds, evidences and writings relating to the Institution" were deposited.

Some years after the Royal Southern buildings were opened Mr. Samuel James, a paid secretary, was appointed and had an office in what afterwards became the Students' Room but, so far as can be recollected, he only occupied it for a limited number of hours in the day. His duties were mainly clerical and were carried out for the most part under the instructions of the President, to whose office he paid frequent visits. He possibly acted in part as collector of subscriptions. He did not seem to have much to do with the internal administration of the hospital, which was in the hands of the Senior Resident Medical Officer (sometimes referred to as the Master of the House) who controlled the male servants. The Matron was responsible for the nursing and domestic departments and also for the housekeeping. There is no doubt that a great deal of personal service must have been devoted to the business affairs of the hospital by the President and Treasurer, with the assistance of the paid secretary and their own office staffs, prior to the advent of the modern organisation having a business superintendent to supervise it. This change took place

in 1907 coincidentally with alterations in the personnel of the Resident Medical Staff. The Honoraries found it impossible to carry on under the arrangement whereby each Resident was attached to a Physician and a Surgeon, so the number was doubled and a Houseman appointed to each member of the visiting Staff. This terminated the functions of the Senior Resident as a domestic administrator. At this period a superintendent and secretary had been advertised for to attend to the whole of the internal economic arrangements and the general business of the Institution under the direction of the Committee. Mr. Allen Naldrett was appointed to this important office and, during his tenure of it for twenty-seven years, he became recognised throughout the country as an authority on hospital administration. At the beginning of his career Mr. Naldrett had a somewhat difficult task in the organisation of his department, partly owing to the change over from purely voluntary to professional superintendence; this, however, became adjusted in time and valuable work ensued. The office staff consisted at first of one typewriter clerk, a very efficient youth derived from a neighbouring industrial school, who subsequently got a better appointment in another hospital. Since then the staff has been augmented to meet the increased requirements and Mr. C. H. Spence* holds the position of Assistant Secretary. Mr. Naldrett died in 1933 after building up a very efficient service of hospital administration. He was succeeded by Mr. Frank Solman, Assistant Secretary to the Westminster Hospital, London, whose business-like efficiency is recognised and appreciated.

*Co-Author of *Hospital Accounting and Secretarial Practice* by Frank D. Dunn and C. H. Spence.

HON. MEDICAL AND SURGICAL STAFFS
OF THE
ROYAL SOUTHERN HOSPITAL,
1842-1936.

Hon. Physicians.

NAME.	DATE.	
John Grindrod M.D.	1842—1848.	Consulting to 1856
John Cameron M.D., F.R.C.P.	1848—1899.	„ „ 1906
William Carter M.D., F.R.C.P., B.Sc., LL.B. (Lond.), F.R.C.S.I.	1870—1907.	„ „ 1912
William Williams M.D., M.R.C.P.	1878—1903.	Consulting to 1931
Charles J. Macalister M.D., F.R.C.P., D.L. (Lancs.), 1921-27.	1900—1925.	Consulting to date
John Lloyd Roberts M.D., F.R.C.P., B.S., B.Sc. (Lond.), F.R.C.S. (Eng.).	1903—1923.	„ „ 1932
William Johnson M.D., F.R.C.P.	1923.	On Staff.
Norman Capon M.D., F.R.C.P.	1925.	„ „

Hon. Surgeons.

J. L. Minshull F.R.C.S. (Eng.), 1853.	1842—1857.	Consulting to 1882
Joseph Churton M.R.C.S., 1821.	1842—1856.	Consulting to 1860
James Petrie M.D. (Ed.), 1827.	1842—1856.	Consulting to 1876
John Nottingham L.R.C.P., 1844.	1856—1877.	Consulting to 1895
Robert Hamilton F.R.C.S., 1861, M., 1849.	1856—1888.	Consulting to 1914
Alfred Higginson M.R.C.S., L.S.A., 1832.	1857—1867.	„ „ 1884

