

Annual report for the year 1920-21 : (23rd year of issue) / Metropolitan Asylums Board.

Contributors

Metropolitan Asylums Board (London, England)
Sprankling, J.
Duncombe Mann, T.
Botterill, C.
Layton, T. B.
Sims Woodhead, G.
Cartwright Wood, G. E.
Pisani, L. J.
Collins, E. Treacher 1862-1932.

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Metropolitan Asylums Board



ANNUAL REPORT

FOR THE YEAR

1920-21

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METROPOLITAN ASYLUMS BOARD.

ANNUAL REPORT

FOR THE YEAR

1920-21.

(23rd YEAR OF ISSUE.)

OFFICE OF THE BOARD,
EMBANKMENT, E.C. 4.

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1921.

METROPOLITAN ASYLUMS BOARD

BIBLIOGRAPHICAL NOTE.—Before the year 1886 no regular annual record of the work of the Board was published. (In the year 1871, however, and again in the years 1876 and 1877, the Chairman of the Board issued a report of the nature of an annual report, with some statistics.) For the years between 1886 and 1897, both inclusive, the Chairman of the Board issued an annual report and the Statistical Committee also issued a report, each separately. These reports may, together, be taken as the reports of the Board for those years.

For the year 1898, and for subsequent years, an annual report of the Board, and so called, has been issued, consisting of a summary of the work of the Board for the year, the reports of the several standing committees, and the report of the Statistical Committee. The reports for the four years 1898, 1899, 1900, and 1901 were issued in two volumes: vol. I. containing the report of the Board and the reports of the standing committees, except that of the Statistical Committee, which itself formed vol. II. The report for the year 1902 commenced a new series in one volume, bound in cloth and furnished with an index. The reports are sold to the public at 5s. a copy, in one volume or two as the case may be.

The separate reports of the Chairman of the Board above referred to and the first report of the Statistical Committee (1886) were of foolscap size; all the remainder are of the size of this volume.

In the report for 1888 a spot map showing smallpox admissions was included. In the report for 1889 spot maps showing admissions of all diseases to the Board's hospitals were included. In the report for 1890 were included spot maps of notifications also. In the reports for 1891 to 1902 spot maps of notifications but not of admissions were included. In the reports for 1903 to 1905 spot maps of notifications of smallpox and typhus cases only are included.

The following reports are nearly or wholly out of print:—The reports issued in 1871, 1876, and 1877. The report of the Statistical Committee for 1886. The report of the Board (two vols.) for 1900. (For this year—1900—however, all those parts of the report which referred to infectious diseases have been collected and separately printed, and copies may still be obtained. For the years 1899 and 1900 a somewhat similar collection was made as regards the imbecile asylums, and copies may still be obtained.)

From the years of the opening of the several institutions to 1885, annual reports of the medical superintendents, with statistics, and, in some cases, reports by the committees of management, were issued separately, and copies of many of them may still be had.

The annual reports of the Captain-Superintendent and Committee of the training ship Exmouth may be obtained in a separate form from 1877 to 1914: the reports of the Children's Committee from 1898 to 1914; the reports of the Ambulance Committee from 1884 to 1897; the reports of the Finance Committee from 1900 to 1907; and the reports of the Casual Wards Committee for 1912 and 1913.

On account of the War, the reports for 1915 to 1918 each consisted of a small volume sewn in paper covers, without charts—preceding volumes having consisted of about 260 pages, with charts and tables, bound in full cloth.

The review of the Board's work in the present issue covers the year 1920 and the year 1921 down to May. The statistical tables are for the year ending 31 December, 1920. It is proposed in future to follow this practice and review the Board's work covering the Board's year of office from May to May, the statistics covering the year ending 31 December.

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ANNUAL REPORT, 1920-21.

REVIEW FOR THE YEAR.

GENERAL.

1. The constitution, powers and duties of the Metropolitan Asylums Board, together with the legislative enactments and departmental orders relating thereto, are set out fully in Appendix A.

2. In July, 1920, the Board considered a scheme which had been proposed for the administration of health services in London so far as it affected the constitution and duties of the Board. The report of the General Purposes Committee on this subject, which was adopted by the Board, will be found in Appendix B. This report received a substantial measure of public attention, and there is little reason to doubt that the course advocated in it will be followed, viz., that before any further changes are made, an authoritative enquiry should be undertaken into the whole question of the government of Greater London, including the proposed extension of boundaries, the constitution of a central council with local legislative powers, the relations between such a council, if created, and the administrative departments dealing with the main public services. The circumstances of the times, and especially the urgent necessity for strict economy in public administration, have, however, rendered any substantial changes much more remote than at one time seemed likely. The Board, in their report, pointed out that all experience showed that any belief that a reduction in expenditure would follow the centralisation of administrative work was illusory, and that, on the contrary, there would be a great increase in expenditure at a time when economy in everything unessential was of urgent importance. Whatever purposes might be served by changes in the machinery of local government, it is quite certain that economy would not be one of them, and that it could best be assured by a period of rest from legislative changes.

INFECTIOUS HOSPITALS.

(a) *Fevers.*

3. The last annual report contained particulars of the exceptional increase in the number of cases of infectious fevers admitted to the Board's hospitals during the autumn and winter of 1919-20

This increase continued to be very marked throughout the year 1920. The number of patients admitted during the year was 35,916, and at the end of the year there remained 7,465 patients under treatment in the hospitals. Admissions were 13,954 more than in 1919, and the number remaining under treatment at the end of the year was 2,675 more than at the end of the previous year. The lowest number under treatment at any time was 3,512 on 2 July, 1920, and the highest 8,453 on 23 November. The number of diphtheria cases received was 10,636, and the number of cases of measles 526. The incidence of disease in the several months of the year is shown in Table XIII., and its geographical distribution in Table XVI. The following paragraphs, numbered 4 to 10, extracted from a report submitted by the Infectious Hospitals Committee and adopted by the Board in February, 1921, give an account of the work of that department to meet the demands made upon it during what proved to be the biggest epidemic the Board have had to deal with in their history.

4. It will be remembered that in January, 1920, a report was adopted by the Board and ordered to be forwarded to the Ministry of Health and to the members of the several metropolitan borough councils, in which were explained the reasons why it had not been found possible to receive all the cases of infectious disease for whose admission application was made during the epidemic of 1919-20. Those reasons were the curtailment of the fever hospital accommodation owing to the alienation of hospitals during the war to meet urgent national needs, the allocation of 150 beds for the treatment, in four of the acute fever hospitals, of sailors and soldiers suffering from tuberculosis, and the grave difficulties experienced in obtaining the necessary nursing and domestic staff. The following is a record of what was actually accomplished, only a few months later, in dealing, with complete success, with a problem vastly greater in magnitude but under conditions from which the embarrassments referred to above had been largely, though not entirely, removed.

5. The highest number of patients, from whatever disease they were suffering, who occupied beds in the Board's fever hospitals during the seasonal rise of 1919-20 (including 229 tuberculous patients in the Northern Convalescent Hospital) was 5,210 on 21 December, 1919. From that date the number under treatment steadily declined, but it did not fall below 3,739, which was reached on 2 July, 1920, and it was from that comparatively high figure that the seasonal rise of 1920-21 commenced and took a normal course, until a few days subsequent to the re-opening of the elementary schools after the summer holidays, when a very

rapid rise took place and continued until 23 November, 1920, when there were no fewer than 8,669 patients in hospital, or 1,511 more than the highest number the Board had previously ever had to deal with, viz., 7,158 on 19 November, 1907. The following table shows how these two totals were made up:—

Disease.	Number under treatment.	
	23 November, 1920.	19 November, 1907. (Previous highest total).
Scarlet fever	5,664	5,712
Diphtheria	2,594	1,315
Enteric fever	15	130
Tuberculosis	334	—
Other diseases	62	1
Totals	8,669	7,158

The total number of cases admitted from 3 July, 1920, when the rise began, to the end of the year, when, although numbers were declining, cases were still being admitted at the rate of 100 to 120 per day, as compared with the number admitted between the same dates in 1907, was as follows:—

Disease.	Total number of cases admitted from 3 July to 31 December, inclusive.	
	1920.	1907.
Scarlet fever	14,995	15,180
Diphtheria	7,198	4,145
Enteric fever	84	428
Tuberculosis	599	—
Other diseases	303	8
Totals	23,179	19,761

It will be observed that during this epidemic there have been a large number of diphtheria cases. This naturally added to the difficulties of the situation, as it is only possible to transfer to the convalescent hospitals a comparatively small percentage of such cases, and patients suffering from this disease cannot be removed to the outlying Joyce Green Hospital, except to a very limited extent, with the result that the great majority of them have to be

retained in the town hospitals until they are ready to be discharged. Up to the end of the year the daily number of admissions to the acute hospitals exceeded 150 on no less than 64 occasions, and on 16 out of this number they exceeded 200, the highest number on any one day being 244 on 5 November. The highest number in any previous epidemic was 193 on 21 October, 1907.

6. In view of the great difficulty experienced last autumn and winter in securing the nursing staff needed for the full working of the various hospitals, the matrons were asked, in the early part of July, to take all practicable steps to obtain staff to meet requirements during the rise that was then beginning. As, however, it appeared that nurses were not forthcoming in anything like the numbers required in response to the usual efforts to obtain them, steps were taken to advertise the vacancies systematically and extensively in the usual nursing papers and also in newspapers circulating in all parts of Great Britain. As a result over 5,000 letters of enquiry were received and answered at the Head Office, and some 860 nurses were engaged by the matrons of the several hospitals. The approximate cost of the advertising campaign was £900, and considering the success attained we think it will be agreed that the money was well spent. We would, however, point out that the number of nurses engaged by no means satisfied the needs, and that it was found absolutely necessary to supplement them by employing nurses from nursing institutes to a maximum of 197. Approval was also given to the working of overtime by the staff wherever by this it was found that a larger number of patients could be accommodated at the various hospitals. Instructions were, moreover, issued that where the granting during 1920 of additional annual leave to the staff at the several hospitals under the regulations made by the Board on 31 July, 1920, would operate to prevent the utilisation to its fullest extent of the accommodation for patients, such leave might be withheld on the understanding that it would be added to the annual leave in respect of the year 1921, or cash compensation granted in lieu thereof, as might subsequently be determined. With a view to utilising the large resources of Joyce Green Hospital, Dartford, in the early stages of the rise, arrangements were made, and came into operation on 13 September, under which, on several days a week, a number of acute scarlet fever cases were removed from their homes to South Wharf, Rotherhithe, and conveyed, either later in the same day or the following day, to Long Reach (for transfer by ambulance tram to the adjacent Joyce Green Hospital) by one of the Board's ambulance steamers. This steamer, on its return, brought up recovered patients to South Wharf, where they were

met by the Board's ambulances and taken to the usual ambulance stations for discharge. The objects in view were:—

(a) to ensure a greater number of beds in the town hospital at the time of heaviest admissions ;

(b) to have more accommodation in the town hospitals for diphtheria cases, which, as has already been mentioned, cannot so well undertake long journeys ; and

(c) to obviate unduly long journeys by the Board's ambulances in the busiest part of the year and the consequent tendency to delay in removal as a result of single cases having to be taken to Joyce Green Hospital by road.

To make sure that cases which were unsuitable for removal to Joyce Green Hospital were not sent there but to one of the town hospitals, an experienced assistant medical officer was stationed at the wharf, which was also otherwise adequately staffed. A considerable number of convalescent cases were also transferred to the River Hospitals by means of the River Ambulance Service. This arrangement, which was only rendered practicable by the fortunate absence of smallpox cases, worked with the utmost smoothness, and was of the greatest possible assistance, though it had to be suspended on several occasions during the spells of heavy fog which were experienced in November and December. The number of patients dealt with by the River Ambulance Service from 13 September to 31 December were as follows :—

Admissions	...	...	...	...	...	2,239
Transfers	...	...	...	...	...	324
Discharges	...	...	...	...	...	1,558

7. It will be remembered that during the epidemic of 1919-20 the Board were without the following hospitals :—

Grove Hospital	...	...	...	537 beds.
Orchard Hospital	...	...	...	800 „
Southern (Lower) Hospital	...	...	...	610 „
Total	...	...	...	<u>1,947 beds.</u>

which were still in the hands of the military authorities, and that the Brook Hospital, with its 580 beds, was only handed back to the Board by the War Department when it was too late to make full use of it. Of the three hospitals mentioned above, the Grove Hospital was evacuated and returned to the Board on 29 February, 1920. The necessary cleaning and painting works and repairs were put in hand at once, and it was re-opened for fever purposes on 3 May. The negotiations in connection with the handing back to the Board of the Lower Southern and Orchard Hospitals were of a very protracted character, and it was not until the last week

in September that the last of the wards and staff quarters at the Lower Southern Hospital were cleared of War Department equipment, while two wards at the Orchard Hospital are to this present day still occupied by such equipment. It will be realised that after military occupation a great deal of cleaning, painting, repairs and restoration was necessary before these hospitals could be used for infectious cases. Every effort was made to push forward the work as rapidly as possible. The Lower Southern Hospital was reopened on 14 September, and on 23 November the number of patients in the upper and lower hospitals attained its maximum, viz., 1,506. The Orchard Hospital has been used as an overflow hospital from Joyce Green Hospital, which it adjoins, and has been occupied by convalescent children transferred from that hospital. It began to come into use for infectious cases on 22 October, and on 21 November there were 503 patients there. The highest number of patients in the Joyce Green and Orchard Hospitals combined was 1,514 on 2 December.

8. In previous epidemics, during periods of great pressure on the accommodation, the several medical superintendents had temporarily placed extra beds in the wards. Having regard to the exceptional need during this seasonal rise the Chairman of the Infectious Hospitals Committee discussed the situation with them in company with the Principal Medical Officer on 11 October, and as a result they agreed, in view of the urgent demands for accommodation and of the mildness of the prevailing types of disease, to make a considerable increase in the number of extra beds in the wards during the period of extreme pressure, the effect of which was to add very largely to the Board's resources. To enable this offer to be acted upon arrangements were made, through the Contract Committee, for the provision forthwith of the necessary furniture and equipment. As a result very largely of the recent purchases from the military authorities on the evacuation by them of certain of the Board's institution, most of the items required were already in the Board's possession. Beyond the money spent in the advertising campaign, in the employment of institute nurses, whose cost to the Board is greater than that of an equivalent number of the Board's own nurses, and in the purchase of the additional equipment without which the patients admitted could not have been received and treated, no other expenditure of a special character was incurred as a consequence of the epidemic. In particular, emphasis should be laid on the fact that the necessary accommodation for patients was provided in the existing infectious hospitals of the Board without any enlargement of them or any addition to their number. During the seasonal rise of 1919-20 and some other previous epidemics the

medical officers of health were asked, as soon as it was apparent that all cases for whose admission application was made could not be received, to select those which, owing to condition, environment or special circumstances, most urgently needed hospital treatment, and notify them to the Clerk of the Board. Notwithstanding the unprecedented demands during the epidemic of 1920-21, it was not found necessary to resort to this measure, but all applications were dealt with in the usual way without any restriction whatever.

9. When, owing to extreme pressure, it was doubtful if beds could be provided for all cases immediately on application, special efforts were made to admit every diphtheria patient at once on account of the graver nature of this disease, and these efforts were entirely successful except on three occasions, when four, four and two cases respectively were held over from one evening to the following morning. This policy entailed in many instances the conversion of scarlet fever wards to diphtheria purposes, a process which naturally takes some little time (on account of the disinfection necessary), during which the wards in question are temporarily unavailable for the reception of patients.

10. The vast majority of the scarlet fever cases throughout the epidemic were likewise removed at once, but, at the busiest times, delay took place in removing some of the cases. However, no case the Board were asked to receive was refused admission. It will be realised that demands so far in excess of any the Board had previously experienced in connection with fever epidemics placed a severe strain on the administration of the infectious hospitals and the land and river ambulance services, and that they were successfully met is the highest tribute to the efficiency of those departments of the Board's work and to the whole-hearted devotion to duty which animated all ranks of the staff concerned.

11. At the Board meeting on 9 April a letter was read from the Ministry of Health expressing the Minister's appreciation of the services rendered by the Board and their staff in dealing with the epidemic.

After reaching its highest point the number of patients under treatment did not fall as rapidly or for as long a period as was anticipated, the lowest number (including tuberculous patients in the fever hospitals) reached up to the date of the publication of this report being 5,755 on 10 June, 1921, when the figure again began to rise.

In this connection the following comparative figures are instructive :—

Seasonal rise.	Highest number under treatment and date.	Minimum to which numbers subsequently fell and date.
1920-21	8,669 (23 Nov., 1920)	5,755 (10 June, 1921)
1919-20	5,210 (21 Dec., 1919)	3,739 (2 July, 1920)
1907-8 (Previous highest seasonal rise.)	7,158 (19 Nov., 1907)	3,283 (4 July, 1908)

From present indications it would appear that a very heavy seasonal rise may be expected during next autumn and winter.

13. In July, 1920, the Board decided to acquire from the City of London Guardians their institution adjoining the Eastern Hospital, Homerton. It is proposed to incorporate the Guardians' institution with the hospital so as to provide 200 additional beds for fever patients, with extra staff accommodation, in a quarter of London where this accommodation is badly needed.

(b) *Smallpox.*

14. Fifty cases of smallpox were admitted during the year 1920, of whom 7 died. Only 20 of these cases came from the metropolitan area. The medical superintendent of the smallpox hospitals (Dr. A. F. Cameron) reports as follows:—

Five separate outbreaks occurred in London. In the beginning of January the disease appeared in the 3rd London General Hospital at Wandsworth, where an unrecognised case died and two men of the R.A.M.C. who had been engaged at the post-mortem examination became infected. No further spread took place. The second outbreak occurred in Poplar and was traced to infected equipment which had been brought back from abroad, and was, I understand, being sorted at a wharf. The cases arising from this source were exceptionally severe and 4 died. The third outbreak occurred in Stepney. A deckhand returned home from Plymouth with the disease upon him and infected his wife. The deckhand was employed on a coastwise coal boat and a time-table of his movements showed that he acquired his infection in the neighbourhood of Erith. It was a remarkable coincidence that an outbreak occurred in Erith, of which the source could not be traced, just three days before the deckhand fell ill on his ship at Plymouth. The Erith outbreak produced 6 cases, of which 1 occurred in Woolwich. The fourth London outbreak occurred in the Seamen's Hospital at Greenwich, and was almost certainly due to the visit paid to that hospital by the deckhand, who went there on his arrival from Plymouth seeking treatment for his skin eruption. Four cases occurred, but the disease was confined to the Hospital. These cases were admitted in April and May and from that time London remained free from the disease until the last week of the year, when a patient was admitted from Hampstead. The source of his infection was not traced, and it remains doubtful whether he acquired his infection in North London or in Essex. He was still under treatment at the end of the year. At the beginning of April, on account of an alarming and widespread prevalence of the disease in Essex and the deficiency of accommodation for smallpox, the Board were asked to admit cases from specified districts of that

county. Twenty-two patients were admitted, of whom 2 died. The majority of the cases were of a mild type, a condition which gave rise to considerable local difficulty in dealing with the outbreak.

During the year 13 patients were examined who were found not to be suffering from smallpox.

(c) *Ophthalmia neonatorum.*

15. During the year the admissions to S. Margaret's Hospital for ophthalmia neonatorum numbered 138 mothers and 252 babies. Various improvements are being effected at this hospital by the provision of balconies and of additional staff accommodation.

(d) *Venereal Diseases.*

16. The Board have been concerned in the treatment of venereal diseases in London since 1917, and the following paragraphs give a short résumé of their work and of the experience they have gained. It may be mentioned that the Local Government Board in 1916 issued the Public Health (Venereal Disease) Regulations, which required that the councils of counties and county boroughs should prepare and submit a scheme for (*inter alia*) the treatment at and in hospitals or institutions of persons suffering from venereal disease. These regulations were the outcome of the final report of the Royal Commission on Venereal Diseases issued in March, 1916. The Royal Commission found that the effects of venereal diseases upon the individual and upon the race were grave and far-reaching, involving a heavy loss to the community in actual and potential population and money. They reported that the medical evidence given before them established the fact that by early and efficient treatment, venereal diseases could be brought under control and reduced within narrow limits, but that, at that time, treatment was in most cases deferred, and the best modern methods of diagnosis and treatment were not within the reach of the population generally. They recommend that the organisation of the arrangements proposed should be entrusted to county councils, and that 75 per cent. of the cost of carrying out approved schemes should be met from national funds. The London County Council prepared a scheme in accordance with these regulations, which provided for the use of existing hospitals as far as possible. The provision made by the Board, and for which they alone are responsible, did not form part of this scheme. It was undertaken at the request of the Local Government Board and the Ministry of Health under the circumstances set forth in the following paragraphs. The Board receive the grant of 75 per cent. of the expenditure already referred to.

17. Early in 1916 the Local Government Board considered the question of the removal from the maternity wards of the

metropolitan workhouses and infirmaries of women suffering from venereal diseases, and after conferring with the Board, a Local Government Board Order was issued on 12 September, 1916, adding to the classes of women for which the Metropolitan Asylums Board was authorised to make provision "parturient women suffering from venereal disease." The Board made the best provision then possible for these cases by contracting with the City of London Guardians for their reception at the Thavies Inn Infirmary of the Guardians. The infirmary was opened for this purpose in September, 1917. It provides accommodation for 20 mothers with infants, and there is also an outdoor clinic for the treatment of women after discharge. The arrangements for admission and discharge are controlled by the Board, but the actual administration is entirely in the hands of the Guardians, and they are reimbursed the cost. In December, 1918, the Local Government Board gave authority under Section 80 of the Public Health (London) Act, 1891, for the admission of non-pauper patients in the same manner as fever patients are admitted into the hospitals of the Board. In connection with this extension of the work done at Thavies Inn Infirmary, the Board, at the instance of the Ministry of Health, acquired a property at Blackheath with estimated accommodation for 50 patients and the necessary staff, intended for pregnant women and married women. This property is in the Board's possession, but has not yet been dealt with in any way.

18. In October, 1919, the Ministry of Health informed the Board that they had been approached by the Home Secretary with a view to the immediate provision of accommodation for the reception and treatment of young girls and women suffering from venereal diseases who come into the hands of the Women Police Patrols in London. Cases of this class had for some time previously been dealt with at the infirmary of the Chelsea Guardians, who wished to be relieved of this work. After conferences between the Board and the Ministry, it was agreed to utilise for the purpose the small hospital in Sheffield Street, off Kingsway, W.C., which during the war had been used as a hospital and dispensary for war refugees. This hospital, with 52 beds, was equipped and opened on 21 June, 1920, with a resident matron in charge, a consulting specialist, who was also engaged in connection with the Thavies Inn Infirmary, and a visiting medical officer. It was very clearly understood by the Board that this hospital would be required, not for the prostitute class, or for persons who had been convicted in police courts for soliciting or other offences, but for girls who had followed soldiers from the country or who had been infected as the result of an occasional lapse into im-

morality. It was thought that the girls in question would be found in poor lodging houses and would be willing to go to an institution for treatment and remain there for some time, though there would be no power of detention, and that when cured, they would for the most part go home and return to normal life.

19. The Sheffield Street Hospital has now been open for a year. The visiting medical officer, in a report dated 29 April, states that 143 patients had been admitted, of whom 52 had been rendered free from any evidence of disease, 19 had left at their own request before treatment was completed, 3 were transferred elsewhere for other diseases, 26 had no evidence of disease, 13 refused investigation, 1 was discharged, 3 were admitted for shelter only, and 26 were still under treatment. The results of the medical work have been satisfactory in cases when the patients have been willing to avail themselves of the treatment and to remain for the period necessary; indeed, there is ground for the belief that good work, both medically and socially, has been done in many cases. It became apparent, however, that the class of case received has not been that which the Board were led to expect, that the hospital was not suitable for the treatment of patients who are not confined to bed but who are likely to make a long stay, and that the work of the hospital is not sufficiently co-ordinated with that of other agencies and institutions for dealing with the problem. It will be remembered that the Board understood that the cases to be sent to the hospital would not be those who had been convicted or who were regularly living immoral lives, but experience shows that a large number come under this classification. Many patients have been of a very depraved class and refuse to remain in hospital for more than two or three weeks. As many as nineteen have been brought from police courts, some after their tenth conviction, and these cases are compelled, while on probation, to remain in hospital to complete a cure. It is practically impossible for other patients, not so degenerate, to remain in company with those using the most offensive language and having the coarsest of manners. In fact, patients of the class originally expected, when they can be found, appear to be frequently directed elsewhere. The difficulties which confront the women police patrols in seeking to bring to the hospital persons of the class superior to the common prostitute without including many of the latter can be appreciated, and it is probable that, with the end of war conditions in London, there has been a marked diminution in the number of potential patients of the class which, undoubtedly, existed when Sheffield Street Hospital was first contemplated. At the same time, there should no doubt be accommodation available for any destitute wanderer, no matter how hardened the type,

even if much of the expenditure may seem to be wasted. The Sheffield Street Hospital, situated in the most crowded part of central London, with no grounds at all, is far from being a suitable place in which to carry on work of this character.

20. It is probable that there is now accommodation available in London under public or voluntary management for all those cases likely to use it, but there is urgent need for greater co-operation and co-ordination between the authorities and agencies concerned. An opportunity to reconsider the position is afforded by the questions which have arisen as to the use of the institution at Blackheath. On this point the Ministry of Health wrote suggesting that a conference should be arranged between the Ministry, the Board and the County Council, and it is hoped that such a conference may be held at an early date. The experience at Sheffield Street Hospital has shown that there is need in the first place for an institution to which all persons found by the women police patrols can be taken for shelter, whether alleged to be suffering from venereal disease or not. It would not be sufficient for this to be done on the same lines as at the Board's Embankment Night Office, mostly used for men, where destitute persons are examined and given a ticket for an institution suitable for their needs. The women's institution must have resident accommodation where cleansing work can be carried out, and where the next day the cases can be enquired into and sorted out by a competent welfare worker. It should be considered whether the Sheffield Street building, which for this purpose is well situated, or any other vacant accommodation in the Board's possession could be utilised for this purpose. The arrangements for placing the persons found to be suffering from venereal disease in other institutions should be reviewed, and the problem of the lowest class, generally marked off as hopeless, requires further consideration than it has yet had. Meantime, a scheme has been formulated for setting up a central joint committee to secure closer co operation between the authorities and voluntary agencies concerned with various aspects of the problem of women and girls in moral danger, and that such a body would consider proposals for the provision of a reception hostel for treatment and training, both residential and non-residential, for after-care work in connection with institutions and hospitals, and for a central bureau for providing information as to accommodation available and records of cases.

(e) Notification Statistics.

21. In the metropolitan area 43,958 cases of infectious disease (exclusive of whooping cough and zymotic enteritis) were notified during the year 1920, or 16,640 more than in the previous

year. Table VIII. shows the number of cases of each disease notified, and the deaths from the principal diseases admissible to the Board's hospitals; also the rate of such notifications and deaths to the population.

(f) Medical Instruction.

22. During the year 303 students attended courses of instruction in fevers, of whom 98 were women. Seventy-nine students attended courses of instruction in hospital administration for the Diploma of Public Health. Arrangements are being made for special post-graduate courses and courses of instruction for naval officers.

(g) Research and Bacteriological Work.

23. The research work conducted by the Board in the pathological laboratories continues under the immediate care of Dr. W. Mair, Research Pathologist, and under the general supervision of Professor Sir G. Sims Woodhead, K.B.E. A report by Sir Sims Woodhead, the Board's Bacteriological Adviser, and by the Bacteriologist (Dr. Cartwright Wood) will be found in Appendix E.

TUBERCULOSIS.

(a) Sanatorium Benefit.

24. The last annual report contained a summary of the work of the Board in connection with the treatment of tuberculosis from the passing of the National Insurance Act, 1911. It was pointed out that the arrangements which were in existence up to last year would be modified by the operation of the National Insurance Act, 1920. Under this Act "sanatorium benefit" ceased to be included amongst the benefits conferred by Part I. of the Act of 1911. The appointed date on which this change came into force was 1 May, 1921. On and after that date Insurance Committees had no longer the duty of providing treatment for persons suffering from tuberculosis, except in so far as medical treatment and attendance are provided as part of "medical benefit" under the original Acts. From the same date the contributions payable by insured persons and their employers under the National Health Insurance Acts did not include any payment towards the cost of the institutional treatment of insured persons suffering from tuberculosis. The duty of providing institutional treatment for such persons, as for the rest of the community, devolved upon the County and the County Borough Councils. The arrangements entered into by the Board with Insurance Committees came to an end and all arrangements after the appointed day were made with the County Councils.

(b) Accommodation.

25. The London County Council have recently reviewed the

question of the accommodation required for London for the ensuing year, with the result that they estimate the requirements as follows :—

ADULTS—					
Observation and emergency cases	...	...	...	...	300
Early cases	...	...	...	...	300
Moderately advanced cases	...	...	...	...	500
Advanced cases	...	...	...	...	400
Surgical cases	...	...	...	...	200
Training	...	...	...	...	100
					1,800
CHILDREN—					
Pulmonary and non-pulmonary	...	...	...	...	750
					2,550

26. It will be interesting to compare with this estimate the provision actually made by the Board, viz. :—

Adults—Early and training cases	...	...	...	755
Hospital cases	...	...	...	746
Surgical cases	...	...	...	164
				1,665
Children—Pulmonary and non-pulmonary	...	...	...	489
				2,154

The classification of beds given above is very approximate and is subject to readjustment as required, and as those institutions not yet open come into use. With regard to children, the Board have 883 additional beds beyond those given in the foregoing list, which gives the number of beds so far allotted to County Council cases. The rest of the accommodation is utilised for children sent through the Boards of Guardians, and in the event of a decrease in the demands for beds from this source, far more beds would be occupied by County Council cases.

27. In addition to the Board's provision, as stated above, the County Council have arrangements in force for the time being with hospitals and sanatoria which bring the number of beds available to a total in excess of the present estimated requirements. This has an important bearing on the plans which the Board had in contemplation last year. It was then proposed to provide 300 additional sanatorium beds by erecting Copthorne Sanatorium and 450 additional beds by extensions at King George's and Colindale Hospitals. In view of the facts given in the foregoing paragraphs as to the estimated requirements and the accommodation so far provided, the Ministry of Health have decided that these three schemes should not be proceeded with for the present.

28. The following table gives the actual accommodation provided by the Board for tuberculosis, viz. :—

(a) Adults.

	Open.		To be opened during ensuing year.		Total.
	M.	F.	M.	F.	
<i>Sanatoria—</i>					
Downs, Sutton, Surrey ...	292	—	—	—	292
Pinewood, Wokingham, Berks	80	—	80	—	160
Highdown, Godalming, Surrey	—	—	—	232	232
Northern Hospital, Winchmore Hill, Middlesex (part of)...	—	202	—	—	202
<i>Hospitals—</i>					
St. George's Home, Chelsea, S.W.	—	50	—	—	50
Colindale Hospital, Hendon, N.W.	251	—	—	—	251
King George's Hospital, Grove Park, Lee, S.E.	—	—	229	84	313
Lowestoft*	—	—	95	69	164
Total	623	252	404	385	1,664

* For surgical tuberculosis.

(b) Children.

	Existing beds.
Queen Mary's Hospital, Carshalton, Surrey ...	562
Princess Mary's Hospital, Margate, Kent ...	271
Millfield, Rustington, Sussex	120
High Wood, Brentwood, Essex	304
Northern Hospital, Winchmore Hill (part of)	60
Total	1,317

29. The number of tuberculous patients under treatment in the Board's institutions on 31 March, 1921, was as follows:—

Name of institution.	Adults.		Children.		Total.
	Males.	Females.	Males.	Females.	
The Downs Sanatorium	270	—	—	—	270
Pinewood	86	—	—	—	86
Colindale Hospital ..	236	—	—	—	236
St. George's Home ..	—	49	—	—	49
Queen Mary's Hospital	—	—	286	298	584
Princess Mary's ..	—	—	157	103	260
High Wood	—	—	140	142	282
Millfield	—	—	30	33	63
Northern Hospital (part of)	—	185	13	47	245
Park Hospital	44	—	—	—	44
South-Eastern Hospital	29	—	—	—	29
	665	234	626	623	2,148

30. The great demands upon the infectious fever hospitals for the accommodation of scarlet fever and diphtheria cases for which they were provided have already been referred to. This pressure is likely to continue for at least another year, and has rendered it necessary to end the arrangement under which a number of beds in these hospitals had been set aside, as a temporary measure, for tuberculous patients.

(c) *Education, Training and After-care.*

31. The arrangements for the education of children in the various institutions for tuberculosis have been constantly under review in consultation with the Board of Education. At High Wood a scheme for the provision of open-air class-rooms, including a room for manual instruction, has been approved.

32. Provision has been made for manual occupation for the patients at the Downs Sanatorium chiefly in woodwork and some excellent work has been done. In the case of Pinewood, with the approaching completion of the training section described in the last annual report, exhaustive enquiries have been made as to the most suitable industries to be taught, and the views and experience both of the Ministry of Health and of the Ministry of Labour have been obtained. A beginning will be made with light leather work, brush making and basket and wicker work.

33. The Tuberculosis and Children's Committees have considered the question of the after-care of tuberculous children discharged from the Board's institutions, and especially the surgical cases. The Committees thought it desirable that the children should be seen after discharge by the surgeons at the hospitals at which they attended prior to their admission to the Board's institutions, but that the repair of their surgical appliances should be undertaken at Queen Mary's Hospital, where most of them were made.

MENTAL HOSPITALS.

(a) *Patients.*

34. The numbers of patients in the Board's mental institutions for the year 1920 were as follow, viz. :—

Remaining on 1 January, 1920	5,446
Discharged during the year	188
Died	594
Admitted	875
Remaining on 31 December, 1920	5,539

The average annual number of admissions during the past ten years has been 985. Of the patients admitted, 499 were under 16 years of age, 93 of these being under 5 years of age. Of the 376 admissions over 16 years of age, 195 were between 70

and 80, 85 between 80 and 90, and 3 over 90. The Board continue to enter into agreements with provincial authorities for the reception of patients under the Mental Deficiency Act, 1913, and the number of such agreements is now 63. The number of patients at the end of the year received under these agreements was 1,169. The patients received by agreement from the London County Council numbered 215. Under these agreements the contracting authority pay the full cost of the patients chargeable to them. Statistical information with regard to the patients in mental institutions will be found in Tables XXXI. to XLIV.

(b) *Accommodation.*

35. The rearrangement of the Board's accommodation in their mental hospitals was detailed in the last annual report. With regard to the mentally deficient, a paper describing the Board's work was read by the chairman of the Board at the Conference on Mental Deficiency arranged by the Central Association for the Care of the Mentally Defective, and the National Special Schools Union, and it is reproduced in Appendix C.

36. It has been decided to proceed gradually with the completion of the partly erected buildings for the extension of Tooting Bec Mental Hospital. This work was in progress at the outbreak of the war and was subsequently suspended. When completed the accommodation at Tooting Bec Mental Hospital will be enlarged from 1,114 to 2,220.

(c) *Staff Housing.*

37. The increase in the staff of the mental hospitals consequent upon the reduction of hours led to difficulties in the way of the male staff obtaining housing accommodation in the districts around Leavesden and Caterham Mental Hospitals. The difficulties were accentuated by the return of men from the forces at the end of the war, with the result that many members of the staff were compelled to live in lodgings apart from their families or to share inadequate lodging accommodation with others. The local authorities were inclined to take up the attitude that the onus of providing accommodation for the Board's staff should fall upon the Board, and eventually the Board decided to undertake a housing scheme on a considerable scale. The scheme provided for the erection, by direct labour under the supervision of the Engineer-in-Chief, of 25 houses each at Leavesden and Caterham, and 6 at Darenth. The estimated cost of this scheme for 56 houses was £51,290, less £14,560 from the Government grant in aid of housing, or a net estimated cost of £36,730. Special powers were conferred on the Works Committee to proceed with

this scheme without delay, and it is gratifying to be able to report that many of the houses were ready for occupation by the end of 1920.

CHILDREN.

38. The numbers of patients dealt with in institutions under the control of the Children's Committee during 1920 are given in the following table :—

	Remaining 1 Jan., 1920	Admitted 1920	Discharged 1920	Died 1920	Remaining 31 Dec. 1920
Sick and convalescent	888	1,645	1,462	68	1,003
Ringworm	170	674	645	5	194
Ophthalmia	160	177	136	1	200

39. A report by Mr. E. Treacher Collins, F.R.C.S., on the treatment of ophthalmia will be found in Appendix G, and one by Sir James Galloway on skin diseases in Appendix H.

40. Details of the cases treated at Queen Mary's Hospital and other institutions under the Committee will be found in Tables XLIX to LIII.

41. In addition to the beds allocated to tuberculous children sent by the London County Council to Queen Mary's Hospital, arrangements have been made for the admission of children sent by the same authority both to the Children's Infirmary and to White Oak (ophthalmia).

TRAINING SHIP "EXMOUTH."

42. The number of boys admitted during the year was 325. Of the boys discharged 82 entered the Royal Navy, and 132 the Mercantile Marine. Details will be found in Tables LIV and LV.

43. The ship was inspected and the prizes distributed on 15 June by Admiral Sir Doveton Sturdee, Bart., K.C.B., K.C.M.G., C.V.O.

CASUAL WARDS.

44. The number of casual poor received during the year was 15,478, the average daily numbers being 136. The following table gives the number of inmates of casual wards for several years past, viz :—

	Jan.	March.	June.	Sept.	Dec.
1912 ...	1,022	951	629	629	461
1913 ...	617	602	294	294	228
1914 ...	313	302	186	238	164
1915 ...	172	160	101	115	118
1916 ...	106	121	78	79	80
1917 ...	94	107	66	74	88
1918 ...	76	87	52	42	40
1919 ..	65	61	41	76	74
1920 ...	95	92	102	176	192
1921 ...	206	201	173	—	—

45. The Casual Wards Committee have continually under consideration the steps that are possible to improve the conditions at the casual wards. The superintendents have made a very liberal use of their powers under the Pauper Inmates Discharge and Regulation Act to discharge inmates before the expiration of the proper period of detention. In every case where there is reasonable ground to assume that the inmate will obtain, or will make an effort to obtain, work he is allowed to go, and is furnished with an introduction to an agency, asking that he may receive assistance in obtaining employment. There has been no stone breaking and no intention of using stone breaking except as a last resort. The difficulties of finding suitable employment for the unskilled are well known. Recourse has chiefly been had in the wards to wood chopping, corn grinding, cleaning and a little oakum picking. The dietary has been improved, the inmates have been allowed to remain up longer, and a supply of magazines has been provided. A great deal of attention has been given to the question of improving the buildings used as casual wards, but very substantial building alterations would be necessary in most cases, and the high cost of this coupled with the financial stringency has rendered progress in the matter difficult. The spirit of the casual ward administration is that recorded in the report of the Committee of November, 1919, reproduced in the last annual report, viz., to improve the condition, and in association with voluntary agencies to uplift and restore every possible case coming under the Board's care.

46. The work of the Board's Night Office on the Embankment in association with the Homeless Poor Committee has continued during the year. The following tables give the numbers of cases dealt with since January, 1920 :—

				Monthly number.	Percentage given orders to casual wards.	
1920,	January	...	...	259	...	7
	February	...	...	444	...	11
	March	...	...	457	...	11
	April	...	...	513	...	17
	May ...	...	...	663	...	27
	June ...	...	...	807	...	21
	July ...	...	...	738	...	28
	August	...	...	943	...	24
	September	...	...	783	...	19
	October	...	...	961	...	22
	November	...	...	673	...	19
	December	...	...	394	...	12
1921,	January	...	...	671	...	13
	February	...	...	623	...	13
	March	...	...	925	...	18
	April ...	...	...	787	...	18
	May ...	...	...	690	...	18
	June ...	...	...	1,144	...	27

The existing office having proved inadequate for the proper carrying on of the work, arrangements have been made for a larger office, including a waiting room, to be provided on an adjacent site on the Embankment, near Charing Cross.

LAND AND RIVER AMBULANCE SERVICES.

47. The number of patients conveyed to hospitals and elsewhere by the Board's ambulances totalled 92,521, as compared with 58,937 in the previous year. As mentioned in the section dealing with infectious fevers, the steamboats of the river service were used for the taking of fever patients to Dartford, and conveyed 4,898 passengers, of whom 4,466 were patients, and 432 were visitors, workmen, &c.

