

*The London County Council Asylum at Claybury, and a Sketch of its first Working Year.** By ROBERT JONES, M.D. Lond., B.S., F.R.C.S. Eng., Medical Superintendent.

This is the first asylum of the London County Council and the fifth for London, and it stands on a hill 230 feet above ordnance datum in a freehold estate of 269 acres, one-and-a-half miles from Woodford Station, on the Great Eastern Railway. It is about nine miles from the Royal Exchange. The ground was bought by the Middlesex Justices for £39,415. They first visited the spot on 27th February, 1886, almost seven years before patients were received. About 70 acres of the ground is woodland, and the soil is clay with beds of gravel interspersed. The Justices proceeded to fence in the estate, build two lodges, lay down a granite tramway from these to the building site, and level the top of the hill, a plateau of about a dozen acres in extent, for all the central and some of the outside blocks, and also to complete the foundations, when the Local Government Act of 1888 transferred the care of lunatics and the management of County Asylums to the County Councils.

On the 1st July, 1889, the Sub-Committee which the Asylums Committee of the London County Council appointed for the purpose, met the Justices at Claybury, and re-appointed Mr. Hine as architect. To him I am indebted for plans and views of the asylum buildings; also for much of the information upon which I base this paper. Up to this time the Justices had expended £83,297 and the Council £9,307. The London County Council decided upon open competition for the superstructure. Thirteen contractors competed, and Mr. E. Gabutt, of Liverpool, was approved, his tender being £337,945. He had the Sub-Committee's sanction to lay down a line of rails over the land to connect the works with the Great Eastern Railway main line.

The first Chairman of the Asylum under the Council was Mr P. M. Martineau, a Surrey magistrate, whose experience in poor-law work and the management of institutions was described before a Royal Commission as unique. The asylum had the advantage of his continued direction until after the first year of opening.

On the 12th June, 1890, a year after taking it over, Lord Rosebery, the then Chairman of the Council, laid a suitably

* Read at the General Meeting of the Medico-Psychological Association, London May, 1896.

inscribed stone over the principal entrance; and during 1891, whilst the structure was in progress, the Asylums Committee appointed Dr. Clave Shaw to confer with the architect, and Mr. Gunyon, the Council's electrical engineer (to whom I am under much obligation for assistance), and to consider the advisability of electric lighting. The estimated cost was £17,500, the real cost £23,000, £5,500 more having been sanctioned to meet further contingencies. The report of the Chairman stated that "gas would probably cost less, but the superior advantage of brilliancy and softness of light, greater cleanliness, improvement in sanitation, saving in cost of decorating walls and ceilings, were sufficient to decide in its favour." Subsequent experience has fully borne out the boon and comfort to have thus decided.

During the year 1891 it was decided to repair and to add to the mansion on the estate, and Mr. Martineau states "so that it may become 'an annexe' for the accommodation of paying male patients—a small private asylum under public control—and it is hoped that the success of this experiment may encourage the Council to provide further for a class of patients above the pauper class, but who can ill afford to bear the cost of a private asylum, and who may find comparative quiet and comfort; perhaps even a touch of 'home' in such an institution as the Claybury mansion-house." This old mansion was repaired and restored at a cost of £800, and a new wing was added to provide suitable accommodation for acute cases at a cost of £13,130. Fifty male patients are accommodated here at 30s. a week if belonging to London, 40s. if otherwise.

In April, 1892, the date named for completion in the contract (still a year from the reception of patients), Mr. Martineau stated that the Committee were keenly alive to the imminent need the county had for the accommodation the asylum could give, and that they were doing their utmost to push the work on. The buildings, however, were by this date roofed in, the blocks plastered, the floors laid, and the joiners' work fixed in the main. There still remained some of the engineer's work for heating the building, although the seven boilers were already seated.

In December, 1892, the Medical Superintendent was appointed, and the steward took residence. In April, 1893, the Medical Superintendent came into residence, and in May the first patients were received. The road to the principal entrance, however, was not completed, and there was

no electric light or gas. There was, hitherto, no pathological laboratory, mortuary, nor farm buildings, but the general arrangement of the asylum was as follows:—Designed in 1887 to accommodate 2,000 patients—800 males and 1,200 females. (Since then rooms designed for other purposes have been given to patients, so that the present accommodation is calculated at 2,500—1,450 females and 1,050 males.)