T. Gulston Wollaston	....	1867—1877.	
M.D. (St. And.), 1861, M.R.C.S & L.S.A.			
William Little	....	1877—1887.	
M.D. (Erling), 1871, L.R.C.P., M.R.C.S. & L.S.A., 1868.			
Thomas D. Ransford	....	1877—1881.	
F.R.C.S., 1876, M., 1873.			
Frank T. Paul	....	1881—1889.	
F.R.C.S., 1878, Ch.M., 1907 & D.Sc., 1912 (Hon. Causa Univ. L'pool.)			
Henry G. Rawdon	....	1887—1897.	Consulting to 1900
M.D. (St. And.) 1859, M.R.C.S., 1858 and later F.R.C.S.			
William Alexander	....	1888—1910.	Consulting to 1919
M.D. (R.U.I.), 1870, F.R.C.S., 1877.			
Sir Robert Jones, Bart.	....	1889—1918.	„ „ 1933
K.B.E., C.B., D.L. (Lancs.), F.R.C.S.			
Hon. D.Sc., LL.D., Aberdeen, Yale, etc.			
Geo. P. Newbolt	....	1897—1924.	
C.B.E., F.R.C.S.			
D. Douglas Crawford	...	1910—1927.	
F.R.C.S.			
Theo. R. Armour	....	1918—1924.	(See Orthopædic Surgeons).
F.R.C.S. (Edin.).			
O. Herbert Williams	....	1924.	On Staff.
F.R.C.S. (Lond & Edin.)			
J. T. Morrison	....	1929.	„ „
O.B.E., M.B., Ch.B. (Edin.), F.R.C.S.			

Hon. Deputy Surgeon in Department of Orthopædics.

T. H. Martin	....	1919—1922.
M.B., Ch.B.		

Hon. Orthopædic Surgeons.

Sir Robert Jones, Bart.	....	1889—1918.	Founder of the Department.
Theo. R. W. Armour	....	1924—1935.	Consulting to date
F.R.C.S. (Edin.).			

Hon. Assist. Orthopædic Surgeons.

H. Taylor	....	....	1924—1932.
M.R.C.S., L.R.C.P.			
B. L. McFarland	....	....	1932. On Staff.
M.D., M.Ch. (Orthop.), F.R.C.S. (Edin.).			

Hon. Assist. Physicians.

William Johnson	...	1921—1923.
M.D., M.R.C.P.		
Norman B. Capon	....	1923—1925.
M.D., M.R.C.P.		

Robert Coope	....	....	1924—1929.
	B.Sc., M.D., M.R.C.P.		
Noble H. Chamberlain	....		1925—1933.
	M.D., M.R.C.P.		
R. W. Brookfield	....	....	1929. On Staff.
	M.D., M.R.C.P.		
D. U. Owen	....	....	1933—1934.
	M.D., M.R.C.P.		
E. T. Baker-Bates	....		1934. On Staff.
	M.D., M.R.C.P.		

Hon. Assist. Surgeons.

Theo. R. W. Armour	....		1906—1918.
	F.R.C.S. (Edin.).		
Herbert Williams	....	....	1913—1924.
	M.B., Ch.B., F.R.C.S., D.P.H.		
H. C. W. Nuttall	....	....	1922—1925.
	F.R.C.S.		
W. R. Williams	....	....	1925. On Staff.
	M.D., Ch.B. (Liv.), F.R.C.S. (Eng. & Edin.).		
C. A. Wells	....	....	1926. „ „
	M.B., Ch.B., F.R.C.S.		

STAFFS OF SPECIAL DEPARTMENTS.

Tropical Diseases Ward.

Prof. Sir Ronald Ross	....		1899—1910.
	K.C.B., K.C.M.G., F.R.C.S., F.R.S., LL.D., D.Sc., &c.		
Prof. W. W. Stephens	....		1910—1917.
	M.D., B.C., D.P.H., F.R.S.		

X-Ray Department.

C. Thurstan Holland	....		1896—1906.
	M.Ch., M.R.C.S., D.L.		
David Morgan	....	....	1906—1921. Consulting to date
	M.B., C.M.		
J. H. Mather	....	....	1921. On Staff.
	M.B., Ch.B., B.Sc., D.M.R.E.		
Norah Walker, Registrar	....		1930. On Staff.
	M.B., Ch.B., D.M.R.E.		

Diseases of Ear and Throat.

C. G. Lee	....	....	1893—1912.
	M.R.C.S.		
William Permewan	....		1912—1923. Consulting to 1926
	M.D., F.R.C.S.		
	Hon. Laryngologist 1895-1912, Ear and Throat, 1912-1923.		

William Sanderson	....	1916—1933.
M.B., Ch.B.		
J. E. G. McGibbon	....	1933. On Staff.
M.B., B.S., D.L.O.		
John McFarland, Clinical Assistant	1933.	On Staff.
M.B., Ch.B.		

Diseases of the Eye.