48. The following figures show the total number of removals carried out, journeys made and miles run in 1920, 1919, and 1914, which was the heaviest previous year (exclusive of mileage run by motor vehicles at country institutions) :—

Year.	Removals.	Journeys.	Mileage.
1914	81,305	43,269	634,332
1919	60,068	39,622	580,424
1920	92,792	54,937	841,186

The greatest number of acute cases removed on any one day was 244 on 5 November, and the greatest mileage run on any one day was 4,338 on the same day. Further details are given in Tables XLVII. and XLVIII.

49. There has been a substantial increase in three branches of the work, viz., the removal of patients, the conveyance of staff, and the transport of stores and equipment, and the necessary measures have been taken by the provision of new vehicles to cope with this work, and to be in readiness to meet future needs.

WORKS.

50. During the year the works department has been very fully occupied by reason of the efforts made—which have for the most part been successful—to overtake the arrears of cleaning and painting and other maintenance work which had accrued during the war period; and with this in view, and in order to alleviate somewhat the distress resulting from unemployment, the formalities of contracts were dispensed with in many cases, and a considerable amount of maintenance works carried out by direct labour. This procedure in the case of the infectious hospitals enabled the whole of the urgent and necessary work to be completed before the big rise that took place in infectious disease. The total value of the

works carried out under the supervision of the Engineer-in-Chief, apart from the value of the works carried out by the engineering and building staffs at the institutions, during the year amounts to £182,250, comprising £147,500 in respect of the surveying and building works (including £59,450 the value of works carried out by direct labour), and £34,750 for engineering works (including £10,421 carried out by direct labour). The Engineer-in-Chief has during the year paid great attention to the cost of engineering services at the several institutions, with the result that economies have been effected, more especially in consumption of fuel, and a saving of 10,190 tons of coal was made in the year at the larger institutions as compared with the average consumption of the previous five years.

51. In June, 1920, owing to the shortage of accommodation for married staff it was decided to take advantage of the Government housing subsidy scheme and to erect 56 houses at mentals hospitals for staff, and subsequently 4 at White Oak. Considerable progress has been made and several of them had been finished by the end of the year. The erection of Highdown Sanatorium, which was commenced in April, 1920, at the outset proceeded slowly owing to the difficulties in obtaining materials and skilled labour, but has since been well advanced. The adaptation as a hospital for non-pulmonary cases of tuberculosis of the Empire Hotel at Lowestoft, the works necessary to prepare King George's Hospital, Grove Park, for opening, and to link up the City of London infirmary adjoining the Eastern Hospital with the Eastern Hospital for the purpose of making one institution have engaged the attention of the Committee, and details of these works have been settled.

SUPPLIES.

52. The Contract Committee has dealt with the question of maintaining the supplies for a daily population averaging 25,000 during the year. The conditions under which supplies to the Board's institutions were maintained during 1920, while somewhat less difficult than in the war period, were still far from normal. The work of the Committee and Department concerned continued to increase, partly owing to the additional institutions acquired by the Board and partly to the unprecedented epidemic of infectious disease.

53. During the year proposals were made through the Ministry of Health for the undertaking by the Board of supplies to the institutions of the Poplar Guardians, and at the close of the year a definite scheme for this work was before the Board and the Ministry.

54. Towards the close of the year prices of many commodities began to fall, and by the end of the year the decline had become pronounced in certain cases.

55. The work of the Central Stores in receiving, examining and distributing goods was exceptionally heavy during the period of the extension of hospital accommodation to cope with the epidemic. The value of the goods passed through the Stores during the year exceeded £230,000.

56. The system of analysis of goods supplied has continued to prove its value, and the quality of supplies generally has been shown by analysis to have been maintained satisfactorily. The following summary of the analysts' reports shows a percentage of unsatisfactory results of 3·49.

ANALYSIS OF SUPPLIES, 1920.

Summary of reports received.

	Satisfactory.	Unsatisfactory.	Total.
Provisions	388	25	413
Necessaries	383	5	388
Drugs	86	1	87
	857	31	888

FINANCE.

57. Table VI. sets out under the customary headings the figures relating to the Board's expenditure for the year ended 31 March, 1920. The total net expenditure amounted to £1,872,013, which is equal to a rate of 9·86d. in the pound. The expenditure in the principal departments within the same period was as follows :—

Infectious Hospitals	£712,941
Mental Hospitals	519,928
Children's Institutions	187,185
Tuberculous do.	153,740

58. As the work of the Board consists of the provision and maintenance of hospitals for various classes of the sick and infirm, its expenditure falls principally under three headings—food and other supplies, salaries and wages, upkeep of buildings. This expenditure has inevitably risen side by side with the known increases of cost under each of these headings throughout the country. It is gratifying to find that the estimates for the year 1920-21 do not entail any increase in the Board's rate, while under the financial arrangements happily made by the Board in 1907, their pre-war indebtedness will be discharged next year.

STAFF.

(a) *Difficulty of obtaining female resident staff.*

59. The difficulties of obtaining the required number of

resident female staff, and especially of nurses for the infectious hospitals, have been referred to in paragraph 6. They are probably due in considerable measure to the post-war reluctance to take up posts, which, however short the hours, and however favourable the other conditions, involve residence within an institution and the undertaking of work in turns over the weekends. In recent years the increase of openings for the employment of women, and in particular the war experience in this direction, have enlarged the difficulties of obtaining female resident staff.

(b) *Bonus Arrangements.*

60. During the year 1920, the cost of living as shown by the monthly official figures published by the Ministry of Labour rose from 125 (i.e., 125 per cent. above pre-war prices) in January to 176 (the highest figure reached) in November. December (169) saw the beginning of the fall, which was continued through 1921, the figure in May being 126. A large percentage of the Board's staff receive a bonus on the same basis as that adopted for the Civil Service, and although the cost of living figure has been dropping for some time, the first decrease in the bonus, and that a substantial one, will operate under the agreement from 1 September, 1921. This is due to the fact that the bonus is adjusted periodically, at first every four months, and from March, 1921, every six months, on the average figures for the preceding months, a method which involves a lower payment on a rising figure and a higher rate on a falling figure than would be the case if the rate were computed monthly. In other words, both the increase and the decrease lag behind the rise and fall of the figure, but the net result, though rather more difficult to follow, is not, of course, inequitable. The mental hospital workers receive by agreement a fixed bonus, which was increased by agreement as from February, 1920. In view of the decrease in the cost of living figure, negotiations are in progress for changing the fixed bonus to one on a sliding scale following the cost of living, and there is no reason to doubt that a mutually satisfactory settlement will be arrived at.

(c) *Staff Dietary.*

61. The feeding of the Board's large rationed staff is a matter which from the points of view both of the well-being of the employees and of the great expense involved (over £200,000 per annum) calls for continuous supervision, and the Staff Sub-Committee, to whom the work is entrusted, devoted much of their time to this important subject. Certain increases in the dietary scale were made in order to allow of greater variety in the menus. Various types of mechanical kitchen appliances were installed in

several institutions. These appliances have been found to be a great advantage, and to save money, time, and labour.

62. As one of the consequences of the introduction of the 48 hour week, and of the increasing tendency for staff to become non-resident, certain difficulties were met with in connection with the supply of meals to employees who live out. Particularly was this the case at the ambulance stations, and the Staff Sub-Committee, after consideration, and after conference with the Ambulance Committee, put forward a recommendation that all the ambulance staff should live out and make their own arrangements as to meals, the necessary facilities for cooking and eating their food being provided at the stations. This was approved by the Board as from 1 January, 1921. The scheme appears to be working well, and the question of its extension to other branches of the service is before the Sub-Committee. Another matter that is occupying attention is the training of the kitchen staffs. Many of the 300 women engaged are unskilled in their work, and it is felt that the comfort of patients and staff and the interests of economy and efficiency will be best secured by taking some steps for these employees to be trained in their important duties.

(d) National Insurance.

63. The Unemployment Insurance Act of 1920, which came into operation in November of that year, and which repeals the previous Unemployment Insurance Acts, affects the majority of the Board's staff. All employees except (a) ministers of religion and medical officers, (b) non-manual workers whose rate of remuneration exceeds £250 per annum, (c) agricultural workers, and (d) domestic servants are insurable under its provisions. The terms under which a general certificate of exception may be issued by the Minister of Labour are much more exacting to the employer than the conditions under which the Board obtained exemption from the 1911 Act. The question of making application for such a Certificate is under consideration. Meanwhile, apart from employees who naturally fall under the four headings above given, the staff as a whole are insured under the Act.

64. The National Health Insurance Act, 1920, increased the rates of contributions and the rates of sickness and disablement benefits under the health insurance scheme. Sickness benefit was altered in the case of men from 10s. to 15s. a week, and it consequently became necessary, pursuant to the provisions of the Act, for the Board to increase similarly the amount of minimum weekly sick pay guaranteed to male staff in order to continue under a Certificate of Exception from compulsory health insurance. This the Board did in July, and subsequently an

amended Certificate was issued by the National Health Insurance Joint Committee and the Ministry of Health, there being no break in the continuity of exception of the employees concerned.

(e) *Miscellaneous Matters.*

65. The position of the many temporary employees of all grades engaged as war staff since 1914 presented difficulties in the way of an equitable settlement. Eventually it was decided to appoint to the Board's permanent staff all those who were recommended as suitable by heads of institutions, the standing order as to the maximum age on appointment being, in view of the unusual circumstances, waived in their cases. After consultation with medical authorities the Board recognised the alteration in practice by formally rescinding an order of long standing forbidding the staff in the infectious services to be non-resident, except so far as it concerned nurses, who must still continue to live in the hospitals. At their last meeting before the 1920 summer vacation the Board dealt with several matters of importance to the staff, amongst which may be noted—the formal adoption of the new and more economical uniforms scale, the approval of an annual leave scale and regulations, granting for the first time a week's holiday to trade union permanent employees, the laying down of rules governing the financial results to staff of being sick and warded in an institution, and general regulations as to the provision of meals for resident and non-resident employees. Rules have also been framed to meet the case of institute and co-operation nurses who fall ill when on duty and are treated in the institution.

66. During the year 1919-20, 933 accidents to staff were reported; most of these were minor in character. Two or three having occurred in the use of certain machinery, regulations were devised with the idea of preventing further accidents of this nature, and so far they have been successful. A few serious claims for compensation for permanent incapacity were received, amongst which may be noted that of a driver who was thrown out of an ambulance as the result of a collision and received injuries to his head, and of a daily woman who met with a fall at a fever hospital, fracturing her left patella. In both these cases substantial lump sums were paid by way of compensation. In another case an X-ray assistant at the Brook War Hospital had contracted X-ray dermatitis, seriously impairing the use of his left hand. In this case, although there was no legal liability, the Board arranged with the War Office for a liberal sum to be paid *ex gratia*.

67. In the last report attention was directed to the increase in the Board's total staff from 6,593 at the end of 1913 to 8,819 on 30 April, 1920. This latter figure increased at the rate of

about 100 per month until September, when it was 9,443. In October there was a marked rise to 10,188, due to the fever epidemic, the figure increasing to 10,583 in November and 10,624 at the end of the year. In January, however, the numbers of staff began to drop, until on 31 March, 1921, they stood at 10,377. It should be noted that there were about 3,650 more patients under the Board's care at the end of 1920 than at the close of the previous year. Other causes for the increase in the numbers of employees are the resumption of hospitals used for war purposes, the opening of the Lower Southern Hospital and the Orchard Hospital for purposes of the epidemic, and the increase of staff in the tuberculosis service. During the year 8,234 staff joined the service, amongst whom may be noted a good proportion of ex-service men, including those disabled. The Board is on the King's National Roll, and every effort is being made to maintain their reputation for employing considerably more than the bare minimum demanded by the Government for this purpose.

THE BOARD'S WORK,

68. A list of the Members of the Board is given in Tables I and II. The Very Rev. Canon Sprankling and Mr. Thomas Cornell were re-elected Chairman and Vice-Chairman of the Board respectively for a second year in May, 1920.

69. Upon the occasion of the King's Birthday, 1921, His Majesty conferred the honour of Knighthood upon Mr. Robert Woolley Walden, who had been a member of the Board for 21 years, who occupied the Chair during the arduous years 1913-1919, and who had taken a special part in the war activities of the Board which were detailed in the last annual report. At the Board meeting on 4 June, Sir Robert Walden received the cordial and unanimous congratulations of his fellow members on his well-merited distinction.

70. The Board received with much regret the news of the death on 21 December, 1920, of Sir Edwin H. Galsworthy, J.P., D.L., who was a member of the Board for nearly 39 years and its chairman for 21 years (from November, 1881 to May, 1901), of the death on 7 January, 1921, of Dr. E. C. Bousfield, a member since 1910, and of the death on 5 June, 1921, of the Rt. Hon. Will Crooks, a member from 1898 to 1907 and chairman of the Children's Committee.

71. A general description of the work of the Board is given in Appendix A, while Table III gives certain details of each of the institutions controlled by the Board.

Most of the work of the Board is done by committees (and their sub-committees), of which the following is a list :—

General Purposes Committee, a committee of the whole Board, to whom are referred all questions of policy and all questions affecting the Board's work as a whole. This committee has 4 sub-committee.

Finance Committee (12 members), whose duties are sufficiently indicated by its name.

Infectious Hospitals Committee (36 members) who manage the infectious hospitals, a list of which is included in Table III. This committee works through 14 sub-committees.

Tuberculosis Committee (21 members), who manage the institutions for tuberculosis. The committee has 7 sub-committees.

Mental Hospitals Committee (30 members), who manage the mental hospitals and the training and epileptic colonies. A list of these institutions is included in the same table. This committee has 7 sub-committees.

Children's Committee (25 members), who manage the hospitals schools and homes for sick children, a list of which is given in the same table. This committee has 6 sub-committees.

Ambulance Committee (12 members), who control the land ambulance service.

Training Ship Committee (12 members), who manage the training ship. Three sub-committees.

Casual Wards Committee (12 members), who control the casual wards.

Works Committee (16 members), who supervise building and engineering work. One Sub-Committee.

Contract Committee (24 members), who arrange for the supplies needed at the several institutions. One Sub-Committee.

Statistical Committee (12 members), whose principal function is to supervise the issue of the annual report of the Board, of which this is the twenty-third consecutive issue.

(Signed) J. SPRANKLING,
Chairman of the Board.

(Signed) DUNCOMBE MANN,
Clerk to the Board.

OFFICE OF THE BOARD,
EMBANKMENT, LONDON, E.C. 4.

July, 1921.

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APPENDICES.

APPENDIX A.

NOTE ON THE CONSTITUTION AND DUTIES OF THE METROPOLITAN ASYLUMS BOARD.

CONSTITUTION.

The Metropolitan Asylums Board was established by an Order of the Poor Law Board, dated 15 May, 1867, pursuant to the provisions of the Metropolitan Poor Act, 1867 [30 & 31 Vic., c. 6]. This Act empowered the Poor Law Board to combine into districts the unions and parishes of the metropolis as they should think fit, for the purpose of establishing "asylums" for the reception and relief of the sick, insane or infirm, or other class or classes of the poor, and to issue Orders controlling the action of the Board of any such district.

The Metropolitan Asylum District embraces all the unions and parishes in London, and the Board deal with those matters which it is considered **can** best be transacted by a central authority for the whole of the metropolis rather than by each separate board of guardians acting locally. The Poor Law Board and their successors, the Local Government Board, and the Ministry of Health have from time to time issued Orders for the direction and guidance of the Metropolitan Asylums Board.

The Board is composed of 73 members, 55 being elected by the metropolitan boards of guardians and 18 nominated by the Ministry of Health.

DUTIES.

(i.) *Infectious diseases.*

The first Order already referred to, dated 15 May, 1867, constituted the Board

for the reception and relief of the classes of poor persons chargeable to some union or parish in the said district respectively, who may be infected with, or suffering from, fever, or the disease of smallpox, or may be insane.

The Diseases Prevention (London) Act, 1883 [46 & 47 Vic., c. 35], removed the civil disabilities which had till then been attached to admission into the Board's hospitals.

In 1888 the Board was authorised to admit diphtheria patients, and by the Poor Law Act, 1889 [52 & 53 Vic., c. 56], they were empowered to admit non-pauper cases of fever, diphtheria, and smallpox.

These provisions with regard to the removal and reception of fever, diphtheria, and smallpox patients were subsequently incorporated in the Public Health (London) Act, 1891 [54 & 55 Vic., c. 76].

By Order dated 18 February, 1911, the Local Government Board sanctioned the admission to any of the infectious hospitals of poor persons suffering from such infectious or contagious diseases other than those above mentioned as they might thereafter determine. On 22 February, 1912, the Board sanctioned the admission of poor children suffering from measles or whooping cough received through the metropolitan poor law authorities, while by further Orders, dated 30 May, 1911, and 9 August, 1912, issued pursuant to the provisions of the Public Health (London) Act, 1891, sec. 80, the Local Government Board sanctioned the admission, subject to certain restrictions, of non-pauper cases of measles and whooping cough respectively.

On 2 July, 1912, the Local Government Board (under their Order of 18 February, 1911) authorised the Board to receive into their infectious hospitals, through the poor law authorities, poor persons suffering from puerperal fever, and by Order dated 20 August, 1912, prescribed that, subject to certain restrictions, non-pauper cases should also be admitted.

Provision is made at the infectious hospitals for the instruction of medical students and of candidates for the diploma of public health. Provision is also made for bacteriological work and for research work into the causation of infectious disease.

The Board receives from the several medical officers of health notifications of infectious disease occurring in the metropolis, and publishes information relating thereto. [Infectious Disease (Notification) Act, 1889 (52 & 53 Vic., c. 72), and Public Health (London) Act, 1891 (54 & 55 Vic., c. 76), s. 55, s.s. (4).]

(ii.) Institutions for tuberculous patients.

The Board has entered into arrangements with the London County Council under which it provides residential treatment for tuberculous patients in the county of London (National Insurance Acts, 1911 to 1918, 1 & 2 Geo. 5, c. 55, and 3 & 4 Geo. 5, c. 37, and 7 & 8 Geo. 5, c. Public Health (Prevention and Treatment of Diseases) Act, 1913, 3 & 4 Geo. 5, c. 23).

Under the National Health Insurance Act, 1920, sanatorium benefit will cease to be included among the benefits conferred by Part I. of the Act of 1911. The Ministry of Health have fixed 1 May, 1921, for sanatorium benefit to cease as an insurance benefit, the cost being borne partly by the Government and partly by the Board.

(iii.) Ambulance service.

By the Poor Law Act, 1879 [42 & 43 Vic., c. 54, s. 16], superseded by sec. 79 of the Public Health (London) Act, 1891, the Board was empowered to provide an ambulance service for the removal of patients.

(iv.) The mentally defective.

The Local Government Board Order, dated 15 May, 1867, included the "insane" amongst the classes of poor for whose reception and relief the Board was constituted.

A further Order, dated 18 May, 1875, defined the persons to be admitted into the Board's mental hospitals as

such harmless persons of the chronic or imbecile class as could be lawfully retained in a workhouse; but no dangerous or curable persons such as would under the statutes in that behalf require to be sent to a lunatic asylum shall be admitted.

A Local Government Board Order, dated 2 April, 1897, included feeble-minded children amongst the classes of poor persons to be received by the Board, and authority was subsequently given for the retention of these

cases after 16 years of age. The provisions in this behalf are now incorporated in an Order dated 29 December, 1911, and called the Metropolitan Asylums (Mentally Defective Persons) Order, 1911, which defines the mentally defective persons to be received as

persons not certified as lunatics, who by reason of mental defect are incapable of receiving proper benefit from ordinary instruction, or cannot be properly trained in association with other persons in ordinary schools or institutions, or are incapable of using ordinary means or precautions for protecting themselves from injury or improper usage or treatment, or are incapable of maintaining themselves by work; provided that any such poor person on admission into an asylum belonging to the Metropolitan Asylum Managers shall not exceed 21 years of age.

On 1 January, 1918, the Local Government Board consented, for a period of five years, to the reception into certain of the Board's mental hospitals and industrial colonies of cases certified under the Mental Deficiency Act, 1913.

(v.) *Boys for training.*

The provision of a training ship for the training of boys for sea service was sanctioned by the Local Government Board in 1875, under the terms of the Metropolitan Poor Amendment Act, 1869 [32 & 33 Vic., c. 63, s. 11.]

(vi.) *Sick children.*

By Orders of the Local Government Board, dated 2 April, 1897, and 11 September, 1908, the Board was constituted as the central metropolitan authority for dealing with various classes of poor law children, the sick and convalescent, those suffering from ophthalmia and ringworm and the mentally defective (see above). Under the first of these Orders the Board also provided for juvenile offenders from 1902 to 1910, when this branch of work was transferred to the London County Council.

(vii.) *Casual poor.*

On 10 November, 1911, the Local Government Board issued the Metropolitan Casual Paupers Order, 1911, forming a district coterminous with the existing Metropolitan Asylum district for the relief of the casual poor of the metropolis. The Order also provided under section 10 of the Pauper Inmates Discharge and Regulation Act, 1871 [34 & 35 Vic., c. 10-], that the Metropolitan Asylums Board should be the Board for the new district. Prior to the issue of this Order, every metropolitan board of guardians was required by the Metropolitan Houseless Poor Act, 1864 [27 & 28 Vic., c. 116], to provide casual wards for "destitute wayfarers and foundlings."

As contemplated in the Casual Paupers Order, the Local Government Board on 28 March, 1912, issued the Metropolitan Casual Wards (Transfer) Order, 1912, transferring to the Board on terms prescribed therein those of the casual wards provided under the Act quoted, which it was proposed to continue.

The effect of these two Orders was to centralise the control under the Board, from 1 April, 1912, of most of the casual wards administered prior to that date by the separate boards of guardians.

In connection with the casual wards the Board has undertaken the management of a scheme for dealing, in co-operation with the police and voluntary agencies, with the homeless poor at night.

(viii.) Parturient women suffering from venereal disease.

The Local Government Board, in September, 1916, issued an order adding this class to those for whom provision is made by the Board, and arrangements have been made for the treatment of such cases in the City of London Guardians' institution at Thavies Inn.

Women and girls suffering from venereal disease are also now received.

(ix.) Ophthalmia neonatorum.

In September, 1917, the Local Government Board stated that it was necessary to make provision for hospital treatment of certain cases of ophthalmia neonatorum, and that they were of opinion that this duty could best be undertaken by the Board.

(x.) Sane epileptics.

In 1916 the Board, on the suggestion of the Local Government Board, undertook to receive sane epileptic children in a portion of one of their children's homes, and subsequently they agreed also to arrange for the care of male adult sane epileptics. Early in 1917 the Local Government Board issued an order adding sane epileptics to the classes of poor persons for whose maintenance the Metropolitan Asylum District is deemed to be formed.

(xi.) Summary of duties.

The work of the Board now includes the following and the administration of the institutions, particulars of which are shown in Table III. :—

Infectious diseases—fourteen hospitals for smallpox, scarlet fever, diphtheria, enteric (or typhoid) fever, typhus fever, measles, whooping cough and puerperal fever (with arrangements for dealing with plague and cholera).

Bacteriological establishment and laboratories.

Sanatoria and hospitals for tuberculous patients (National Insurance Act, 1911-1913)—seven institutions (and three in preparation) and part of one of the infectious hospitals.

Women and girls with venereal disease—one institution, one in preparation, and one managed for the Board by the Guardians of the City of London Union.

Ophthalmia neonatorum—one hospital.

Notification of infectious disease—the collection and distribution of information in this matter.

Mentally defective—four mental hospitals for imbeciles, including infirmary for aged patients, two training colonies for improvable imbeciles and feeble-minded.

Sane epileptics—one colony, and one managed for the Board by the Hackney Guardians.

Sick children—five institutions (two inland, one at the seaside, one home for ringworm and other skin diseases, and one ophthalmia school).

Boys—a training ship Exmouth I. and its tender Exmouth II.

Casual poor—eighteen (12 closed) casual wards for homeless poor; homeless poor night office.

Ambulance services—seven ambulance stations, three riverside wharves, with motor ambulances and ambulance steamers.

Central stores—for reception of goods and their distribution to the various institutions.

The following is a list of the several classes of persons for whom the Board is now required to provide accommodation, with the year in which the duty was first cast upon it.

(a) *The mentally afflicted and epileptics.*

- (1) 1867. Harmless poor law imbeciles (adults incapable of improvement).
- (2) 1867. " " (children incapable of improvement).
- (3) 1867. " " (adults capable of improvement).
- (4) 1867. " " (children capable of improvement).
- (5) 1867. Suitable cases certified under the Lunacy Acts transferred from the London County Asylums.
- (6) 1897. Feeble-minded poor law children (uncertified).
- (7) 1916. Sane epileptics (poor law).
- (8) 1917. Cases certified under the Mental Deficiency Act, 1913.

(b) *The physically afflicted—infectious and contagious diseases.*

- (9) 1867. Cases of scarlet fever.
 - (10) 1867. " enteric fever.
 - (11) 1867. " typhus fever.
 - (12) 1867. " small-pox.
 - (13) 1888. " diphtheria.
 - (14) 1897. Poor law children suffering from ophthalmia.
 - (15) 1897. " " ringworm.
 - (16) { 1910. Cases of measles (poor law).
1912. " " (other than poor law).
 - (17) { 1911. " whooping cough (poor law).
1912. " " (other than poor law).
 - (18) 1912. " puerperal fever (poor law and otherwise).
 - (19) 1907. " cerebro-spinal meningitis.
 - (20) 1917. " ophthalmia neonatorum.
 - (21) { 1905. " plague and cholera (when necessary).
(22) }
 - (23) { Trench fever.
(24) 1919. { Malaria.
(25) { Dysentery.
- } Poor law cases only till 1883, when Parliament removed the civil disability. All cases are now receivable whatever their status.

(c) *The physically afflicted—tuberculosis.*

- (26) { 1913. Cases received *via* the London Insurance Committee and the London County Council.
1913. Cases received *via* Extra-Metropolitan authorities
- (27) 1897. Poor law children with tuberculous disease.
- (28) 1917. Discharged soldiers and sailors suffering from advanced tuberculosis.

(d) *The physically afflicted—other diseases.*

- (29) 1897 & 1908. Poor law children requiring seaside air or special treatment in a hospital or convalescent home.
- (30) 1916. Parturient women suffering from venereal disease.
- (31) 1920. Women and girls suffering from venereal disease.

(e) *Healthy classes.*

- (32) 1875. Poor law boys for training for the sea service (including many received from extra-metropolitan parishes and unions).
- (33) 1911. Casual poor.

APPENDIX B.

HEALTH ADMINISTRATION IN LONDON AND THE MANAGEMENT
OF RESIDENTIAL INSTITUTIONS.

Report of the General Purposes Committee, adopted by the Board on 31 July, 1920, with regard to the Scheme of the London County Council.

31 JULY, 1920.

TERMS OF REFERENCE.

(1) On the 27 March last the Board instructed us to consider and report upon the scheme proposed by the London County Council for the administration of the health services in London in so far as it affects the constitution and duties of the Metropolitan Asylums Board.

THE COUNTY COUNCIL SCHEME.

(2) This scheme is set out in a report dated 31 October, 1919, by a special committee of the Council on Health Administration in London, which was adopted by the Council on 19 December, 1919. A copy of this report has been supplied to each member of the Board. The Special Committee's report, after referring to the object of the Ministry of Health Act, 1919, which was to bring under one Minister of the Crown and one Government Department the health functions hitherto exercised or supervised by various Government Departments, points out that the Act did not effect any re-distribution or re-arrangement of the health functions of local authorities. In expectation that in due course proposals with this object would be submitted to Parliament by the Government, the Council proceeded to prepare their own scheme for this re-distribution and re-arrangement so far as London is concerned. The report proceeds to survey the development of health services, including those in respect of (i.) infectious diseases, (ii.) the poor law, (iii.) education, (iv.) National Health Insurance Acts, (v.) maternity and child welfare, and (vi.) voluntary health agencies, including the voluntary hospitals. After giving instances of overlapping in several directions and of certain deficiencies, the County Council scheme proceeds to set forth proposals for reconstruction involving the division of all health services in London between the Council and the metropolitan borough councils, leaving the County Council the statutory authority for health services in the county with power to organise and supervise the services for which the borough councils are to be allowed to remain responsible. Accompanying this scheme are financial proposals, the chief of which are for a standard Government grant of 50 per cent. of the expenditure on health services otherwise falling on the rates, for the full cost of the work of inspection and supervision of the whole of the arrangements made in respect of the health of the community to be borne by the public, and for the individual who is benefiting by treatment to be charged a portion of the cost where he is in a position to pay. The Council conclude by stating that their proposals involve the minimum of change in the existing organisation of London government.

THE PROPOSALS WITH REGARD TO THE METROPOLITAN ASYLUMS BOARD.

(3) With regard to the Metropolitan Asylums Board, the report of the Council's Special Committee states—

The institutions of the Metropolitan Asylums Board and its highly competent staff would, it is assumed, be transferred *en bloc* to the Council.

In addition it would probably be desirable that the Council should have the benefit of the experience in hospital management of some of the members of the Metropolitan Asylums Board.

Elsewhere in the report it is stated that

Although the constitution of the Metropolitan Asylums Board, which is not appointed by direct election, has long been considered anomalous, this important body has certainly performed its duties very efficiently.

In dealing with the question of provision for tuberculosis, the report proceeds—

The Council and the Metropolitan Asylums Board have throughout worked in friendly co-operation

The Chairman of the Council's Special Committee, speaking in support of the proposals at a deputation from the Council to the Minister of Health, said—

If Parliament should decide to transfer to the Council the duties of the Metropolitan Asylums Board, it would be an advantage that the members of that body should be available to assist the Council.

We desire to say at the outset that we appreciate to the fullest possible extent the great services rendered by the Council to the metropolis, and that the comments which we offer on their present scheme are dictated in no spirit of carping criticism and with no wish to maintain in their entirety, without alteration or improvement, the existing arrangements which are dealt with in the scheme. We specially appreciate the friendly and complimentary references in the Council's reports to the work of the Board and its staff. They make us regret the more that the Council did not include the Board amongst the authorities (the Corporation and the borough councils) who were invited in July, 1919, before the report was prepared, to forward their views as to the manner in which the administration of the health services for which they were responsible might best be correlated with that of the Council, nor, apparently, amongst the same and other authorities exercising health functions in London, with whom the Council, after adopting the report, decided to confer with a view to the formulation of detailed proposals. Our comments are directed to the positive and practical purpose of submitting the views of the Board, based on their long administrative experience, to those responsible for settling any changes in the government of London. They divide themselves into two parts, first, some observations on the present proposals as affecting the whole question of London government, and, second, some comments on the particular proposal to transfer the management of a large number of residential institutions for the sick to the central governing authority for London.

LONDON GOVERNMENT AS A WHOLE.

(4) It has been observed that the County Council state that their scheme involves the minimum of change in the existing organisation of London government. We believe, however, that it is undesirable to consider the scheme in this connection only, and that it should be borne in mind that the Council has, on many occasions, expressed a very strong desire to bring about a complete alteration in the existing organisation of London government and to change the entire basis on which that organisation has been constructed. On 21 October, 1919, the Council adopted a report submitted by their Local Government, Records and Museums Committee, and they decided that in the opinion of the Council an enquiry should be instituted with the least possible delay by the Government in order to determine

- (a) the particular services which should be brought under a single administration throughout Greater London,
- (b) the area of Greater London which should be unified in respect of the administration of these services,
- (c) the authority to which should be entrusted the administration of these services, and
- (d) the relation of that authority to other local authorities in the area.

From the report in question it may fairly be gathered that the Council think it necessary for the efficient performance of all the more important powers of local government that the boundaries of the administrative County of London should be widely extended. The present administrative county has an area of 116.9 square miles, with a population in 1911 of 4,521,685, and an assessable value in April, 1917, of £45,341,004. The "Greater London" of the census, which is the combined area of the metropolitan and city police districts, includes 692.9 square miles, with a population of 7,251,358, and an assessable value in April, 1917, of £63,226,105. This area covers the district from Acton on the West to Ilford on the east, and from Edmonton on the north to Croydon on the south. The five home counties also mentioned by the Council as a possible basis for a future province of London include an area of 4,758 square miles, with a population of 9,201,484, and a rateable value in April, 1914, of £72,000,000. It is significant that the Council, in pressing for an immediate enquiry into this question, urge many strong reasons why local government problems, including health, cannot satisfactorily be dealt with unless the present county boundaries are extended, and say—

These are all urgent problems which press for a solution. They must be solved either piecemeal and independently as in the past, or on a single considered plan. We cannot contemplate without dismay the prospect of the former alternative, and we are convinced that the time is ripe for a careful enquiry by some independent tribunal into the whole question of the government of Greater London. The enquiry must be difficult and may be prolonged.

(5) With these views we are entirely in agreement, and we think they provide, from the Council's own reports, a very strong argument against dealing piecemeal with the problem of London health government. Incidentally it may be mentioned that on 27 January, 1920, the Council decided that the constitution of the Metropolitan Water Board was unsatisfactory, and that in the event of a central authority being established for the government of Greater London such authority should exercise the functions and duties of that Board. Again in 1893 the Council decided that

A market authority for the County of London should be created and that the County Council should be such market authority, but the departmental committee set up to consider the question last year reported in favour of an *ad hoc* authority, mentioning that no existing body had authority over the whole area of Greater London. The Local Government Committee of the Council accepted the view that in the event of a central authority being set up for Greater London, that authority should become the market authority, and that any new *ad hoc* body should be of a temporary character pending a decision on the question of the government of Greater London.

(6) The recent report of the Consultative Committee of the Ministry of Health on the future provision of medical and allied services, presided over by Lord Dawson of Penn, raises the same question. With regard to a new health authority, that Committee say in their report—

As regards the nature of this new health authority there are some who favour a statutory committee of an existing local authority, whereas there are others who favour the establishment of an *ad hoc* independent body for the purposes of administering health services alone. The question which of these courses is preferable is one upon which we would rather defer any final expression of opinion.

(7) The interim report just issued of the Committee appointed by the Minister of Health to consider and advise on the principles to be followed in dealing with unhealthy areas also calls attention to the fact that there is no body in existence having a sufficiently widespread authority to deal with this matter, considers it of great importance that such a body should be established at the earliest possible moment, and refers definitely to the setting up of a parliament for London.

(8) The Speaker's Conference on Devolution has recently proposed local parliaments for England, Scotland and Wales, with powers which include those relating to public health. London already has the population and wealth of a small state, and it may well be entitled to a legislative body in local affairs, with an increased area, under a federal scheme. Indeed, the County Council, in many reports, has advanced cogent reasons for this course. But until this has been decided, it appears inadvisable to proceed by way of adding administrative duties, full of detail, to the Council, already heavily charged with such duties, and at a time when it is in contemplation to transform the Council into a local parliament for the enlarged province of London. Such a body would of necessity be legislative rather than administrative, and would occupy much the same relation to the province of London in local affairs as the present Parliament does to the whole country in the same affairs.

(9) Our first recommendation is therefore based on the views which we gather were those of the County Council until the production of the present scheme of health administration, namely, that the problem of London government should be dealt with as a comprehensive whole, including the question of areas, powers and duties, and that the least desirable course is that there should be any attempt at piecemeal reorganisation.

THE MANAGEMENT OF RESIDENTIAL INSTITUTIONS FOR THE SICK.

(a) *The extent of the work.*

(10) In the previous paragraphs of this report we have given our reasons in general against any transfer of the duties at present undertaken by the Metropolitan Asylums Board in connection with the management of residential institutions pending the consideration of much larger issues in connection with the government of London. We propose now to deal in more detail with the scheme for making such a transfer while the responsibilities and duties of the County Council remain as they are at present. The County Council is an administrative body charged, *inter alia*, with the care of lunatic asylums and mental deficiency, the Building Acts, education, fire brigade, highways and improvements, housing, main drainage, parks and small holdings, and certain duties relating to public health, theatres and music halls. The Council is composed of 144 members, and apparently has sufficient work to occupy fully this number of representatives. On the committees appointed for (i.) asylums and mental deficiency, and (ii.) education, there is a number of co-opted members. The percentage of actual to possible attendances of the co-opted members on these two important committees is very much larger than that of the elected members of the council, as might naturally be expected from the great volume of work which awaits the elected members on the Council proper and on the committees on which co-opted members find no place. A real disadvantage of the system of management by a committee with co-opted

members is that the latter, while devoting a large amount of time to the detailed work of the committee, have no voice or influence when the principal matters dealt with by the committee come up for consideration at the parent body. This difficulty does not arise where a separate body is given the whole administrative responsibilities.

(11) Leaving aside the question of the Water Board, which presumably finds ample occupation for its 66 members, we come to the work carried on by the Asylums Board. In the 50 residential institutions under its care are generally found about 16,000 patients and 9,000 staff, or a resident population of about 25,000. The administrative work entailed in the management of these institutions, and in the arrangements for finance and for works and supplies, occupies a Board of 73 members. It is a truism to say that the work of the Board is so extensive that any one of these members who wishes to do so can give his whole time to it, as many do.

(12) In addition to the transfer of the residential institutions now under the Board, it is proposed to transfer to the Council those under the Guardians, involving twenty-four infirmaries with about 15,000 patients and a proportionate staff, and thirty-one homes and schools with an additional 12,000 inmates and a proportionate staff, and thirty-eight workhouses and accommodation for 38,000 persons.*

(13) In connection with the transfer of the Board's institutions it is suggested that some members of the Board might, presumably as co-opted members, assist the committee to be formed by the County Council, but we are unable to see how a number of co-opted members on a committee, composed mainly of members of the Council whose duties already occupy so much time, can undertake the whole of this work. Nor would the situation be much relieved by a large addition to the ordinary membership of the Council, since such an addition, while tending to make the parent body unwieldy, would not secure a sufficient body of persons who wished to devote to the management of this great number of institutions a large share of their time, and not merely the remnant of it which can be spared from the general work of the Council. The experience of the Metropolitan Asylums Board goes to prove that it is by the personal interest of a sufficiently large body of representatives, giving a large proportion of their time to this special work, that the welfare of the patients is secured, and that efficient and economical management of the institutions is maintained. The inclusion of this work with that of the general municipal duties of the Council may well be viewed with uncertainty and hesitation.

(b) *The Maclean Report on Reconstruction.*

(14) It is urged that the Maclean report on reconstruction recommended such a transfer as that proposed, but this Committee produced their report not as the result of an enquiry on present conditions, but on the basis of the Poor Law Commission's report of 1909, and the Maclean report has not met with entire acceptance either from the County Councils Association or the Association of Municipal Corporations or the Guardians, nor did it attempt to deal with the wide issues we have referred to.

The present Minister of Health (Dr. Addison) in speaking of this report said—

This distinguished Committee, like many others, formulated very general propositions, and when it came to solving the administrative difficulties which stood in the way of their application, we did not find their report so clear and constructive as it was with regard to their

* The figures given in paragraphs (11) and (12) are approximate.

general propositions. Of course this was entirely excusable, because they were confronted with the biggest problem of local government that stands before this country. . . . I confess that the administrative difficulties which have to be overcome and disentangled in this matter go far beyond the general recommendations made by the Committee.

(c) *The Analogy from the Ministry of Health.*

(15) The Council point to the fact that the Ministry of Health Act brought under one department the health functions of various Government departments for the whole country, for the purpose of securing unified administration, and they point from this to the necessity for a similar step for London. The Ministry of Health is, however, a body dealing with health only, and so far as an analogy can be drawn from its constitution, it would be in favour of a provincial health board for London.

(d) *The Question of Direct Election and the Constitution of the Board.*

(16) The fact that the Metropolitan Asylums Board is not directly elected is referred to in the Council's report and has elsewhere been used as an argument in favour of the proposed change. Without questioning the validity of the principle of direct election in parliamentary and municipal bodies, it may well be urged that there are many specialised subjects which can safely be left to the jurisdiction of representatives from other directly elected bodies chosen for their fitness for the work and for the time they have to give to it rather than by a popular election conducted, as it must necessarily be, on a political basis. It has not been the least merit of the Metropolitan Asylums Board that party politics have played no part in its proceedings, nor can it be understood why such considerations should enter into the constitution of a body whose concern is the care of the sick. We think, however, that each metropolitan council should be given representation on the Metropolitan Asylums Board, since so much of the Board's work in relation to infectious disease and tuberculosis is not poor law work, and brings the Board into direct relationship with the Councils. At the same time representation could be given to the London County Council by their nominating some of their number to serve on the Board, a course for which there are many precedents.