These are all accommodated in separate blocks, generally only two storeys high, and connected by one-storey corridors, which communicate with the administrative buildings, the recreation hall, and chapel. The administrative buildings are so arranged as to give access from each in the most convenient way without unnecessary length of corridors. The corridors connecting blocks are 15ft. wide, are divided by screens, cross-ventilated and heated, so that in wet weather they can be used by patients for exercising. One section of the corridor on each side (male and female) is used as a visiting-room three times a week, the number of visitors on Sundays varying from 700 to 1,000.

The asylum throughout is constructed in a very substantial manner, being in red brickwork with plain brick facings, very little stonework or expensive detail being introduced, except in a few of the principal rooms and entrance block, which is the official centre, the materials used being specially selected of the most durable description, and with a view of saving expense in painting and renewals, the corridors being lined to dado height with glazed brickwork. The bake-house, all the sculleries, lavatories, bath-rooms, larders, washhouses, as well as the annexes of every ward and dormitory, and the slop and water closets, are all of white glazed brickwork.

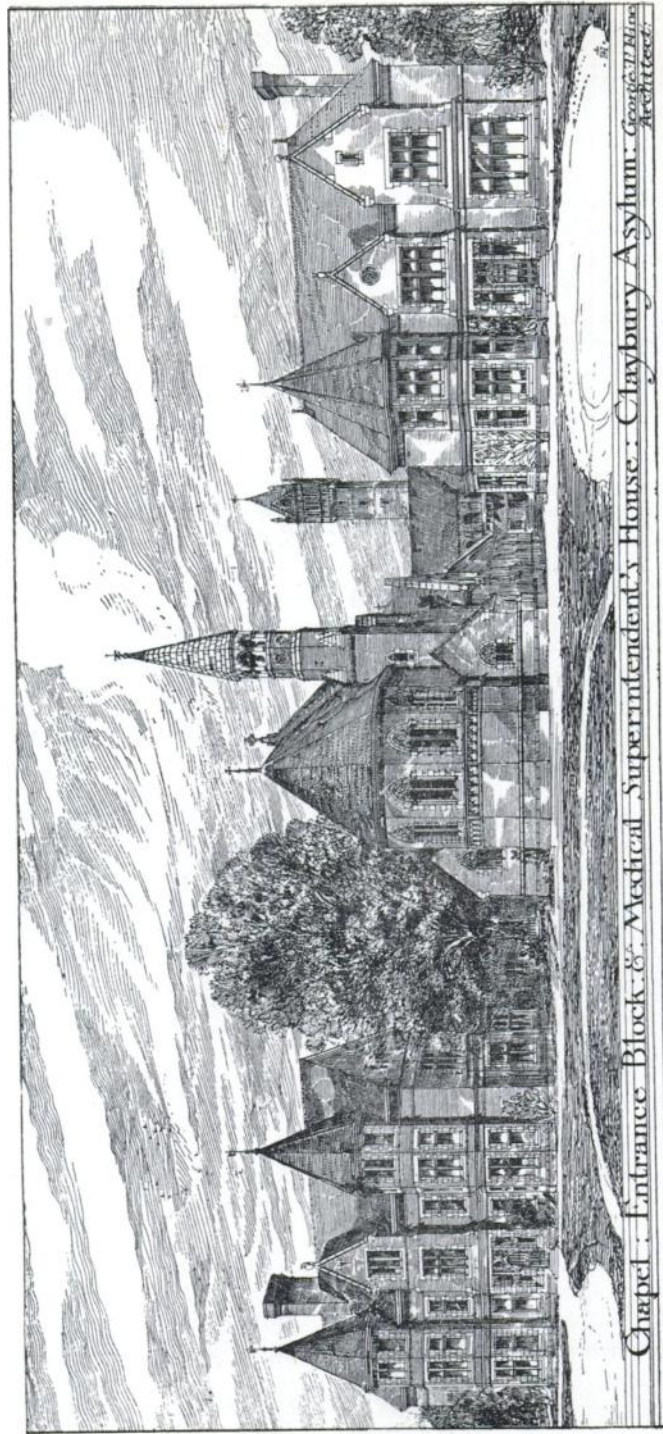
The patients' wards comprise on each side three two-storey blocks for sick and infirm and recent cases in twelve distinct wards, each being self-contained on a floor. These six blocks accommodate 650 patients (300 males and 350 females). Beyond these are two three-storey blocks for acute cases, one on the male side of six wards for 180 patients, the other on the female side of nine wards for 295 patients. A great feature of Claybury is that the acute wards (nine on the female side and six on the male side) are arranged each for a comparatively small number of patients, the total for each ward being 24 or 30, according to its size, each of these wards being again subdivided into three or