Richard Williams	....	1893—1909.
M.R.C.S.		
Robert Hamilton, Jun.	...	1908—1919.
F.R.C.S. (Ed.).		
T. Louis de Courcy	....	1921—1926.
B.A., M.D., Ch.B., D.P.H.		
A. McKie Reid, M.C.	....	1927. On Staff.
F.R.C.S. (Eng.), L.R.C.P., D.O.M.S. (Lond.).		

Children's Department.

(CLINICAL ASSISTANTS).

Mrs. Simonne Thompson	....	1922.
M.B.		
Norman B. Capon	....	1922.
M.D., M.R.C.P.		
H. T. Finlayson	....	1922—1923.
M.B., Ch. B.		

Actino-Therapeutic Department.

Charles J. Macalister	....	1915—1925.
M.D., F.R.C.P.		
Arthur A. Fitch	....	1933—1934.
M.R.C.S., L.R.C.P.		
R. M. B. MacKenna	....	1935. On Staff.
M.D., M.R.C.P., M.R.C.S.		

Dermatological Department.

F. H. Barendt	....	1900—1926.
M.D., F.R.C.S.		
Arthur A. Fitch	....	1927—1934.
M.R.C.S., L.R.C.P.		
R. M. B. MacKenna	....	1934. On Staff.
M.A., M.D., B.Ch. (Cantab.), M.R.C.P.		

Neurological Department.

William Johnson	....	....	1921.	On Staff.
				M.D., F.R.C.P.
Fredk. Hopkins,		Hon. Medical Psychologist	1934.	" "
				M.D., B.Ch., B.A.O.

Cardiological Department.

E. Noble Chamberlain	....		1925—1933.	
				M.D., M.R.C.P.
D. U. Owen	....	....	1933—1934.	
				M.D., M.R.C.P.
R. W. Brookfield	...	....	1935.	On Staff.
				M.D., M.R.C.P.

Gynæcological Department.

A. Leyland Robinson	....		1924.	On Staff.
				M.D., F.R.C.S.

Assistant Gynæcologist.

Morris Datnow	....	....	1933.	On Staff.
				M.D., F.R.C.S. (Edin.), M.C.O.G.

Electro-Therapeutic and Massage Department.

Harman Taylor	....	....	1933	On Staff.
				M.R.C.S., L.R.C.P.

Pathological Department.

Prof. J. M. Beattie,	Hon. Consulting Pathologist,		1912 to date.	
J. R. L. Dixon	....	....	1887—1888.	
Charles J. Macalister	....		1888—1893.	
F. H. Barendt	....	....	1893—1900.	
Lyn Dimond	....	....	1900—1907.	
F. F. Leighton	....	....	1907—1909.	
D. Moore Alexander	....		1909—1914.	Later Bacteriologist
J. T. Morrison	..	....	1914.	Went to War.
E. H. Eastwood	....	....	1920—1922.	
H. C. W. Nuttall	....	....	1922.	
A. A. Finch	....	....	1923—1924.	
R. Howard Mole	....	....	1930.	On Staff.

RESIDENT MEDICAL STAFF.

1842—1936.

NAME.	DATE.
William Okell	1842
John William Metcalfe	1844—1845
Thomas Guyon Purchase	1844
Thomas Wm. Challinor	1845
Thomas Morris	1846—1849
John Cowburn	1846
Thomas A. Cammark	1848
W. P. Harrison	1849—1850
G. C. Sharman	1850—1851
H. F. Barrett	1851
Robert Batty	1852
Alfred Wall	1852—1853
Barnabas Barrett	1853
Charles Royston	1854—1856
W. B. Pepler	1854—1855
Ed. C. Garland	1856—1857
Wm. Townsend	1857
Joseph J. Pope	1858
John M. Bateson	1858
Clarence Pemberton	1859—1860
P. E. Downs	1860—1862
Hayden Starke	1862
T. G. Wollaston	1863—1867
John H. Evans	1863—1867
Alfred Trubshaw	1868
W. R. Davies	1868—1870
William Little	1869—1871
Richmond Leigh	1871
Henry Harvey	1871—1873
W. R. Hughes	1874
William Williams	1874—1875
Henry Cuddy	1875—1876
Owen Gwatkin	1876—1878
Richard Wearing	1877—1880
J. Milner Helme	1878—1880
L. W. Davies	1879—1881
Henry Welch	1881
J. M. Chisholm	1881—1882
J. T. R. Davison	1882—1883
W. H. J. Sellers	1882—1884
M. M. Fitzpatrick	1883
F. J. Allen	1884
A. H. Gordon	1884—1886