(e) *The Example of Tuberculosis.*

(17) Such difficulties as are thought to arise under the present system are much more apparent than real, and are more theoretical than practical. This is admitted by the County Council in the following references in their report to the provision for tuberculosis:—

In view of the growing interest in health questions and the growing demand for the provision of institutional accommodation, it is becoming increasingly difficult to determine where the domain of the Council should end and that of the Metropolitan Asylums Board should begin. The Council and the Metropolitan Asylums Board have throughout worked in friendly co-operation, and the Board has responded to the best of its ability to the demands made on it for accommodation. It does not appear, however, entirely satisfactory—at any rate in theory—that the Council should be responsible for providing accommodation and should have to rely for its actual provision on the goodwill of another authority over which it has no direct control. Another *theoretical* inconvenience is involved in the rating question. The effect of the existing arrangement is that the Council determines the amount of accommodation which it asks the Metropolitan Asylums Board

to provide; the Board then makes this provision without control over its expenditure being exercised by the Council and the cost then falls on the poor rate. The expenditure is thus in effect determined jointly by the Council and the Metropolitan Asylums Board without either body being in a position to control it altogether.

The fact is that whatever theoretical difficulties may appear, there have been no practical difficulties. The Board has satisfactorily met every request from the Council in the matter of accommodation; the expenditure is of course determined by the demands made, and, so far as the rate is concerned, it does not require a transfer of duties to bring about a change in the matter of the particular authority through which the rate is raised.

(f) *The Question of Overlapping.*

(18) Too much has, we think, been made of the difficulties caused by overlapping, too little of the impracticability of producing any scheme which would remove either all the difficulties or all the overlapping. A few instances will suffice. If the poor law infirmaries are to fill their proper position in any health scheme they need to be brought into closer association with the voluntary hospitals, in order that each may supplement and aid the facilities offered by the other. It is not, however, proposed that the Council should take over the responsibility for the management of the voluntary hospitals. The case of tuberculosis has been mentioned, as has also the reference of the County Council to the fact that they do not control the expenditure of the Board in the matter of the accommodation provided by the Board at their request. The remark is equally applicable to the arrangements the Council already make with a number of voluntary institutions, but it is not proposed to take over these institutions. Even in the services already under the control of the Council, the prevention of overlapping in health matters presents much difficulty, as, for instance, the transfer of health functions relating to school children from the education department to the public health department. The truth is that no scheme, however attractive on paper, can be perfect or can separate such a subject as health into a watertight compartment. Difficulties of overlapping, where removable, can be removed, and, where inevitable, can be rendered practically innocuous, by that spirit of friendly co-operation between the various authorities concerned which the Council states it has found to exist in its relations with the Board.

CONCLUSIONS.

(19) The great complexity of the problems of London government is apparent. These problems have been the subject of enquiries by Commissions and Committees in the years before the war and again since its conclusion. These enquiries have, however, been limited to separate branches of the subject. At present the Government have before them the report of the Committee of the Ministry of Reconstruction on the Poor Law (the Maclean report), the report of the Consultative Council of the Ministry of Health on the future provision for medical and allied services (the Dawson report), the report of the Departmental Committees on the subject of markets and transport, the report of the Ministry of Health Committee on unhealthy areas, the proposals of the London County Council for health administration of London, the proposals of the London County Council for an immediate enquiry into the question, of boundaries of the administrative county and of the constitution and powers of a new central authority. So far as there is agreement in these reports it is for a larger London with its local parliament. In the first part of this report we have indicated our support of the proposed authoritative enquiry

by the Government into the subject as one comprehensive whole, believing that the lines on which the main question is settled will have the most important bearing on the subsequent decision as to the constitution and powers of the administrative departments dealing under the legislative council with all the main public services including health. Such an enquiry would afford an opportunity for a statesmanlike scheme drawn up with a breadth of vision worthy of the greatest city in the world.

(20) Pending the settlement of the general question, we think there is nothing to be gained by adding the control of the residential institutions for the treatment of the sick in London to the multifarious administrative duties of the present County Council. We believe that such a course would result in a diminution in the personal service given by a large body of representatives for whom there would be no place on the County Council, and who do not desire, and have no opportunity, to take part in the general work of the Council, that it would throw great pressure on the elected representatives of the Council, and would lead to the substitution of a centralised administration at a time when the decentralisation of administrative duties has been shown to be a more desirable course. The schemes which have been drawn up so far appear to us to have given insufficient attention to the question of the administrative machinery necessary for the work proposed to be absorbed, and to the relationship between the Ministry of Health and the bodies which it is proposed should absorb the work, and to the mutual relationship of these latter bodies, a subject containing the seeds of future friction unless frankly dealt with at the outset. Lastly, all experience shows that any belief that a reduction in expenditure would follow the proposed centralisation of administrative work is illusory, and that, on the contrary, there would be a great increase in expenditure at a time when economy in everything unessential is of urgent importance.

(21) As an alternative to the proposals of the County Council so far as the constitution of the Metropolitan Asylums Board is concerned, and as a step which we believe would meet present requirements without prejudice to any future changes in London government, we suggest that representation on the Metropolitan Asylums Board should be given to each metropolitan borough council and to the London County Council. It is also very desirable that the name of the Board should be changed to one more clearly indicating the nature of its work.

(22) We recommend—

(A) That in the opinion of the Metropolitan Asylums Board—

(i) an authoritative enquiry, as proposed by the London County Council, should be undertaken by the Government into the question of London government as a comprehensive whole, including the proposed extension of boundaries, the constitution of a central council with local legislative powers, the relations between the legislative council and the administrative departments dealing with the main public services, and other cognate questions ;

(ii) it is inadvisable to proceed to make further important changes in individual branches of the public services of London pending the result of such an enquiry and of the settlement of the questions raised thereat ;

(iii) present needs, so far as the Metropolitan Asylums Board is concerned, would be met by the London County Council and each Borough Council being afforded representation on the Board, and by an alteration in its name.

(B) That copies of this report be forwarded to the Ministry of Health, the London County Council, the City Corporation and the Metropolitan Borough Councils and Boards of Guardians.

(Signed) C. BOTTERILL, *Chairman.*

APPENDIX C.

THE WORK OF THE METROPOLITAN ASYLUMS BOARD FOR THE MENTALLY DEFECTIVE.

A paper read by the Very Rev. Canon Sprankling, Chairman of the Board, at the Conference on Mental Deficiency, arranged by the Central Association for the Care of the Mentally Defective and the National Special Schools Union, at the Church House, Westminster, on 26 November, 1920.

Long before the passing of the Mental Deficiency Act of 1913, the Metropolitan Asylums Board had been responsible for the care of certain classes of mentally defective persons, and particularly of children, who, in many instances at least, would certainly have fallen within the classes enumerated in the Act of 1913. These children were placed in the care of the Board under the terms of an Order of the Local Government Board dated 2 April, 1897, which required the Metropolitan Asylums Board to provide accommodation for poor law children "who by reason of defect of intellect . . . cannot properly be trained in association with children in ordinary schools."

It may be of some historical interest to the Association to trace briefly the steps taken by the Board to deal with these children.

The Children's Committee (the Central Committee appointed by the Board to deal with cases under the Order of 1897) decided that it would be well to proceed experimentally in the treatment of these cases by providing accommodation for them in ordinary dwelling houses scattered over the London area, each in touch with one of the special schools provided by the London County Council, and actually at one time there were five such homes in existence, the first having been opened in January, 1899.

The object was to provide the children with something as nearly akin to the ordinary home life of a normal London child as was compatible with the special care and training which was essential, and a house-mother was appointed for each home, who was required to live with the children much in the same way as the mother of a family of lives. The children attended the local special schools, and there is no doubt that in some cases the methods adopted resulted in considerable improvement. Many of them became quite efficient at shopping, some grew into reasonably good domestic helps, while a very few of the boys were ultimately able to take their places in the world as wage earners.

In 1906 provision was found necessary for continuance of control over the children after they reached the age of 16, and the institution now known as the Bridge Training Home at Witham, in Essex, was opened for the use of the male patients as a working colony, while High Wood School, Brentwood also in Essex, which is an institution built on the cottage home principle, had one of the groups of cottages containing 60 beds allocated for the accommodation of the elder feeble-minded girls.

In 1911, however, the Board referred the whole question of the systematic re-classification and treatment of the mentally defective cases which came within their sphere of work to a special committee, who came to the conclusion that the experiment now under discussion, in spite of all efforts to bring about the most favourable results, had met with little success.

The Committee found themselves strengthened in the view which had already been tentatively formed, that the permanent retention of the majority of the feeble-minded children was necessary in the interests of themselves and of the community, and that by this very fact the desired results could be attained with as great efficiency in large colonies as in small scattered homes and much more economically.

The procedure indicated was in conformity with the views contained in the report of the Royal Commission on the feeble-minded, which was issued in 1908, and the Board's Committee submitted recommendations which led to the placing of all the mentally defective persons in the Board's institutions, including the children already referred to (who were not certified under the Lunacy Acts) under the care of the Board's Asylums Committee, the well-known institution at Darenth being at the same time transformed from an asylum for imbeciles into a training colony reserved for the higher grades of mental defectives.

It was confidently anticipated that many advantages would accrue from the co-ordination of the work, of which not the least would be increased efficiency, by providing at this colony far larger facilities for training and rendering more industries available, by avoiding duplication of machinery, and by giving greater opportunities for classification under one medical control.

Another recommendation had reference to the age of the uncertified feeble-minded persons in the Board's care.

At first children under 16 only could be admitted as uncertified mental defectives, and the power of the Board to retain them ceased on their reaching the age of 16, but in 1903 the Local Government Board authorised the retention of such feeble-minded persons until they reached the age of 21 years, and in 1911 the Local Government Board issued an Order authorising their original reception up to the age of 21 years.

The passing of the Mental Deficiency Act, 1913, as it did not place on the Board any duties in regard to the provision of accommodation for mental defectives, did not immediately alter the policy which had been pursued in the past. The Board's institutions were still used for their original purpose, viz., the reception of "insane persons" chargeable to the Metropolitan Boards of Guardians of the Poor, being "harmless persons of the chronic or imbecile class," with, of course, the addition of the class of uncertified feeble-minded persons to whom the previous part of this paper has been devoted.

In May, 1914, however, the Board were approached by the local authority for the Metropolis (the London County Council) with a view to their providing certified accommodation under section 37 of the Act for certain classes of the mentally defective.

While the matter was under consideration the war broke out, and subsequently the Council were informed that while there was no doubt that the Board would, in ordinary circumstances, have been willing to enter into an agreement with them to receive suitable cases, the situation was so altered by the war and by the heavy demands made upon the Board to provide accommodation for military and other purposes, demands which were obviously likely to be increased in the near future, that with extreme reluctance they felt that they were not then in a position to enter into an agreement such as was suggested. Two years later, however, the effect of the war in the way of decreased demands on the accommodation for imbeciles, which was, I believe, noted generally all over the country, became increasingly manifest in the Board's institutions, and the existence of a number of vacancies provided an opportunity for the resumption of negotiations at the instance of the Board of Control and of the London County Council. Ultimately it was arranged that five of the Board's institutions should be certified for the treatment of cases under the Act of 1913, the whole to form a group known as the Metropolitan Asylums Board Certified Institution. Darenth Training Colony and Bridge Training Home were to receive improvable juveniles, Leavesden and Caterham Mental Hospitals were to receive unimprovable adults from 16 years and upwards, and the Fountain Mental Hospital to receive idiot children.

The Board made it perfectly clear that they could only undertake this

work on special conditions. For instance, it was essential that they should have the absolute right to accept or reject any cases so that in no way should their normal work be jeopardised, and that further, owing to the existence in their institutions side by side of two classes of certified cases, it would be impossible to follow all the prescribed forms required under the regulations laid down by the Board of Control.

There were other stipulations, such as a provision that patients might be transferred by the Board from one section of the Certified Institution to another without the consent of the Board of Control, and also that patients should be treated in precisely the same way as the poor law cases received under the Lunacy Acts. The general idea was that the Board might be able to accept something up to 500 mental defectives from the London County Council area and from the Home Counties, with perhaps a few from provincial areas.

In 1918 all arrangements having been made, the first cases were admitted.

So far as numbers are concerned the position to-day is that the Board have about 1,000 mental defectives under their care, having thus exceeded by 100 per cent. the utmost promise they were able to hold out in 1917, but the available accommodation and the demand for it are more or less equalised, so that it is doubtful whether it will be practicable in the near future to accept more cases.

As a matter of fact, circumstances have rendered it necessary or desirable to depart in a measure from the original arrangements as to the classes of cases to be received at the different institutions. So far as Darenth is concerned there has been indeed no change whatever, cases sent there being all of the trainable class, but it has been found that there are a goodly number of lower grade cases who, while not *prima facie* likely to benefit by the special form of instruction given at Darenth, may yet be considered as a separate class from the unimprovable adults it was originally intended should be sent to Leavesden and Caterham.

So impressed were the Board in 1919 with the pressure on the accommodation provided at the Fountain for the most deeply defective cases (it being understood that the Fountain was, in fact, the only institution of its class in the country) that they proceeded to make arrangements for the provision of accommodation for unimprovable children of both sexes at Leavesden Mental Hospital. Accordingly two wards were provided on each side of this institution, being the top floor wards of two adjacent blocks in each case connected by a wide covered bridge used as an airing court. For reasons which will be apparent, the type of child sent to Leavesden Mental Hospital was bound to be restricted to the less robust and physically vigorous, and the provision of the extra accommodation only slightly relieved the demands on the Fountain.

Early this year, however, the congestion had again become acute in certain directions, so that the position was, that while there was ample accommodation for some classes of cases, there were no vacancies for other classes, but instead a long waiting list of applications.

The problem was how to change the kind of accommodation so as to render the vacant beds available for the reception of cases who needed institutional treatment, without entirely altering the character of the institutions concerned.

The Ministry of Health, who had not looked upon the proposal to receive children in the upper wards at Leavesden with much favour, had indeed suggested that it might be found possible to allocate one or other large institution entirely to the use of children, but as a matter of fact it was found that by no possible re-arrangement could all the adult patients (covering both lunacy and mentally defective cases) be gathered into one institution.

It was found that while there was very little vacant accommodation for female adults, there was a large number of vacant beds for male adults principally at Caterham, where, in fact, one or two blocks were unoccupied.

The medical superintendents of the various institutions were consulted and the opinion was expressed that there might be found at Darenth a number of cases which after reasonable trial were not "trainable" in the sense given to that word at Darenth, but still were not "unimprovable" in the sense applied to that word at Leavesden and Caterham, and it was decided to examine the records of the male patients at Darenth with a view to transferring all those who fell into this category to Caterham, there to be segregated as far as possible and employed in simple trades such as wood-cutting, land work, laundry work, etc. The idea was that if these cases were found to be susceptible of a higher degree of training in any particular industry, steps would be taken to provide facilities for such training at Caterham. Further, the advantage of transferring cases which were not likely to benefit to the fullest extent from the specialised accommodation at Darenth was obvious, seeing that at that time there were about 180 cases of mental defectives awaiting admission to Darenth all classed as "trainable." Thus, the first considerable change in the original arrangements for the reception of mental defectives was made, a change which seems to mark a step forward in the classification of these cases.

To-day, a number of the patients thus transferred to Caterham from Darenth are engaged in industries (such as carpentry) with what is looked upon by the medical superintendent as a remarkable degree of success.

The system adopted has been to start classes of 3 or 4 pupils in a very small way without any idea of "forcing the pace" or aiming at output. The patients are encouraged to play at their work in the first place. When they become interested and begin to understand how to use, for instance, a hammer and a nail, they are allowed to make some simple object which will be of use and which they know will be of use.

There are classes also in mat-making and tailoring, but it will be understood that the whole scheme is, at the present time, in embryo and that it is too soon to suggest any very reliable inferences as to its future possibilities. I should say in passing, however, that a similar scheme is being adopted on the female side at Caterham among the young women, who are being trained to do more than had hitherto been done there in the way of needlework, rug-making, and so on. Results of these experiments are being carefully watched, and every encouragement will no doubt be offered if it is found that there is real hope of genuine usefulness arising from them.

The next step was to make further use of the vacant male adult blocks at Caterham by transferring thither the elder boys at the Fountain who had reached the age of about 9 years and were found more suitable for male than for female nursing. A block of about 130 beds was therefore prepared at Caterham and all the boys were transferred last spring.

An interesting feature of this change was provided by the statement made to the Board by the responsible medical officers that it was hard to say that any child was quite "unimprovable," and that it was, in fact, more correct to say that nearly all the cases at the Fountain hitherto considered hopeless were trainable to a greater or lesser degree.

It should be noted that it was carefully provided that should any of the boys sent to Caterham be unimprovable turn out after reasonable observation to be "trainable" in the Darenth sense, they would, in due course, be transferred to Darenth in order that they might benefit by the ample facilities for training which exist there.

The transference of about 130 boys from the Fountain to Caterham meant, naturally, the freeing of so much accommodation at the Fountain,

and it was decided, in future, to reserve the Fountain for unimprovable boys under the age of 9, for unimprovable girls up to the age of 16, and for children of both sexes, whether stated to be "trainable" or not, up to 7 years.

The reason for this change in the arrangements at the Fountain was that it was felt that there was need for a testing institution at which children could be observed so that their capacity might be more or less accurately measured before they were sent to Darenth. Previous to this arrangement all children of whatever age who were stated to be "trainable" had been admitted direct to Darenth, but it was found that so many were not really "trainable" in the Darenth sense that the accommodation there became, as it were, choke with cases which were not suitable and which could not benefit by the specialised arrangements provided.

On the other hand, the children admitted to the Fountain as unimprovable had, in some cases at any rate, been found to be so far superior to the original estimate of their capacity as to be suited for Darenth.

At present, therefore, all children under 7 are admitted to the Fountain, where they are carefully watched, and after a longer or shorter period the medical superintendent of that institution consults the medical superintendent of Darenth with a view to the admission to the latter colony of all those whom experience has shown are "trainable."

This procedure of selection is, as a matter of fact, merely carrying into the working of the Mental Deficiency Act the scheme which has worked well in connection with Lunacy Act cases. All Lunacy Act cases are received at Tooting Bec, whence they are distributed according to the estimate of their capacity made by the medical officers there to the institution most suited for them.

So far no use has been made of Bridge Training Home under the Mental Deficiency Act. It is found that there are sufficient cases of feeble-minded males (uncertified) at Darenth to permit of a slow but steady flow to Bridge Training Home. Cases there are therefore all uncertified. They are employed on the cultivation of land, in boot repairing, tailoring and so on, while the fact that the Home brass band is in great request for paid performances at functions in the surrounding districts shows that these lads are capable of attaining considerable proficiency in directions which might perhaps be least suspected.

The foregoing sketches briefly the way in which vacant accommodation available in the Board's institutions has been utilised for the reception of the mentally defective. No doubt a great deal could be written from a medical standpoint on the various methods of training which have been adopted at Darenth, but it is hardly the province of a non-scientific paper to deal with a subject which has been amply covered from that point of view many times before and which can only adequately be evaluated by the trained scientific mind.

The Association knows well that apart from school training at Darenth a very large number of industries are carried on, and that these industries produce definite results which are creditable alike to the patients who turn out the work and to their instructors. A mere recital of the kinds and numbers of articles made or repaired at Darenth would be tedious, but when I say that the Metropolitan Asylums Board actually relies to a considerable extent for the toys provided every Christmas for the children in its hospitals upon the workshops at Darenth, which make these toys from waste materials of all kinds, it will be appreciated that this industry alone must have a very considerable output.

The printing and bookbinding shop at Darenth is a source of interest to every visitor, and as I write I have before me a calendar for 1920 prepared and printed with skill and delicacy which bears the proud imprint—"Set up by (A.B.) a Colonist."

Leavesden Mental Hospital has been as far as possible turned into an infirmary for the harmless imbecile classes and to a large extent its inmates are Lunacy Act cases, but there is a great deal to interest one in the work at this institution. The classification of the sick there has been carried to a very high degree, and nowadays, so far as accommodation permits, cases of chronic sickness are sent from all the other institutions to Leavesden. For instance, all ophthalmia cases are sent there, whether children or adults, and whether they are under the Lunacy or Mental Deficiency Acts.

The mentally defective children housed at Leavesden to whom reference has already been made are practically all paralysed or helpless, and while everything possible is done for them their infirmities are so many and overwhelming that it is hardly possible to give them any instruction or training, but these cases are not to be taken as disproving the view held by some of the Board's medical officers that few cases can truly be spoken of as "unimprovable."

A few words on the Fountain Mental Hospital, which takes in the very lowest grade of idiot children, should be of interest.

The institution consists of pavilions standing in about 10 acres of ground, with airing courts and grass plots between each pair of wards.

This arrangement allows all the children (cripple or otherwise) who are not confined to bed to spend the maximum number of hours in the open air, and during the summer to take all their meals outside.

The wards are arranged in pairs opposite each other and contain on an average about 40 beds, the main corridor, a covered way, dividing the bungalows; which number 16 altogether, and are built of corrugated iron with uralite linings painted without and within, are cheaply constructed, easily kept clean, and therefore are favourable for administrative purposes. They have, in fact, proved to be quite ideal for this class of work.

The most common type of patients admitted are the helpless, the paralysed, and the epileptic.

The first care is to see that the patients are made free from vermin and skin diseases following them.

Next they are classified, though this cannot be done according to age, but rather on the basis of their mental and physical condition, dividing them up as far as possible to equalise the work in the wards, keeping in view the maximum amount of possible benefit to the type of patient. It became evident soon after the hospital was opened that as many of these children were trained to feed and dress themselves, and in other ways become clean and even tidy and useful, some higher form of training might be attempted. To this end a school was started in 1917, a suitable teacher-nurse being selected to take charge of the children. She started by teaching them how to play, and gradually advanced them through elementary kindergarten work, musical drill and singing with action songs and dancing, to doll making, mat-making and the dressing of dolls. This simple instruction may not appear to mean much, but in practice it is found to be economical in many ways, and, above all, the lives of these unfortunate children are made much brighter and happier.

Those responsible hope to see still further progress as they feel that this work is still in its infancy. Experience has been that the younger the patients when first received the higher are the possibilities of improvement. Every care is taken to select the most suitable nurses who are specially interested in children, many of them having been children's nurses. They are trained to the work both in theory and practice. Over these nurses are fully trained sisters, who work in conjunction with the matron and her assistant, all of whom are specially qualified in the management and training of children. After the children have been to school for a certain period they are subjected to special

tests periodically by the medical officers with a view to selecting the best for further intensive training at the high-grade institution at Darenth.

No one who sees the children as they are on admission can fail to be struck with the remarkable change there is in them, in most instances after a comparatively short period.

The patience and care which must be lavished on these afflicted atoms before they can reach the standard of education displayed can hardly be appreciated except by those who watch the work of the institution constantly. Those directing the work must be whole-heartedly enthusiastic to have achieved such results as are visible here where, apparently, the most hopeless of the mentally deficient have been gathered together.

I have confined my paper to the work of the Metropolitan Asylums Board for the mentally deficient, and especially that under section 37 of the Act, as being that with which I am personally familiar. I need scarcely say in conclusion that the Board are well aware of the splendid work done under the same section by Boards of Guardians and combinations of Boards of Guardians at Monyhull Colony and elsewhere, which no doubt representatives of the authorities concerned will describe to the Conference.

APPENDIX D.

A REPORT ON THE OTOLOGICAL WORK DONE AT THE NORTH-EASTERN AND WESTERN FEVER HOSPITALS DURING THE YEAR, JULY, 1920, to JUNE, 1921.

BY

T. B. LAYTON, D.S.O., M.S.Lond., F.R.C.S.Eng.,
Surgeon to the Throat and Ear Department of Guy's Hospital and of the
L.C.C. School Clinic at St. George's Dispensary, Pocock Street, S.E.

FOREWORD.

I. Under the date 7 July, 1920, I received from the Clerk to the Metropolitan Asylums Board notice of my appointment as Otologist at the North-Eastern and Western Fever Hospitals under the following terms:—

“The duties are to visit each hospital at least twice a week, or more often if assistance is urgently required, and examine those patients whom the Medical Superintendent may put forward for the opinion of the Otologist, advise as to their necessary treatment and perform such operations as may be considered necessary. It is understood that the Otologist will not only see patients who are suffering from chronic ear discharge, but also examine and treat those in whom the middle ear is inflamed though not yet discharging.”

Notice of confirmation of this appointment by the Ministry of Health was received by me on 10 August, 1920, and of the extension of my appointment for a further period of six months on 18 June, 1921.

I was specifically asked by one of the members of the Committee of selection before whom I appeared whether I would consider the question of prevention of “running ears” in the acute specific fevers in all its aspects. I have therefore conceived my duty in holding this appointment to be twofold: to treat, so far as I could, all cases of ear disease referred to me by the medical staff of these hospitals, and to make such investigations as were possible on

the prevention of ear discharge, so that I might embody in my report certain suggestions as to how the problem of running ears resulting from the infective fevers may be approached in the Metropolitan Asylums Board Area. This report is accordingly divided into three parts—

I. INTRODUCTORY—being an account of the means of approaching the subject and of the ground covered.

II. CLINICAL—being an account of the symptoms of ear disease in scarlet fever so far as they have been observed, and suggestions for the treatment of the same.

III. ADVISORY—being suggestions put forward for organising a service to prevent the occurrence of chronic ear disease as a sequela of the infective fevers.

PART I.—INTRODUCTORY.

2. The experience upon which this report is based is limited to scarlet fever. The diseases of which there have been any number in the two hospitals during the past year are diphtheria and scarlet fever. Ear disease is not so common in the former as it is in the latter, and therefore after consultation with the Medical Superintendents it was decided to limit such investigations as were made to the latter. A few cases of ear discharge or ear-ache have been seen in cases of diphtheria at the request of the M.O.s in charge of the patients, but not enough on which to base any conclusions. It was hoped that as the year went by measles cases would be admitted to one or both of the hospitals so that similar investigations could be made in this disease as were being made in scarlet fever. That this has not happened is much to be regretted. It is generally believed that measles rivals scarlet fever as a cause of chronic otitis media, and a comparison of the two diseases under similar conditions would have been most valuable.

3. A word of caution must be put forward against setting any great reliance upon deductions made from this year's work. The epidemic of the past year has afforded a large number of cases of scarlet fever, but they have not been of a very severe type, nor has it been possible for one who makes two visits a week to a hospital to see every case in which ear discharge has resulted. For these reasons I have refrained from drawing up any tables with percentages in them. Such can only be made from thousands of comparable cases, and no such numbers of comparable cases could be put forward to illustrate any otological point except the one which has already been worked out by various series, viz., the percentage of cases in which otorrhœa occurs in scarlet fever. To work out percentages on a small series does not lead to accuracy, the addition or omission of one or two doubtfully comparable cases may lead to a considerable variation in the percentage, and deductions may then be made to fit in with preconceived ideas one way or another, with the result that the truth is thereby put further off rather than approached. This report, then, is based upon the impressions that remain after a year of work.

In taking up a systematic survey of any new subject, some time must elapse before it is clear what points need investigation and what cases are comparable upon which to make such an investigation. It may be considered that this stage is passed, and that there are open lines along which further investigations may be made.

4. There are plenty of series of cases published which afford evidence of the number of cases that develop otorrhœa in an attack of scarlet fever, but few of the number which leave the fever hospitals with the middle ear inflammation in a chronic condition. There is a difference of opinion as to how many such cases occur.

Dr. Ker¹ says that in few cases does otorrhœa persist so long as ten weeks. Dr. Goodall² says, "of 303 cases of scarlet fever which were discharged directly from the Eastern Hospital during the period 1 January, 1912, to the middle of February, 1913, in only one was otorrhœa still present." On the other hand, at the same meeting Mr. Arthur Cheate³ said, "I can assure Dr. Goodall that hundreds leave the fever hospitals with chronic discharge from the ear or ears."

The question is one which needs investigation and as such will be discussed later, for the present it will be well to remember that however many or few the cases be, we should try to make them fewer and to consider how we may accomplish this.

(NOTE.—On page 18 of Dr. A. G. Cameron's report on return cases, we learn that 361 cases were discharged with running ears in a twelvemonth, during which 15,501 patients were discharged from the infectious fever hospitals of the Board. Literally, this is consistent with Mr. Arthur Cheate's words, but when spread over the vast population of London, does not bear out his sweeping statement; it is, however, six times the number which Dr. Goodall observed. The question is considered below in para. 64.)

5. *First*: It is clear that the fewer the number of scarlet fever cases that occur the fewer will be cases of chronic otitis media resulting from it. It is not in my province as an otologist to help in this diminution other than by pointing out that steps taken to attain it form the truest kind of preventive otology.

6. *Secondly*: We may take it as proved that otitis media occurs in an increasing percentage of cases the more septic the type of disease. This is my experience and I believe that of other servants of the Board. Here again any steps which can be taken to limit the virulence of an epidemic and so to diminish the number of septic cases, or to improve the general condition of the patient when this condition arises, are of the utmost importance in the prevention of chronic otitis media. I wish specially to lay stress upon this point. Firmly as I agree with those who advocate that someone with training in otology should be attached to every fever hospital, I do not think that their combined efforts will do as much to diminish the amount of ear complications as has been obtained during the past 25 years by the better treatment of the disease and by the prevention of the disease. Such an admission is no argument in favour of refraining from making use of the otologist's skill, it is merely a warning against expecting that the whole aspect of ear disease will be changed immediately by the appointment of otologists to the fever hospitals. It is a moot point whether the difference in the virulence of scarlet fever of recent years is due to better treatment and prevention or whether it is merely a phase of a periodic wave. If it be the latter, time will show, and an opportunity should be given to the otologist to see whether he can devise some method to prevent an increase of ear disease *pari passu* with an increasing severity of scarlet fever. To succeed in this when the time comes he must have been given previous opportunity of studying the ear complications while the disease is yet mild.

7. *Thirdly*: We will assume that all inflammations of the middle ear travel to that region by the Eustachian tube from the naso-pharynx. Whether in any case the infection goes there by the blood-stream with a healthy intervening Eustachian tube I doubt, but if it ever occur it must be of extreme rarity. Hence anything that will diminish the inflammation in the naso-pharynx will diminish the likelihood of a case developing otitis media. I have not been able to think of any treatment directed to this part that has not already been

¹ "Infectious Diseases. A practical text-book," 1920, p. 152.

² XVII. Int. Congress of Medicine, 1913. Report of Sections XV. and XVI. Part I., p. 144.

³ *Ibid.*, Part II., p. 732.

used. Some epidemiologists syringe the throat during the disease, others believe that as good or even better results occur without such syringing. In acute disease of the throat other than infectious fevers I am not an advocate of syringing the throat, and in a disease such as scarlet with irritable patients, I have not felt that any improvement in the ear condition is likely to result from the use of such a thing. I have therefore neither asked for syringing to be done nor asked medical officers to refrain from it in cases in which they have ordered it. I feel that for improvement in this stage we must wait for a serum analogous to the anti-diphtheritic toxin and more specific than is the present polyvalent anti-streptococcal serum.

8. *Fourthly*: We must realise that in every case of otitis media there is a catarrhal stage before suppuration sets in, before the drum-head ruptures, and before ear discharge occurs. It is clear that if the otologist is to do anything materially to diminish the number of cases which leave the hospital with discharging ears it is at this stage that he must get the cases. More especially is this so when we remember that in incision of the drum-head (paracentesis) there is an operative process simple of itself yet productive of extraordinary good results. Otologists, like members of other branches of the medical profession, have wide ranges of opinion, yet on this one point all are I believe agreed—that if in every case of acute inflammation of the middle ear incision of the drum-head were performed at the proper moment, there would be but few cases of chronic otorrhœa, and the numbers of cases needing operation for acute inflammation of the mastoid process would very materially be lessened. I therefore from the first tried to get the cases in the stage of inflammation of the middle ear before rupture of the drum-head had occurred in order to find out whether there was any difference in the value of puncture of the drum-head in cases of inflamed ears with scarlet fever from its value in the similar lesion of ordinary practice. As a result of the year's experience I can say most emphatically that there is no such difference. The great majority of the cases in whom I have incised the drum-head have got well almost at once and completely. One or two cases have gone on and become chronic; in one case, to which I shall refer in detail later (para. 47), a mastoid operation had subsequently to be performed. I have purposely refrained from drawing up any statistics on this point. On the one hand, it is hard to say exactly which cases need paracentesis, and of the cases in which I have performed some would probably have got well without it and without rupture of the drum-head; on the other hand, it is impossible to put any series of cases in which the drum-head is allowed to burst in a class which would be strictly comparable with these. When more have been done in scarlet fever it may be possible to get statistics, but for the present it must be enough for me to state my firm conviction that a paracentesis of nearly every case in which any degree of inflammation of the ear occurs is the best way to limit the number of cases which leave the hospitals with running ears, and that the most important otological problem before the Board is so to develop the medical service as to aim at this ideal; that to every patient likely to develop an inflamed ear some one is called, before the discharge begins, who is capable of examining the drum-head and if necessary of performing a paracentesis.

9. *Fifthly*: In a limited number of cases the disease goes on to involve the mastoid process with abscess formation in this and in the structures in relation to it. It is necessary to consider whether it is the best policy to perform an operation—and if so, what operation—during the height of the disease, or whether it is better to defer this till a later stage after recovery from the infectious fever and intentionally to allow these cases to leave the hospital with running ears.

10. *Sixthly*: There is the problem of treating the ear that has begun to

discharge in order that the patient may leave the hospital not merely with cessation of discharge but without any active disease in the middle ear.

II. With the last three of these problems I shall deal again in the second part of this report, but as it is on the fourth that I have spent most time and thought some more detailed account of this problem may be considered here. It is an easy thing to define an ideal, it is a difficult thing to attain to it. It is the practice of some otologists to speak as if it were only necessary to attach one of their colleagues to every fever hospital to abolish the complication of otitis media. This is far from the case; much careful work is necessary in order that we may learn exactly how most often to get the cases at the right time, and however carefully we improve our organisation there will still remain some cases in which the running of pus from the ear is the first suggestion that anything is wrong. It is cases such as these which has led some to advocate routine daily examination of every case.

Thus Mr. Sydney Scott⁴ (strongly supported by Dr. Dan McKenzie) said that "he advocated daily routine inspection of the tympanic membrane in fever patients, without awaiting more obvious symptoms indicative of operative treatment."

I have found that in doing routine examinations it takes about an hour to do thirty cases. This is very quick work and leaves no time for the removal of wax which some cases need, nor for the operation of paracentesis when it has to be done. Working at this rate for eight hours a day it would take one man his whole time simply to do this routine examination in a hospital of 240 beds. But as there is a certain monotony in such routine work it would be impossible for any one man to do it even for one day. It could only be carried out by every M.O. of the Board learning to examine the drum-head and looking at the ears of every one of his own cases daily. Excellent as this would be in theory, I do not think it practicable with the constantly changing personnel, with young M.O.s coming for a few months while reading for the D.P.H. or putting in a few weeks as a locum tenens during a holiday or illness. It would mean an allotment of fewer beds to each M.O. and therefore an increase by one of the staff of each of the larger hospitals. If such an organisation were to eliminate from the community running ears consequent on infectious fevers, I should not hesitate to urge the increased expense; but so far from eliminating them I do not think it would have a result at all compatible with the work, the energy or the expense necessary to see it through. There would still be some cases that would slip through the sieve, very small children in whom an accurate examination is not possible, children who are so ill that the gain does not warrant the pulling about that is necessary to make the examination, children whose ears run before admission, cases with doubtful physical signs, and cases in which the signs are negligible one day and the ear is already discharging the next. When these are excluded the number remaining that would be discovered in time to perform paracentesis would be considerable, but would not be comparable to the time and money expended in the work. I write this not as an ardent economist, but as the result of this year's experience. It is true that I have had no opportunity of daily routine examination; but I have spent some time in weekly routine examinations of certain wards, for the first six months at the Western and for part of the second six months at the North-Eastern Hospital. In these examinations I have seen all the new cases admitted during the previous week and have seen again any cases that exhibit the slightest change in the drum-heads. This method has afforded me valuable evidence of the early signs to be seen in the drum-heads, but has been disappointing in the results of treatment. It has

⁴ XVII. International Congress of Medicine, 1913. Rep. of Sections XV. and XVI., Pt. II. p. 736.

enabled me to catch a few bulged drum-heads at about the fourth day of disease, it has lead me to re-examine a certain number of cases in which the drum-head was pink or exhibited dilated blood-vessels, and of these, one here and there have been found bulged at the next visit, a few have already burst by that time, but the great majority have resolved, and of these, at least one has suddenly developed a discharge a month later without any warning.

12. I have obtained much better results by asking M.O.s and sisters in charge of the wards to look out for certain signs⁵ suggesting ear disease and notifying me at my next round, especially when these signs occur shortly before my round. I have visited the hospitals at different times in order to determine the best time of day for catching such cases. Towards the end of last year I made it a habit to go to the North-Eastern Fever Hospital between 5 and 7 p.m., during the early part of this year I have been going to the Western Hospital between 8 p.m. and 10 p.m., I have also tried to pursue this method on certain of my morning rounds. As a result of this experience I am of opinion that the time between 5 p.m. and 7 p.m. is the most favourable for getting the cases. It would seem that at the end of the day when the child is tired slight exacerbations are liable to occur which cause attention to be drawn to the ears, and this observation fits in with the fact that it is at the morning washing that the ears are so often found to be running; of these discharges some would be avoided if the drum-heads had been examined the evening before. It might be expected that the later time would be the better as allowing the greater crop of symptoms to materialise. In practice this is not the case. The children have fallen asleep, one hesitates to wake them; if suddenly awakened a fit of crying may result which makes examination almost impossible; the nurse who has been in the ward all day has left, and the night nurse has not yet had time to note the idiosyncrasies of her charges, and at this late hour the otologist is tired and unable to afford the energy and the patience that the occasion demands. I have by these evening rounds caught more drum-heads than by similar searchings in morning rounds or by routine examinations. When it is remembered that such round has only occurred one day in seven I am inclined to believe that work along these lines affords the greatest chances of success.

13. But supposing no child who had had running ears left the fever hospital with them still running, there is still a great problem—perhaps the greatest—to be considered. Everyone who has had much experience in a school clinic for the treatment of throat and ear disease must have felt his optimism rising steadily during the spring and summer while his cases of running ears get steadily better, as he fondly believes from the result of the treatment he has afforded them. Then as the damp raw days of November are followed by those of December his optimism gives way to pessimism as his little friends return to him again with their ears running as before.

To what extent does this occur with the scarlet fever patients and with those who have suffered from other infectious disease? Does such a recurrence explain the discrepancy between the statistics quoted from Dr. Goodall and the statement made by Mr. Arthur Cheatle?⁶ To the best of my knowledge we are absolutely ignorant upon this point, and I hold that any complete study of ear disease in infectious fevers must include an observation of the same cases for the next year or so, and that any organisation set up will be wanting of this problem is not included in the survey.

⁵ For a discussion of these signs see Part II., paras. 29-32.

⁶ *Vide* para. 4 above.

PART II.—CLINICAL.

14. CONTENTS : A. THE RASH, para. 15.
 B. OTITIS MEDIA, paras. 16-37.
 Paras. 16-23. Objective symptoms or physical signs: these may be subdivided into those of three stages.
 Paras. 16-20. (i) Early signs before there is any bulging of the drum-head.
 Paras. 21, 22. (ii) The forms which a bulged drum-head takes.
 Para. 23. (iii) The condition after rupture of the drum-head
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 Paras. 27, 28. The operation of incision of the drum-head (paracentesis).
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 Paras. 49, 50. Operative treatment—Wilde's incisions.
 Paras. 51. Operative treatment—Antrotomy.
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II.—CLINICAL.

A. *The Rash.*

15. When the ear is examined in a patient in whom a well-marked rash is fully "out," it is seen that the erythema extends down the whole of the external auditory meatus and involves even the drum-head itself. This is easy accurately to observe in an adult, less so in a child. Its importance lies in the necessity for distinguishing it from the early stages of an acute otitis media. This may be done so far as the meatus is concerned by noting that the whole area of the skin of this part is involved and the more vivid colouration is not limited to the upper and back portion of the deeper parts as it is in the early stages of an otitis media.