four separate rooms. The increased staff necessary to manage these wards is thus very evident, but the advantage in treatment is also very evident, and experience strongly commends this plan for other asylums. Our acute wards, as a result of this, are often quieter and easier to manage than the convalescent, but the extra staff needed tells heavily against the maintenance account.

Near the centre, and fronting two large airing-courts, are two blocks of three wards each for the epileptics, 170 males and 190 females. The dormitories for these are on the first floor, and form one continuous suite. Behind these wards are three-storey blocks, intended for quiet working and chronic cases, the day-rooms being generally on the ground floor and the dormitories above. On the male side these accommodate 350 patients, and 460 on the female side, whilst a block for 150 female patients employed in washing is placed near the laundry. There are 36 padded rooms, all of india-rubber panels, and of these 20 are fully padded, the rest being "half-padded." On the male side are workshops for tailors, shoemakers, upholsterers, carpenters, plumbers, and smiths, and on the female side a large and well-lighted work-room for 100 patients. Adjoining the cross corridors, and near to all the general wards, are bath-rooms with dressing-rooms. On the male side there are 24 and on the female 30 baths.

The whole administrative departments lie between two service corridors, 12ft. wide, running north and south, which give separate access from male and female sides to the laundry buildings, stores, kitchens and offices, and recreation hall, the serving-rooms in the stores, kitchen, and laundry being at the two opposite ends of these buildings, so that the nurses and attendants need not come in contact. Flanking these buildings are two blocks for attendants and nurses, with day, mess, and club-rooms on the ground floor, and bedrooms over, while a second block for nurses, with a separate wing for night nurses, is situated on the north side of the asylum.

The chapel, seating 800 patients, occupies a central position south of the main southern corridor, and on its western side is the entrance or official block, with committee-rooms and offices for the Superintendent and staff on the ground floor, and sitting and bedrooms for the male assistant medical officers above, whilst at the north-east corner of the asylum is a complete house for two lady



Chapel, Entrance Block, & Medical Superintendent's House: Claybury Asylum. George W. Hine Architect.

doctors. On the eastern side of the chapel is the Medical Superintendent's house, connected with the asylum by a private covered corridor.

Near the stores approach to the asylum is a detached house for the steward.

An infectious hospital for 20 patients occupies a site at least 100 yards to the north of the asylum, and a small one for two or three patients is always kept unoccupied and in readiness against the outbreak of any infectious disease.

The mansion for private patients, the workshops, the chapel, and the recreation hall are warmed by what is known as the "Plenum system," the remainder of the asylum being heated on a modification of this, all the heating elements and steam pipes being in the basement storey, out of patients' reach. Fresh air is admitted into underground trunks, which communicate by vertical flues in the walls with all the rooms required to be warmed. The air when heated ascends by its own levity and disperses in the room before being drawn off in the extraction flues, which are carried up into trunks in the roof space and communicate with extraction shafts and cowls, at the base of which are coils of steam pipes to be used as an extracting power in the summer when no warm air is being passed into the building. The heating power is steam, generated in one centre, where seven Galloway boilers provide steam for all heating, hot water, laundry, and cooking purposes throughout the asylum.

Water is laid on from the East London Waterworks Company's service, the buildings being fed from a number of tanks in the roofs, which provide a reserve of about 108,000 gallons.

There is also a system of water mains, charged at 50lbs. pressure, with hydrants and hose piping both inside and outside the buildings, for use in case of fire. The pressure in the main can be increased by setting the engines to work the pumps to about 65lbs. per square inch, and an additional pressure of 48lbs. can be obtained from the high service tank capable of holding 27,000 gallons. The valve of this is always released automatically when a fire alarm is given. This year in their official report the Commissioners in Lunacy stated that never in their experience have they noted so much pressure of water as at Claybury. The soft water is collected by a carefully-laid system of pipes, and conducted into a large tank near the laundry buildings

holding 300,000 gallons, and supplying the boilers, also at one time the laundry wash-tubs.