NAME.	DATE.
F. Knight	1885—1886
J. R. L. Dixon	1885—1887
F. H. Wigmore	1887—1888
W. C. Helme	1887—1889
R. Jackson	1888—1889
W. H. C. Davey	1889—1890
W. B. Paterson	1890
Ed. Hale	1890—1891
W. E. Burton	1891
W. A. Betts	1891—1892
William Crooke	1892—1895
Robert Ed. Roberts	1892—1893
Wm. J. Woods	1894
F. J. Hare	1894
C. R. Edmondson	1895—1896
James Marsh	1895
J. A. Craig	1896—1897
J. R. Thompson	1896—1897
T. W. Naylor Barlow	1897
Charles M. Morris	1898
John Owen	1898
M. A. Archdall	1898—1900
Harold Nuttall	1899—1900
Arthur Henry Evans	1899
A. Middleton Dodd	1900
Harold G. Webster	1901
J. Gerald Sheahan	1901—1902
W. E. Herbert	1901—1902
John H. Wrightson	1902
D. McCrae Aitken	1903
Thoe. R. W. Armour	1903
David Moore Alexander	1903—1904
E. Colston Williams	1904
H. Bertram Smith	1904
Frances H. Salisbury	1905
G. Robertson Mill	1905
Robert Donaldson	1905—1906
Alan H. Pinder	1906
J. Tryweryn Lloyd	1906

**1907.—Resident Staff divided into Resident Physicians
and Resident Surgeons.**

O. Herbert Williams	1907—1908
E. R. Grieveson	1907
Wilfred Parry	1907

NAME.	DATE.
James Glen Wallis	1907
Stanley Alwyn Smith	1907—1908
Bertram T. John Glover	1907
B. A. J. Peters	1908
Arthur C. Jenner	1908
Geo. C. F. Simpson	1908
Raymond Verel	1909
M. A. Lindsay	1909
A. Bruce Gordon	1909
G. E. C. Simpson	1909
Wm. Robertus Pierce	1909
Eric McKay Reid	1910—1911
A. Walbrugh	1910
S. F. Fismer	1910—1911
B. P. Campbell	1910
Norman G. Thornley	1910
Joseph J. Levin	1911
T. P. McMurray	1911
Naughton Dunn	1911—1912
Quintus Madge	1912
W. Hilton Parry	1912—1913
Alfred R. Hargreaves	1912
T. H. Martin	1912—1913
Robert Findlay	1913—1914
Hugh Pierce	1913
Noel G. Chavasse	1913—1914
V.C. and Bar.	
A. L. Krogh	1914—1915
F. A. Belam	1914
Hesketh Roberts	1914
David Johnson	1915
Miss Christine Hanson	1915—1916
Miss Margaret Basden	1915
J. R. Jones	1915—1916
R. J. Minnitt	1916
Lyle Cameron	1916—1917
Miss Grace Pailthorpe	1916
M. Nurick	1917
Miss F. M. Kerruish	1917
Miss E. Mawson	1917
F. P. M. Clarke	1917—1918
F. C. Lewis	1918
S. D. McAusland	1918
G. H. C. Harding	1918
H. Jennings	1918

NAME.						DATE.
E. Percy Edwards	....	....	....	....	....	1918—1919
P. E. Gorst	....	....	....	....	....	1918—1919
G. V. C. Last	....	....	....	....	....	1918—1919
R. A. Cooke	....	....	....	....	....	1918—1919
R. M. Jones	....	....	....	....	....	1919
R. O. Jones	....	....	....	....	....	1919—1921
S. Glynne Jones	....	....	....	....	....	1919—1921
H. Beade	....	....	....	....	....	1919
D. J. Browne	....	....	....	....	....	1919
E. J. Littlejohn	....	....	....	....	....	1919
P. Y. Lyle	....	....	....	....	....	1919—1920
E. R. Webb	....	....	....	....	....	1919—1920
J. Duffin	....	....	....	....	....	1919—1920
R. J. B. Madden	....	....	....	....	....	1919—1920
D. J. Nicol	....	....	....	....	....	1920
G. H. C. Harding	....	....	....	....	....	1920—1921
B. F. Niblock	....	....	....	....	....	1920
D. O. Williams	....	....	....	....	....	1920—1921
J. P. Martin	....	....	....	....	....	1920—1921
J. P. T. Mills	....	....	....	....	....	1920—1921
J. Mackenzie	....	....	....	....	....	1921
Hugh Carson	....	....	....	....	....	1921
F. G. Latham	....	....	....	....	....	1921
M. Newman	....	....	....	....	....	1921
C. Milne	....	....	....	....	....	1921
T. McG. Reid	....	....	....	....	....	1921
W. J. Micks	....	....	....	....	....	1921
M. H. Cohen	....	....	....	....	....	1921
W. H. A. Dodd	....	....	....	....	....	1921
Miss M. F. Menzies	....	....	....	....	....	1922
Miss F. M. Lamport	....	....	....	....	....	1922
Miss A. A. Alexander	....	....	....	....	....	1922
A. A. Mackenzie	....	....	....	....	....	1922
H. P. Widdup	....	....	....	....	....	1922
C. H. Gordon	....	....	....	....	....	1922
T. S. King (Casualty Officer)	....	....	....	....	....	1922
B. Orsman (Casualty Officer)	....	....	....	....	....	1922
Nora Walker (Casualty Officer)	....	....	....	....	....	1922