On the drum-head itself the rash is less seldom seen and is less definite, a translucent pinkness suffuses the membrane and the colour is less intense than that of the rash which accompanies it on the skin of the external auditory meatus.

B. *Otitis media.*

16. The earliest sign of inflammation in the middle ear is a dilatation of the blood-vessels of the drum-head over the handle and short process of the malleus and of that part above this which is known as Shrapnel's membrane. This condition is not infrequently seen in the routine examination of the ears of patients in whom no suspicion of otitis media arises. But since we may postulate that there is such a suspicion in every case of scarlet fever, it is a physical sign that should not be neglected. It is more likely to indicate an inflammation when seen on one side than when seen on both; but this is no hard and fast rule. On the one hand, the conditions, other than an inflammation of the drum, whatever they may be which give rise to this dilatation, may be present on one side only; on the other hand, by our postulate we must admit the possibility of an early bilateral otitis media to be as great as that of a unilateral one.

The irritation of a plug of wax, or of the manipulations necessary to remove the same, would appear frequently to cause this sign without inflamma-

tion, and therefore when wax is present it is of less importance. It would seem, however, that the redness from external irritation is more intense and the separate blood-vessels less distinct than is the case with the feathery dilatation of minute vessels over this area when caused by the very earliest stage of middle-ear inflammation.

We may sum up this physical sign by saying that it is not a condition that needs any special treatment, but that when it has been observed the ears should again be examined to see whether it is progressive, and that even after it has subsided the slightest malaise or rise of temperature during the convalescence of the patient should indicate the necessity of again examining the ears.

17. More common and more definite than the last physical sign is a diffuse or local pinkness of the drum-head. This can be distinguished from the pinkness described as occurring as a part of the skin rash by its seldom being synchronous with the rash upon the rest of the body, but also by its rendering the drum-head less translucent, and by its being unaccompanied by any increased depth of colour of the skin of the external auditory meatus; or if it is so accompanied, by the colour on the drum-head being more intense than that on the skin of the meatus; or if it is not so intense, by the more vivid colouration of the meatus being limited to the postero-superior part of the deep meatus, as will shortly be described. This physical sign may extend over the whole drum-head or may be limited to the postero-superior quadrant. It very frequently passes off without treatment being directed to it, or it may go on to the further stages of an acute inflammation and end in rupture of the drum-head. It is probable that every acute inflammation of the middle ear passes through this stage. For these reasons simple local treatment should always be applied until the sign has passed away or until the further progress of the inflammation indicates an active interference.

18. In the opinion of the writer the changes seen in the postero-superior quadrant of the drum-head *and in the adjacent part of the external auditory meatus* are the most frequent, and the most definite of those seen in the early stages of acute otitis media in scarlet fever. It is sometimes hard even in a normal drum-head to be quite certain where the drum-head ends and the skin begins; it depends upon the slope of the drum-head and the configuration of the meatus. When inflammatory changes occur this distinction is frequently impossible, and for this reason the two areas may be considered together. Two stages may be recognised, that of mere redness and that of slight swelling.

19. The redness, when limited to the drum-head, is the same physical sign as that described in paragraph 17 where the pinkness is not diffused over the membrane, but from here it spreads to the neighbouring part of the skin of the meatus; sometimes, however, this structure may be involved first.

It is reasonable to suppose that as this is a sign of inflammation within the tympanic cavity the drum-head will always be involved first. I do not think it is so, but believe that redness of the postero-superior wall of the meatus may occur before any changes in the drum-head, and therefore consider that such a sign must be looked upon with suspicion as being possibly the start of an acute otitis media. I put this forward with reserve owing to the difficulty mentioned above of saying where drum-head ends and skin begins, and because redness of the meatus is a not uncommon sign from the presence of wax and the efforts made to remove it, or even from the stimulation of the patient's finger if he has felt any irritation. It is, however, a point well worth careful observation and further consideration.

20. It is not easy to say exactly when swelling begins. One looks at the deep parts of the outer ear through a funnel-shaped tube not always with

binocular vision. The various surfaces of the structures in this part are inclined to the line of vision through various angles and in various planes, and a slight normal variation in one of these angles may appear to the eye like a variation in structure, especially when the surface is picked out by the brilliancy of the dilated blood-vessels. In certain cases, however, a fulness of the tissues in the top back area of the deepest part of the meatus and of the adjacent drum-head may be seen merging by infinitesimal stages into a definite swelling of the skin structures in this region. This not infrequently may be taken for the limited bulging of the drum-head, to be described in the next paragraph, and may indeed be associated with it.

21. The forms which the bulged drum-head takes.

These are two—local and general.

(i) *The local bulging* of the drum-head is by far the commoner. It occurs in the postero-superior quadrant behind the posterior fold, and therefore is not a bulge of Shrapnel's membrane. The swelling fades gradually away to the surrounding parts of the drum-head and on to the neighbouring skin, and no definite line divides this condition from the fulness of the drum-head described in the last paragraph. The one is probably a further stage of the other, dependent upon the stage at which the inflammation beneath has reached and the rapidity of its progress.

More rarely the bulging is not only local but localised, with a small portion of the drum-head in the posterior-superior quadrant markedly convex towards the exterior. I believe that in such a condition the disease is stayed and that it indicates a less virulent infection.

22. (ii) *The diffuse bulging* of the drum-head is, I believe, extremely rare. In it the whole drum-head from the anterior fold to the posterior is convex towards the external meatus, with the handle of the malleus holding down the centre of the membrane and with delicately curling dilated blood-vessels streaming across all its parts. I have only seen one such. On this I chanced almost by accident, meeting the night sister at 1 a.m. in an unusually late visit at which she told me of a child who had that night been complaining of ear-ache.⁷ It is possible that this condition is frequent in these drum-heads which rupture apparently without warning. Further and careful observation alone will show.

23. The condition after rupture of the drum-head.

The amount and the condition of the discharge varies greatly. Generally speaking, the more viscid it is the less there is in quantity. An extremely profuse discharge of a very watery character would appear to be more common in these otites of scarlet fever than in those of the common colds of practice.

When the meatus is mopped dry the perforation may be seen in any part of the drum-head, but is most usual in the lowest point of the posterior-superior quadrant, upon swelling of which emphasis has been laid above. In my experience, the perforation has been small and frequently inadequate. The rapid destruction of the drum-head described in the books as occurring in scarlet fever I have not seen.

24. The treatment of the early stages.

Where there is no physical sign beyond the dilatation of blood-vessels mentioned in para. 16 I do not think any treatment is necessary, the physical sign is of importance merely as an indication that the drum-head should be looked at again; but where the pinkness described in para. 17 is seen, and more especially where the more definite signs in the postero-superior quadrant of the drum-head and of the skin of the meatus described in paras. 18 to 20 are seen, treatment is indicated. The treatment that I have tried is the application of warmth and the use of leeches.

⁷ *Vide* below, para. 27.

25. Heat is best applied to the ear by making the patient lie upon a hot-water bottle, but as any patient may roll off this in his sleep, and a child is specially likely to do so, and as the hot-water bottle cannot be applied to both ears, this method is not universally applicable and not suited to this class of case.

I would lay stress upon the importance of this heat being dry and would urge that hot fomentations be not used. These prevent absolutely any further accurate observation of the drum-head. The moisture causes the surface epithelium of the meatus to swell and to occlude the lumen; it is hard to remove this, and when done, that on the outer surface of the drum-head is similarly moistened, swollen and opaque, so that slight changes of colour and of swelling of the drum-head beneath cannot be seen through it. This epithelial *débris* is impossible to remove from the inflamed membrane beneath. Hence any further treatment is purely guess-work, and one is working entirely in the dark without any guidance as to whether the condition is progressing to one in which puncture is advised or whether it is quieting down.

Dry heat may be applied by means of a flannel cap⁸ with strings which tie under the chin, under this may be tucked warm wool or Thermogene wool, and this may be changed from time to time. In addition warm glycerine drops should be instilled into the ear. This has the added advantages of being hygroscopic and also antiseptic, and therefore is of use if paracentesis is necessary later.

26. The use of leeches was greatly advocated by surgeons before the days of antiseptics,⁹ when they were afraid to do such an operation as paracentesis as often as we do now. It is on the experience of such as these that we may especially rely for treatment short of operation, and the use of leeches in otitis media is probably a form of treatment which is not now used often enough. I have not used them so extensively in the scarlet fever cases as in others, but being satisfied with them in the latter, purpose to use them in the future for the former class of case if I have the opportunity. I believe the kind of case in which they would specially be useful is those in whom the physical signs described in para. 20 with fulness of the tissues before actual bulging occurs, and where, as we shall learn in the next paragraph, some doubt may exist whether a puncture should be done.

27. Paracentesis or incision of the drum-head.

In my opinion it is upon the early and efficient performance of this operation in every case in which there is bulging of the drum-head that the success or failure of any organisation set up by the Board for the prevention of chronic otitis will depend.

In the vast majority of cases if this operation is performed at the right time the inflammation of the ear will clear up and chronic ear discharge will not ensue.

I have divided the physical signs of otitis media into the early signs before there is any bulging of the drum-head "and the forms which a bulged drum-head takes," because I believe that paracentesis should be done in every case that has passed over into the second class. A comparison of para. 20 with 21 will show that the difference between the two is slight and that there is no distinct dividing line between a "swelling with fulness" and a "bulged drum-head where the prominence fades off into surrounding tissue." The important thing to remember is that it is better to do too many than too few cases, that it is in early cases that paracentesis has so great a value, and that if the case passes on to one of chronic discharge after incision it is probably not a criticism of the operation, but due to the fact that it was done late. No

⁸ I am indebted to Mr. Chas. Heath for an excellent pattern, *vide* his "Otitis Media," Fig. 18. p. 36.

harm is done by early incision, considerable harm is daily done by want of incision. On at least four occasions I have mistaken some swelling of the meatal wall for a bulged drum-head and have punctured this and have found my knife strike bone. No harm has come of it; on the other hand, the cases have uniformly improved, so that I believe that even at this stage the incision is of value; but this observation needs repeating before one can lay it down with certainty.

After paracentesis blood alone usually flows, sometimes serum exudes, occasionally pus. When the last is seen the prognosis is not favourable and it is likely that chronic discharge for some time may result. That this will not necessarily follow is shown by the case mentioned in para. 22. In this case pus poured out the moment the incision was made. Much to my surprise the ear was well within the week and the hole in the drum-head completely healed.

28. There are certain administrative difficulties which must be faced in connection with the performance of this operation. They are connected with the time that it takes to obtain consent to an anæsthetic being given. This operation is perhaps the smallest in surgery, but it is also the most urgent. If the condition indicating paracentesis is recognised in a given number of cases one evening it is certain that in an appreciable percentage it will be too late if the operation is deferred until the morning. I have been in the habit of performing it without an anæsthetic. From the point of view of the patient there is nothing to complain of in this. The pain is so momentary that even the smallest child will allow examination of the ear again at the next visit, and I have had a little boy of six in whom the two ears have been done at successive visits and who raised no objection to the second. From the point of view of the surgeon it is not advisable, he only has one chance, and if he is unsuccessful there is no other. Under these circumstances the operation is likely to be a puncture rather than an incision. It is far more satisfactory deliberately to incise the drum-head under light ether anæsthesia. Because it should be done deliberately, I do not advise gas; this gives little or no more time than does no anæsthesia at all, and it has the disadvantage that the coincident cyanosis so changes the colour of the structures in the ear that the landmarks have to be picked out afresh and the condition recognised again; in the time that it takes to do this the anæsthesia is passing off. In a certain number of cases where there were early signs of inflammation on my first visit I have been able to get consent for an anæsthetic and to incise the drum-head at the next. It is probable that in the future this will more often be possible, but I think that in the majority of cases to incise without an anæsthetic is the only alternative to getting consent for an anæsthetic as a routine in all cases admitted to hospital. I do not think this last is necessary, and even if it were so for this purpose, it seems to me so very inadvisable from other points of view that I should hesitate to advise it.

29. The subjective symptoms.

We have seen that daily routine examination of the ears of every case in a fever hospital is impracticable and unnecessary, we have seen that routine examination of every new case does not lead to one catching the inflamed drum-head in any appreciable number of cases; on the other hand, we are convinced that the only true solution to the otological problem is to puncture the drum-head at the proper moment. How, then, are we to decide which are the ears at which we should look? What are the symptoms that are to lead one to an examination of the ears?

In my opinion there are two—pain, and a sudden rise of temperature after it has once become normal.

30. It is perfectly true that otitis media may occur in children suffering

⁹ See especially the works of William Wilde.

from scarlet fever without causing any pain and may go on to rupture of the drum-head without this symptom occurring; but it does not occur nearly so often as is generally supposed. This is shown by the increased number of cases reported from a ward in which there is a keen and intelligent sister as soon as she is asked to report it at once and starts to be on the lookout for it. From a ward in which a sister believes that most ear discharges start without the child having pain cases are not reported; from a ward in which the sister is interested in the problem and approaches it with an open mind a considerable number of cases are reported. The pain may be very slight. One of my most strikingly bulged drum-heads occurred in a child who complained of itching in the ear one afternoon. This symptom is most likely to come on towards the end of the day, that is why I think that between 5 and 7 p.m. is the best time to be on the lookout for the cases of otitis. It means, I believe, that the drum-head is about to burst, therefore it is transient, and to wait for next morning before examining the drum-head is frequently too late; by then it has already burst. Sometimes, on the other hand, it may last for days, as is instanced by the cases in which fomentations are applied.

It is in the cases of septic scarlet fever that discharge most often occurs without the child having complained of any pain. Either the mind of the patient is deadened to it by the illness or is occupied with other aches and pains more trying than that from the ear, or the reaction of the tissues to the invasion of the micro-organisms is below normal so that the swelling does not raise enough pressure to cause the pain. I admit that in these cases I have not yet found the guides which will lead me to discover which are those with the bulged drum-heads.

The infant again does not complain verbally, but he does so in other ways, and the skilled nurse soon picks out those infants in whom a bulged drum-head may be the cause of restlessness or of crying. One of my most successful cases occurred in a child aged one suffering from diphtheria who ceased crying at once after incision of each drum-head. It must be admitted, however, that a smaller number are likely to be found at the right stage in the first five years of life than in the next, but it is in the second five years of life that scarlet fever is most common. This especially is one of the points in which I had hoped to be able to make comparison of scarlet fever with measles.

31. It would appear that the greater number of cases of otitis occur after the primary temperature due to the scarlet fever has subsided. Here again it is true that in some cases otitis media occurs and goes on to rupture of the drum-head with discharge from the ears without further rise of temperature. This, however, I believe to be the exception. The rise of temperature is not necessarily great, but is sudden. The child who has had a normal or sub-normal temperature for days is found to have one from 99.6 or 100 up to 102 F. when it is taken in the evening. This is reported to the M.O. next morning, he then examines to see whether albuminuria or enlarged glands may be the cause of it, and, finding none such, considers the possibility of its being the ears. It may then be too late, the drum-head may have burst and the discharge be accumulating at the bottom of the meatus ready to flow over a few hours later. The reverse should be the routine. The ears should be examined the same evening; the possibility of their inflammation being the cause should be considered first not last, since it is the only condition that necessitates immediate interference. Even when some other apparent cause of the rise of temperature is present they should still be examined, as a double cause of the rise may be present.

32. The examination of the above cases will not make it possible for all cases of otitis to be examined before the drum-head bursts, there will remain some where the otitis develops in the first days of the disease and in whom

no pain occurs. It may be well to examine the ears at this stage of children who have marked enlargement of the glands of the neck. I am not in a position yet to say whether otitis media occurs more often in cases with marked cervical enlargement. I am suspicious that it may do so. A proportion of such will occur in the cases of septic scarlet fever, and in these it must be left to the decision of the M.O. as to whether it is worth while disturbing the child to look at his ears on the off chance of finding a drum-head ripe for puncture, or whether it is better to leave a child so seriously ill without further disturbance. I must admit that I have been in the habit of practising the latter course, and that at present I have made no way in preventing the occurrence of otitis media in these severe cases. It would seem that the otologist is needed here rather than at the next stage, where the question of operation for the complications of mastoiditis is concerned.

33. The treatment of the running ears.

I have nothing new to say upon this subject. It cannot be too frequently repeated that from the otological point of view the case is seen too late when once the ears have begun to run. This is the aspect from which the whole staffs of the hospitals, medical and nursing, must be trained to view the problem of ear disease. I look to the day when a running ear shall be considered in the same light as a bed-sore, as rather a disgrace both to medical and nursing staff if it occur too frequently in any one ward or hospital. This is no dreamer's vision, but a practical ideal. All treatment applied to the external ear merely deals with the overflow and has little or no effect upon the disease itself; it is necessary to do this to keep parts clean, but it is the repair in the blood and tissues of the patient that gets the ear well, not the proceedings of the doctor and the nurse. It is like mopping up the floor when the closet pipe is blocked, rather than removing the threatened obstruction before the overflow has resulted.

34. Treatment must first aim at keeping the outer ear as dry of discharge as possible. When this first occurs, whether it should be syringed or not depends entirely upon the profuseness of the discharge. When very profuse this is the quickest way of getting rid of the pus. To get rid of small quantities of pus drops of peroxide of hydrogen may be used. In either of these procedures it must be remembered that it is purely a mechanical proceeding and that there is no virtue in the chemical nature of the liquids used. Mopping with dry cotton wool wound on to the end of a small stick is the only way of getting the ear dry. This is much more efficiently done by the patient than by the most skilful nurse, and every intelligent child over the age of seven who is not seriously ill may be taught to do it.

35. When the outer ear has been emptied of pus the otologist may be able to see that the perforation is inefficient and that pus is becoming pent up beneath it. Such a hole should be enlarged. As this is not an urgent operation, and as it is necessary to do it carefully, an anæsthetic should be given. Other treatment is limited to the instillation of stimulating or drying drops where there is so large a hole in the drum-head that it is possible for these to enter the middle ear through it.

36. The question of operations upon tonsils and adenoids.

I have long held the view¹⁰ that the many and serious complications which are known to follow these operations are far more likely to result when the operation has been done shortly after some acute inflammation has occurred in the throat, than when a proper quiescent period is allowed to supervene before interference is considered. I have therefore not considered the question of doing such operations in the early stages of the disease because I believe it is against all the canons of good surgery.

¹⁰ See Medical Sec. Transactions, vol. xxxvii., p. 248.

37. For chronic running ears, however, we take away the tonsils with a view to removing a source of constant re-infection of the middle ear *via* the Eustachian tube, and the question as to whether this should be done before the children leave the hospital had to be considered. During the month of February I spent a week in Edinburgh studying the work being done in the Throat and Ear Clinics of that city. An otologist, Mr. W. T. Gardiner, has recently been appointed to the Edinburgh City Hospital, and I had the opportunity of a talk both with him and with Dr. C. B. Ker, the Medical Superintendent of that Hospital. I learnt that they had operated upon the tonsils and adenoids of cases of ear discharge arising in the course of scarlet fever, which had not cleared up after prolonged expectant treatment, and that their results were sufficiently encouraging for them to continue with their policy. There is, however, a difference between the conditions in Edinburgh and in London, in that the City Hospital there subserves the function of the convalescent hospitals in London as well as of such as those to which I have been attached. I have not, therefore, had under my care the cases at the stage in which these operations have been performed at Edinburgh. On my return, I discussed the subject with each of the Medical Superintendents, and after careful consideration decided not to start this form of treatment. The subject will need further consideration if and when an otologist is appointed to one of the convalescent hospitals of the Board.

Mastoiditis.

38. A small prolongation of the cavity of the middle ear known as the antrum extends backwards into that nipple-like mass of bone known as the mastoid process which can be felt behind the outer ear. An inflammation of the middle ear may then spread backwards into the antrum, and from lining of the cavity it may spread to the bone of the process. These form the two stages of mastoiditis. Now an acute inflammation of bone is a serious disease in any part of the body; in this part it is specially serious because the mass of bone is in relation, on the one hand, with the membrane covering the brain, and, on the other, with the large vein which leaves the skull carrying the blood that has recently coursed through the brain. When the inflammation reaches either of these structures the patient's life is in danger.

39. The physical signs of mastoiditis in scarlet fever are the same as they are when this disease is not present, but they may be masked by it. Particularly is this the case with the temperature. On the one hand, a middle ear inflammation may occasionally pass on to a mastoiditis without any rise of temperature, just as it may in cases without scarlet fever; but, more often, the temperature resulting from the scarlet fever or from some complication coincident with the mastoiditis masks that due to the ear disease, so that this physical sign does not help so much as usual. So also with the look of the patient. If a child otherwise healthy but suffering from otitis media looks very ill, it is a strong suggestion that some inflammation of the bone has supervened; but when a child is desperately ill with a septic type of scarlet fever his appearance gives no indication as to how far the disease has extended in the region of the ear. I think that tenderness behind the ear is a less common symptom in this form of mastoiditis than is usual, but wish for further observations on this point.

40. There remains the sign of swelling behind the outer ear. This may be due to the flooding of the structures by fluid, known as œdema, or to an abscess with pus under the periosteum. The former is the more usual and I believe that it is commoner in this type of mastoiditis than it is in cases other than scarlet fever. The abscess is not constantly tucked into the fold between the outer ear and the skin of the head, it may be at some distance from this,

and I am suspicious that it is so more often in the scarlet fever cases of mastoiditis than in others. The point is of some importance, as it indicates extensive disease of bone. It is such distant abscesses that track down the neck and have to be distinguished from masses of enlarged glands.

41. The diagnosis of markedly enlarged glands from an abscess under the skin arising from the mastoid process is one of the most difficult as well as one of the most frequent decisions that I have been called upon to make. Enlarged glands may be surrounded by an œdematous area which overlaps the mastoid process, or the two lesions may be present at once, or the mastoid abscess may extend downwards in the tissues of the neck. I can lay down no rules to aid in the diagnosis. It is a question of the appearance afforded by each case separately in combination with the evidence gained by a consideration of all other points. I have not met a case of mastoiditis associated with a normal drum-head.¹¹ I operated upon one such and found myself wrong and that the mass was glands only. I should hesitate to advise operation again in the presence of a normal drum-head and meatus. In many cases, however, this does not help, for the decision has to be made in cases recovering from a severe attack of scarlet fever in which otitis media has already occurred with the resulting ear discharge.

42. The intra-cranial complications of mastoiditis form the nightmare of every otologist. He dreads the onset of that inflammation of the inner membranes around the brain which he calls meningitis. The extension of the inflammation to the great vein of the head (lateral sinus) is only less dreaded by him, and the extension of the inflammation to the space between the bone and outer membrane of the brain forming an extra-dural abscess is feared as a sign that the disease is approaching these structures. It is this fear which leads him to advise early operation, it is this which makes him feel that it is better to err on the side of opening a few mastoid processes unnecessarily rather than leave one which has gone too far. His dilemma is well expressed by a modern American author¹² :—

“The aural surgeon is, therefore, frequently confronted with a grave responsibility. If he waits in all cases until symptoms are present rendering surgical intervention absolutely obligatory, he will frequently find, when these symptoms appear, that the question is shifted from the advisability of opening the mastoid to a far more serious one—*i.e.*, the possibility of saving the patient's life by any means at his command.”

43. Otologists seem generally to think that the middle-ear suppuration occurring in scarlet fever is more severe than that occurring in other diseases, Thus Politzer¹³ writes :—

“We not infrequently find caries and necrosis of the temporal bone, with the exfoliation of smaller or larger portions of the same, erosion of the Fallopian tube with facial paralysis, or perforation of the bone into the labyrinth, and towards the cranial cavity with a fatal termination from sinus-phlebitis, meningitis and brain-abscess.”

And Kerrison¹⁴ says :—

“There can be no doubt that children suffering from suppurative middle-ear lesions complicating the acute infectious diseases more frequently develop intra-sinus infection than do children who have not been subjected to such severe systemic depletion.”

¹¹ A. M. Zamora, *Guy's Hospital Reports*, vol. lxxi., case 1.

¹² Kerrison, “*Diseases of the Ear*,” p. 191.

¹³ “*Diseases of the Ear*,” 5th English Edition, p. 502. He is speaking of scarlatinal-diphtheritic suppuration, but it is clear from the context that he means that which is here referred to as the septic type of scarlet fever.

¹⁴ “*Diseases of the Ear*,” p. 344.

44. On the other hand, those who have had experience in infectious diseases are unanimous in their opinion that intra-cranial complications are not much to be feared in the otitis of scarlet fever. Thus Goodall¹⁵ says:—

“While a mastoid abscess, suppuration of the antrum or mastoid cells, and inflammation and necrosis of a portion of the mastoid process are not very uncommon within a few weeks of an attack of scarlet fever or measles, the more serious lesions (intra-cranial suppuration, sinus thrombosis and pyæmia) are rarely met with during this period, so that they are seldom seen in fever hospitals.”

All those working in fever hospitals to whom I have spoken in the last year say the same thing. To the best of my memory Dr. Ker's words when I asked him a question on this subject were, “No! we do not fear these things.”

45. When I started this appointment I was faced with two exactly contrary views upon this point, and it behoved me to go carefully and slowly in order to find out which was correct. So far as this year's work is concerned my experience is entirely on the side of the epidemiologists, and is contrary to the view indicated by the above quotations from works on Otology. The point is of the greatest importance, because upon it depends the whole aspect with which one must look upon the question as to whether one must operate at once or may wait another day or so to see how things go on. As a result of this year's work I have come to the conclusion that one may approach these cases in a totally different way from that in which one must approach the cases that come into the out-patient department of a hospital. In the latter class of case, one feels that once having diagnosed the presence of acute inflammation of the bone of the mastoid, one should not go to rest until that bone has been opened; in the former class, one is quite safe in waiting for the condition of the patient to improve while expectant or minor operative treatment is employed.

46. There have been three cases in which intra-cranial complications have occurred in the two hospitals during the past year.

The first is that of a small girl in whom there was left ear discharge on admission to hospital, who had had this discharge for some time. She went through her attack of scarlet fever and was convalescing normally when she vomited on one or two occasions. The M.O. did not associate this with the ear discharge. One evening she told the nurse that she had a swelling behind the ear. There was a large extra-dural abscess at the operation, from which she made an uneventful recovery.

In another case, which was recently transferred to the Western Fever Hospital from one of the other fever hospitals of the Board, a mastoid operation had been performed at Golden Square Hospital during the incubation period of scarlet fever. When seen by me he had fully developed the physical signs of a temporal abscess in his brain. This was drained and a large quantity of pus evacuated, but after lingering for ten days the boy died.

In each of these cases the intra-cranial complication was secondary to disease which was present before the patient acquired scarlet fever. The latter may have had some result in the progress of the disease, but this cannot be attributed to the infectious disease.

47. The third is the case to which reference has been made in para. 8. A girl in the second quinquennial period of life complained of pain in the ear about one hour after I left the ward on a certain Tuesday. The temperature rose and the pain was intermittent until my next visit, when I incised her drum-head with immediate relief. The ear did not heal up, and she subsequently developed more pyrexia associated with enlarged glands on each side of the neck, which were opened by incisions. She then developed a swelling in front

¹⁵ International Congress, *loc. supra cit.*, p. 138.

of the left ear and I was asked to see it. I thought it was more glandular suppuration. The M.O. incised this and told me at my next visit he did not think it could be explained by its being glands, as he had found it necessary to go through the temporal muscle to reach the abscess. We agreed to wait and see whether the opening of the abscess would improve her condition. Subsequently an operation was performed. An extra-dural abscess was found in front of the ear deep to the muscles moving the jaw. The disease had apparently left the middle ear at the front end of its roof. It was not easy to reach.

A week later it was clear that free drainage of the abscess had not been secured, and another operation was performed; subsequent to this she developed meningitis and died. This was the only case of intra-cranial disease due to scarlet fever that occurred during the year. In my opinion it was not the delay in operating that was the fault in this case, but the fact that the abscess being in an unusual and inaccessible place, an efficient operation was not performed. It is, indeed, possible that it was the operation interference that was the determining factor in setting up the meningitis.

48. How, then, are we to reconcile the statements of the otologists quoted in para. 43 with these things? I would suggest three possible ways:—

(i) That scarlet fever varies in its clinical forms from time to time, and that in some more severe type than we have seen in this country of recent years severe complications of mastoiditis occur to an extent of which we have no knowledge. We must bear this possibility in mind in case the type of disease changes in this country.

(ii) That the otologist deals not with mastoiditis during the scarlet fever, but with cases of mastoiditis arising from a secondary infection from the first common cold caught by a child with an ear damaged by scarlet fever after he leaves the infectious hospital. We must bear this in mind in considering the question of allowing children to leave the hospital before the ear is quite healed.

(iii) That the otologist by his surgical interference stirs up the inflammation and breaks through the barrier of repair that nature has been forming around it.

49. Operative treatment.—Wilde's incision.

I was asked by the Chairman of the Committee before whom I appeared, whether I ever made use of Wilde's incision, and I replied that in children under one I thought it a good operation and that it might be useful up to the age of two.

The fact that I was specifically asked the question has made me consider this procedure more carefully than otherwise I should have done. For the reasons given above there is not the fear that a smaller operation may endanger the patient's life by not staying the spread of disease towards the brain cavity; and so it is perfectly sound surgery to do the smaller operation first and the larger operation on the mastoid at a later stage, if necessary; and in this way a certain number of major operations are undoubtedly avoided. But there is a further advantage in this operation; it is done in a couple of seconds, without removing the patient from his bed and without an anæsthetic. Hence it is particularly useful in those severe cases in which you feel that every little disturbance of the patient may be an important factor in the chances of his recovery.

50. I can sum up my experience of this operation thus:—

(i) In a certain number of cases the ear and the mastoid become quite well, the incision behind the ear heals, and the drum-head heals without any remaining sign of inflammation.

(ii) In some cases a fall of temperature results and the incision behind the ear heals, but the drum-head does not heal and the otitis media continues.

I think it important that a case such as this should be kept constantly under observation, and a mastoid operation performed if any further symptoms arise. With the knowledge that the bone of the mastoid has once been inflamed any further inflammation in it must be looked upon as a grave symptom.

(iii) In some cases the temperature will fall and the wound will partially heal, but will leave a track at one part unhealed. I think that these cases should not leave the hospital without an operation on the mastoid being performed.

(iv) In some cases the operation will not result in the temperature falling. If there is no other cause for a raised temperature the deduction should be made that the bone disease is extending, and after a period of not more than three or four days a mastoid operation should be done if the symptoms have not then subsided. If, however, the mastoiditis occur in a severe case of septic scarlet fever, a longer time may be allowed to elapse, during which the patient may very materially improve and be in a more fit state for operation.

51. Operative treatment—Antrotomy.

The indications for performing an operation upon the mastoid have been discovered by inference in the last paragraph. The operation that I have always performed has been that of opening the antrum, assuring myself that there is free drainage between this and the middle ear, and then of removing all the bone which can be recognised by the naked eye as being inflamed and leaving the cavity as smooth as possible without overhanging spurs of bone.

I have not found it necessary either to perform the operation of antrostomy (or, as it is called, the conservative operation or modified radical operation), nor to perform the operation of antrectomy (or the radical mastoid operation).

D. *The Effect upon the Hearing.*

52. Much is said about the amount of deafness that results from scarlet fever. The prevention of chronic ear disease will prevent some of this deafness. My time has been spent in trying to devise some plan whereby to prevent this chronic ear disease. Except in so far as this is concerned I have not directly tackled the question of deafness. The problem wants to be approached systematically and much preliminary work remains to be done before we can expect to know much about it or to get much improvement.

53. (i) The estimation of hearing in children is no easy matter, inattention or slight mental incapacity is often mistaken for deafness; inattention is rapidly grafted on to slight deafness and makes it worse, mental incapacity follows more slowly.

Where different observers are concerned, similar methods of examination should be used to diminish the personal factor and make the results comparable. Some standard method of testing should be made authoritative if comparable results are to be obtained.

(ii) The exclusion of the sound ear in testing unilateral deafness is a most difficult thing. It has not been sufficiently considered by otologists in the past. In children it is more difficult even than in adults. The good ear has often sharper hearing than it has in the adult, and the steps taken to exclude it have greater effects upon the mind of the child than on that of the adult. These points need consideration in any work on the subject.

(iii) The amount of deafness occurring during the acute disease is not the important point. Complete recovery will generally result from this. What we want to know is the amount of damage to the hearing when the ear has got quite well and before it has been reinfected by the organisms of ordinary life. This is the amount of damage that can be laid down to scarlet fever.

I do not think we have as yet sufficient evidence upon this point. It can only be obtained by following the cases through and examining them shortly after their recovery from the scarlet fever.

54. I am suspicious that the amount of deafness which will be ultimately proved to be due to the otitis media of scarlet fever is not so great as it is generally supposed to be. We must estimate this in proportion not to any theoretical physiological standard, but in proportion to the amount of hearing needed by the dweller under modern urban conditions. It is surprising how many war pensioners are seen who say they have never had anything wrong with one ear, and in this ear evidence of an old suppuration is seen which must have dated from childhood and very possibly from one of the acute infectious diseases.

55. On the other hand, I think it possible that the damage done to hearing through suppurative otitis media may not be the only deafness which is attributable to scarlet fever. I think I have observed cases in which the early signs of middle-ear inflammation described in paras. 16-20 have been followed by resolution of the inflammation with retraction of the drum-head and the incipient signs of chronic catarrhal otitis media. I have not made enough observations to form an opinion on the point, but it is one which must be borne in mind and will need investigation. In my experience chronic catarrhal otitis media is the cause of far more cases of serious deafness than are destructive changes in the middle ear, and if my suspicions are correct then scarlet fever may be the cause of more deafness even than that which is now laid to its charge.

(Signed) T. B. LAYTON.

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[NOTE.—The concluding section of the report which is not reproduced here contains various recommendations which are under consideration.]

APPENDIX E.

REPORT UPON THE LABORATORY WORK AND PREPARATION OF DIPHTHERIA ANTITOXIN CARRIED OUT UNDER THE METROPOLITAN ASYLUMS BOARD DURING THE YEAR 1920.

BY SIR G. SIMS WOODHEAD, M.A., M.D., LL.D., Bacteriological Adviser
to the Board, and

G. E. CARTWRIGHT WOOD, M.D., B.Sc., Bacteriologist to the Board.

Diphtheria antitoxin. The very heavy demands of the institutions of the Board during the year under review necessitated the reduction of the strength of the antitoxin doses supplied from 4,000 units to 3,000 units per dose, the change being effected on 29 January, 1920.

As a result of war conditions the reserve of antitoxin at the Laboratories was insufficient to meet the abnormal circumstances and it was necessary in the early part of the year to purchase from external sources 22½ litres of 400 units per c.c. antitoxin and 10 litres of 500 units per c.c. antitoxin or 14,000,000 units at a total cost of £722 14s. 9d.

The number of doses of antitoxin supplied to institutions of the Board during 1920 was 5,175 doses of 4,000 units and 74,142 doses of 3,000 units, or a total of 243,126,000 units, which is more than three times the normal output.

This quantity is very much in excess of that supplied in any one year since the commencement of this work. The amount supplied during 1919, which exceeded all previous years, was 40,198 doses, each of 4,000 units, or a total of 160,792,000 units.

The amount of antitoxin purchased for the Laboratories equals 5·7 per cent. of the total amount supplied to the various institutions of the Board.

During the year 12,286 cases, including 747 in which diphtheria bacilli were found to be present, although they manifested no clinical evidence of the disease, were treated in the Board's hospitals. It is calculated that, on the average, 19,788 units were used for each patient. The corresponding figures for 1919 show an average of 18,367 units per patient.

In addition to the Board's institutions, the Hospital for Sick Children, Great Ormond Street, was supplied with 400,000 units of diphtheria antitoxin.

Diagnostic work. During 1920, 106 specimens, mainly swabs from the throat, nose or ear of patients in the hospitals of the Board, have been examined for the presence of diphtheria bacilli. These specimens were derived from 60 patients in whom the diagnosis was doubtful or who were awaiting their discharge from hospital. Specimens from 0·04 per cent. of the diphtheria patients treated were thus examined at the Laboratories. In 1919 the corresponding figures were 71 specimens from 51 patients, or 0·5 per cent. of the total cases treated.

In addition, 22 specimens from 11 inmates of the mental hospitals, 428 specimens from 188 patients in the children's institutions, and 11 specimens from 10 patients in the sanatoria, have been examined in a similar manner.

During 1920, 254 samples of blood taken from typhoid patients in the Board's fever hospitals have been examined for the determination of the agglutinative reaction upon typhoid bacilli of the serum from these samples with the object of corroborating or correcting the diagnosis of enteric fever (Widal's reaction). These specimens were derived from 191 patients. Three samples of blood from 2 inmates of the mental hospitals and 1 sample from the children's institutions were tested in a similar manner.

236 samples of blood, from 178 patients, have also been examined for their agglutinative reaction upon organisms allied to typhoid bacilli, viz., the members of the paratyphoid group.

Of faeces 3 samples and of urine 3 samples, from 3 cases in the infectious hospitals were examined for the presence of typhoid bacilli and one sample each of faeces and urine from the mental hospitals were similarly examined.

Of sputum 6,924 samples were examined microscopically for the presence of tubercle bacilli. The specimens were derived from patients in the Downs Sanatorium, Pinewood, Colindale, Western, Park, Northern and Queen Mary's Hospitals and High Wood. In addition, 45 specimens from cases suspected to be suffering from tuberculosis have been examined for various institutions.

Of cerebro-spinal fluid from cases suspected to be suffering from cerebro-spinal meningitis, 58 samples were submitted for examination during the year.

Other samples, 35 in number, were received at the Laboratories and there examined with the object of separating and if possible identifying the organisms present. In 28 cases standardised vaccines designed for use in the treatment of these cases were prepared from the bacteria isolated from the material submitted for examination, and in 105 cases vaccines prepared from organisms of which cultures are maintained at the Laboratories were supplied.

In 16 cases determinations of the opsonic index were carried out and material from 9 cases were examined for dysentery and from one case for the gonococcus.

Twelve specimens were examined for ringworm, one test for occult blood was made and 8 specimens were examined histologically.

The water supplies of certain of the Board's institutions have been kept under observation during the year, 18 samples of potable water taken from 4 institutions being brought under examination.

(Signed) G. SIMS WOODHEAD,
Bacteriological Adviser to the Board.

G. E. CARTWRIGHT WOOD,
Bacteriologist to the Board.

APPENDIX F.

REPORT BY MR. L. J. PISANI, F.R.C.S., ON OPHTHALMIA IN THE BOARD'S MENTAL HOSPITALS.

I beg to submit my report for the past year.

The number of visits paid to the asylums of the Board since my last report was submitted is as follows:—

Leavesden	...	...	12
Fountain	...	...	4
Darenth	...	...	2
Caterham	...	...	1

Total ... 19 visits.

None of the other institutions under the Committee requested a visit during the year.

Leavesden.—The number of cases of trachoma under treatment in February as compared with the two previous years is shown below:—

	1919.	1920.	1921.
Males	38	36	40
Females	35	37	36
Totals	73	73	76

There is an increase of 3 cases. As there are now no cases of trachoma at the Fountain, there is really a total decrease of 12 cases, the combined total of Leavesden and the Fountain last year being 85.

The cases of trachoma are generally in a satisfactory condition.

In the ordinary Ophthalmia Ward the figures for the three years are as follows:—

	1919.	1920.	1921.
Males	26	41	43
Females	48	53	52
Totals	74	94	95

An increase of one over last year. During the year a good many cases were transferred from the Fountain and some from Caterham. In dealing with acute conjunctival cases the large wards at Leavesden have been found very unsuitable as it is practically impossible to prevent re-infection of nearly cured cases.

Fountain.—All the cases of trachoma were transferred to Leavesden and at one time during the year all cases under treatment were transferred. Cases of trachoma are best all collected in one institution, but to transfer all conjunctival and lid cases is not practicable, as in an institution with a large number of children, many of them admitted with eye complaints, it is not possible to transfer cases constantly—many of these cases are easily curable under a short course of treatment, but proper accommodation is necessary to prevent the spread of infection.