The entire ceilings of top floors of patients' blocks are of fire-proof construction, and all wards are provided with two exits.

There is a service of gas-piping in the building for cooking purposes, and gas is laid on to every ward kitchen, and gas stoves are supplied for summer use.

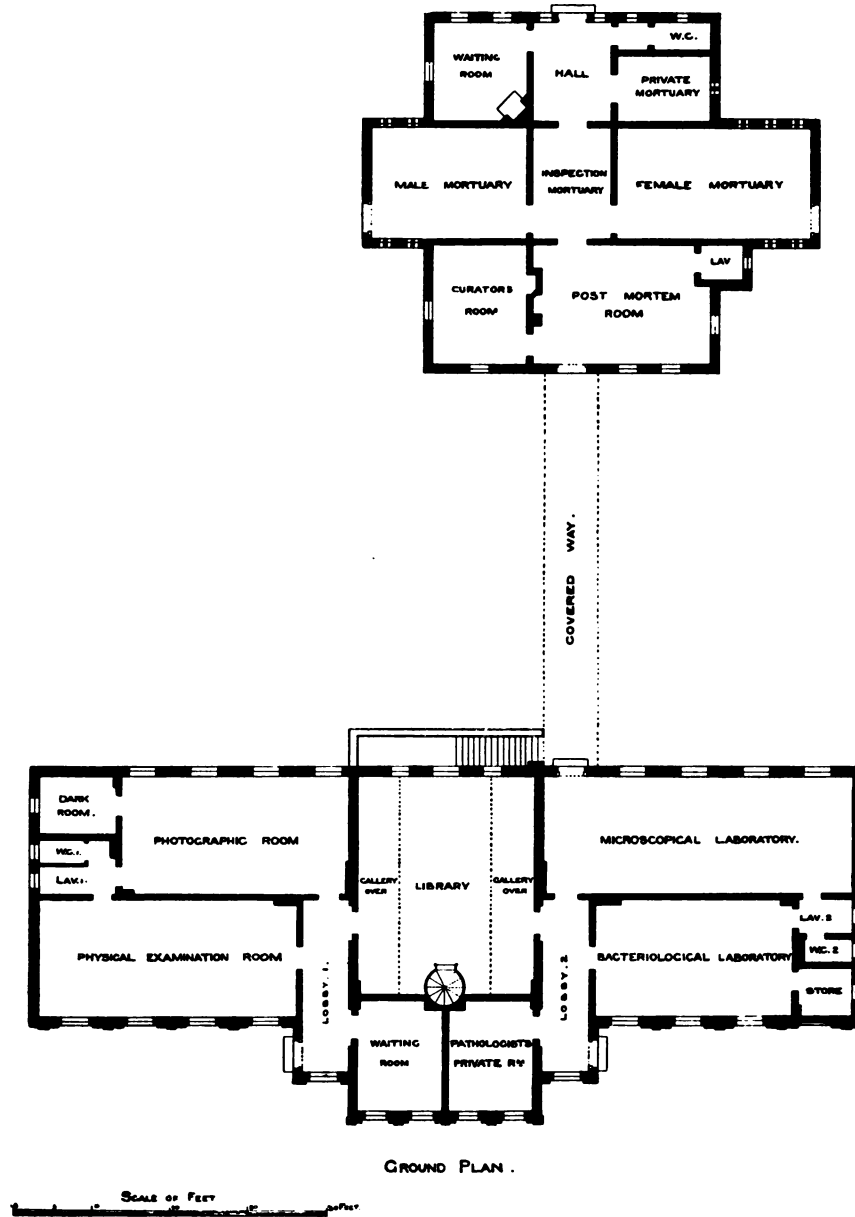
The roads and some of the outside buildings are gas-lighted, but the asylum is electric-lighted throughout at a cost of under twopence per unit. For this purpose three high-pressure boilers were laid by Paxman. They work four engines and with the accumulators supply over 4,000 incandescent and two arc lamps (I hope in another paper to give a full account of the electric lighting).

The airing courts are enclosed with unclimbable iron fencing and are planted. The paths are all asphalted. Seats for patients are found in kiosks and on ordinary garden seats made of teak.