Resident Medical Officers.

APPOINTED FOR SIX MONTH PERIODS.

J. K. Reid	....	....	....	....	....	1922—1923
A. Cathcart	....	....	....	....	....	1922—1923
J. V. Hall	....	....	....	....	....	1922—1923
W. E. Crosbie	....	....	....	....	....	1922—1923

NAME.	DATE.
C. H. Ross Carmichael	1922—1923
K. Lumsden	1922—1923
G. Prideaux	1923
J. V. Hall	1923
W. E. Crosbie	1923
D. Brown	1923
E. Liston	1923
J. R. Azurdia (Casualty Officer)	1923
G. Prideaux	1923—1924
D. Brown	1923—1924
H. P. Widdup	1923—1924
E. R. Smith	1923—1924
B. F. Niblock	1923—1924
W. J. Laird (Casualty Officer)	1923—1924
E. Blair Wilkinson	1924
E. L. Roberts	1924
H. P. Widdup	1924
Robt. C. Gubbins	1924
W. J. Laird	1924
Sidney C. Goldstone (Casualty Officer)	1924
Sidney C. Goldstone	1924—1925
Robt. C. Gubbins	1924—1925
E. Blair Wilkinson	1924—1925
R. J. Prydderch	1924—1925
D. McLoughlin	1924—1925
R. V. Berrington (Casualty Officer)	1924—1925
R. V. Berrington	1925
H. A. Cole	1925
G. Lowe	1925
A. Gillies	1925
G. F. Kinder	1925
Horace Walker (Specials Officer)	1925
R. W. Brookfield	1925—1926
G. F. Kinder	1925—1926
H. McGrath	1925—1926
Seton Lloyd	1925—1926
H. A. Cole	1925—1926
L. Earlam (Casualty Officer)	1925—1926
A. I. Tumarkin (Specials Officer)	1925—1926
W. J. Pierce	1926
A. T. Ashcroft	1926
C. E. Unsworth	1926
S. C. Gawne	1926
A. I. Tumarkin	1926
J. E. C. Walker (Casualty Officer)	1926

NAME.	DATE.
E. D. Bieber (Specials Officer)	1926
J. E. C. Walker	1926—1927
J. Halton	1926—1927
Gordon Brown	1926—1927
J. Edgar Wallace	1926—1927
J. C. McFarland	1926—1927
D. E. P. Pritchard (Casualty Officer)	1926—1927
W. J. Pierce (Specials Officer)	1926—1927
J. Edgar Wallace	1927
J. C. McFarland	1927
S. G. Massey Lynch	1927
E. E. Glenton	1927
J. Halton	1927
A. B. Follows (Casualty Officer)	1927
Gordon H. Brown (Specials Officer)	1927
N. W. Riley	1927—1928
R. L. Wynne	1927—1928
T. Pearse	1927—1928
A. J. Walsh	1927—1928
E. N. Wardle	1927—1928
A. B. Follows (Specials Officer)	1927—1928
H. C. Calvey (Casualty Officer)	1927—1928
Percy H. Whitaker	1928
E. N. Wardle	1928
G. W. Phillips	1928
J. W. Melville	1928
J. V. M. Taylor	1928
H. C. Calvey (Specials Officer)	1928
J. W. Pickup (Casualty Officer)	1928
S. W. Adler	1928—1929
L. G. R. Roberts	1928—1929
E. T. Baker-Bates	1928—1929
J. H. Follows	1928—1929
I. Gurland	1928—1929
J. W. Pickup (Specials Officer)	1928—1929
W. E. James Jones (Casualty Officer), Part period	1928—1929
G. A. T. Jones (Casualty Officer) Part period	1928—1929
I. Gurland	1929
J. H. Follows	1929
F. W. Earle	1929
J. Pasvolsky	1929
L. R. G. Roberts	1929
S. W. Adler (Specials Officer)	1929
S. Canter (Casualty Officer)	1929
C. Lucan Pratt	1929—1930