The cases under treatment at the Fountain during the past 3 years were below :—

	1919.	1920.	1921.
Trachoma ...	15	12	Nil.
Ophthalmia ...	24	29	20
	—	—	—
Totals ...	39	41	20

Darenth.—Two visits were made. In addition to a number of cases of minor ailments seen, a number of cases were refracted. The children at this institution are intelligent enough, in many instances, to derive benefit from the use of glasses.

Caterham.—One visit was made to perform an operation.

(Signed) L. J. PISANI, F.R.C.S.
Ophthalmic Surgeon.

APPENDIX G.

REPORT BY MR. E. TREACHER COLLINS, F.R.C.S., ON THE TREATMENT OF OPHTHALMIA IN WHITE OAK.

There were 160 children left in the school at the end of 1919. During the year 1920, 148 have been admitted.

The affections of the eyes from which these children were suffering may be classified as follows :

Trachoma ...	26
Follicular conjunctivitis ...	9
Mucopurulent ophthalmia ...	10
Chronic conjunctivitis ...	45
Phlyctenular ophthalmia ...	39
Purulent ophthalmia ...	1
Marginal blepharitis ...	18
96 children have been discharged cured.	
Trachoma ...	14
Follicular conjunctivitis ...	4
Mucopurulent ophthalmia ...	4
Chronic conjunctivitis ...	39
Phlyctenular ophthalmia ...	22
Lacrymal obstruction ...	1
Marginal blepharitis ...	12

9 children were removed by order of the Guardians before they were cured.

1 child died of tuberculosis of the lungs.

2 children absconded.

200 children were left in the school at the end of the year.

The following table shows the number of trachomatous and non-trachomatous cases admitted into the school from the different parishes and unions :—

Parish or Union.	Non-Trachomatous.	Trachomatous.	Total.
Bermondsey ...	5	2	7
Bethnal Green ...	1	—	1
Camberwell... ..	1	—	1
City	1	—	1
Fulham	3	—	3
Greenwich	3	—	3
Hackney	2	—	2
Hammersmith	4	—	4
Hampstead... ..	1	—	1
Holborn	4	3	7
Islington	6	—	6
Kensington... ..	8	2	10
Lambeth	2	1	3
Lewisham	—	1	1
Marylebone... ..	3	—	3
Mile End	—	1	1
Paddington... ..	8	—	8
Pancras, S.	3	—	3
Poplar	29	2	31
Shoreditch	5	2	7
Southwark	7	3	10
Stepney	2	1	3
Wandsworth	6	—	6
Westminster	3	—	3
Whitechapel	3	—	3
Woolwich	1	—	1

Extra Metropolitan.

Dartford	2	2	4
Willesden	1	—	1
Canterbury... ..	1	—	1
London County Council ...	1	—	1
Norwich	1	—	1
Middlesborough	—	4	4
Hendon	—	1	1
Chertsey	1	—	1
West Ham	3	1	4
Swindon	1	—	1
Total	122	26	148

There were 29 cases of measles in the early part of the year, and a few cases of chicken pox and mumps amongst the babies at the end of December.

E. TREACHER COLLINS.

APPENDIX H.

REPORT BY SIR JAMES GALLOWAY, K.B.E., C.B., M.D., F.R.C.P.,
F.R.C.S., CONSULTING PHYSICIAN FOR SKIN DISEASES, ON
THE WORK AT THE GOLDIE LEIGH HOMES DURING
THE YEAR 1920.

(A) GENERAL.—During the year 1920 the medical work at Goldie Leigh has been carried out under what may be described as normal conditions with the means at our disposal. There seems to be no diminution in the number of cases of contagious skin disease, especially ringworm, requiring admission to the Homes. There has therefore been a steady admission of cases almost to the full capacity of our accommodation. The work has been seriously impeded from time to time by outbreaks of infectious diseases such as chicken pox, measles, scarlet fever and diphtheria among our children. It is difficult to avoid such outbreaks, especially in seasons when these diseases are prevalent among the population whose children are sent to our Homes.

It is very difficult to set apart a cottage for the observation of the cases sent to the Homes in order to check the admission of children affected by these zymotic diseases. If it were possible to do so, no doubt the ordinary work at the Goldie Leigh Homes would be less impeded and a larger number of children could be dealt with. Failing this, I would venture to ask my medical colleagues to do their best to avoid sending to the Homes children who have been in contact with, or possibly suffering from, these zymotic infectious diseases.

With regard to the incidence of ringworm, there seems to be little diminution in that section of the population from which children come to the various institutions of our Board. It appears to be the case that large numbers of children suffering from ringworm are treated by X-rays at various institutions or centres throughout London. These children return to their homes after exposure of the diseased scalp, or part of it, to the X-rays. In process of time the hair on the exposed surfaces falls out, carrying with it the ringworm spores in enormous quantities. The hair and spores are widely distributed, and cannot fail to spread the disease easily amongst the children and others who are susceptible to the infection. Children during the period in which the hair is falling are in a highly contagious state and should be under care and close observation.

(B) RINGWORM DIVISION.—The treatment of ringworm by X-rays is being continuously and carefully carried out by my colleague, Dr. H. J. Critchley. We are thankful to say that the treatment has been very successful; the number of doubtful or unsatisfactory results has been very small indeed. I would draw attention to the fact that on one or two occasions during the year cases have been sent who have been shown subsequently to have had X-ray exposures of the scalp shortly before admission. No note of this has been made on their admission forms. In the case of such children there may be no evidence to be seen on admission that the scalp had been so treated, and it might very well happen that the affected skin could be treated by X-rays at Goldie Leigh shortly after the previous exposures, of which we had no knowledge. The results might be very damaging to the skin. I am glad to say that no such accident has occurred. We should be very glad, not only that note of previous X-ray exposure is made on the admission form, but also that the duration and the method of treatment adopted previous to admission to the Homes are recorded.

(C) SKIN DISEASES OTHER THAN RINGWORM.—A number of cases of very considerable interest are always under treatment in this department of the Homes. I would draw attention on this occasion to cases of Pemphigoid eruptions in young children, not the newly-born. We have cases of these diseases under treatment.

They are always of great medical interest ; they require very special care, especially on account of the complicating visceral diseases. I should be glad to be informed of the occurrence of such cases in our institutions, and if thought advisable, to have them under treatment at Goldie Leigh.

I would again draw attention to my Report for the year 1919, and would emphasize once more the great importance of the inspection of the children at our various institutions by skilled persons, in order that the contagious diseases affecting the children may be recognised early and treated.

JAMES GALLOWAY.

TABLES.

TABLE

TABLES I. & II.

List of members of the Board at the close of the year 1920.

MEMBERS ELECTED BY THE SEVERAL METROPOLITAN BOARDS OF GUARDIANS.

UNION OR PARISH.	NAME.	ADDRESS.
Bermondsey ..	Ecroyd, W. H., J.P.	89 Mayow Road, Sydenham, S.E. 26
Bethnal Green	Eickhoff, Walter, J.P.	"Clovelly," 165, Devonshire Road, Forest Hill, S.E. 23
Camberwell ..	Edmonds, Henry	3, Lyndhurst Square, Peckham, S.E. 15
" ..	Sayer, Samuel	44, Bushey Hill Road, S.E. 5
Chelsea ..	Crosse, T. Warren	10, Crosswell Gardens, South Kensington, S.W. 5
City of London	Benson, C. J.	18, Camomile Street, E.C. 3
" ..	Champhess, Major W. H.	14, Serjeants' Inn, E.C. 4
" ..	Doughty, Rev. Geo. Bell	Brooke House, Woodford Road, E. 18
" ..	Sladen, Rev. St. Barbe S., M.A. ..	8, Clydesdale Mansions, Notting Hill, W. 11
" ..	Spaul, H. B.	"Hollingbourne," 5, Halesworth Road, Lewisham, S.E. 13
City of West-	Heilbuth, Geo. H.	3, Down Street, Piccadilly, W. 1
minster	Hillersdon, Rev. F. Harcourt, ..	73, Ridgmount Gardens, W.C. 1
" ..	M.A., J.P.	
" ..	Smith, William	88, Cambridge Street, S.W. 1
" ..	Thomson, Capt. H. Lyon,	34, St. James' Street, S.W. 1
" ..	Walden, Sir Robert, C.B.E., J.P. ..	"Bella Vista," Upper Waringham, Surrey
" ..	Wallis, J. Palmer	359, Oxford Street, W. 1
" ..	Botterill, Charles	"St. Botolph's," 532, Fulham Palace Road, Fulham, S.W. 6
Fulham	Oldman, F. J.	Troutbeck House, 39, Troutbeck Road, New Cross, S.E. 14
Greenwich	Larter, G. W.	"Invergie," 54A, Cawley Road, South Hackney, E. 9
Hackney	Parker, Richard	102, Downs Park Road, Clapton, E. 5
" ..	Jones, J. G.	5, Elm Gardens, Brook Green, W. 6
Hammersmith	Gard, W. G. Snowdon, M.B.E., ..	10, Hampstead Hill Gardens, N.W. 3
Hampstead	E.L.B.	
Holborn	Garrity, Edward, J.P., F.J.I. ..	220, Goswell Road, E.C. 1
" ..	Mount Somerby, Herbert S. ..	32, Great Ormond Street, W.C. 1
" ..	Smith, Col. Sir William, J.P., ..	37, Russell Square, W.C. 1
Islington	D.L., M.D.	
" ..	Parker, W. B.	35, Fieldway Crescent, N. 5
" ..	Reed, Patrick	8, Tyndale Place, Upper Street, N. 1
" ..	Walkley, Alfred, J.P.	Tower House, 17, Cromartie Road, Hornsey Rise, N. 19
Kensington	Graham, W. E.	12, Ladbroke Gardens, W. 10
" ..	Rickards, A. G., K.C., J.P. ..	20, Southwell Gardens, S.W. 7
" ..	Wilde, Miss M. J.	84, Lexham Gardens, W. 8
Lambeth	Brittain, George, J.P.	366, Kennington Road, S.E. 11
" ..	Thimm, Commndr. F. K., R.N.R. ..	3, Court Road, West Norwood, S.E. 27
" ..	West, F. H.	24, Haycroft Road, Brixton Hill, S.W. 2
Lewisham	Bradley, W. G.	5, Trewsbury Road, Sydenham, S.E. 26
Mile End Old	Boustred, G. R.	83, Clark Street, Stepney, E. 1
Town		
Paddington	Blackwell, Mrs. E. M.	1, Garway Road, Westbourne Grove, W. 2
" ..	Hobson, John	81, Praed Street, Paddington, W. 2
Poplar	Sumner, C. E.	61, Knapp Road, Bow, E. 3
St. George-in-	Reidy, Mrs. F. W.	314, Commercial Road, E. 1
the-East		
St. Marylebone	Anglim, Jeremiah, J.P.	111, Lisson Grove, N.W. 1
" ..	Broadbent, Miss M. E.	6r, Bickenhall Mansions, Gloucester Place, W. 1
" ..	Morris, Francis, J.P.	14, St. John's Wood Park, N.W. 8
St. Pancras	Cosburn, Major G. F., J.P. ..	83, Judd Street, W.C. 1
" ..	Miles, A. R.	29, Gloucester Crescent, N.W. 1
" ..	Tapping, Dan.	Dartmouth Villa, Patshull Road, N.W. 5
Shoreditch	Tucker, Thomas	20, Pleasant Place, N. 1
Southwark	Cornell, Thomas (<i>Vice-Chair-</i> <i>man of the Board</i>)	"Ferndale," 176, Victoria Avenue, Southend-on-Sea
" ..	McCarthy, Phillip	52, Pullen's Buildings, Penton Place, S.E. 17
Stepney	Attlee, Major C. R.	638, Commercial Road, E. 14
Wandsworth	Potts, Rev. E. Eccleston	47, Studley Road, Clapham, S.W. 4
" ..	Pritchard, Rev. A. G.	12, Foxmore Street, Battersea, S.W. 11
" ..	Winfield, Albert	39, Morrison Street, Battersea, S.W. 11
Whitechapel	Murphy, Rev. P. J.	1, Hamilton Road, Sidcup, Kent
Woolwich	Hutchinson, Rev. C. W.	Wharf House, Bell Watergate, Woolwich, S.E. 13

MEMBERS NOMINATED BY THE MINISTRY OF HEALTH.

NAME.	ADDRESS.
Baker, Miss I. M.	37, Brooke Street, Holborn, E.C. 1
Bousfield, E. C., L.R.C.P., M.R.C.S., D.P.H. ..	6, De Crespigny Park, Denmark Hill, S.E. 5
Brinton, Miss M. D.	34, Bedford Gardens, Campden Hill, Kensington, W. 8
Curtis, Rev. Canon Hubert, M.A.	The Vicarage, Malwood Road, Balham Hill, S.W. 12
Doneraille, The Viscount	91, Victoria Street, Westminster, S.W. 1
Drage, Geoffrey	29, Cadogan Square, S.W. 1
Elliott, Sir George, M.P.,	14, Upper Street, Islington, N. 1
Henderson, Admiral W. H.	3, Onslow Houses, S.W. 7
Hubbard, N. W., J.P.	"Hawarden," 41, Chestnut Road, West Norwood, S.E. 27
Meinertzhagen, E. L., J.P.	4, Cheyne Walk, Chelsea, S.W. 3
Paton, W. B.	10, Stanhope Gardens, Queen's Gate, S.W. 7
Rendel, James Meadows	7, Courtfield Road, South Kensington, S.W. 7
Salmund, Mrs. E. M., O.B.E.	36, Brunswick Square, W.C. 1
Scovell, Sir Augustus, J.P.	8, Primrose Mansions, Battersea Park, S.W. 11
Shaw, Lauriston E., M.D., F.R.C.P.	The Bungalow, Otlands Chase, Weybridge
Sheffield, Col. Frank	"Palaspat," Daleham Gardens, Hampstead, N.W. 3
Sommerville, Rev. W. J.	Otford Vicarage, nr. Sevenoaks, Kent
Sprankling, The Very Rev. Canon (<i>Chairman</i> <i>of the Board</i>)	St. Charles, Heath Road, Weybridge, Surrey

No.	Date of opening.	Acreage.	Accommodation.		
			Total number of beds.	No. of beds in special wards (isolation, separation discharge, &c.)	No. of beds in ordinary wards.
1	September, 1908 .. .. .	.. .. .	..	..	..
2	May, 1907	2 a. 2 r. 0 p. .. .. .	..	..	..
3	31 August, 1896	29 a. 1 r. 2 p.	580	104	476
4	1 February, 1871	9 a.	375	67	308
5	17 August, 1899	22 a. 3 r. 3 p.	537	121	416
6	8 October, 1892	33 a. 0 r. 6 p.	623	149	474
7	25 January, 1870	12 a. 1 r. 19 p.	464	100	364
8	8 November, 1897 <small>(Used for sick and convalescent children from Nov., 1910, to Oct., 1914)</small>	19 a. 1 r. 6 p.	548	132	416
9	17 March, 1877 <small>(Reconstructed 1904-1906 and re-opened 2 July, 1906)</small>	10 a. 2 r. 0 p.	496	72	424
10	31 January, 1871	8 a. 1 r. 20 p.	347	77	270
11	10 March, 1877	13 a. 2 r. 35 p.	456	54	402
12	25 September, 1887	35 a. 2 r. 38 p.	411	85	326
13	October, 1890	160 a. 0 r. 16 p.	922	166	756
14	Erected 1902		610	42	568
14	28 December, 1903		940	184	756
			7,309	1,353	5,956
15	27 February, 1902	24 a. 0 r. 37 p.	50 beds. 300 "	1,150	48
16	Erected spring, 1902	63 a. 0 r. 18 p. .. .. .				800 "
17	September, 1918	1 a. (about)	48 "	48	
18	21 June, 1920 .. .. .	.. .. .	52 "		
19	Purchased February, 1920	17½ a. (about)	—	Not ready	52
20	26 February, 1903 <small>(Used for ringworm cases until Jan. 1913, and re-opened in Feb. 1913)</small>	42 a. 3 r. 27 p.	292		
21	7 July, 1919	82 a. 0 r. 0 p.	160		
22	Now in course of erection	57 a. (about)	232	Not yet available.	
23	1 January, 1920	27 a. 2 r. 0 p.	271		
24	14 May, 1914 .. .. .	.. .. .	50		
25	Purchased in 1920—not yet ready for occupation .. .. .	.. .. .	313	Not yet available.	
—	(see above)	(see above)	262		
26	Purchased in 1920—not yet ready for occupation .. .. .	.. .. .	164	Not yet available.	
27	26 June, 1898 <small>(Reconstructed 1914-1919 and re-opened Oct. 1919.)</small>	3 a. 2 r. 20 p.	271		
28	26 July, 1904 <small>(Used for ophthalmia until 1918, then for sane epileptics from Aug., 1918, until Nov., 1919)</small>	28 a.	308		
29	6 April, 1904	5 a. 2 r. 0 p.	120		
30	Site purchased July, 1914—scheme indefinitely postponed	185 a. (about)	—	2,443	
31	Ditto Ditto	153½ a. (about)	—		
32	19 January, 1903	28 a. 3 r. 18 p. <small>(including Bushey Down)</small>	1,114		
33	October, 1870	223 a. 0 r. 4 p.	2,209		
34	" "	215 a. 3 r. 2 p.	2,109		
35	" 1893 <small>(Used as a fever hospital until 1911, then as home for defectives during part of 1912, and since 1912 as an asylum for unimprovable imbeciles)</small>	10 a. (about)	658		
36	Purchased 1902	93 a. .. .. .	..	
37	" 1914	23 a.	Not ready.		

(g) In addition to the number of beds for tuberculosis cases shown under this heading, there are 30 at St. Anne's Home (No. 44), and about 560 at Queen Mary's Hospital (No. 42).

(h) Let to Fulham Guardians but by arrangement lent to the military authorities.

No.	Name of institution.	Where situated.
Training colonies.		
38	Darenth—(i.) Imbeciles (ii.) Feeble-minded	Dartford, Kent
39	Bridge—Feeble-minded	Witham, Essex
Colony for sane epileptics.		
40	Edmonton Epileptic Colony (male adults and children of both sexes)	Silver Street, Edmonton, N. 18
41	(i) Training ship Exmouth	Grays, Essex
	Infirmary	„ „
	Exmouth II., sea-going tender	„ „ and cruising
Children's institutions.		
42	Queen Mary's Hospital for Children (sick and convalescent children)	Carshalton, Surrey
43	The Children's Infirmery (sick and convalescent children)	Cleveland Street, W. 1
44	S. Anne's Home (seaside convalescent home)	Herne Bay, Kent
45	Goldie Leigh Homes (ringworm & skin diseases)	Abbey Wood, S.E. 2
46	White Oak (ophthalmia,— also convalescent children)	Swanley Junction, Kent
Casual wards.		
47 to 63	17 wards	Various parts of the metropolis
Ambulance stations.		
64	Brook Station	Shooters Hill, Woolwich, S.E. 18
65	Eastern „	Brooksby's Walk, Homerton, E. 9
66	Mead „ (motor workshop)	Carnwath Road, Fulham, S.W. 6
67	North-Western „	Lawn Road, Hampstead, N.W. 3
68	South-Eastern „	New Cross Road, S.E. 14
69	South-Western „	Landor Road, Stockwell, S.W. 9
70	Western „	Seagrave Road, Fulham, S.W. 6
Wharves, piers, and steamers.		
71	North Wharf	Managers Street, Blackwall, E. 14
72	South „	Trinity Street, Rotherhithe, S.E. 16
73	West „	Carnwath Road, Fulham, S.W. 6
74	Five ambulance steamers	„

(i) The present training ship "Exmouth" was built for the Board in 1905.

No.	Date of opening.	Acreage.	Accommodation.
38	November, 1878	164 a. 1 r. 0 p.	1,668 beds
39	12 February, 1901 <small>(Used for ringworm cases until 1906, then as a home for defectives until 1911)</small>	7 a. 1 r. 0 p.	630 beds.
40	Purchased 1914	10 a.	210 "
41	March, 1876 .. .. .	.. .. .	316 "
41	August, 1905	6 a. 2 r. 13 p.	700 boys,
	July, 1913 .. .. .	.. .. .	34 beds.
42	29 January, 1909	136 a. 0 r. 0 p.	70 boys.
43	May, 1916	$\frac{1}{2}$ a. (about)	804
44	26 December, 1897	2 a. 3 r. 0 p.	810 beds
45	1 November, 1914	32 a.	234 "
46	20 March, 1903	49 a. 2 r. 10 p.	150 "
47 to 63	Transferred to the Asylums Board, 1 April, 1912.	.. .. .	270 "
64	18 August, 1896 .. .. .	.. .. .	360 "
65	20 June, 1885 .. .. .	.. .. .	— 1,824
66	April, 1902 .. .. .	.. .. .	1,123 beds.
67	1 September, 1897 .. .. .	.. .. .	.. .. .
68	1 October, 1883 .. .. .	.. .. .	.. .. .
69	2 May, 1898 .. .. .	.. .. .	.. .. .
70	9 July, 1884 .. .. .	.. .. .	.. .. .
71	Purchased January, 1884	— 2 r. 0 p.	9 beds.
72	.. .. . December, 1883	2 a. 1 r. 0 p.	24 "
73	.. .. . February, 1885	2 a. 2 r. 10 p. .. .. .	.. .. .
74	May, 1884, to March, 1902 .. .. .	.. .. .	178 beds.

The following classes of cases are treated for the Board as indicated :—

1. *Sane Epileptics (Female Adults)*. By the Hackney Guardians at their Branch Institution at Brentwood, Essex, where 300 women and 50 girls can be accommodated. This arrangement began on 1 April, 1921.

2. *Veneral disease*. By the City of London Guardians at Thavies Inn, High Holborn, where 20 (mothers with infants) patients can be accommodated. This arrangement began on 5 September, 1917.

TABLE IV.

Numbers and classification of the staff at the end of the year 1920.

	Infectious hospitals and laboratories.		Mental hospitals.		Sanatoria.		Children's institutions and Exmouth.		Ambulance, casual wards, and other services.		Head office, &c.		TOTALS.	
	Per.	Tem.	Per.	Tem.	Per.	Tem.	Per.	Tem.	Per.	Tem.	Per.	Tem.	Per.	Tem.
MALES.														
Principal officers	37	1	19	1	12	—	12	—	16	—	—	—	96	3
Medical and dental staff	56	16	19	1	16	1	16	2	7	—	1	—	115	20
Male nurses, attendants and instructors	18	1	62 ^a	12	18	1	63	1	—	—	—	—	727	15
Clerical staff	73	3	35	1	15	—	18	3	24	5	120	—	285	12
Engineering staff	157	79	82	19	33	11	39	4	18	17	—	—	329	130
Motor drivers	7	—	5	—	—	—	1	—	171	6	—	—	184	6
Porters	312	100	82	12	45	3	39	14	10	2	4	—	492	131
Garden and farm staff	28	32	49	9	14	2	3	5	—	—	—	—	94	58
Others	88	61	130	52	5	17	28	23	70	42	7	3	328	198
TOTAL ...	776	293	1,049	107	158	35	219	63	316	72	132	3	2,650	573
FEMALES.														
Principal officers	14	—	6	—	7	—	6	—	—	—	—	—	33	—
Medical staff	24	5	—	—	—	1	2	3	—	—	—	—	26	9
Nursing staff	2,276	335	815	19	234	8	325	7	21	—	—	—	3,671	369
Teaching staff	1	1	46	2	19	1	33	1	—	—	—	—	99	5
Motor drivers	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kitchen staff	163	17	35	2	49	7	20	1	4	3	—	—	271	30
Domestic staff... ..	1,231	206	115	9	151	24	198	59	49	7	10	6	1,754	311
Needleroom staff	115	61	27	4	17	6	26	1	1	—	—	—	186	72
Laundry staff	269	40	84	11	31	1	41	6	—	—	—	—	425	58
Clerical and telephone staff...	24	7	4	—	2	2	2	1	7	1	31	1	70	12
TOTAL ...	4,117	672	1,132	47	510	50	653	79	82	11	41	7	6,535	866
TOTAL MALE AND FEMALE...	4,893	965	2,181	154	668	85	872	142	398	83	173	10	9,185	1,439
													TOTAL ... 10,624	

TABLE V.

Summary of the main financial statistics of the Metropolitan Asylum District.

NOTE.—Unless otherwise stated the following statistics relate to the financial year ended 31 March, 1920.

The Metropolitan Asylum district is coterminous with that of the metropolitan unions and parishes, *i.e.*, the Metropolis, excluding the Inns of Court (Inner and Middle Temples, Gray's Inn and Lincoln's Inn), which during the continuance of certain payments are regarded as extra parochial.

The population of the district, as estimated by the Registrar-General at the middle of 1920, was 4,531,971.

The rateable value of the district was £45,546,751 on the 6 April, 1919, being an increase of £106,752 (0·23 per cent.) during the year then ending.

The produce of one penny in the £ on the rateable value of the district at 6 April, 1919, represents £189,778.

The precepts levied by the Managers on the constituent parishes and unions of the district for the year work out at 1s. 2½d. in the £, and the average for the past five years was 8·7d. in the £.

The total expenditure out of general account for the year was £2,104,993, and there was no expenditure out of loans in the year.

The total income on general account for the year was £1,986,652.

The rateable value of the property of the Board is £174,973, and the amount of the rates paid last year on the property occupied was £74,700, of which £36,049 was paid to metropolitan authorities, and £38,651 to provincial authorities.

The borrowing powers are limited to one-fifth of the rateable value of the district.

A sanction to borrow an amount of £111,220 was received during the year.

No amount was borrowed during the year. The total amount borrowed to 31 March, 1920, was £5,814,449. The amount repaid in the year was £260,193, making the total amount of loans discharged £5,134,859.

The amount of loans outstanding at 31 March, 1920, was £679,590, and works out at £1 9s. 10d. for every £100 of rateable value, and is 3s. per head of the population of the district as estimated by the Registrar-General at the middle of 1920.

The rates of interest on loans vary from £2 15s. 0d. per cent. to £4 5s. 0d. per cent. and the average rate of interest at 31 March, 1920, was 3½ per cent.

The number of institutions under the control of the Managers is 74 (Table III.).

The average daily number of inmates maintained was, in—

1915	(Year to 30 September)	...	...	...	16,295
1916	do.	...	...	...	14,514
1917	(Six months to 31 March)	...	...	...	13,797
1918	(Year to 31 March)	...	...	...	13,201
1919	do.	...	...	...	12,217
1920	do.	...	...	...	13,557

The number of persons in receipt of superannuation allowances at the end of the year was 363, and the superannuation payments, excluding compensation, amounted to £18,029 for the year.

The percentage deductions from the pay of the staff under the Poor Law and Asylum Officers' Superannuation Acts during the year amounted to £18,310, after allowing for contributions refunded.

Dr.

TABLE VI.—Receipts and Expenditure Account

Year 1918-1919. £	EXPENDITURE.	£	£
	To Maintenance, &c., of inmates:—		
251,265	Provisions, necessaries, clothing, and funerals	317,970	
1,715	Clothing for discharged inmates, expenses of boys going to sea and of children to and from homes, and certification, &c., of imbeciles	1,833	
252,980			319,803
	Salaries, establishment, &c., charges:—		
	Maintenance of officers and servants—	£	
388,016	Salaries and wages (including allowances)	705,672	
26,974	Pay of employees with H.M. forces, less army pay and allowances	7,504	
109,858	Provisions	153,573	
2,473	Necessaries	3,402	
12,529	Uniforms and sundries	22,839	
539,850			892,990
	Buildings and establishment—		
	WORKS—		
30,887	Wages, £35,064; Contracts and materials, £23,445	58,509	
5,920	GARDENING—		
	Wages, £9,082; Plants, seeds, &c., £332	9,414	
15,145	FURNITURE—	£	
12,732	Furniture and other articles	27,545	
3,473	Bedding and linen	23,352	
2,049	Earthenware	5,695	
	Hardware	3,394	
			59,986
	HEATING, LIGHTING, AND CLEANSING—		
32,425	Wages of engineering staff	53,831	
91,469	Coal and coke	121,939	
41,623	Gas, electric light, water and other supplies	55,397	
			231,167
235,723			359,076
66,667	Rates, rent, taxes and insurance		86,033
17,404	Medicines and medical and surgical appliances		23,451
	Miscellaneous expenses—		
8,463	Printing, stationery, postage and office expenses	12,672	
	Other charges—running expenses of ambulance vehicles and travelling, Managers' and sundry expenses (including Board's contributions under the National Insurance Act, 1911, £1,689) ...	37,317	
25,812			49,989
34,275	Sundry general expenses—		
252,000	Repayment of loans	261,344	
37,861	Interest on loans	31,152	
24,106	Pensions, notification fees, law expenses, &c. ...	27,528	
313,967			320,024
1,207,886			1,731,563
	Deduct—		
11,936	Balances on industrial, &c., accounts	15,594	
8,389	Services of nurses engaged in ambulance work and fees for hire of ambulances ...	11,587	
20,325			27,181
1,187,561			1,704,382
	Expenditure of a special character—		
22,485	Buildings—contract and non-contract	53,860	
6,486	Furniture, &c.	26,948	
28,971			80,808
1,216,532			1,785,190
1,469,512	Net total expenditure		2,104,993
	Balance carried down, being surplus of receipts over expenditure for year		£2,104,993
£1,469,512			
	To Balance brought down, being expenditure in excess of receipts for year		£118,341
	To Balance at 31 March, 1920, carried to balance sheet		£186,220
			£304,561

for year ended 31 March, 1920.

Cr.

		RECEIPTS		Year 1918-1919.
By contributions from parishes and unions in the district (on rateable value), net		£	£	£
			1,753,672	1,230,652
Parishes and unions in the district—				
Amounts recovered in respect of maintenance of inmates in the Board's institutions		14,780		13,580
Ministry of Health—				
Grant, being half of net deficiency on maintenance and treatment of tuberculous patients—				
		£	£	
	Balance of grant for 1917-1918	—		10,191
	" " 1918-1919	6,261		15,000
	On account of grant for 1919-1920	16,000		—
		22,261		
			22,261	25,191
Extra metropolitan and other authorities, &c.—				
	For maintenance of inmates in asylums, hospitals and schools	75,085		37,893
	" boys on Exmouth	16,540		11,737
	" inmates in sanatoria	58,180		35,679
			149,805	85,309
	Interest on investments and balances in hands of bankers, &c.	10,328		9,220
Sundry receipts:—				
	Rents of buildings and land (net)	4,191		6,677
	Sale of old ambulance vehicles and sundry receipts	10,517		5,586
	Value of furniture and other stocks transferred and brought into account during year	2,788		4,754
	Superannuation contributions	18,310		9,718
			35,806	26,735
			232,980	160,035
	Total income		1,986,652	1,390,687
	Balance carried down, being expenditure in excess of receipts for year		118,341	78,825

HEADS OF EXPENDITURE.

1918-1919.			1919-1920.	
Amount.	Rate in the £		Amount.	Rate in the £
£	d.		£	d.
372,544	1'97	Imbeciles and feeble-minded	519,928	2'74
		Infectious sick—		
402,772	2'13	Fever, smallpox, &c.*	712,941	3'76
71,263	0'38	Tuberculosis* (other than Poor Ambulance service— [Law cases])	153,740	0'81
44,584	0'23	Land	69,068	0'36
9,158	0'05	River (including wharves)	12,392	0'06
37,878	0'20	Boys on training ship	54,962	0'29
146,679	0'77	Children of various classes	187,185	0'99
17,656	0'09	Casual poor	22,821	0'12
		General expenses (including repayment of and interest on loans, printing, &c., and head office salaries and expenses)	371,956	1'96
366,978	1'94			
£1,469,512	7'76		£2,104,993	11'09
		<i>Less—</i>		
		Income other than contributions from parishes and unions	232,980	1'23
160,035	0'84			
£1,309,477	6'92	Net expenditure	£1,872,013	9'86

* Expenditure on maintenance in fever hospitals of discharged tuberculous soldiers and sailors is included under fever expenditure.

£2,104,993

£1,469,512

By Balance at 1 April, 1919

304,561

£304,561

LIABILITIES.									
LOAN ACCOUNT.									
Loans.									
								£	£
Loans outstanding 31 March, 1919	..	..	..	..	..	..	..	939,783	
Less instalments of loans repaid during the year	..	..	..	..	..	..	..	260,193	
Loans outstanding 31 March, 1920	..	..	..	..	..	..	..		679,590
London County Council	..	..	..	..	..	..	..	£605,460	
Public Works Loan Commissioners	..	..	..	..	..	..	..	50,130	
Other mortgagee	..	..	..	..	..	..	..	24,000	
								<u>£679,590</u>	
Balance.									
Instalments repaid	..	..	..	..	..	..	..	5,134,859	
Expenditure paid out of current account and sundry receipts	..	..	..	..	..	..	..	525,702	
									<u>5,660,561</u>
									£6,340,151
GENERAL ACCOUNT.									
Suspense Adjustment Account.									
									£
Amounts due for Government Grants and for maintenance and treatment of inmates, &c., to be credited when received	..	..	..	..	..	..	..	164,925	
Sundry Creditors.									
Tradesmen's accounts and other amounts owing	..	..	..	..	..	..	..	191,263	
Legacies.									
									£
Captain Brown's legacy to the Training Ship (£119), less legal expenses; with unapplied interest (£7)	..	..	..	..	..	..	..	122	
William Thomas Ferguson's legacy to the Homerton Smallpox Hospital (£100), and accumulated income (£68); with unapplied interest (£12)	..	..	..	..	..	..	..	180	
George Dryden's legacy to the Stockwell Smallpox Hospital, less books purchased for hospital ships	..	..	..	..	..	..	..	117	
George Cook's legacy to Darenth Asylum (£100), less legal expenses; with unapplied interest (£12)	..	..	..	..	..	..	..	85	
Mrs. M. E. Bates' legacy to the Eastern Hospital (£100), less books purchased; with unapplied interest (£8)	..	..	..	..	..	..	..	102	
Mrs. A. Charlton's legacy (£200) and accumulated income (£23); with unapplied interest (£18)	..	..	..	..	..	..	..	241	
Mrs. E. R. Johnson's legacies (£7,000) and accumulated income (£1,013); with unapplied interest (£346)	..	..	..	..	..	..	..	8,359	
									<u>9,206</u>
Students' Fees for Clinical Instruction.									
				Total at	Year to	Total at			
				31 Mar.,	31 Mar.,	31 Mar.,			
				1919.	1920.	1920.			
Amounts received from students	..	..	..	£28,799	£1,065	£29,864			
Less amounts paid to medical superintendents for clinical instruction	..	..	..	18,076	624	18,700			
				<u>£10,723</u>	<u>441</u>	<u>11,164</u>			
Less									
Amount transferred <i>re</i> (i) provision of buildings for instruction at Park Hospital £1,750, and Grove Hospital £750, (ii) Bacteriological Laboratories £5,000, and (iii) expenses on reproduction of work, "The Diagnosis of Smallpox" £143 ..						7,643			
									<u>3,521</u>
Cash.									
London County Westminster and Parr's Bank, Ltd. :—									
Balance in their favour	..	..	..	..	..	..	..	19,621	
Add unrepresented cheques	..	..	..	..	..	..	..	118,473	
									<u>138,094</u>
Less									
Cheques drawn in advance for payments for ensuing year..	..	..	..	..	..	..	..	£46,342	
Accounting officers—balances in their hands	..	..	..	..	..	..	..	10,274	
								<u>56,616</u>	
									<u>81,478</u>
Balance.									
Net credit balance..	..	..	..	..	..	..	..	186,220	
									<u>636,613</u>
Total on General Account									
									636,613
Grand Total									
									£6,976,764

* In addition to these figures, large amounts of expenditure of a capital nature

NOTE.—The Board's accounts are audited by the District Auditor appointed by the Ministry of Health.

at 31 March, 1920.

PROPERTY ASSETS AND CAPITAL OUTLAY.

LOAN ACCOUNT.

Capital Outlay.

Land, buildings, fittings and furniture (original cost)	--	£	6,340,151	
Total on Loan Account							..	£6,340,151

GENERAL ACCOUNT.

Stock.

Goods at central stores and at the various institutions, including unused railway tickets and postage stamps	£	276,130
--	----	----	----	----	----	----	----	---	---------

Sundry Debtors.

Other authorities and sundry debtors	196,713
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Legacies (Investment Accounts), at cost.

Brown's legacy—£104 14s., 3½ per cent. stock, London County Council (Metropolitan Board of Works)	£	115
Ferguson's legacy—£173 17s. 2d., consols	..	..	..	..	..	..	..	..	168
Dryden's legacy—£124 3s., consols	..	..	..	..	..	..	..	..	114
Cook's legacy—£75 18s. 4d., consols	..	..	..	..	..	..	..	..	73
Bates' legacy—£100, 3 per cent. stock, London County Council	..	..	..	..	..	..	..	..	94
Charlton's legacy—									
£277 18s., 2½ per cent. stock, Corporation of London	..	..	..	..	..	..	..	£202	
£21 15s. 7d., 5 per cent. war stock, 1929/47	..	..	..	..	..	..	..	21	
									223
Johnson's legacy—									
£9,984 3s. 9d., 2½ per cent. stock, Corporation of London	..	..	..	..	..	..	..	£7,264	
£787 15s. 7d., 5 per cent. war stock, 1929/47	..	..	..	..	..	..	..	749	
									8,013
									8,800

Investments, at cost.

£25,000 5 per cent. war stock, 1929/47	..	..	..	..	..	..	..	£23,750	
Less subscribed for by staff	..	..	..	..	..	..	..	18,686	
									5,064
£150,000 5 per cent. national war bonds, repayable 1 April, 1923	149,906	
									154,970

Total on General Account							636,613
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Grand Total							£6,976,764
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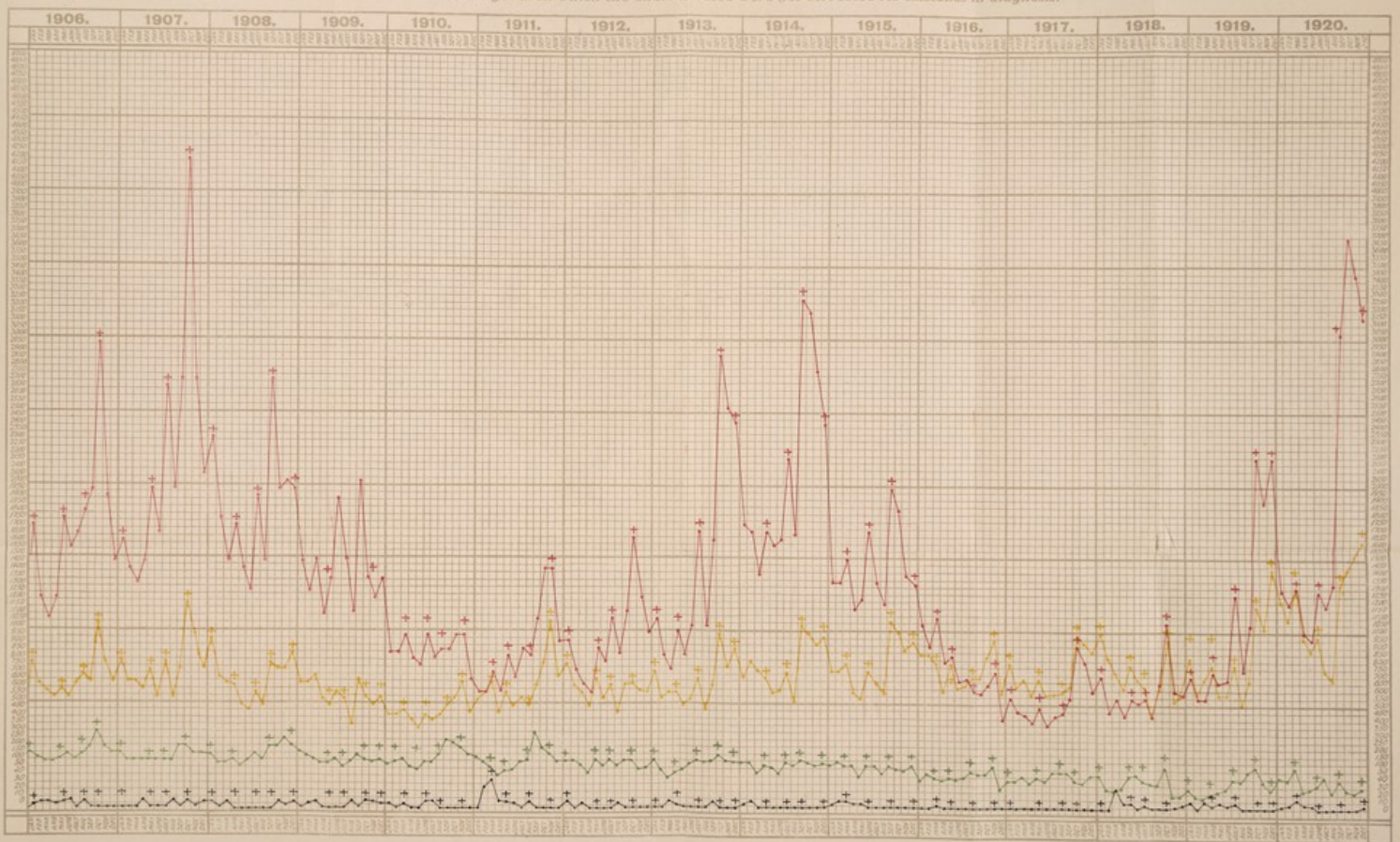
exceeding £500,000 have from time to time been defrayed out of the current rates.