The drainage of the asylum has been very carefully considered, pipes with patent joints being used throughout, and in the few cases where it has been necessary to cross under corridors or buildings, iron pipes have been used. All the lavatories, baths, urinals, &c., empty on to disconnecting traps, the seats of all closets are fixed, and a handle at the end of a chain, enclosed in piping, can be pulled to open a syphon flushing tank of two gallons. The whole drainage system is well ventilated, and furnished at the head of each section with automatic flushing chambers which discharge from 200 to 500 gallons, and of these there are 15, including two at Claybury Hall. These are set in action once a week and are superintended by a workman whose special duty it is to clean the drains, gulleys, w.c.'s and urinals. There are manholes and air shafts and the main drain is carried to a settling tank near the farm for distribution on the land, with an alternative drain connected with the public sewer. The sewage from Claybury Hall has recently been discharged over beds of coke-breeze after the new method of purifying by Dibdin, and the effluent, which is perfectly sweet and clear, is discharged outside the estate. The mortuary and pathological laboratory have separate sewers.

The mortuary consists of an examination and specimen room, two rooms for the dead, one for each sex, and a "cold room" kept below freezing point for pathological purposes. There is also a waiting-room for friends.

PATHOLOGICAL BUILDING AND MORTUARY.
CLAYBURY ASYLUM.



G. T. HINE, ARCHT.
WESTMINSTER, S.W.

The pathological department has a bacteriological, chemical, physical and photographic room, with a central library and museum. It was built and fitted up at a cost of £4,000, and it is superintended by Dr. Mott, F.R.S., Pathologist to the London Asylums.

The mortuary and farm buildings were built by the works department of the London County Council and erected at a cost of over £14,200. The latter accommodates about 80 cows and 400 pigs, and is provided with the necessary store rooms and appliances for chaff cutting, cake and corn grinding, worked by a gas engine. There is stabling for six or more horses, and there are outbuildings for young stock, &c.

The asylum alone covers an area of over 20 acres, there are 12 acres of slating, 13 acres of flooring, 2,600 doors, 4,700 windows, 11 miles of sewerage and rain-water pipes, and 22 miles of steam pipes, exclusive of hot and cold water piping; 27,000,000 bricks were used in its construction, and to go round an ordinary inspection involves a walk of about $10\frac{1}{2}$ miles.

The asylum is assessed at a gross value of £22,000 and at a rateable value of £17,000.

It is insured at £189,000.

The keys of the asylum reflect great credit upon the architect, whose ingenious and excellent arrangement of suites has worked well in practice and has the advantage that the officers, attendants, and nurses need as a rule to carry only one key. There is one G.M. (grand master) that passes all locks even when double-locked; next to this comes the A.M.O., which takes the lower grade; then the F.A. (female attendant) key, double-locked by the F.M. (female master), the same with the M.A. (male attendant), which is covered by the M.M. (male master). Then there are suites for the engineers (E.) covered by the master (M.E.) key, and the stewards (S.) covered by S.M. (stores master). The bath-tap key takes the shutter lock, the telephone box lock, attendants' w.c.'s. The stores for males and females have a separate key.

There is a system of tell-tale clocks—one for each side registering in the assistant medical officers' offices, a complete circuit of fire alarm signal stations. Every block and the various administrative offices are in telephonic communication, but it is not possible to be put on directly from the male to the female side; the message from either goes to an exchange and is repeated by the attendant present.

As to the equipment, the contracts were taken in two sections, viz., for the first 500 cases and then for the remainder; the reason being that the reception of 500 cases would much relieve pressing needs and would in the unfinished state of the asylum be as far as we could go, without interfering with the architect's completion. This division, although giving a great deal more trouble and being in reality equal to furnishing two separate asylums, had its advantages; we were enabled to get many changes in the fittings and furniture which were considered necessary, and to introduce many useful varieties of these which have since proved to be improvements as to comfort and safety.