NAME.	DATE.
E. L. Rubin	1929—1930
A. J. Halton	1929—1930
G. A. C. Lynch	1929—1930
R. B. H. Faichney	1929—1930
A. H. Barzilay (Casualty Officer)	1929—1930
E. B. Whittingham (Specials Officer)	1929—1930
S. Alstead	1930
R. B. H. Faichney	1930
T. J. Gilmartin	1930
J. Lee Walker	1930
Richard Mennie (Casualty Officer) Part period	1930
Alan Curtis (Casualty Officer) Part period	1930
Alan Curtis	1930—1931
W. Newton Chalmers	1930—1931
D. Osborne Hughes	1930—1931
H. Hughes Jones	1930—1931
J. Lee Walker (Specials Officer)	1930—1931
D. H. Collins (Casualty Officer)	1930—1931
A. L. Beresford	1930—1931
Richard Mennie	1930—1931
Alan Curtis (Casualty Officer)	1931
Douglas H. Collins	1931
D. Osborne Hughes	1931
J. E. Lloyd Morris	1931
M. Solomon	1931
L. G. Anderson (Specials Officer)	1931
O. Vaughan Jones	1931—1932
W. Jones Morris	1931—1932
W. Gordon Campbell	1931—1932
I. Harris	1931—1932
M. L. Kaufmann (Casualty Officer)	1931—1932
H. F. Loewenthal	1931—1932
A. Lloyd Potter	1932
H. D. Owen	1932
O. Vaughan Jones	1932
W. H. M. Smith	1932
W. J. Hutchinson	1932
A. M. Russell (Casualty Officer)	1932
H. V. Corbett	1932—1933
G. R. Griffith	1932—1933
H. D. Owen	1932—1933
W. H. M. Smith	1932—1933
W. J. Hutchinson	1932—1933
G. E. Thomas (Casualty Officer)	1932—1933
G. A. Talwrn-Jones (Specials Officer)	1932—1933

NAME.	DATE.
F. C. Angior	1933
J. L. Williams	1933
G. R. Griffith	1933
H. V. Corbett	1933
J. R. Eatough (Casualty Officer)	1933
R. G. Reid	1933—1934
K. W. Stroude	1933—1934
R. A. Hughes	1933—1934
F. C. Angior	1933—1934
R. T. Bowes (Casualty Officer)	1933—1934
S. Basil Levy (Specials Officer) and Resident anæsthetist	1933—1934
J. L. Williams	1933—1934
R. T. Bowes	1934
R. A. Hughes	1934
Idwal Pugh	1934
R. G. Reid	1934
G. E. Thomas	1934
David Simpson (Specials Officer) and Resident anæsthetist	1934
W. R. Hunter (Casualty Officer)	1934
G. W. Evans	1934—1935
Idwal Pugh	1934—1935
Donald Beaton	1934—1935
R. T. Bowes	1934—1935
G. P. Nash	1934—1935
G. C. Gundersen (Specials Dept. & Res. anæsthetist	1934—1935
Miss Freda Knight (Casualty Officer)	1934—1935
A. Gleave	1935
R. P. Tong	1935
S. Shulman	1935
J. C. Goligher	1935
M. M. Wallis (Specials Dept. and Resident anæsthetist)	1935
J. L. Treneman	1935
Ley Pentz (Casualty Officer)	1935
Miss Mary Hurst	1935—1936
M. M. Wallis	1935—1936
J. E. E. Hughes	1935—1936
G. E. Jones	1935—1936
Miss Clarice Hughes	1935—1936
Miss Agnes Y. Bowie (Specials Dept. and Res. anæsthetist)	1935—1936
L. Millward (Casualty Officer)	1935—1936

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CORRECTIONS.

Page 14 (middle) "but is evidently" should read "but it evidently."

Page 60. Dr. Robert Bark should be Dr. *John* Bark.

Page 70. "Golje" should be spelt "*Golgi*."

Page 82. For "Clinical Board of Studies" read "*Board of Clinical Studies*."

Page 152 (4th line) "differences of opinion with those" should be "*from* those."

Page 193. John O. Strafford, Treasurer 1897-1910 instead of 1857-1910.