(Signed) MORRIS HEYES, A.C.A.,
Treasurer and Accountant to the Board.

XI.

METROPOLITAN ASYLUMS BOARD.

NOTIFICATION CHART—Monthly notifications, Scarlet fever, Red line —•••, Enteric fever, Green line —•••, Diphtheria, Yellow line —•••, Smallpox, Black line —•••
N.B.—The crosses indicate months including five weeks. The figures on which the Chart is based were not corrected for mistakes in diagnosis.



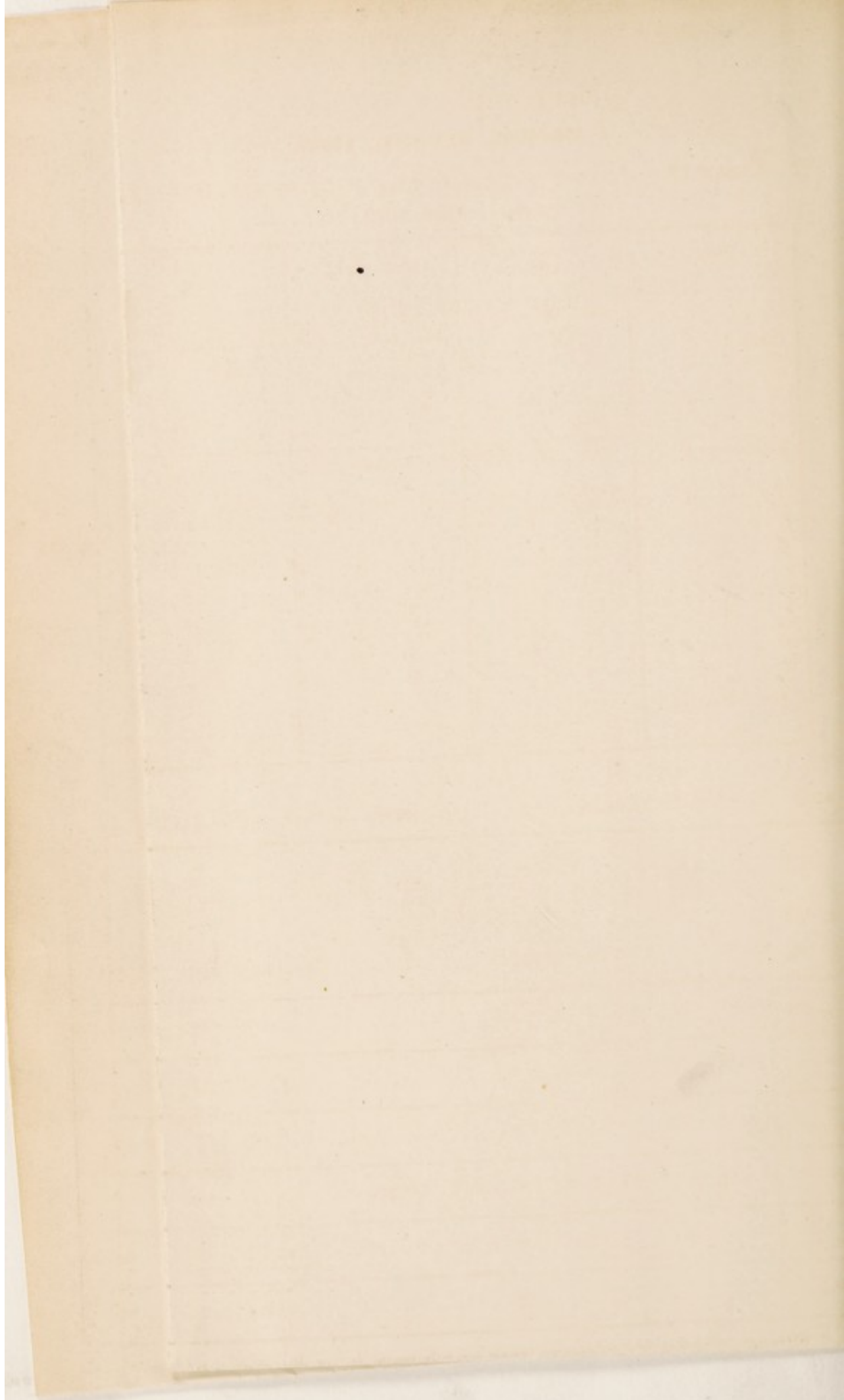


TABLE IX.—Ages and sex of scarlet fever, diphtheria and enteric fever cases notified, 1920.

AGES.	SCARLET FEVER.			DIPHTHERIA.			ENTERIC FEVER.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Under 1	126	77	203	161	120	281	..	..	..
1 to 2	269	225	494	279	260	539	1	..	1
2 „ 3	424	375	799	355	334	689	2	1	3
3 „ 4	608	643	1,251	485	472	957	1	..	1
4 „ 5	863	905	1,768	574	564	1,138	..	2	2
Total under 5 ..	2,290	2,225	4,515	1,854	1,750	3,604	4	3	7
5 to 10	4,673	5,645	10,318	2,578	2,944	5,522	15	14	29
10 „ 15	2,069	3,099	5,168	1,002	1,357	2,359	20	20	40
15 „ 20	529	746	1,275	251	515	766	30	38	68
20 „ 25	147	411	558	118	440	558	22	42	64
25 „ 30	96	264	360	77	249	326	20	30	50
30 „ 35	83	150	233	66	153	219	9	18	27
35 „ 40	53	105	158	46	129	175	17	16	33
40 „ 45	27	43	70	19	66	85	14	11	25
45 „ 50	15	23	38	10	38	48	17	6	23
50 „ 55	4	10	14	9	30	39	6	6	12
55 „ 60	1	6	7	4	7	11	6	4	10
Upwards	1	3	4	7	15	22	3	3	6
Unrecorded ..	1	..	1	..	..	..	..	..	..
Totals	9,989	12,730	22,719	6,041	7,693	13,734	183	211	394

TABLE X.—Number of cases of principal admissible diseases notified, 1890-1920.

	YEARS.	Cerebro-spinal meningitis.	Continued fever.†	Diphtheria.	Enteric.	Ophthalmia neonatorum.	Pollo-mycetis.	Puerperal fever.	Relapsing fever.†	Scarlet.	Smallpox.	Typhus.	TOTALS.
Totals for..	1890-9	..	1,302	105,065	33,013	..	..	..	68	212,399	5,971	178	357,996
Yearly average	1890-9	..	130	10,506	3,301	..	..	..	7	21,240	597	18	35,799
Totals for..	1900-9	328	326	86,792	22,073	..	..	..	9	181,443	10,626	88	301,685
Yearly average	1900-9	33	33	8,679	2,207	..	..	..	1	18,144	1,063	9	30,169
Totals for..	1910-9	2,452	131	†80,929	6,835	870	927	2,345	4	126,706	172	22	221,393
Yearly Average	1910-9	245	13	†8,093	683	87	93	234	..	12,671	17	2	22,140
Totals for..	1920	154	5	‡13,797	394	1,186	42	451	2	22,719	22	..	38,772

† Although relapsing and continued fevers are admissible to the Managers' hospitals, few cases so certified are sent in.

‡ Including cases of membranous croup.

TABLE XII.—Admissions, discharges, and deaths at fever hospitals during 1920.

BROOK HOSPITAL.									
DISEASES.	Re- maining on 31 Dec., 1919.	Adm'd during 1920.		Total under treatment during 1920.	Disch. during 1920.		Died during 1920.	Mort. per cent.	Re- maining on 31 Dec., 1920.
		Direct from homes.	From other Board hosps.		Re- cov'd.	To other Board hosps.			
Cerebro-spinal fever	..	..	..	..	..	..	..	..	..
Diphtheria ..	120	770	..	890	348	304	67	9'00	171
Diph. (bacteriological)	3	74	..	77	61	7	..	..	9
Measles ..	..	23	..	23	21	..	1	4'44	1
Puerperal ..	..	4	..	4	4	..	..	..	..
Scarlet fever ..	97	2,669	1	2,767	449	1,872	22	8'88	424
Whooping cough ..	..	4	..	4	2	..	..	..	2
Other diseases ..	220	3,544	1	3,765	885	2,183	90	2'69	607
Totals ..	13	257	..	270	247	..	8	3'12	15
Totals ..	233	3,801	1	4,035	1,132	2,183	98	..	622
EASTERN HOSPITAL.									
Cerebro-spinal fever	..	..	..	4	1	..	3	75'00	..
Diphtheria ..	*213	,540	2	1,755	828	588	152	9'78	187
Diph. (bacteriological)	2	8	..	10	5	5	..	..	..
Enteric ..	2	23	..	25	23	..	1	4'26	1
Measles ..	12	58	..	70	64	1	5	7'81	..
Poliomyelitis ..	..	2	..	2	2	..	..	..	..
Puerperal ..	1	15	..	16	12	..	4	25'81	..
Scarlet fever ..	122	1,159	1	1,282	360	684	15	1'35	223
Whooping cough ..	2	3	..	5	4	..	1	25'00	..
Other diseases ..	354	2,812	3	3,169	1,299	1,278	181	6'5	411
Totals ..	*24	471	..	495	438	2	19	4'08	36
Totals ..	378	3,283	3	3,664	1,737	1,280	200	..	447
GROVE HOSPITAL.									
Cerebro-spinal fever	..	..	..	..	..	..	..	..	..
Diphtheria ..	..	719	..	719	163	276	33	5'54	247
Diph. (bacteriological)	..	57	..	57	30	17	..	..	10
Encephalitis lethargic a	..	1	..	1	..	..	..	..	1
Measles ..	..	25	4	29	24	1	4	13'79	..
Puerperal ..	..	..	..	..	..	..	..	..	..
Scarlet fever ..	..	1,783	..	1,783	176	1,206	18	1'13	383
Whooping cough ..	..	..	..	..	..	..	..	..	..
Other diseases ..	..	2,585	4	2,589	393	1,500	55	2'42	641
Totals ..	..	155	..	155	116	..	2	1'46	37
Totals ..	..	2,740	4	2,744	509	1,500	57	..	678
NORTH-EASTERN HOSPITAL.									
Cerebro-spinal fever	..	2	..	2	..	..	2	100'00	..
Diphtheria ..	168	1,137	1	1,306	594	270	119	11'22	323
Diph. (bacteriological)	2	42	1	45	37	3	..	..	5
Diphtheria (negative)	33	322	..	355	317	..	3	9'3	35
Measles ..	6	45	..	51	48	..	3	6'25	..
Puerperal ..	..	7	..	7	6	..	..	..	1
Scarlet fever ..	370	2,955	..	3,325	1,160	1,810	26	0'87	329
Whooping cough ..	..	6	..	6	5	..	..	..	1
Other diseases ..	579	4,516	2	5,097	2,167	2,083	153	3'43	694
Totals ..	10	144	..	154	143	..	1	6'69	10
Totals ..	589	4,660	2	5,251	2,310	2,083	154	..	704
NORTH-WESTERN HOSPITAL.									
Cerebro-spinal fever	1	5	..	6	3	..	2	40'00	1
Diphtheria ..	147	1,300	2	1,449	613	540	112	8'72	184
Diph. (bacteriological)	11	271	..	282	198	62	7	2'60	15
Encephalitis lethargic a	..	3	..	3	..	..	..	..	3
Enteric ..	4	32	..	36	34	..	..	..	2
Measles ..	3	63	..	66	54	..	7	11'29	5
Poliomyelitis ..	..	3	..	3	3	..	..	..	..
Puerperal ..	1	11	..	12	8	..	4	34'78	..
Scarlet fever ..	172	1,627	4	1,803	448	1,140	27	1'66	188
Whooping cough ..	4	9	..	13	11	..	1	9'53	1
Other diseases ..	343	3,324	6	3,673	1,372	1,742	160	4'84	399
Totals ..	46	467	..	513	469	..	12	2'53	32
Totals ..	389	3,791	6	4,186	1,841	1,742	172	..	431
PARK HOSPITAL.									
Cerebro-spinal fever	..	2	..	2	..	..	2	100'00	..
Diphtheria ..	163	1,177	..	1,340	674	362	97	8'40	207
Diph. (bacteriological)	..	4	..	4	..	4	..	..	..
Measles ..	2	7	..	9	9	..	..	..	..
Scarlet fever ..	282	2,078	..	2,360	842	1,173	29	1'41	316
Whooping cough ..	..	5	..	5	5	..	..	..	..
Other diseases ..	447	3,273	..	3,720	1,530	1,539	128	3'95	523
Totals ..	7	159	..	166	142	3	5	3'24	16
Totals ..	454	3,432	..	3,886	1,672	1,542	133	..	539

TABLE XII. (continued).—Admissions, discharges, and deaths at fever hospitals during 1920.

SOUTH-EASTERN HOSPITAL.									
DISEASES.	Re- maining on 31 Dec., 1919.	Adm'd during 1920.		Total under treatment during 1920.	Disch. during 1920.		Died during 1920.	Mort. per cent.	Re- maining on 31 Dec., 1920.
		Direct from homes.	From other Board hosps.		Re- cov'd.	To other Board hosps.			
Cerebro-spinal fever	1	5	..	6	2	..	4	72.72	..
Diphtheria	*170	1,460	2	1,632	1,055	253	105	7.30	219
Diph. (bacteriological)	*1	117	1	119	107	7	1	0.86	4
Enteric	3	13	..	16	14	..	2	13.8	..
Measles	*3	46	..	49	40	1	7	14.9	1
Puerperal	2	25	..	27	13	..	12	48.0	2
Scarlet fever	*224	2,291	10	2,525	596	1,633	23	1.01	273
Whooping cough ..	..	3	..	3	3	..	..	..	..
Encephalitis lethargica	..	1	..	1	1	..	..	..	..
Para-typhoid .. ..	..	1	..	1	1	..	..	..	..
Poliomyelitis .. ..	..	1	..	1	1	..	..	..	..
	404	3,963	13	4,380	1,833	1,894	154	3.92	499
Other diseases	*15	352	..	367	340	..	10	2.85	17
Totals	*419	4,315	13	4,747	2,173	1,894	164	..	516
SOUTH-WESTERN HOSPITAL.									
Cerebro-spinal fever	..	13	..	13	3	..	10	76.92	..
Diphtheria	126	767	..	903	671	19	64	8.41	149
Diph. (bacteriological)	..	13	..	13	10	..	..	..	3
Enteric	9	29	..	38	33	..	3	9.23	2
Measles	14	92	..	106	95	1	6	6.19	4
Puerperal	3	20	..	23	21	..	1	4.76	1
Scarlet fever	139	1,188	2	1,329	331	833	16	1.25	149
Whooping cough ..	..	8	..	8	4	..	2	28.57	2
	301	2,130	2	2,433	1,168	853	102	4.79	310
Other diseases	20	235	..	255	214	2	22	9.30	17
Totals	321	2,365	2	2,688	1,382	855	124	..	327
WESTERN HOSPITAL.									
Cerebro-spinal fever	2	2	..	4	4	..	..	..	..
Diphtheria	199	1,462	..	1,661	811	486	129	8.93	235
Diph. (bacteriological)	..	96	..	96	82	11	..	..	3
Enteric	1	12	..	13	13	..	..	..	..
Measles	23	162	..	185	151	4	30	17.29	..
Puerperal	4	21	..	25	16	..	5	23.80	4
Scarlet fever	189	1,925	3	2,117	812	1,154	21	1.07	130
Whooping cough ..	20	65	..	85	60	..	8	12.03	17
	438	3,745	3	4,186	1,949	1,655	193	5.12	389
Other diseases	12	181	..	193	153	1	19	10.73	20
Totals	450	3,926	3	4,379	2,102	1,656	212	..	409
JOYCE GREEN HOSPITAL.									
Diphtheria	*123	301	718	1,142	1,019	..	10	0.98	113
Diph. (bacteriological)	1	39	26	66	65	1	..	..	..
Measles .. ..	..	5	1	6	6	..	..	..	..
Scarlet fever	*575	3,145	1,547	5,267	3,923	123	16	0.37	1,205
	699	3,490	2,292	6,481	5,013	124	26	0.47	1,318
Other diseases	*10	169	2	121	119	..	2	1.74	..
Totals	709	3,599	2,294	6,602	5,132	124	28	..	1,318
NORTHERN HOSPITAL.									
Diphtheria	104	..	1,143	1,247	1,145	4	1	0.87	97
Diph. (bacteriological)	..	..	46	46	46	..	..	..	..
Scarlet fever	160	..	2,743	2,903	2,683	1	..	..	219
	264	..	3,932	4,196	3,874	5	1	0.03	316
Other diseases .. ..	..	..	2	2	2	..	..	..	..
Totals	264	..	3,934	4,198	3,876	5	1	..	316
SOUTHERN HOSPITAL.									
Diphtheria	107	3	1,235	1,345	1,204	1	1	0.08	139
Diph. (bacteriological)	6	..	43	49	41	..	..	..	8
Measles .. ..	..	..	3	3	3	..	..	..	..
Scarlet fever	469	1	7,327	7,797	6,777	9	1	0.01	1,010
	582	4	8,608	9,194	8,025	10	2	0.02	1,157
Other diseases .. ..	..	..	4	5	4	..	..	..	1
Totals	583	4	8,612	9,199	8,029	10	2	..	1

TABLE XII. (continued).—Admissions, discharges, and deaths at fever hospitals during 1920.

SUMMARY.							
DISEASES.	Re- main- ing on 31 Dec., 1919.	Admitted	Total under treatment during 1920.	Discharged	Died during 1920.	Mort. per cent.	Re- main- ing on 31 Dec., 1920.
		Direct from homes.		Recovered.			
Cerebro-spinal fever ..	4	33	37	13	23	66·67	1
Diphtheria ..	*1650	10,636	12,286	9,125	890	8·61	2,271
Diph. (bacteriological) ..	*26	721	747	682	8	1·13	57
Diph. (negative) ..	33	322	355	317	3	0·93	35
Encephalitis lethargica ..	..	7	7	3	..	..	4
Enteric ..	19	109	128	117	6	5·17	5
Measles ..	*63	526	589	515	63	11·41	11
Poliomyelitis ..	..	6	6	6	..	..	..
Puerperal ..	11	103	114	80	26	24·88	8
Scarlet fever ..	*2,799	20,821	22,620	18,557	214	1·08	4,849
Whooping cough ..	26	103	129	94	12	11·48	23
Totals ..	4,631	33,387	38,018	29,509	1,245	3·88	7,264
Other diseases ..	*158	2,529	2,687	2,386	100	3·98	201
Grand totals ..	4,789	35,916	40,705	31,895	1,345	..	7,465

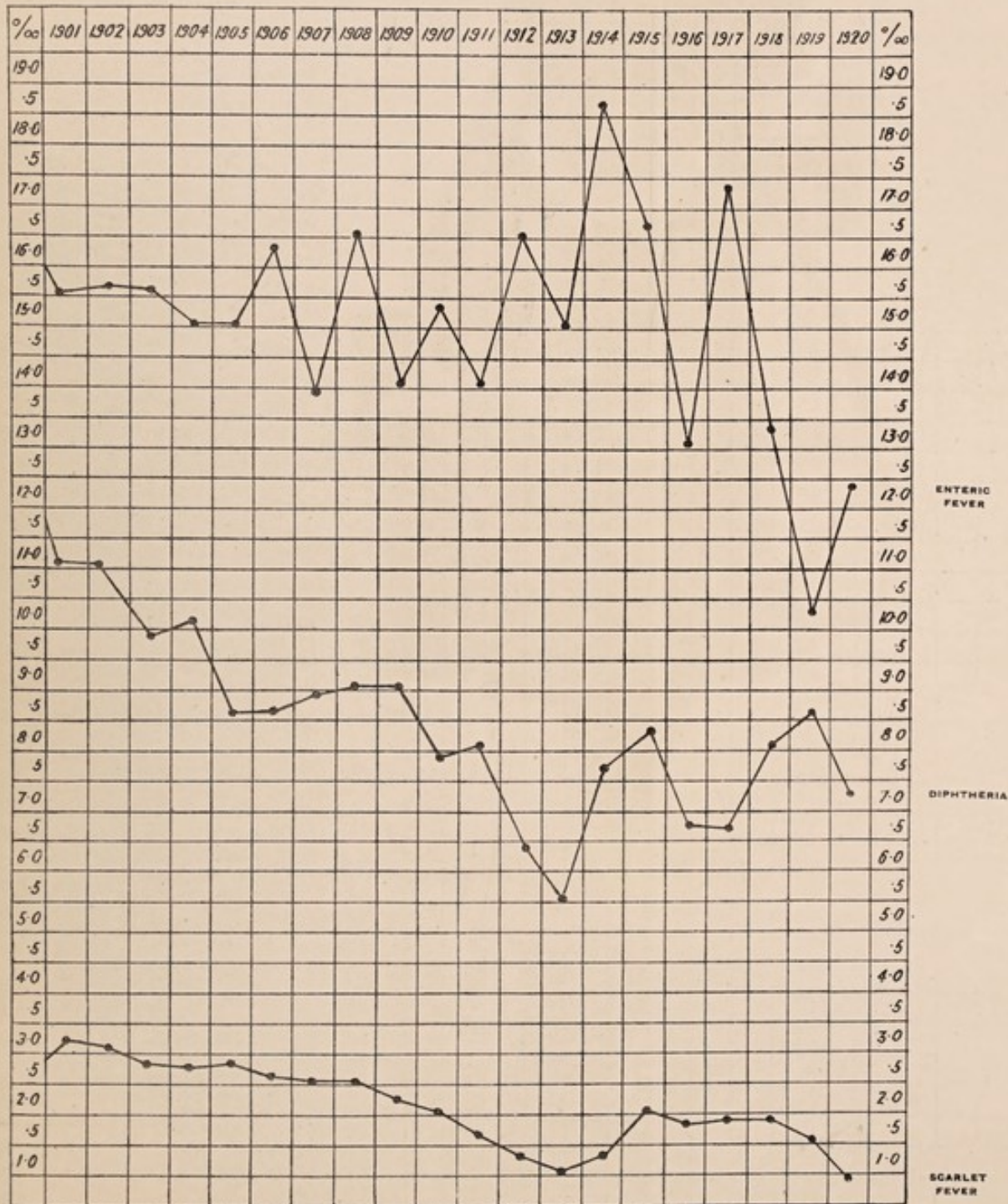
NOTE.—The mortalities returned as above include all deaths occurring from intercurrent diseases.
 The mortality rates are calculated according to the Registrar-General's formula—i.e., by dividing the deaths, multiplied by 100, by half the sum of the admissions, discharges, and deaths for the year.
 * These figures differ from those given in the Board's report for 1919, pp. 88-90, owing to the subsequent correction of errors of diagnosis.

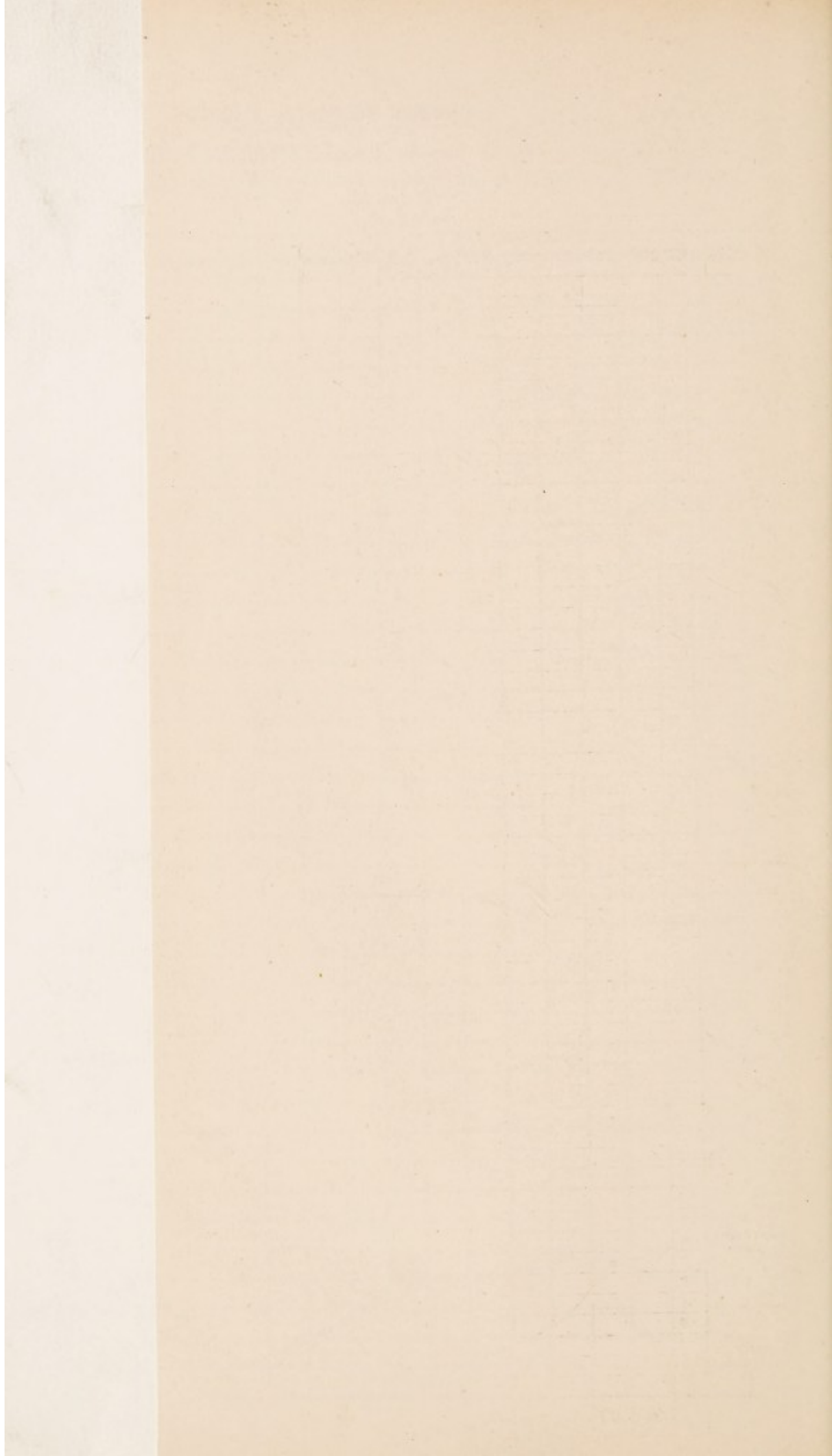
TABLE XIII.—Summary of monthly admissions at fever hospitals during 1920.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Cerebro-spinal fever.	5	3	11	3	2	1	1	3	3	—	—	1	33
Diphtheria ..	918	780	972	799	767	655	618	596	950	1,230	1,204	1,147	10,636
" (bact.)	84	64	70	36	57	45	50	29	47	109	75	55	721
" (negative)	38	13	28	16	15	13	23	13	40	51	47	25	322
Enteric ..	8	19	20	8	6	7	14	4	9	8	2	4	109
Measles ..	40	106	85	43	63	54	47	23	11	23	14	17	526
Poliomyelitis ..	—	—	—	2	—	—	1	1	1	1	—	—	6
Puerperal ..	7	14	10	14	14	7	8	4	6	6	7	6	103
Scarlet fever ..	1,224	1,072	1,017	873	938	1,023	1,199	1,436	2,550	3,681	3,257	2,551	20,821
Whooping cough	12	3	13	7	9	7	6	11	3	13	10	9	103
Totals ..	2,336	2,074	2,226	1,801	1,871	1,812	1,967	2,120	3,620	5,122	4,616	3,815	33,380
Other diseases ..	223	161	184	146	188	182	178	216	219	395	291	243	2,536
Grand totals	2,559	2,235	2,410	1,947	2,059	1,994	2,145	2,336	3,839	5,427	4,907	4,058	35,916

ANNUAL REPORT, 1920.

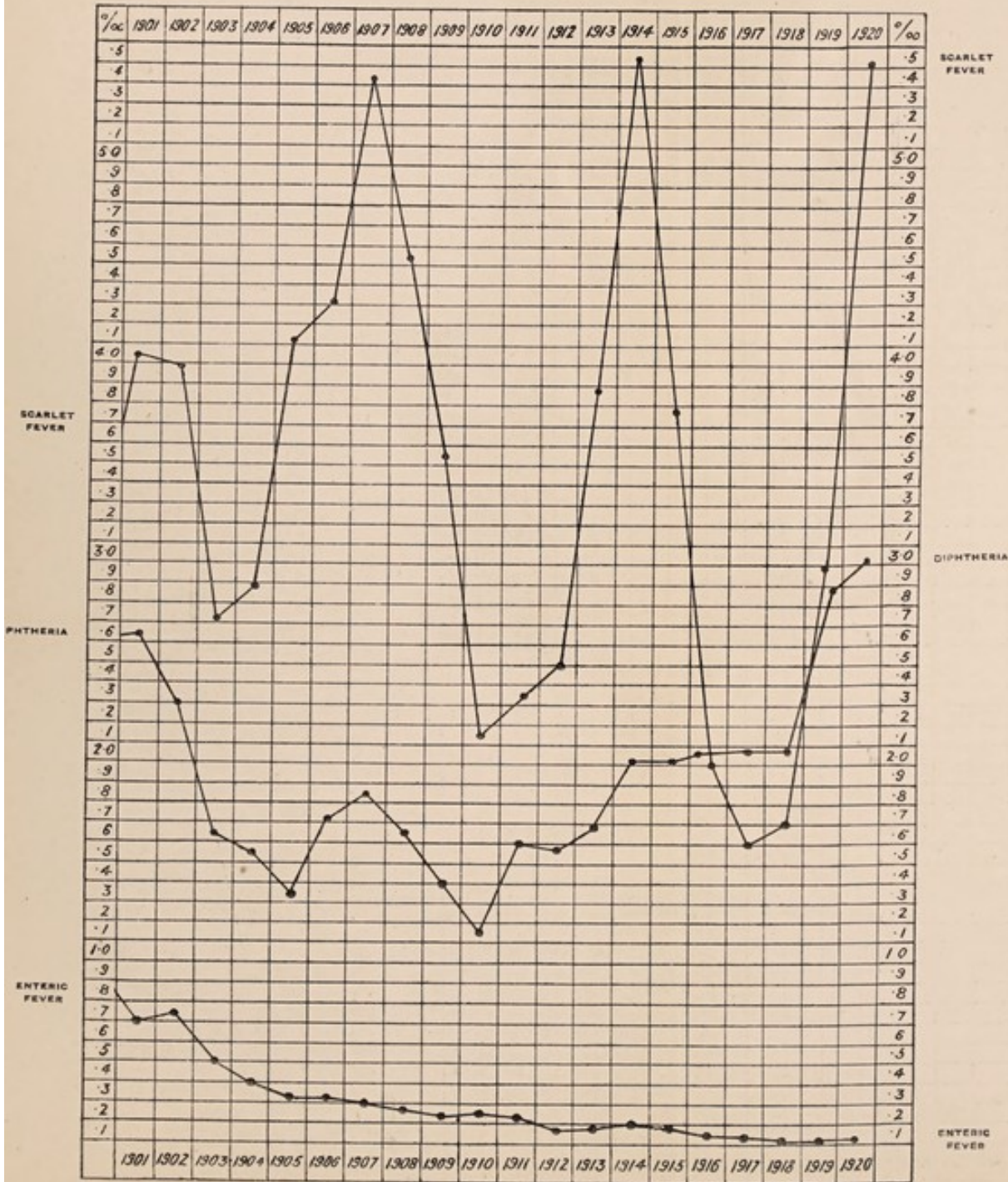
XIV. —CHART showing the case mortality from SCARLET FEVER, DIPHTHERIA, and ENTERIC FEVER in the Metropolis during each of the twenty years 1901-1920.

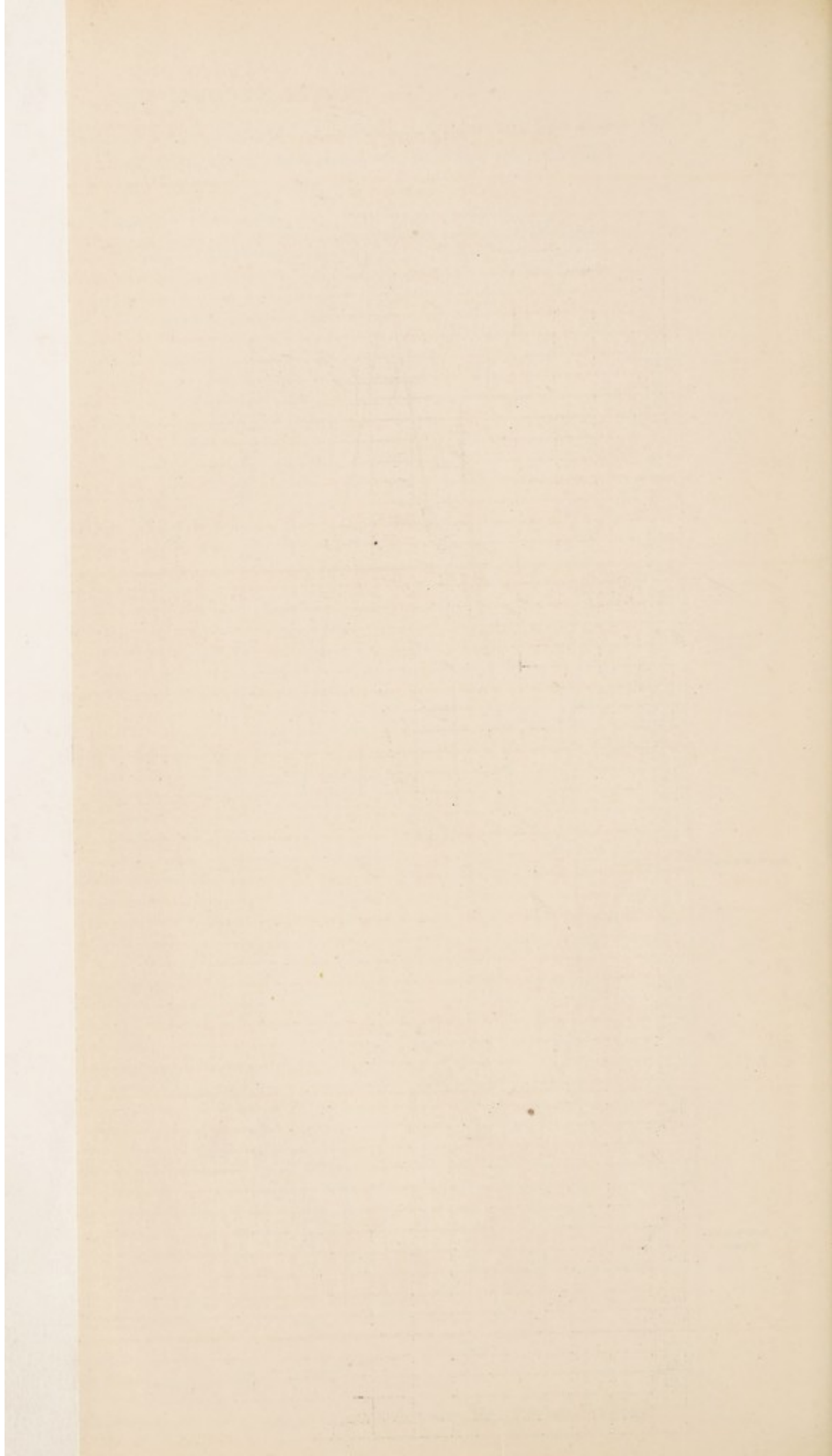




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XV. —CHART showing the incidence of SCARLET FEVER, DIPHTHERIA, and ENTERIC FEVER per 1,000 of the population of the Metropolis during each of the twenty years 1901-1920.