The bedsteads are all of iron. They have rubber pads to the feet instead of castors, to prevent rolling and scratching the pitch-pine polished floors. The heads have no rods or bars, but are in one piece of sheet iron, thus affording no hold and suggesting no convenient place for tying a sheet or other article to. They have tinned wire-woven mattresses. The horse-hair mattresses weigh 20lbs. (27lbs. being considered necessary where there are wooden lathes, or canvas and no spring mattress). The bedsteads are of two kinds—high and low; some of the latter have the feet ending in studs and are locked by a simple adjustment to the floor. This is done in all single rooms furnished with bedsteads. Settees are cushioned in the seats and back. Arm-chairs are carpet or leather-lined, the latter having the arms padded for the elbows—a necessary precaution for the prevention of sores in paralysed and helpless cases, when out of bed. There are Austrian bent-wood arm chairs, as well as ordinary ones. The sofas have no sides and are all upholstered in green American leather. All the floors are beeswaxed and there is no wet scrubbing; squares of carpet and hearthrugs are spread about. The tables are of three kinds, octagons, small round tables, and long tables of 8, 12, and 18 feet long, and patients may have meals at one and all.

The equipment being for 2,000, it was contracted to supply every patient with four chairs on an average—apart from settees, arm-chairs, or sofas—viz., one for the dining, one for the sitting-room, one for the bedroom—at the head and between each bedstead—and one for the recreation hall, the latter when necessary being also used in that part of the corridor serving as visiting rooms.

The chapel has seats in pitch-pine with backs (but no kneelers), and they are not fixed to the floor.

The clothing for male patients was so arranged as to give each man three suits of clothing—two day or working suits, one for summer and one for winter, as well as one for Sundays, also an Inverness overcoat. The women have no uniform, the patterns of material offering abundant variation.

The equipment of the asylum and mansion-house together with matters not referable to building amounted to £65,689. The total cost of the asylum to date, May, 1896, has been £579,303, which, divided by 2,500, gives a cost of £238 18s. per bed, or excluding cost of land, equipment, etc., £189 14s. per bed. These figures I have obtained through the kindness of Mr. Partridge, the clerk to the Asylums' Committee.

The date of opening had always to be kept in view, for it was much pressed by the Committee, who in their turn were pressed by the parish authorities, for the guardians were compelled, through want of beds in London, to find room for their paupers in private asylums and even hospitals, through the length and breadth of the country, paying in some cases two guineas a week for their accommodation.

In March and April, 1893, therefore, before the reception of patients, a foreman engineer with a staff of workmen were appointed under the direction of Mr. Clifford Smith, the Asylums' Engineer, to test the kitchen, bakery, and laundry plants, also the hot and cold water services, and to familiarise themselves with these various appliances. Meanwhile the equipment was proceeding slowly, officers' quarters could not be got ready, and the different contractors for furniture were unable to deliver by the time fixed. The delay was dispiriting and the pressure to open caused unrest, but it was at last decided to receive patients on May 16th, there being as yet no electric light, so that candles had to be suspended in wire baskets from the ceiling as a temporary illuminant; neither had we gas, so that cooking had to be carried on as best we could in the bakery ovens or on the kitchen range.

The great difficulty, and an anxious one, was the presence of scores of workmen in every part of the asylum and grounds, who, from their number and in consequence of the unfinished state of the place, flocked in and out of every conceivable entrance, and occupied wards into which patients had to be received. After about four weeks, candles gave way to the electric light, gas was used for cooking, the workmen one by one gradually disappeared, and order finally prevailed.

The staff at first engaged were the Medical Superintendent, two assistant medical officers, a matron with an assistant, a steward, clerk, and as few attendants as could possibly be managed, keeping only four or five in reserve for opening the next block, and bearing in mind "maintenance rate," before which all seemingly must bow. On one or two occasions we became short of staff, but almost the whole time the supply, such as it was, was more than the demand. It was about six or seven months after opening, and when we were drawing to our full number, that the greatest difficulty was experienced. We opened in May, and by the following February we had over 2,000 in residence. By this time the novelty of a new place and the excitement of opening were wearing off and we had to settle down to constant hard work. It was then that desertion set in. To fill 250 posts, we had engaged 390 staff; one out of every three engaged left the service; many good nurses and attendants left through ill health from excessive labour and strain; some left because they found the work too hard—which indeed it was, for we had no chronic patients to do it; some left also because they were unwilling to work and were unsuitable for the service, others from not getting promotion, which was very rapid for junior nurses and attendants during the opening.