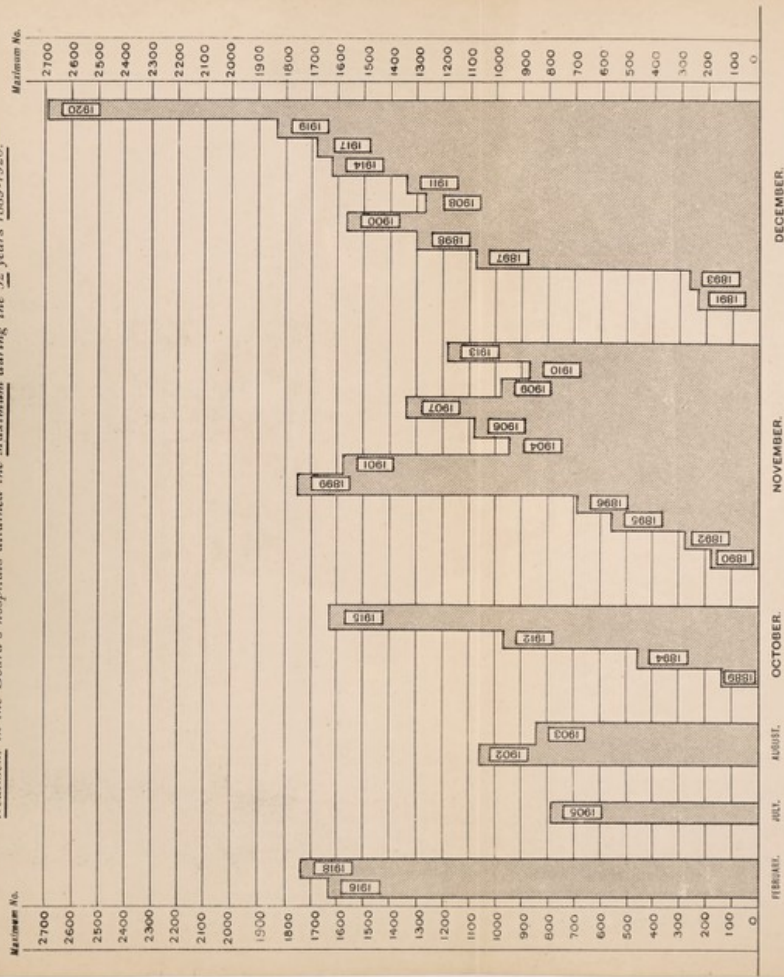
BOROUGH.	ADMISSIONS.										DEATHS.															
	Cerebro-spinal fever.	Diphtheria.	Diphtheria (bact.)	Diphtheria (negative).	Enteric.	Measles.	Polio-myelitis.	Pauperial.	Scarlet fever.	Whooping cough.	Other diseases.	Total admissions.	Cerebro-spinal fever.	Diphtheria.	Diphtheria (bact.)	Diphtheria (negative).	Enteric.	Measles.	Polio-myelitis.	Pauperial.	Scarlet fever.	Whooping cough.	Other diseases.	Total deaths.		
West—Paddington ..	1	283	69	15	5	32	2	6	460	7	77	957	..	23	1	..	..	..	4	..	3	3	1	1	36
Kensington ..	2	267	28	1	6	11	..	2	537	2	66	922	1	20	..	..	..	..	2	..	..	..	..	..	31
Hammersmith ..	1	304	12	1	4	16	..	3	633	5	62	1,041	2	27	..	..	1	..	3	..	1	2	..	..	47
Fulham ..	..	468	39	..	1	18	..	11	840	4	79	1,460	..	41	..	..	..	..	1	..	1	..	..	..	60
Chelsea ..	..	111	4	..	4	15	..	..	162	5	28	329	..	7	..	..	..	..	2	..	..	..	..	..	14
City of Westminster ..	1	201	13	..	1	27	..	1	389	4	44	681	..	8	..	..	..	..	3	..	..	..	..	..	20
North—St. Marylebone ..	..	77	15	4	12	3	..	2	419	1	34	566	..	3	1	..	..	..	..	..	..	..	..	..	13
Hampstead ..	1	103	11	6	8	8	..	2	174	1	24	338	..	3	..	..	..	..	..	..	..	..	..	..	8
St. Pancras ..	2	480	80	22	10	30	..	4	695	4	169	1,496	2	29	1	1	..	..	3	..	..	..	..	..	53
Islington ..	4	1,052	56	69	4	28	1	6	1,176	14	164	2,574	3	120	1	1	..	..	4	..	..	..	..	..	148
Stoke Newington ..	..	124	3	7	1	2	..	3	162	..	21	323	..	15	..	..	..	..	..	..	..	..	..	..	20
Hackney ..	..	559	18	32	3	31	..	6	906	..	143	1,698	..	62	1	1	..	..	6	..	..	..	..	..	82
Central—Holborn ..	..	98	20	3	2	10	1	1	176	2	52	365	..	6	..	..	..	..	3	..	..	..	..	..	17
Finsbury ..	..	145	11	9	2	6	..	..	360	2	35	570	..	17	..	..	..	..	..	..	..	..	..	..	20
City of London ..	..	25	3	..	..	..	..	..	37	1	10	76	..	..	..	..	..	..	..	..	..	..	..	..	1
East—Shoreditch ..	..	262	16	26	4	14	..	..	477	4	90	893	..	21	..	..	..	..	..	..	..	..	..	..	29
Bethnal Green ..	1	406	7	39	1	21	..	1	961	6	155	1,598	1	29	..	..	..	..	2	..	..	..	..	..	50
Stepney ..	1	506	17	22	3	30	..	..	2,290	2	223	3,094	..	34	..	..	..	..	..	..	..	..	..	..	60
Poplar ..	..	535	19	13	3	20	1	13	1,315	1	147	2,067	..	47	..	..	..	..	..	..	..	..	..	..	69
South—Southwark ..	1	337	30	..	2	8	..	5	864	2	81	1,330	1	29	..	..	..	..	..	..	..	..	..	..	44
Bermondsey ..	2	216	12	1	1	5	..	1	973	1	62	1,274	2	16	..	..	..	..	..	..	..	..	..	..	29
Lambeth ..	3	618	17	..	2	93	1	9	1,110	16	158	2,027	2	62	..	..	..	..	20	..	..	..	..	..	112
Battersea ..	2	447	39	..	5	16	..	4	656	1	76	1,246	1	30	..	..	..	..	..	..	..	..	..	..	46
Wandsworth ..	4	813	41	..	7	25	..	9	1,243	4	124	2,270	2	56	..	..	..	..	..	..	..	..	..	..	79
Camberwell ..	1	687	57	..	1	12	..	7	1,125	3	125	2,018	..	57	1	..	..	..	..	..	..	..	..	..	80
Deptford ..	..	240	12	..	6	8	..	5	634	1	70	976	..	17	..	..	..	..	..	..	..	..	..	..	27
Greenwich ..	..	201	24	..	5	5	..	..	493	3	46	777	..	14	..	..	..	..	..	..	..	..	..	..	17
Lewisham ..	2	382	16	..	1	2	..	..	600	1	44	1,048	2	40	..	..	..	..	..	..	..	..	..	..	50
Woolwich ..	3	331	16	..	4	7	..	3	450	1	74	889	4	21	..	..	..	..	..	..	..	..	..	..	30
Port of London ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tottenham ..	1	327	13	51	..	3	429	2	36	862	1	35	42
Beyond Metropolitan Area ..	..	19	3	1	1	20	..	..	56	2	12	114	..	1	..	..	..	..	..	..	..	..	..	..	10
Local Government Board ..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
War Office ..	..	2	..	..	..	..	..	..	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
London County Council ..	..	8	..	..	..	..	..	..	7	1	4	20	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS ..	33	10,636	721	322	109	526	6	103	20,821	103	2,536	35,916	23,890	8	3	6	63	..	26,214	12,100	..	..	..	..	1,345

TABLE XVIII.—Admissions, deaths, and mortality at the FEVER HOSPITALS.

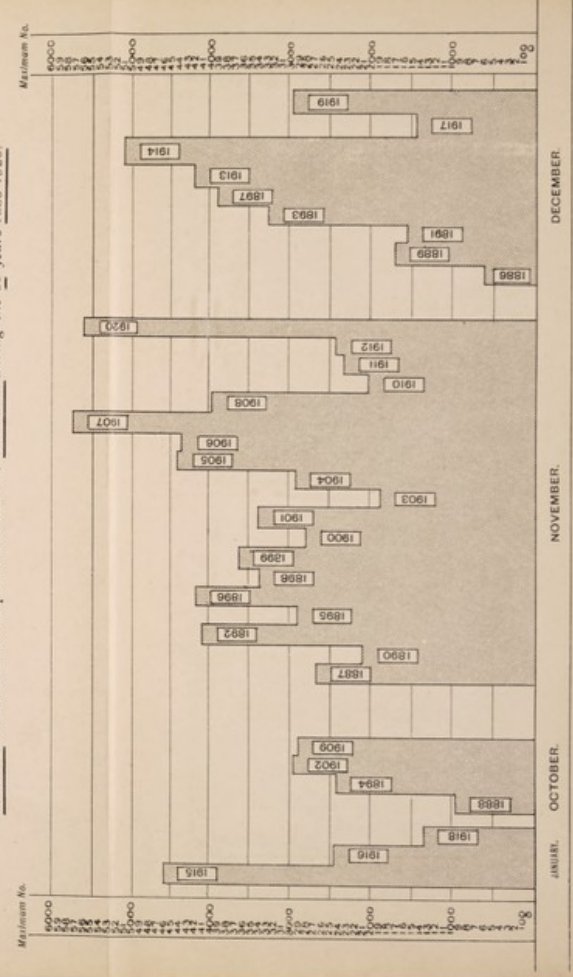
YEAR.	ADMISSIONS.										DEATHS.										Mortality per cent. of patients treated in Managers' hospitals.					Annual mortality per 1,000 of estimated population. (Registrar-General).								
	Scarlet.	Diphtheria.	Diph. bac. and negative†	Typhus.	Enteric.	Measles.	Whooping cough.	Other diseases.	Total.	Scarlet.	Diphtheria.	Diph. bac. and negative†	Typhus.	Enteric.	Measles.	Whooping cough.	Other diseases.	Total.	Scarlet.	Diphtheria.	Typhus.	Enteric.	Measles.	Whooping cough.	Relapsing fever 6-3	Scarlet.	Diphtheria.	Typhus.	Enteric.	Measles.	Whooping cough.			
1870 to 1874	1,004	..	..	1,071	1,095	..	..	*4,961	106	..	..	227	176	..	..	..	4735	10.5	..	..	21.2	16.1	..	..	0.73	0.09	0.10	0.26	..	..	..
1875 to 1879	4,480	..	..	590	1,828	..	1,178	8,076	608	..	..	138	390	..	..	..	1,371	13.5	..	..	23.4	21.3	..	..	0.67	0.13	0.03	0.24	..	..	..
1880 to 1884	9,041	..	..	469	2,157	..	1,253	12,920	1,067	..	..	183	405	..	..	..	2,64	18.19	..	..	19.1	18.4	..	..	0.55	0.20	0.01	0.23	..	..	..
1885 to 1889	17,950	821	..	1,221	1,734	..	877	21,513	1,637	321	..	21	257	..	..	..	2,471	9.1	39.1	..	17.2	14.8	..	..	0.24	0.28	0.00	0.10	..	..	..
1890	6,537	942	..	16	498	..	341	8,334	510	316	..	5	93	..	..	..	81	1,005	7.9	33.5	..	25.7	19.7	..	0.21	0.33	0.00	0.15	..	..	..
1891	5,262	1,312	..	18	755	..	402	7,809	357	397	..	1	106	..	..	..	102	963	6.7	30.6	..	19.7	14.5	..	0.14	0.34	0.00	0.13	..	..	..
1892	13,093	2,009	..	19	430	..	725	16,276	839	583	..	2	65	..	..	..	140	1,629	7.3	29.3	..	9.8	13.2	..	0.27	0.46	0.00	0.10	..	..	..
1893	14,548	2,848	..	6	544	..	732	18,674	901	865	..	1	110	..	..	..	105	1,982	6.1	30.4	..	50.0	20.5	..	0.37	0.76	0.00	0.16	..	..	..
1894	11,508	3,666	..	6	534	..	863	16,667	717	1,035	..	1	96	..	..	..	150	1,999	5.9	29.3	..	16.7	18.1	..	0.22	0.62	0.00	0.15	..	..	..
1895	11,271	3,635	..	3	661	..	1,277	16,847	591	820	..	..	119	..	..	..	142	1,672	5.4	22.8	..	25.0	15.8	..	0.19	0.54	0.00	0.14	..	..	..
1896	15,982	4,508	..	9	600	..	1,174	22,273	666	948	..	2	96	..	..	..	109	1,821	4.3	21.2	..	18.6	17.7	..	0.21	0.60	0.00	0.13	..	..	..
1897	15,113	5,673	..	9	664	..	1,417	22,869	619	987	..	..	124	..	..	..	140	1,870	4.1	17.7	..	17.7	18.6	..	0.18	0.51	0.00	0.13	..	..	..
1898	12,125	6,566	..	9	869	..	1,488	21,057	514	991	..	1	143	..	..	..	147	1,706	4.1	15.4	..	11.1	17.7	..	0.13	0.39	0.00	0.13	..	..	..
1899	13,290	8,676	..	11	1,535	..	1,582	25,094	353	1,182	..	1	240	..	..	..	160	1,935	2.6	13.9	..	22.2	14.1	..	0.09	0.43	0.00	0.18	..	..	..
1900	10,343	7,873	..	4	1,728	..	1,706	21,654	313	988	..	1	245	..	..	..	167	1,714	3.0	12.3	..	30.8	14.2	..	0.08	0.35	0.00	0.17	..	..	..
1901	14,539	7,622	..	13	1,129	..	2,365	25,668	542	849	..	4	175	..	..	..	167	1,737	3.8	11.1	..	30.8	14.2	..	0.13	0.30	0.00	0.12	..	..	..
1902	14,503	6,520	..	19	967	..	2,108	24,551	512	739	..	4	148	..	..	..	178	1,647	3.4	11.0	..	21.0	15.4	..	0.12	0.25	0.00	0.13	..	..	..
1903	10,345	5,072	..	19	967	..	1,913	18,316	333	504	..	4	145	..	..	..	166	1,152	3.1	9.7	..	21.0	15.4	..	0.08	0.16	0.00	0.08	..	..	..
1904	11,155	4,687	..	3	750	..	1,993	18,588	364	469	..	..	115	..	..	..	183	1,131	3.4	10.0	..	14.6	14.6	..	0.08	0.16	0.00	0.06	..	..	..
1905	16,958	4,148	..	5	586	..	2,157	23,854	536	347	..	..	82	..	..	..	147	1,112	3.3	8.3	..	13.1	13.1	..	0.11	0.12	0.00	0.06	..	..	..
1906	17,933	5,218	..	4	698	..	2,151	26,004	521	445	..	..	108	..	..	..	163	1,237	2.9	8.8	..	16.0	16.0	..	0.11	0.15	0.00	0.05	..	..	..
1907	22,764	5,744	..	3	541	..	3,117	32,169	622	544	..	..	72	..	..	..	167	1,405	2.8	9.6	..	13.1	13.1	..	0.14	0.17	0.00	0.04	..	..	..
1908	19,629	5,230	..	2	509	..	2,597	27,967	520	507	..	..	80	..	..	..	148	1,255	2.6	9.7	..	16.3	16.3	..	0.11	0.15	0.00	0.05	..	..	..
1909	15,384	4,393	..	4	331	..	2,324	22,646	371	432	..	3	48	..	..	..	184	1,035	2.3	9.4	..	11.9	11.9	..	0.08	0.13	0.00	0.03	..	..	..
1910	8,782	3,634	..	3	509	..	1,727	15,238	213	281	..	2	77	..	..	..	89	701	2.3	7.8	..	15.8	15.8	..	0.04	0.09	0.00	0.04	0.41	0.28	..
1911	8,818	5,034	..	3	360	..	3,144	1,184	2,242	213	..	..	54	..	..	..	144	1,255	1.9	8.4	..	14.3	13.9	..	0.04	0.14	0.00	0.03	0.57	0.23	..
1912	9,883	4,844	..	2	222	..	4,314	1,731	1,930	154	..	4	42	..	..	..	146	1,228	1.6	6.2	100.0	17.8	10.4	..	0.04	0.10	0.00	0.03	0.40	0.22	..
1913	15,010	5,076	..	4	238	..	3,400	1,044	2,575	176	..	2	37	..	..	..	137	1,333	1.2	6.2	..	16.2	10.4	..	0.02	0.04	0.09	0.02	0.34	0.17	..
1914	22,006	6,591	..	4	316	..	770	735	2,598	304	..	..	54	..	..	..	87	1,514	1.4	7.9	..	17.1	9.3	..	0.03	0.07	0.16	0.03	0.31	0.20	..
1915	15,197	6,776	..	3	269	..	1,260	1,14	3,761	329	..	4	46	132	1,44	1.32	14	257	1,360	2.0	8.4	66.7	16.7	10.3	11.0	0.07	0.16	0.00	0.03	0.50	0.25
1916	7,646	7,201	..	1	202	..	1,171	734	3,263	20,692	152	..	27	..	..	..	71	1,58	1,030	1.8	6.8	..	13.1	8.9	9.9	0.03	0.14	0.02	0.19	0.19	..
1917	5,294	6,791	..	..	172	..	2,951	391	4,047	20,246	98	..	30	..	..	..	348	50	1,197	1.9	6.7	..	17.3	11.7	13.4	0.02	0.14	0.01	0.49	0.14	..
1918	6,078	6,634	..	1	130	..	1,345	276	2,577	17,433	111	..	18	..	..	..	187	55	206	1.8	7.7	..	13.4	13.2	17.5	0.03	0.16	0.02	0.41	0.49	..
1919	11,010	7,184	..	..	136	..	751	146	2,178	152	..	..	14	..	..	..	149	152	1,023	1.5	9.3	..	10.4	6.7	10.7	0.03	0.18	0.01	0.08	0.05	..
1920	20,821	10,636	1,043	..	109	..	526	103	2,078	214	..	..	6	..	..	..	63	12	1,345	1.1	8.6	..	5.2	11.4	11.5	0.05	0.22	0.01	0.22	0.17	..
Totals	435,401	167,564	5,645	2,418	25,226	19,929	6,523	66,329	729,253	16,187	19,839	59	495	4,110	2,244	732	5,630	49,330		

NOTE.—(1) From 1 December, 1870, to the end of September, 1871, smallpox cases only were admitted to the Board's hospitals. (2) The deaths of fever patients include those deaths due to intercurrent maladies. (3) Diphtheria cases have been admitted into the Managers' hospitals since 23 October, 1888. The use of antitoxin serum in the treatment of diphtheria began in 1894. (4) The mortality rates of patients in the Managers' hospitals are calculated according to the Registrar-General's formula, i.e., by dividing the deaths multiplied by 100, by half the sum of the admissions, discharges, and deaths for the year. * Includes 218 cases of relapsing fever in 1876. † Negative cases are cases in which there was no evidence of diphtheria beyond that of the admission certificate.

XVIIb.—DIPHTHERIA.—Diagram showing the Months in which the number of patients under treatment in the Board's hospitals attained the Maximum during the 32 years 1889-1920.



XVIIa.—SCARLET FEVER.—Diagram showing the Months in which the number of patients under treatment in the Board's hospitals attained the Maximum during the 35 years 1886-1920.



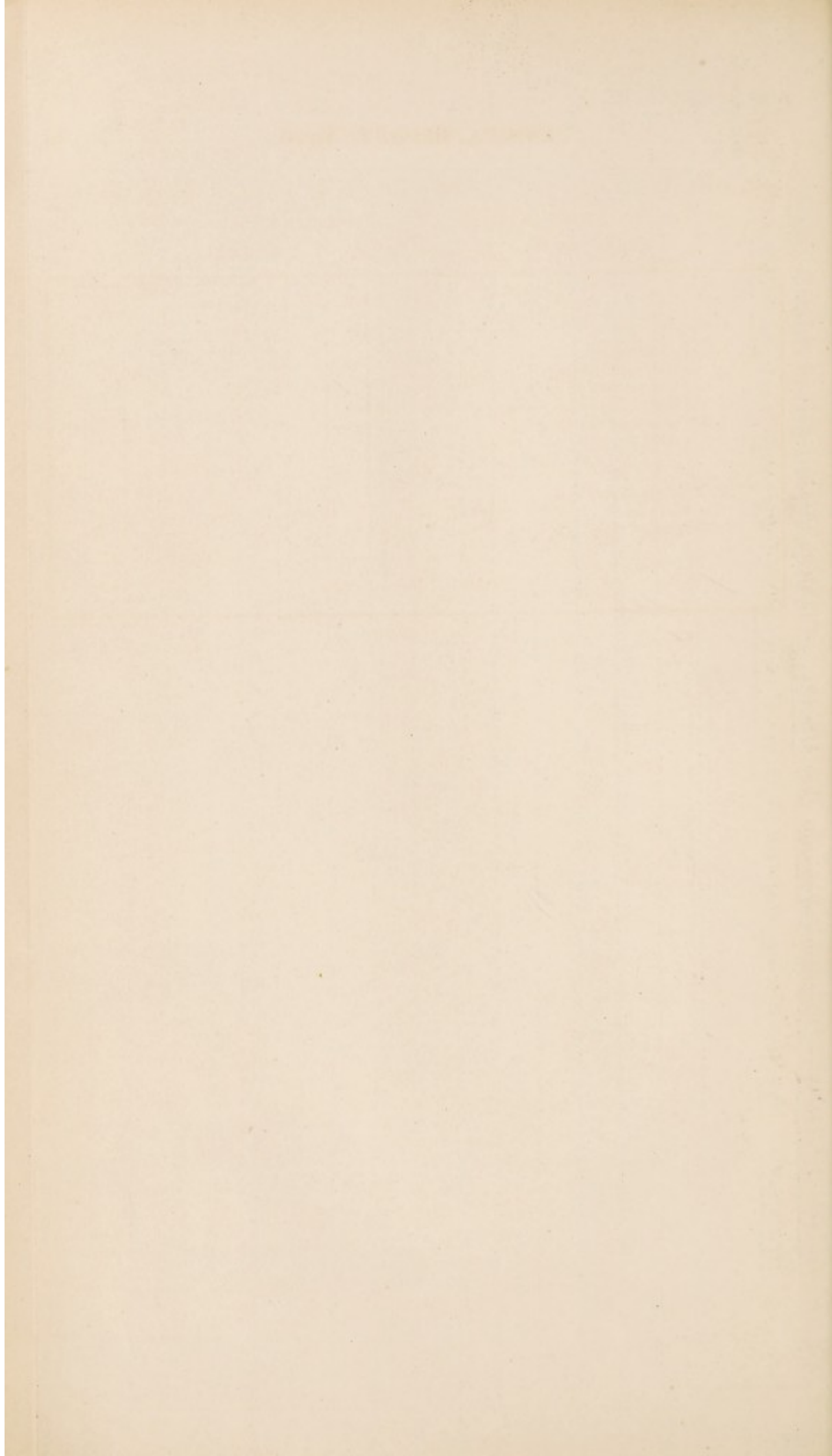


TABLE XIX.

Smallpox Statistics.—Condition as to vaccination of patients admitted suffering from smallpox during the year 1920.

	Admissions.	Deaths.	Mortality per cent.
A. Vaccinated class :—			
A 1. Half and upwards of half square inch total area of cicatrices	19	—	—
A 2. One-third, but less than half ditto	5	—	—
A 3. Less than one-third ditto	4	2	50·00
A 4. Area not recorded	1	1	100·00
Total of vaccinated class	29	3	10·34
B. Doubtful class	3	1	33·33
C. Unvaccinated class	18	3	16·66
Totals	50	7	14·00

TABLE XX. *Smallpox Statistics.—Admissions, deaths, and mortality per cent. of smallpox patients since 1 December, 1870, together with the annual mortality per 1,000 persons living of the population of the metropolis from smallpox. (Registrar-General's returns.)*

YEAR.	ADMISSIONS.			DEATHS.			Mortality per cent. of patients treated in Managers' hospitals.	Total annual mortality per 1,000 of estimated population.
	Smallpox.	Other diseases.	Total.	Smallpox.	Other diseases.	Total.	Smallpox.	Smallpox.
1 Dec., 1870, to 3 Feb., 1871	582	..	582	97	..	97	20·8	..
1871-2 (4 Feb., 1871, to 31 January, 1872)	13,139	6	13,145	2,460	..	2,460	18·9	2·42
1872-3 (year ended 31 Jan., 1873)	2,359	3	2,362	467	1	468	17·8	0·54
1873-4 (year ended 31 Jan., 1874)	174	17	191	35	..	35		0·03
1874 (11 months ended 31 Dec.)	112	8	120	10	..	10	17·0	0·02
1875	89	22	111	22	..	22		0·01
1876	2,134	16	2,150	372	1	373	21·6	0·21
1877	6,516	104	6,620	1,214	4	1,218	17·9	0·71
1878	4,558	96	4,654	824	9	833	18·0	0·39
1879	1,628	60	1,688	273	5	278	15·7	0·12
1880	1,982	50	2,032	286	2	288	15·9	0·12
1881	8,551	120	8,671	1,417	14	1,431	16·6	0·62
1882	1,799	55	1,854	260	3	263	13·0	0·11
1883	598	28	626	93	..	93	16·1	0·03
1884	6,363	204	6,567	940	3	943	16·0	0·31
1885	6,146	198	6,344	1,052	3	1,055	15·8	0·36
1886	99	33	132	22	2	24		0·01
1887	56	3	59	3	..	3		0·00
1888	62	5	67	8	..	8	14·3	0·00
1889	5	..	5	..	..	..		..
1890	22	5	27	3	..	3		0·00
1891	63	1	64	8	..	8		0·00
1892	325	23	348	35	..	35	11·3	0·01
1893	2,376	118	2,494	180	2	182	7·6	0·05
1894	1,117	120	1,237	102	7	109	8·9	0·02
1895	941	81	1,022	64	1	65	6·4	0·01
1896	190	41	231	9	1	10		..
1897	70	26	96	13	1	14		..
1898	5	9	14	..	..	..	7·3	0·00
1899	18	18	36	3	..	3		..
1900	66	19	85	3	..	3		..
1901	1,743	107	1,850	257	3	260	18·5	0·05
1902	7,916	608	8,524	1,337	5	1,342	16·6	0·28
1903	355	80	435	12	1	13		..
1904	449	64	513	27	..	27		..
1905	53	34	87	8	1	9		..
1906	27	6	33	..	..	..	5·4	..
1907	2	13	15	..	1	1		..
1908	1	3	4	..	..	..		..
1909	15	13	28	2	..	2		..
1910	5	5	10	..	..	..		..
1911	70	21	91	11	..	11	15·7	0·00
1912	5	5	10	1	..	1	25·0	..
1913	1	8	9	..	..	..		..
1914	1	7	8	..	..	..		..
1915	11	1	12	2	..	2	18·2	..
1916	1	4	5	..	..	..		..
1917 .. .. .	..	3	3	..	..	..		..
1918	45	8	53	..	..	..		..
1919	25	6	31	4	..	4	16·0	0·00
1920	50	4	54	7	..	7	14·0	..
Totals	72,920	2,489	75,409	11,943	70	12,013	..	..

TUBERCULOSIS STATISTICS.

TABLE XXI.—Admissions (classified), discharges and deaths of tuberculous patients during 1920.

COLINDALE HOSPITAL.											
Admissions.	*Stage (Turban-Gerhardt).			Total.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total Admissions.	Discharges.	Deaths.	Remaining 31 Dec., 1920.
	I.	II.	III.								
<i>Age Groups.</i>											
Under 16 years ...	Not noted.	Not noted.	Not noted.	...	...	...	...	1	1	...	...
From 16 to 20 years ...				...	...	...	...	53	18	12	23
" 20 ,, 25 ,, ...				...	...	...	...	59	30	19	10
" 25 ,, 30 ,, ...				...	...	...	1	69	34	14	21
" 30 ,, 35 ,, ...				...	...	...	...	73	44	8	21
" 35 ,, 40 ,, ...				...	...	...	...	92	39	29	24
" 40 ,, 45 ,, ...				...	...	...	...	93	45	22	26
" 45 ,, 50 ,, ...				...	...	...	...	92	24	26	42
" Over 50 ...	...	...	...	1	111	43	29	39			
Totals ...				...	2	...	...	643	278	159	206
HIGH WOOD.											
Under 16 years ...	120	8	124	252	67	1	49	369	211	1	272
Totals ...	120	8	124	252	67	1	49	369	211	1	272
MILLFIELD.											
Under 16 years ...	19	7	5	31	43	...	...	74	149	2	41
Totals ...	19	7	5	31	43	...	...	74	149	2	41
NORTHERN HOSPITAL (PART OF).											
<i>Age Groups.</i>											
Under 16 years ...	25	46	39	110	4	...	3	117	784	1	237
From 16 to 20 years ...	41	46	67	154	...	...	2	156		16	
" 20 ,, 25 ,, ...	37	50	54	141	1	...	2	144		7	
" 25 ,, 30 ,, ...	43	39	44	126	...	...	1	127		4	
" 30 ,, 35 ,, ...	35	30	41	106	...	...	...	106		2	
" 35 ,, 40 ,, ...	18	23	52	93	...	...	...	93		4	
" 40 ,, 45 ,, ...	10	18	25	53	...	...	...	53		4	
" 45 ,, 50 ,, ...	8	6	12	26	...	...	...	26		...	
Over 50 ...	5	5	6	16	1	...	...	17	...		
Totals ...	222	263	340	825	6	...	8	839	784	38	237
PARK HOSPITAL.											
<i>Age Groups.</i>											
From 20 to 25 years ...	...	...	57	57	...	...	...	57	28	21	11
" 25 ,, 30 ,, ...	...	...	36	36	...	...	...	36	28	11	7
" 30 ,, 35 ,, ...	...	...	41	41	...	...	...	41	17	13	8
" 35 ,, 40 ,, ...	...	...	27	27	...	...	...	27	19	14	4
" 40 ,, 45 ,, ...	...	...	30	30	...	...	...	30	21	13	3
" 45 ,, 50 ,, ...	...	...	18	18	...	...	...	18	14	9	3
Over 50 ...	...	...	10	10	...	...	...	10	14	2	1
Totals	219	219	219	141	83	37

* The "Astor" classification in each case will be 1 higher.

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TABLE XXI. (continued).—Admissions (classified), discharges and deaths of tuberculous patients during 1920.

PINWOOD SANATORIUM.											
Admissions.	*Stage (Turban-Gerhardt).			Total.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total Admissions.	Discharges.	Deaths.	Remaining 31 Dec., 1920.
	I.	II.	III.								
<i>Age Groups.</i>											
From 16 to 20 years	17	15	...	32	...	...	1	33	29	...	11
" 20 ,, 25 ,, ...	37	9	2	48	2	...	...	50	44	...	19
" 25 ,, 30 ,, ...	22	9	3	34	1	...	1	36	32	...	12
" 30 ,, 35 ,, ...	14	6	3	23	...	...	...	23	28	...	7
" 35 ,, 40 ,, ...	19	2	5	26	1	...	...	27	25	...	6
" 40 ,, 45 ,, ...	9	10	1	20	...	...	...	20	23	...	4
" 45 ,, 50 ,, ...	3	3	1	7	1	...	...	8	5	...	4
Over 50	...	1	...	1	...	...	...	1	2	...	...
Totals	121	55	15	191	5	...	2	198	188	...	63
QUEEN MARY'S HOSPITAL.											
Under 16 years	...	...	...	87	...	...	359	446	286	48	547
Totals	...	...	...	87	...	...	359	446	286	48	547
ST. GEORGE'S HOME.											
<i>Age Groups.</i>											
Under 16 years	...	1	8	9	2	1	1	13	12	9	6
From 16 to 20 years	1	6	8	15	...	...	...	15	4	9	4
" 20 ,, 25 ,, ...	3	8	14	25	...	...	...	25	7	12	9
" 25 ,, 30 ,, ...	...	9	10	19	1	...	...	20	6	14	8
" 30 ,, 35 ,, ...	1	1	9	11	1	...	1	13	4	10	4
" 35 ,, 40 ,, ...	...	5	9	14	1	...	...	15	3	9	6
" 40 ,, 45 ,, ...	1	7	6	14	1	...	...	15	10	6	4
" 45 ,, 50 ,, ...	...	2	6	8	...	...	...	8	3	5	2
Over 50	1	1	2	4	2	...	...	6	2	3	2
Totals	7	40	72	119	8	1	2	130	51	77	45
SOUTH-EASTERN HOSPITAL.											
<i>Age Groups.</i>											
From 16 to 20 years	...	...	2	2	...	...	...	2	2	...	...
" 20 ,, 25 ,, ...	1	1	21	23	1	...	1	25	17	13	4
" 25 ,, 30 ,, ...	1	1	20	22	...	...	...	22	10	11	6
" 30 ,, 35 ,, ...	1	2	12	15	...	...	...	15	8	8	4
" 35 ,, 40 ,, ...	...	1	22	23	...	...	...	23	13	7	8
" 40 ,, 45 ,, ...	...	2	19	21	...	...	...	21	8	11	10
" 45 ,, 50 ,, ...	...	...	5	5	...	...	...	5	3	3	1
Over 50	...	...	5	5	...	...	...	5	3	1	3
Totals	3	7	106	116	1	...	1	118	64	54	36

* The "Astor" classification in each case will be 1 higher.

TABLE XXI. (continued).—Admissions (classified), discharges and deaths of tuberculous patients during 1920.

THE DOWNS SANATORIUM.											
Admissions.	*Stage (Turban-Gerhardt):			Total.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total Admissions.	Discharges.	Deaths.	Remaining 31 Dec., 1920.
	I.	II.	III.								
<i>Age Groups.</i>											
Under 16 years ...	...	1	2	3	...	...	...	3	...	...	3
From 16 to 20 years	26	38	87	151	8	...	4	163	139	5	60
" 20 " 25 " ...	31	42	96	169	3	...	3	175	176	8	26
" 25 " 30 " ...	28	53	81	162	8	...	3	173	190	6	18
" 30 " 35 " ...	25	56	82	163	2	2	1	168	172	4	25
" 35 " 40 " ...	26	43	96	165	2	1	1	169	167	6	39
" 40 " 45 " ...	13	34	73	120	5	3	1	129	142	4	13
" 45 " 50 " ...	10	22	69	101	3	...	1	105	93	3	24
Over 50 ...	6	24	55	85	2	...	1	88	80	2	20
Totals ...	165	313	641	1,119	33	6	15	1,173	1,159	38	228
WESTERN HOSPITAL.											
<i>Age Groups.</i>											
From 20 to 25 years	...	...	...	...	...	...	...	11	8	6	2
" 25 " 30 " ...	...	...	...	...	...	...	...	8	5	5	2
" 30 " 35 " ...	...	...	...	...	...	...	...	11	9	2	2
" 35 " 40 " ...	...	...	...	...	...	...	...	7	6	3	2
" 40 " 45 " ...	...	...	...	...	...	...	...	11	7	3	4
" 45 " 50 " ...	...	...	...	...	...	...	...	3	2	2	...
Over 50 ...	...	...	...	...	...	...	...	3	2	1	...
Totals ...	...	...	...	...	...	...	...	54	39	22	12

*The "Astor" classification in each case will be 1 higher.

TABLE XXII.—Discharges of tuberculous patients during 1920, classified as to condition.

COLINDALE HOSPITAL.											
	* Stage (Turban Gerhardt).			Total.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total discharges.			
	I.	II.	III.								
Much improved		Not	noted	8	...	...	...	8			
Improved		Not	noted	163	2	...	...	165			
In statu quo		Not	noted	79	...	...	...	79			
Worse		Not	noted	26	...	...	...	26			
Total discharges ... ..	...	...	...	276	2	...	...	278			
HIGH WOOD.											
Much improved	25	4	21	50	21	...	4	75			
Improved	36	1	35	72	36	...	5	113			
In statu quo	3	...	4	7	9	...	1	17			
Worse ... ..	...	...	5	5	1	...	...	6			
Total discharges	64	5	65	134	67	...	10	†211			
MILLFIELD.											
Much improved	40	6	...	46	69	...	...	115			
Improved	8	8	4	20	3	...	...	23			
In statu quo	1	2	4	7	1	...	...	8			
Worse ... ..	...	1	2	3	...	...	...	3			
Total discharges	49	17	10	76	73	...	...	149			
NORTHERN HOSPITAL (PART OF).											
Much improved	51	80	67	198	4	...	3	205			
Improved	138	128	158	424	4	...	1	429			
In statu quo	17	21	52	90	1	...	2	93			
Worse	4	10	43	57	...	...	...	57			
Total discharges	210	239	320	769	9	...	6	†784			
PARK HOSPITAL.											
Much improved ... ..	...	...	...	...	...	...	...	...
Improved ... ..	...	...	24	24	...	...	...	24			
In statu quo ... ..	...	...	28	28	...	...	1	29			
Worse ... ..	...	...	88	88	...	...	...	88			
Total discharges ... ..	...	...	140	140	...	...	1	141			

* The "Astor" classification in each case will be 1 higher.

† Of the above total 10 patients remained under treatment less than 4 weeks.

‡ Of the above total 63 patients remained under treatment less than 4 weeks.

TABLE XXII. (continued).—Discharges of tuberculous patients during 1920, classified as to condition.

PINWOOD.										
	* Stage (Turban Gerhardt).			Total.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total discharges.		
	I.	II.	III.							
Much improved	49	23	7	79	1	...	1	81		
Improved	54	16	9	79	4	...	1	84		
In statu quo	15	3	5	23	...	...	...	23
Worse ... ..	...	...	...	...	...	...	...	...
Total discharges ...	118	42	21	181	5	...	2	188		
QUEEN MARY'S HOSPITAL.										
Much improved ... ..	...	...	...	68	...	...	173	241
Improved ... ..	...	...	...	...	...	...	23	23
In statu quo ... ..	...	...	...	6	...	...	6	12
Worse ... ..	...	...	...	6	...	...	4	10
Total discharges ...	...	...	...	80	...	...	206	†286
ST. GEORGE'S HOME.										
Much improved ... ..	...	3	...	3	...	1	1	5	
Improved	3	6	5	14	2	1	...	17		
In statu quo	3	11	8	22	3	...	1	26		
Worse ... ..	...	3	...	3	...	...	...	3
Total discharges ...	6	23	13	42	5	2	2	†51		
SOUTH-EASTERN HOSPITAL.										
Much improved ... ..	...	...	...	...	...	...	1	1
Improved ... ..	...	2	8	10	...	...	...	10
In statu quo	3	3	42	48	1	...	...	49
Worse ... ..	...	...	4	4	...	...	...	4
Total discharges ...	3	5	54	62	1	...	1	§64		
THE DOWNS SANATORIUM.										
Much improved	42	65	54	161	4	...	1	166		
Improved	106	192	305	603	20	...	7	630		
In statu quo	37	78	210	325	9	7	2	343		
Worse ... ..	...	2	17	19	...	...	1	20
Total discharges ...	185	337	586	1,108	33	7	11	||1,159		

* The "Astor" classification in each case will be 1 higher.

† Of the above total 5 patients remained under treatment less than 4 weeks.

‡ Of the above total 11 patients remained under treatment less than 4 weeks.

§ Of the above total 15 patients remained under treatment less than 4 weeks.

|| Of the above total 121 patients remained under treatment less than 4 weeks.

TABLE XXIII.—Deaths of tuberculous patients during 1920.

	*Stage (Turban-Gerhardt).			Total.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total deaths.
	I.	II.	III.					
Colindale Hospital	...	...	...	...	...	...	...	159
High Wood	...	...	...	...	...	...	1	1
Millfield	...	1	1	2	...	...	...	2
Northern Hospital (part of)	1	2	35	38	...	...	...	38
Park Hospital	...	...	83	83	...	...	...	83
Pinewood Sanatorium	...	...	...	...	...	...	...	...
Queen Mary's Hospital	Not recorded	...	...	20	...	...	28	48
St. George's Home	...	14	62	76	...	1	...	77
South-Eastern Hospital	...	...	54	54	...	...	...	54
Downs Sanatorium	...	4	34	38	...	...	...	38
Western Hospital	Not recorded	...	...	22	...	...	...	22

TABLE XXIII. (continued).—Numbers of tuberculous patients remaining
31 December, 1920.

									Total.
Colindale Hospital	206
High Wood	98	3	104	205	26	1	40	272	
Millfield	14	14	7	35	6	...	...	41
Northern Hospital (part of)	37	67	126	230	...	...	7	237
Park Hospital	...	...	37	37	...	...	...	37
Pinewood Sanatorium	40	21	2	63	...	...	...	63
Queen Mary's Hospital	...	...	...	107	...	...	440	547
St. George's Home	4	21	15	40	3	...	2	45	
South-Eastern Hospital	...	2	34	36	...	...	...	36
Downs Sanatorium	26	45	147	218	6	...	4	228	
Western Hospital	Not recorded	...	...	...	...	...	...	12

* The "Astor" classification in each case will be 1 higher.

TABLE XXIV.—Discharges and deaths of tuberculous patients during 1920, classified on examination of sputum.

GOLINDALE HOSPITAL.									
	*Stage (Turban Gerhardt).			Total.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total discharges.	Total deaths.
	I.	II.	III.						
Tubercle bacilli found ...				No	record				
Tubercle bacilli not found...				No	record				
No expectoration ...	Not	noted		...	2	...	...	2	...
Not examined ...				No	record				
Totals ...	...	...	...	...	2	...	...	2	...
HIGH WOOD.									
Tubercle bacilli found ...	...	...	7	7	...	...	...	7	...
Tubercle bacilli not found ...	3	...	8	11	3	...	...	14	...
No expectoration ...	60	5	46	111	63	...	10	184	1
Not examined ...	1	...	4	5	1	...	...	6	...
Totals ...	64	5	65	134	57	...	10	211	1
MILLFIELD.									
Tubercle bacilli found ...	1	...	...	1	...	...	...	1	...
Tubercle bacilli not found ...	...	2	...	2	...	...	...	2	1
No expectoration ...	48	15	10	73	73	...	...	146	1
Not examined ...	...	...	...	...	...	...	...	...	...
Totals ...	49	17	10	76	73	...	...	149	2
NORTHERN HOSPITAL (part of)									
Tubercle bacilli found ...	29	77 ⁽¹⁾	191 ⁽³²⁾	297	...	...	...	297	33
Tubercle bacilli not found ...	86 ⁽¹⁾	78 ⁽¹⁾	59 ⁽²⁾	223	1	...	2	226	4
No expectoration ...	95	84	70 ⁽¹⁾	249	8	...	4	261	1
Not examined ...	...	...	...	...	...	...	...	...	...
Totals ...	210 ⁽¹⁾	239 ⁽²⁾	320 ⁽³⁵⁾	769	9	...	6	784	38
PARK HOSPITAL.									
Tubercle bacilli found ...	...	...	179	179	...	...	...	179	...
Tubercle bacilli not found ...	...	...	33	33	...	...	...	33	...
No expectoration ...	...	...	...	...	...	...	...	...	...
Not examined ...	...	...	12	12	...	...	...	...	12
Totals ...	...	...	224	224	...	...	...	212	12

*The "Astor" classification in each case will be 1 higher.

TABLE XXIV. (continued).—Discharges and deaths of tuberculous patients during 1920, classified on examination of sputum.