The officers had many anxieties about the duties, for there were no written rules, and many of the staff were raw and new to asylum work. They had therefore to be specially trained. The exactness with which all the details of service are arranged in the London asylums did much to help us, for the pay, leave, emoluments and rank, etc., are all accurately defined, and are the same throughout the Council's service, which relieved us of some of the disadvantages of being without rules. Much of our difficulty was owing to this great mass of raw unused material which had to be relied upon, but this trust gave them confidence, and there was an earnest desire on their part to be useful, to be appreciated, and to be considered joint-heirs to responsibility.

From May, 1893, to February, 1894, a period of about eight months, 1,140 patients were received as transfers from about forty different asylums and licensed houses; the rest, 860, were acute and recent cases, admitted as they occurred in London, where persons become insane at the rate of over 70 per week. For seven months our admission rate

was about 300 per month, but we never received more than 40 per day.

Every male patient was examined naked and the whole bodily condition was taken on admission, but only the chest (heart and lungs) of the female could be examined until the appointment by the Committee of a lady doctor (subsequently increased to two), when the same complete examination of cases in their wards became possible.

Each patient on admission had a case paper. Their names were attached to their bed, and in many cases they were sewn to the inside of their clothing, but we had much assistance from patients themselves, when receiving transfers, for there was generally one male or female more interested and officious than the rest, who gave the names, history, habits, etc., not only of the patients themselves, but also of the staff who accompanied them. We had periodical reckonings of patients, and a roll call had at stated periods to be arranged for, the names being gone through to ensure identification—often a difficult task, for there were several who gave themselves names other than their own. Shortly after admission every patient was photographed and a copy kept in the case-book, which proved a great help in note-taking and since in the recapture of escapes. We had no serious or fatal accident of any kind, and we had no suicide during the first year or indeed during the second, but the “inevitable” happened in our third.

The discharges “recovered” during the first year were very high, but when calculated, as is usual, upon the percentage of admissions, they were low, and I would remark that the manner of calculating upon the percentage of admissions appears to be somewhat anomalous and fallacious. The result is decidedly against a new asylum with a high admission rate, for the higher the admission rate, in a sense, the lower for a particular period will be the “discharged recovered” rate. The more fair method seems to me, that one based upon the average number resident, but the most exact and correct one is that based upon the total number under treatment. As is usual the recoveries occurred in those who had been about three months under treatment, but several unfavourable and restless chronic cases recovered. As to these few, I am not at all sure that the excitement of transferring them from other places, the novelty of their surroundings, the “bustle” of their new life, and the sort of “picnic” existence they lived, gave

them a new zest and a fresh vigour, which unconsciously encouraged them into convalescence, perhaps by opening up new association tracts and exciting fresh nerve ganglia, and perhaps also by refreshing the old paths with new stimuli.

The relapses, as may be expected, in so short a time, were hardly a noticeable factor.

As to the death-rate, it occurred from among the transfers, and it is my opinion that chronic lunatics as a rule bear removal badly. Probably they get accustomed—in a dull but fixed way—to their old surroundings and settle down with difficulty to new habits, as is noticed in a similar degree in old emigrants, who are out of all proportion less successful than the young.

The task of opening so enormous a place has not been a light one; but the strain, the wear and tear, and the anxieties have been greatly relieved by the friendly help of colleagues and the indulgent and sympathetic support of one's Committee.

The Detection of Insanity in Prisons. By J. J. PITCAIRN, L.R.C.P., M.R.C.S., M.P.C.; H.M. Prison, Holloway.

It is frequently levied as a reproach to prison surgeons that they fail to realise how slender and impalpable is the border-line between crime and insanity, and that the proper inmates of an asylum are too frequently treated with the penal discipline of a prison.

In some instances, it is true, the privilege of private practice in combination with his official duties forbids the medical officer of a prison preserving that acquaintance with mental diseases which is nowadays expected from the holders of such appointments. But he is at a disadvantage in respect of the large number of individuals at any given moment for whose physical health he is responsible, and also from the rapidity with which they usually pass through his hands.

The minor officials of a prison, in the routine discharge of their duties, are apt to regard all but the coarser symptoms of mental derangement as the natural concomitant of the tendencies which have placed the individual prisoner under their charge. Thus, to take only the cases of the kleptomaniac or the sexual pervert, who are of necessity deprived of all opportunity of a repetition of the acts which have landed them in prison, the mere observance of the comparatively