PINEWOOD.										
	* Stage (Turban Gerhardt).			Total.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total discharges.	Total deaths.	
	I.	II.	III.							
Tubercle bacilli found ...	44	17	16	77	...	...	...	77	...
Tubercle bacilli not found	68	22	3	93	5	...	2	100	...	
No expectoration ...	6	3	...	9	...	...	...	9	...
Not examined ...	...	...	2	2	...	...	...	2	...
Totals ...	118	42	21	181	5	...	2	188	...	
QUEEN MARY'S HOSPITAL.										
Tubercle bacilli found ...	...	...	...	20	...	...	...	...	16
Tubercle bacilli not found	...	...	...	35	...	...	...	...	3
No expectoration ...	...	...	...	25	...	...	...	...	1
Not examined ...	...	...	...	...	...	...	...	...	...
Totals	...	...	...	80	...	...	...	...	20
ST. GEORGE'S HOME.										
Not examined ...	...	...	...	...	...	...	...	51	77
Totals ...	...	...	...	...	...	...	...	51	77
SOUTH-EASTERN HOSPITAL.										
Tubercle bacilli found ...	...	1	40	41	...	...	...	41	44
Tubercle bacilli not found	2	4	8	14	1	...	1	16	5	
No expectoration ...	...	...	1	1	...	...	...	1	...
Not examined ...	1	...	5	6	...	...	...	6	5
Totals ...	3	5	54	62	1	...	1	64	54	
DOWNS SANATORIUM.										
Tubercle bacilli found ...	63	186	461	710	...	...	...	710	27
Tubercle bacilli not found	112	140	108	360	26	...	6	392	2	
No expectoration ...	6	2	6	14	5	...	5	24	4	
Not examined ...	4	9	11	24	2	7	...	33	5	
Totals ...	185	337	586	1,108	33	7	11	1,159	38	

The "Astor" classification in each case will be 1 higher.

TABLE XXV.—Reasons for discharge of tuberculous patients 1920.

COLINDALE HOSPITAL.									
	* Stage (Turban Gerhardt).			Total.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total discharges.	
	I.	II.	III.						
Period of treatment expired ...		Not	noted	...	...	...	...	...
Against advice ...		Not	noted	255	...	...	...	255
Misconduct ...		Not	noted	9	...	...	...	9
Contagious disease ...	...	...	...	...	...	...	...	...
Transferred to other institutions	...	...	...	12	2	...	...	14
Totals ...	...	...	...	276	2	...	...	278
HIGH WOOD.									
Period of treatment expired ...	41	4	37	...	48	...	5	135	
Against advice ...	11	1	12	...	9	...	3	36	
Misconduct ...	2	...	...	...	...	...	...	2
Contagious disease*	6	...	7	...	6	...	2	21	
Transferred to other institutions	4	...	9	...	4	...	...	17
Totals ...	64	5	65	...	67	...	10	211	
MILLFIELD.									
Period of treatment expired ...	27	6	...	33	59	...	...	92
Against advice ...	2	1	...	3	1	...	...	4
Misconduct ...	9	2	2	13	11	...	...	24
Contagious disease ...	7	4	2	13	2	...	...	15
Transferred to other institutions	5	3	6	14	...	...	...	14
Totals ...	50	16	10	76	73	...	...	149
NORTHERN HOSPITAL (PART OF).									
Period of treatment expired ...	193	225	299	717	9	...	6	732	
Against advice ...	17	14	12	43	...	...	...	43
Misconduct ...	...	...	...	...	...	...	...	...
Contagious disease ...	...	...	...	...	...	...	...	...
Transferred to other institutions	...	...	9	9	...	...	...	9
Totals ...	210	239	320	769	9	...	6	784	
PARK HOSPITAL.									
Period of treatment expired ...	...	...	50	...	...	...	...	50
Against advice ...	...	...	88	...	...	...	...	88
Misconduct ...	...	...	2	...	...	...	...	2
Contagious disease ...	...	...	...	...	...	...	...	...
Transferred to other institutions	...	...	1	...	...	...	...	1
Totals ...	...	...	141	...	...	...	...	141

* The "Astor" classification in each case will be 1 higher.

TABLE XXV. (continued).—Reasons for discharge of tuberculous patients 1920.

PINEWOOD.									
	* Stage (Turban Gerhardt).			Total.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total discharged.	
	I.	II.	III.						
Period of treatment expired ...	94	35	15	144	5	...	2	151	
Against advice ...	11	2	2	15	...	...	...	15
Misconduct ...	6	1	...	7	...	...	...	7
Contagious disease ...	...	1	...	1	...	...	...	1
Transferred to other institutions	7	3	4	14	...	...	...	14
Totals ...	118	42	21	181	5	...	2	188	
QUEEN MARY'S HOSPITAL.									
Period of treatment expired ...	...	...	...	70	...	...	176	246
Against advice ...	...	...	...	5	...	...	9	14
Misconduct ...	...	...	...	...	...	...	...	...
Contagious disease ...	...	...	...	1	...	...	9	10
Transferred to other institutions	...	...	...	4	...	...	12	16
Totals ...	...	...	...	80	...	...	206	286
ST. GEORGE'S HOME.									
Period of treatment expired ...	...	6	1	7	3	...	...	10
Against advice ...	3	13	12	28	1	...	2	31	
Misconduct ...	...	...	...	...	...	...	...	...
Contagious disease ...	...	...	...	...	...	...	...	...
Transferred to other institutions	3	4	...	7	1	2	...	10	
Totals ...	6	23	13	42	5	2	2	51	
SOUTH-EASTERN HOSPITAL.									
Period of treatment expired ...	...	...	...	...	...	...	...	42
Against advice ...	...	...	...	...	...	...	...	...
Misconduct ...	...	...	3	3	...	...	...	3
Contagious disease ...	...	...	...	...	...	...	...	...
Transferred to other institutions	...	3	15	18	...	...	1	19
Totals ...	..	3	18	21	...	...	1	64
THE DOWNS SANATORIUM.									
Period of treatment expired ...	123	229	373	725	25	...	4	754	
Against advice ...	47	75	102	224	4	6	5	239	
Misconduct ...	6	11	23	40	...	...	...	40
Contagious disease ...	...	...	...	...	...	1	...	1
Transferred to other institutions	9	22	88	119	4	...	2	125	
Totals ...	185	337	586	1,108	33	7	11	1,159	

* The "Astor" classification in each case will be 1 higher.

TABLE XXVI.—Capacity for work of tuberculous patients on discharge, 1920.

COLINDALE HOSPITAL.										
	*Stage Turban-Gerhardt)			Totals.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total discharges.		
	I.	II.	III.							
Fit for work		Not	noted	...	...	...	...	...		...
Fit for light work		Not	noted	4	...	...	...	...		4
Unfit for any work		Not	noted	272	2	...	...	...		274
Fit for school		All over school age								
Totals	276	2	...	...	...		278
HIGH WOOD.										
Fit for work
Fit for light work		1	1	4	6	2	...	...		8
Unfit for any work
Fit for school		42	3	21	66	52	...	3		121
Totals		43	4	25	72	54	...	3		129
MILLFIELD.										
Fit for work
Fit for light work		1	...	...	1	...	...	...		1
Unfit for any work		1	1	2	4	3	...	...		7
Fit for school		47	16	10	73	68	...	...		141
Totals		49	17	12	78	71	...	...		149
NORTHERN HOSPITAL (part of).										
Fit for work		21	13	...	34	...	...	...		34
Fit for light work		119	112	76	307	1	...	2		310
Unfit for any work		46	80	213	339	4	...	2		345
Fit for school		24	34	31	89	4	...	2		95
Totals		210	239	320	769	9	...	6		784
PINWOOD.										
Fit for work		31	6	...	37	3	...	...		40
Fit for light work		63	20	7	90	2	...	...		92
Unfit for any work		24	16	14	54	...	...	2		56
Fit for school
Totals		118	42	21	181	5	...	2		188
QUEEN MARY'S HOSPITAL.										
Fit for work
Fit for light work
Unfit for any work	9	...	...	10		19
Fit for school	71	196		267
Totals	80	206		286

* The "Astor" classification in each case will be 1 higher.

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TABLE XXVI. (continued).—Capacity for work of tuberculous patients on discharge, 1920.

ST. GEORGE'S HOME.										
	* Stage (Turban-Gerhardt)			Totals.	Diagnosis not confirmed.	Diagnosis not ascertained.	Tuberculous other than pulmonary.	Total discharges.		
	I.	II.	III.							
Fit for work	1	1	...	...	2		
Fit for light work	5	1	...	...	6		
Unfit for any work	34	1	1	2	38		
Fit for school	2	2	1	...	5		
Totals	42	5	2	2	51		
SOUTH-EASTERN HOSPITAL.										
Fit for work	1	...	...	...	1		
Fit for light work	2	3	2	7	8		
Unfit for any work	54	1	...	...	55		
Fit for school		
Totals	62	1	...	1	64		
THE DOWNS SANATORIUM.										
Fit for work	186	15	...	3	204		
Fit for light work	345	7	...	1	353		
Unfit for any work	577	11	7	7	602		
Fit for school		
Totals	1,108	33	7	11	1,159		

* The "Astor" classification in each case will be 1 higher.

TABLE XXVIII.—Number of tuberculous patients with complications, 1920.

COLINDALE HOSPITAL.

Deafness	3	Tubercular arthritis	5
Fistula in ano	1	„ laryngitis	51
Piles	9	„ orchitis	1
Tubercular adenitis	5		
Total	75		

N.B.—The occurrence of hæmoptysis, night sweats or alimentary symptoms (for example, diarrhœa, dyspepsia, &c.) has not been counted.

HIGH WOOD.

Abscess of jaw	1	Ophthalmia	3
Anterior poliomyelitis	1	Pleurisy	2
Bronchiectasis	1	Sarcoma of jaw	1
Bronchitis... ..	2	Scarlet fever	8
Chorea	1	Tinea capitis	5
Diphtheria	10	Tuberculous spine	2
Hæmoptysis	3	Whooping cough... ..	1
Herpes zoster	1		
Total	42		

MILLFIELD.

Asthma	2	Pneumonia	2
Total	4		

NORTHERN HOSPITAL (PART OF).

Tuberculous in nature.		Non-tuberculous in nature.	
Adenitis	3	Albuminuria	2
Arthritis—Ankle... ..	1	Bronchitis... ..	4
„ Hip	2	Cardiac disease	3
„ Knee	1	Diphtheria	1
Empyema	3	Enlarged thyroid... ..	1
Enteritis	5	Gastric ulcer	1
Keratitis	1	Metrorrhagia	1
Laryngitis	27	Nasal polypi	1
Mastoid	1	Neurasthenia	1
Peritonitis... ..	3	Pregnancy... ..	5
Ulcer of leg	1	Psoriasis	1
„ mouth and pharynx	1	Thrombosis of veins	1
Total	49	Total	22

PARK HOSPITAL.

Enteritis	12	Meningitis	7
Hæmoptysis, severe	18	Nephritis	5
Laryngitis... ..	23	Pneumo-thorax	9
Total	74		

PINWOOD SANATORIUM.

Tuberculous in nature.		Non-tuberculous in nature.	
Abdominal tuberculosis	6	Boils	1
Albuminuria	1	Bronchitis	1
Early hip disease... ..	1	Favus	1
Fistula in ano	3	Hepatitis	1
Laryngitis	1	Hernia	1
Pleurisy, acute	1	Neurasthenia	2
		Paralysed right arm	1
Total	13	Total	8

ST. GEORGE'S HOME.

Morbus cordis	2	Movable kidney	1
Arterio-sclerosis	1	Tuberculous knee... ..	1
Cerebral hæmorrhage	1		
Total	6		

TABLE XXVIII. (continued).
Number of tuberculous patients with complications, 1920.

SOUTH-EASTERN HOSPITAL.

Abscess, antrum of Highmore	1	Intussusception	1
Asthma	1	Laryngitis... ..	14
Chronic abscess	1	Nephritis	2
Adenitis	1	Otitis media	1
Appendicitis	2	Pneumo-thorax	1
Hæmoptysis	7	Primary lateral sclerosis... ..	1
Total	33		

THE DOWNS SANATORIUM.

Tuberculous in nature.		Non-tuberculous in nature.	
Appendicitis	1	Acute otitis media	2
Bronchiectasis	1	Appendicitis	1
Cervical adenitis	2	Chronic bronchitis and emphysema	28
Cystitis	1	Epilepsy	1
Empyema	1	Heart disease	3
Enteritis	3	Herpes zoster	2
Epididymitis	1	Ischio-rectal abscess	2
Laryngitis... ..	51	Ichthyosis... ..	1
Lupus of foot	1	Locomotor ataxy	1
Peritonitis... ..	1	Malaria	1
Pleurisy with effusion	3	Neurasthenia (including shell shock)	8
Pneumo-thorax	1	Osteo-arthritis	2
Prostatitis... ..	1	Otorrhœa	5
Tuberculosis of hip	1	Perineal fistula	6
" femur	1	Pharyngeal thrush	1
" spine	1	Rodent ulcer	1
" sternum... ..	1	Scabies	1
" ulna	1	Syphilis	1
" wrist	1	Varicella	1
Total	74	Total	68

TABLE XXIX.—Number of tuberculous patients whose diagnosis was corrected after admission, 1920.

COLINDALE HOSPITAL.

Gastric ulcer	1	Lymphadenoma	1
Total	2		

HIGH WOOD.

Abscess of jaw	1	Mitral stenosis	
Bronchiectasis	2	Whooping cough..	
Coeliac disease	1		
Total	9		

MILLFIELD.

Diagnosis not confirmed (includes 2 cases of asthma)	43
---	----

NORTHERN HOSPITAL (PART OF).

Bronchitis... ..	3	Gastric ulcer	1
Cardiac disease	2	Splenic anæmia	1
Exophthalmic goitre	2		
Total	9		

PINEWOOD SANATORIUM.

No obvious disease	5
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SOUTH-EASTERN HOSPITAL.

Actinomycosis	1	Pleurisy	1
Empyema	1		
Total	3		

THE DOWNS SANATORIUM.

Chronic bronchitis	5	Neurasthenia	
Doubtful phthisis (no obvious disease)	21	Sclerosis	2
Empyema	2	Spinal caries	1
Morbus cordis	1		
Total	33		

TABLE XXX.—Admissions, transfers, discharges and deaths at hospitals and homes for tuberculous patients during 1920.

	Remaining 31 Dec., 1919.			Admissions.			Transfers from other institu- tions of the Board.			Total cases under treatment during year.			Died.			Discharged.			Transferred to other institu- tions of the Board.			Remaining 31 Dec., 1920.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Colindale Hospital	...	...	...	593	1	594	49	...	49	642	1	643	159	...	159	268	1	269	9	...	9	206	...	206
High Wood	52	63	115	190	166	356	12	1	13	254	230	484	1	1	2	102	92	194	10	7	17	142	130	272
Millfield	62	56	118	39	33	72	2	...	2	103	89	192	1	1	2	70	61	131	15	3	18	17	24	41
Northern Hospital (part of)	9	211	220	23	816	839	...	...	...	32	1,027	1,059	38	38	38	16	759	775	1	8	9	15	222	237
North-Western Hospital	37	...	37	84	...	84	9	...	9	130	...	130	57	...	57	41	...	41	30	...	30	2	...	2
Park Hospital	42	...	42	215	...	215	4	...	4	261	...	261	83	...	83	140	...	140	1	...	1	37	...	37
Pinewood Sanatorium	53	...	53	198	...	198	...	...	...	251	...	251	...	...	...	179	...	179	9	...	9	63	...	63
Princess Mary's Hospital	78	67	145	146	109	255	28	9	37	252	185	437	3	2	5	93	53	146	26	39	65	130	91	221
Queen Mary's Hospital	163	272	435	200	189	389	32	25	57	395	486	881	27	21	48	140	128	268	12	6	18	216	331	547
St. George's Home	1	42	43	...	125	125	...	5	5	1	172	173	...	77	77	1	45	46	...	5	5	45	...	45
South-Eastern Hospital	36	...	36	110	...	110	8	...	8	154	...	154	54	...	54	58	...	58	6	...	6	36	...	36
The Downs Sanatorium	252	...	252	1,163	...	1,163	10	...	10	1,425	...	1,425	38	...	38	1,098	...	1,098	61	...	61	228	...	228
Western Hospital	19	...	19	54	...	54	...	...	...	73	...	73	22	...	22	39	...	39	...	...	...	12	...	12
	804	711	1,515	3,015	1,439	4,454	154	40	177				444	140	584	2,245	1,139	3,384	180	68	248	1,149	798	1,947

NOTE.—Colindale Hospital was taken over by the Board on 1 January, 1920, with 50 patients from the City of Westminster Guardians.

MENTAL HOSPITALS STATISTICS.

TABLE XXXI.

Number of admissions, transfers, discharges, and deaths (exclusive of feeble-minded patients) at the Board's several mental hospitals during 1920, according to parishes and unions, also the numbers remaining under treatment at the end of the year.

PARISHES & UNIONS.	No. remaining at mental hospitals 1 January, 1920.			Admitted.						Died.			Discharged.			Transferred to other mental hospitals of the Board.			No. remaining at mental hospitals on 31 December, 1920.		
	M.	F.	Total.	Direct and indirect.			From other mental hospitals of the Board.			M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
				M.	F.	Total.	M.	F.	Total.												
Bermondsey ..	94	132	226	8	16	24	9	11	20	7	18	25	(2)	(1)	9	11	20	92	129	221	
Bethnal Green ..	72	106	178	14	15	29	12	7	19	8	17	25	(1)	(3)	12	7	19	73	99	172	
Camberwell ..	120	176	296	(2)	7	31	26	22	48	10	8	18	(1)	(1)	26	22	48	133	174	307	
Chelsea ..	30	46	76	4	(4)	4	3	3	6	2	7	9	(1)	(1)	3	3	6	29	39	68	
Fulham ..	37	61	98	4	(4)	8	12	12	16	2	2	4	(1)	(1)	12	4	16	38	63	101	
Greenwich ..	82	107	189	8	10	18	12	17	29	2	8	10	(1)	(1)	12	17	29	87	108	195	
Hackney ..	95	171	266	(1)	24	28	17	17	34	12	35	47	(1)	(4)	17	17	34	94	157	251	
Hammersmith ..	36	71	107	6	14	20	4	3	7	4	17	21	(2)	(4)	4	3	7	36	50	86	
Hampstead ..	20	36	56	6	(3)	9	3	2	5	3	3	6	(1)	(1)	3	2	5	23	38	61	
Holborn ..	131	169	300	(1)	13	37	(1)	16	23	13	24	37	(1)	(4)	16	7	23	137	153	290	
Islington ..	117	143	260		6	22	30	14	44	7	7	14	(1)	(4)	7	30	44	123	137	260	
Kensington ..	69	84	153	(4)	17	(1)	18	9	27	10	7	17	(1)	(3)	18	9	27	77	87	164	
Lambeth ..	211	289	500	(1)	83	166	44	31	75	34	49	83	(2)	(20)	41	44	85	240	302	542	
Lewisham ..	36	44	80	9	(3)	4	10	6	16	5	5	10	(1)	(1)	10	6	16	39	45	84	
London, City of ..	31	36	67		1	1	1	1	2	2	5	7	(1)	(1)	1	1	2	29	32	61	
Mile End ..	59	83	142	(1)	17	(1)	12	10	22	11	17	28	(2)	(6)	12	10	22	64	82	146	
Paddington ..	56	66	122	(1)	8	(1)	12	9	21	4	8	12	(2)	(2)	12	9	21	58	67	125	
Poplar ..	111	155	266	(1)	16	43	14	9	23	13	18	31	(2)	(3)	14	9	23	117	150	267	
St. George's, East ..	37	42	79	6	3	9	5	1	6	1	1	2	(1)	(1)	1	1	2	40	41	81	
St. Marylebone ..	69	85	154	19	21	40	4	12	16	6	13	19	(1)	(3)	4	4	12	77	90	167	
St. Pancras ..	168	241	409	(4)	38	(4)	21	15	36	11	19	30	(1)	(5)	14	21	36	189	239	428	
Shoreditch ..	80	69	149	(1)	12	(3)	16	3	19	8	3	11	(1)	(1)	16	3	19	83	73	156	
Southwark ..	137	136	273	16	(2)	8	23	(1)	29	19	10	29	(3)	(7)	23	6	29	129	129	258	
Stepney ..	33	37	70	(1)	3	6	5	1	6	4	3	7	(1)	(1)	5	1	6	33	37	70	
Wandsworth ..	140	246	386	15	(1)	38	25	22	47	9	26	35	(4)	(4)	25	22	47	140	246	386	
Westminster, City of ..	76	104	180	(1)	20	(1)	8	10	18	5	13	18	(1)	(1)	8	10	18	91	116	207	
Whitechapel ..	79	75	154	(1)	15	7	18	9	27	10	7	14	(1)	(1)	18	9	27	79	75	154	
Woolwich ..	48	74	122	6	11	17	8	5	13	1	7	8	(1)	(1)	8	5	13	51	78	129	
Board of Control ..	32	48	80	(1)	13	(3)	10	5	13	5	5	10	(1)	(3)	5	3	8	36	50	86	
Extra Metropolitan ..																					
Totals ..	2,306	3,140	5,446	(22)	452	(21)	(1)	398	(2)	607	228	366	(25)	(37)	93	289	398	2,437	3,102	5,539	

NOTE.—The small figures in brackets represent alterations in chargeability after admission.

TABLE XXXIV.

Summary showing the movement [i.e., admissions, discharges, &c.] of the mental hospitals population (exclusive of feeble-minded patients) during 1920.

	M.	F.	Total.	M.	F.	Total.
In the mental hospitals 1 January, 1920 ...				2,306	3,140	5,446
Total cases admitted during the year—						
Direct cases	335	412	747			
Indirect cases	117	11	128			
				452	423	875
Total cases under treatment during the year ...				2,758	3,563	6,321
Discharged or transferred* during the year as—						
Escaped	—	—	—			
Not insane	2	1	3			
Recovered	20	3	23			
Relieved	14	18	32			
Not improved	57	73	130			
Died... ..	228	366	594			
Total cases discharged, transferred, and died during the year ...				321	461	782
Remaining in the mental hospitals 31 December, 1920 ...				2,437	3,102	5,539
Average number resident during the year				2,426	3,128	5,554

* Exclusive of transfers between the Board's own mental hospitals.

TABLE XXXV. (continued).—Analysis of the admissions to the Mental Hospitals during the year 1920. (B 1.)

SUMMARY.

CLASSES OF ADMISSIONS.	CONGENITAL.			ACQUIRED.									TOTAL.		
				First attack.			Not first attack.			Unknown whether first attack or not.					
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Direct	89	70	159	199	294	493	23	20	43	*24	28	52	335	412	747
Indirect	10	2	12	44	1	45	7	..	7	56	8	64	117	11	128
Statutory re-admissions .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total admissions	99	72	171	243	295	538	30	20	50	80	36	116	452	423	875

* Includes 1 "not insane" case.

TABLE XXXVI. (continued).—Showing the form of mental disorder on admission in the admissions during the year 1920. (B 5.)

SUMMARY.

Forms of mental disorder.		DIRECT ADMISSIONS.			INDIRECT ADMISSIONS.			TOTALS.			
		M.	F.	T.	M.	F.	T.	M.	F.	T.	
Congenital or infantile mental deficiency (Idiocy or imbecility) occurring as early in life as it can be observed.	(1) Intellectual { With epilepsy ..	31	19	50	2	1	3	33	20	53	
	{ Without epilepsy ..	101	96	197	9	1	10	110	97	207	
	(2) Moral .. .. .	..	1	1	..	..	..	..	1	1
	Not insane	3	1	4	3	1	4
Insanity occurring later in life.	(1) Insanity with epilepsy	2	3	5	3	..	3	5	3	8	
	(2) General paralysis of insane	7	2	9	..	..	..	7	2	9
	(3) Insanity with grosser brain lesions .. .. .	..	8	8	..	..	..	..	8	8
	(4) Acute delirium .. .. .	..	1	1	..	..	..	..	1	1
	(5) Confusional insanity .. .. .	..	2	2	2	..	2	2	2	4
	(6) Stupor .. .. .	..	..	..	..	..	..	..	..	..
	(7) Primary dementia	7	5	12	1	..	1	8	5	13	
	(8) Mania { (a) Recent .. .. .	..	..	..	..	..	..	..	..	..
	{ (b) Chronic	3	5	8	9	1	10	12	6	18	
	{ (c) Recurrent .. .. .	..	..	..	..	..	..	..	..	..
	(9) Melancholia { (a) Recent .. .. .	..	..	..	..	..	..	..	..	..
	{ (b) Chronic	4	12	16	2	2	4	6	14	20	
	{ (c) Recurrent .. .. .	..	..	..	..	..	..	..	..	..
	(10) Alternating insanity .. .. .	..	..	..	..	..	..	..	..	..
(11) Delusional { (a) Systematised	4	14	18	2	1	3	6	15	21		
{ (b) Non-Systematised	2	23	25	7	1	8	9	24	33		
(12) Volitional { (a) Impulse .. .. .	..	..	..	..	..	..	..	..	..
{ (b) Obsession .. .. .	..	..	..	..	..	..	..	..	..
{ (c) Doubt .. .. .	..	..	..	..	..	..	..	..	..
(13) Moral insanity .. .. .	..	..	..	..	..	..	..	..	..
(14) Dementia { Senile	171	220	391	6	1	7	177	221	398		
{ Secondary	74	3	77	74	3	77		
Total	335	412	747	117	11	128	452	423	875		

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TABLE XXXVI. Mental Hospitals.—Showing the form of mental disorder on admission in the direct admissions and transfers during the year 1920. (B 5.)

Form of mental disorder.	CATERNAM MENTAL HOSPITAL.						DAREMTH TRAINING COLONY.						FOUNTAIN (Temporary) MENTAL HOSPITAL.						LEAVESDEN MENTAL HOSPITAL.						TOOTING GEE MENTAL HOSPITAL.						TOOTING GEE RECEIVING HOME FOR CHILDREN.					
	Direct admissions.		Transfers.		Total.		Direct admissions.		Transfers.		Total.		Direct admissions.		Transfers.		Total.		Direct admissions.		Transfers.		Total.		Direct admissions.		Transfers.		Total.							
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Intellectual																																				
a. With epilepsy				64	13	77																														
A. Without epilepsy	5			143	21	148	148	21	169	1	13	14	16	25	41	17	39	56	1	1	2	33	32	65	54	34	88									
2. Moral																																				
Not insane	1																																			
1. Insanity with epilepsy																																				
2. General paralysis of the insane																																				
3. Insanity with grosser brain lesions																																				
4. Acute delirium																																				
5. Confusional insanity																																				
6. Stupor																																				
7. Primary dementia																																				
a. Excess																																				
A. Chronic																																				
B. Recurrent																																				
C. Excess																																				
A. Chronic																																				
B. Recurrent																																				
8. Mania																																				
a. Excess																																				
A. Chronic																																				
B. Recurrent																																				
9. Melancholia																																				
a. Excess																																				
A. Chronic																																				
B. Recurrent																																				
10. Alternating insanity																																				
a. Systematized																																				
A. Non-systematized																																				
11. Delusional insanity																																				
a. Impulse																																				
A. Obsessive																																				
C. Doubt																																				
12. Volitional insanity																																				
a. Simple																																				
A. Obsessive																																				
C. Doubt																																				
13. Moral insanity																																				
a. Simple																																				
A. Secondary																																				
Totals	7			261	71	332	268	71	339	2	13	15	21	31	52	25	44	69	2	1	3	92	42	134	84	46	130									

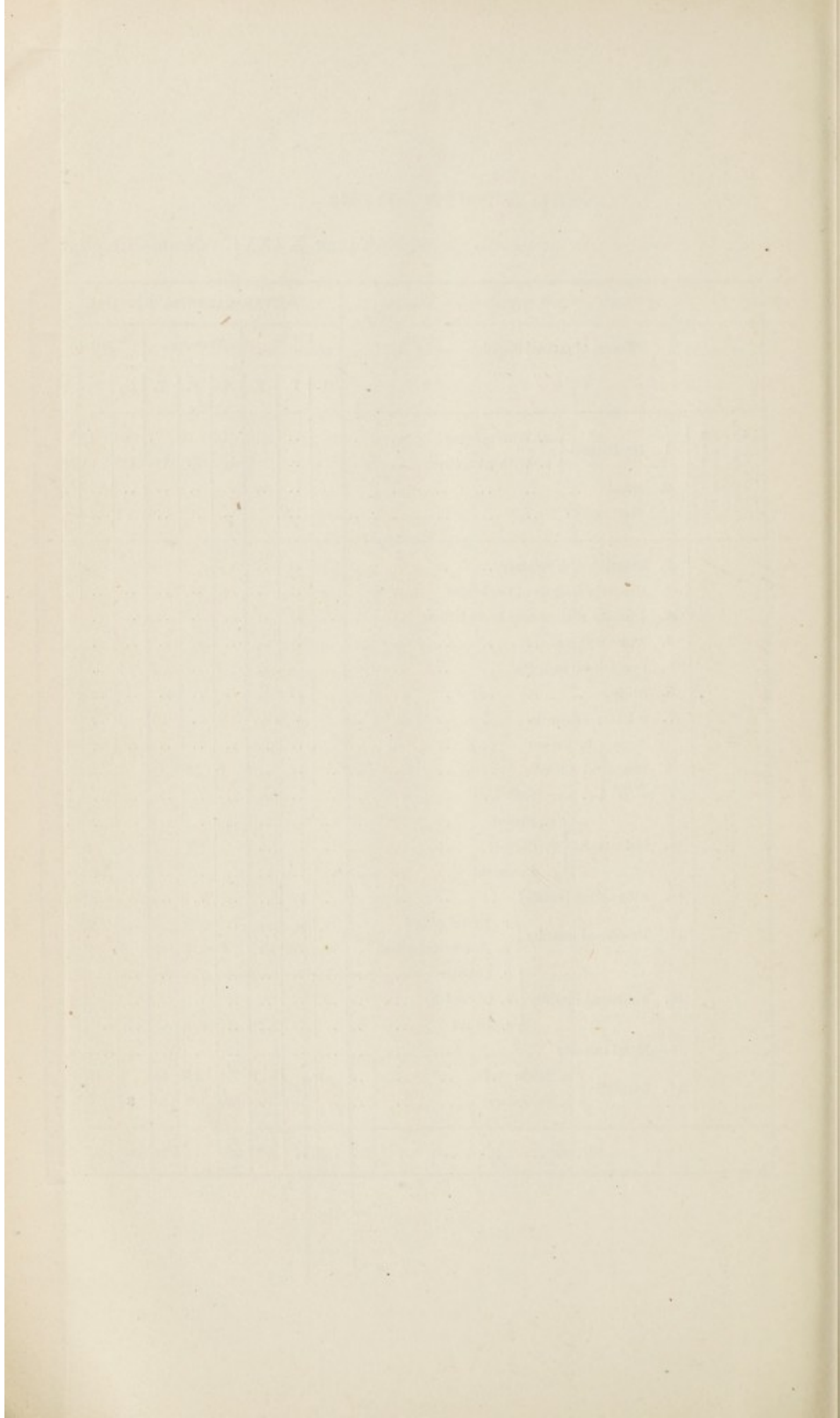


TABLE XXXVII.—Showing the GENERAL PARALYTIKS in the direct admissions at the Mental Hospitals during the year 1920, arranged according to their ages at commencement of the attack and to their civil state, and also the number of instances in which the attack was ascertained to have been preceded by syphilis, together with the age at which the latter was contracted. (B 9.)

SUMMARY.

TOOTING BEC MENTAL HOSPITAL (RECEIVING HOSPITAL).

CIVIL STATE.	AGE AT COMMENCEMENT OF THE ATTACK OF GENERAL PARALYSIS.											With positive evidence of syphilis.						
	Under 15.		15—19.		20—24.		25—34.		35—44.		45—54.		55—64.		65 and upwards.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.		F.	M.	F.	M.		F.	T.
Single	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
Married	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Widowed	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Unknown	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
TOTALS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7
SYPHILIS, congenital	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7
contracted prior to age 25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
25—34	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
35—44	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
45—54	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
at or after age 55	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
at age unknown	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2

* Denotes admission to Tooting Bec Children's Receiving Home.

TABLE XXXVIII. (continued). *Mental Hospitals.—An analysis of the discharges and transfers during the year 1920. (C 1.)*

SUMMARY.

	M.	F.	T.	M.	F.	T.	M.	F.	T.
Discharged as recovered—									
From direct and indirect admissions—									
First-attack cases	18	1	19	..	..	..	..	..	..
Not-first-attack cases	3	1	4	..	..	..	..	..	..
Cases unknown-whether-first-attack-or-not	1	..	1	..	..	..	..	..	..
Total from direct admissions .. ..	..	..	..	22	2	24	..	..	..
From transfers—									
First-attack cases .. .. .	..	2	2	..	..	..	..	..	..
Not-first-attack cases .. .. .	..	..	..	..	..	..	..	..	..
Cases unknown-whether-first-attack-or-not	..	..	..	..	..	..	..	..	..
Total from transfers .. .. .	..	..	..	..	2	2	..	..	..
Total discharged as recovered .. ..	..	..	..	22	4	26	..	..	..
Discharged (not recovered) as—							Relieved	Not improved	
Relieved	14	18	32	14	18	32	..	..	..
Not improved	57	73	130	..	..	..	57	73	130
Total	71	91	162						
Reasons for such discharge—									
To go to care of friends	31	35	66	..	..	..	..	..	..
To go to workhouse	9	7	16	..	..	..	..	..	..
To go to L.C.C. and other mental hospitals	31	35	66	..	..	..	..	..	..
To be boarded out .. .. .	..	..	..	..	..	..	..	..	..
Statutory, by irregularity in reception order	..	..	..	..	..	..	..	..	..
Statutory, by lapsing of reception order ..	..	..	..	..	..	..	..	..	..
To fever hospital .. .. .	..	..	..	..	..	..	..	..	..
To M.D. section of Darenth Training Colony ..	..	12	12	..	..	..	..	..	..
Total	71	89	160						
Transferred as—									
Relieved .. .. .	..	..	..	..	..	..	..	..	..
Not improved .. .. .	..	..	..	..	..	..	..	..	..
Total .. .. .	..	..	..	..	..	..	..	..	..
Destination of such transfers—									
To other mental hospitals, reg. hospitals, and licensed houses .. .. .	..	..	..	..	..	..	..	..	..
To "single care" .. .. .	..	..	..	..	..	..	..	..	..
Other destination .. .. .	..	..	..	..	..	..	..	..	..
Total .. .. .	..	..	..	..	..	..	..	..	..
Total discharged and transferred as—									
Relieved	14	18	32
Not improved	57	73	130

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TABLE XXXVIII. (continued). Mental Hospitals.—An analysis of the discharges and transfers during the year 1920. (C I.)

SUMMARY.

	Discharged as recovered—			Discharged (not recovered)			Transferred as—		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Direct and indirect admissions—									
Attack cases	18	1	19						
Not attack cases	3	1	4						
Unknown-whether-first-attack-or-not	1	..	1						
From transfers				22	2	24			
First attack cases									
Not first attack cases		2	2						
Cases unknown-whether-first-attack-or-not									
Total from direct admissions				22	2	24			
Total discharges as recovered					2	2			
				22	4	26			
Relieved				14	18	32			
Not improved				57	73	130			
Total				71	91	162			
Reasons for such discharge									
To go to care of friends	31	35	66						
To go to workhouse	9	7	16						
To go to L.C.C. and other hospitals	31	35	66						
To be boarded out									
Statutory, by irregularity of order									
Statutory, by lapsing of order									
To fever hospital									
To M.D. section of D. Colony		12	12						
Total				71	89	160			
Relieved									
Not improved									
Total									
Destination of such transfers									
To other mental hospitals, and licensed houses									
To "single care"									
Other destination									
Total									
Total discharges transferred as—				14	18	32			
Relieved							57	73	130
Not improved									

DISCHARGED AS RECOVERED
 From direct and indirect admissions—
 First attack cases
 Not first attack cases
 Cases unknown whether first attack or not
 Total from

From transfers
 First attack cases
 Not first attack cases
 Cases unknown whether first attack or not
 Total from
 Total discharges as recovered

DISCHARGED (NOT RECOVERED)
 RELIEVED
 NOT IMPROVED
 Total

REASONS FOR SUCH DISCHARGE
 To go to care of friends
 To go to workhouse
 To go to L.C.C. or other hospitals
 To be boarded out
 Statutory, by irregularity of order
 Statutory, by lapsing of order
 To fever hospital
 To M. D. section of D. Colony
 Total

TRANSFERRED AS—
 RELIEVED
 NOT IMPROVED
 Total

DESTINATION OF SUCH TRANSFERS
 To other mental hospitals
 To "single care"
 Other destination
 Total

TOTAL DISCHARGED AND TRANSFERRED AS—
 RELIEVED
 NOT IMPROVED

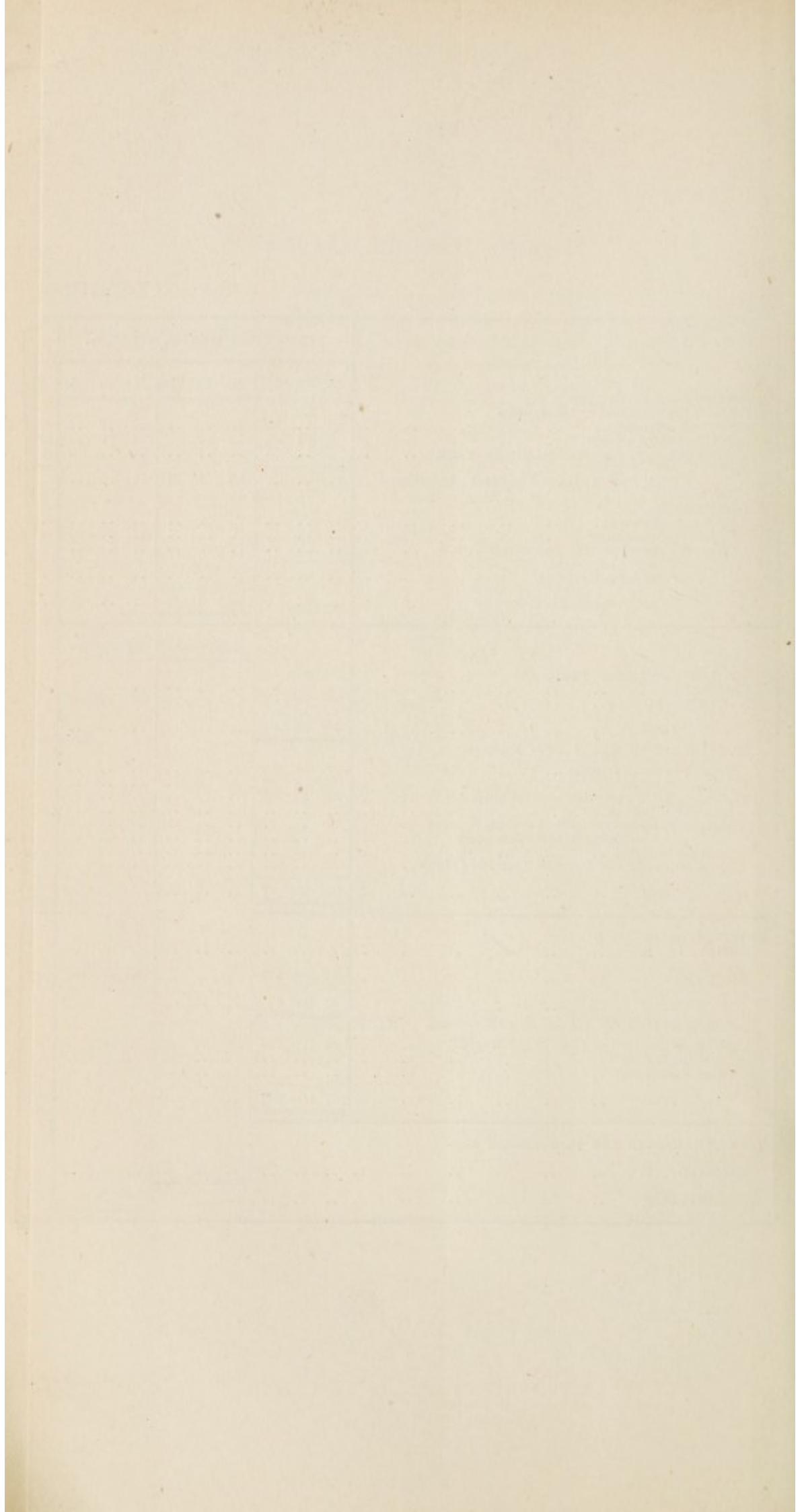
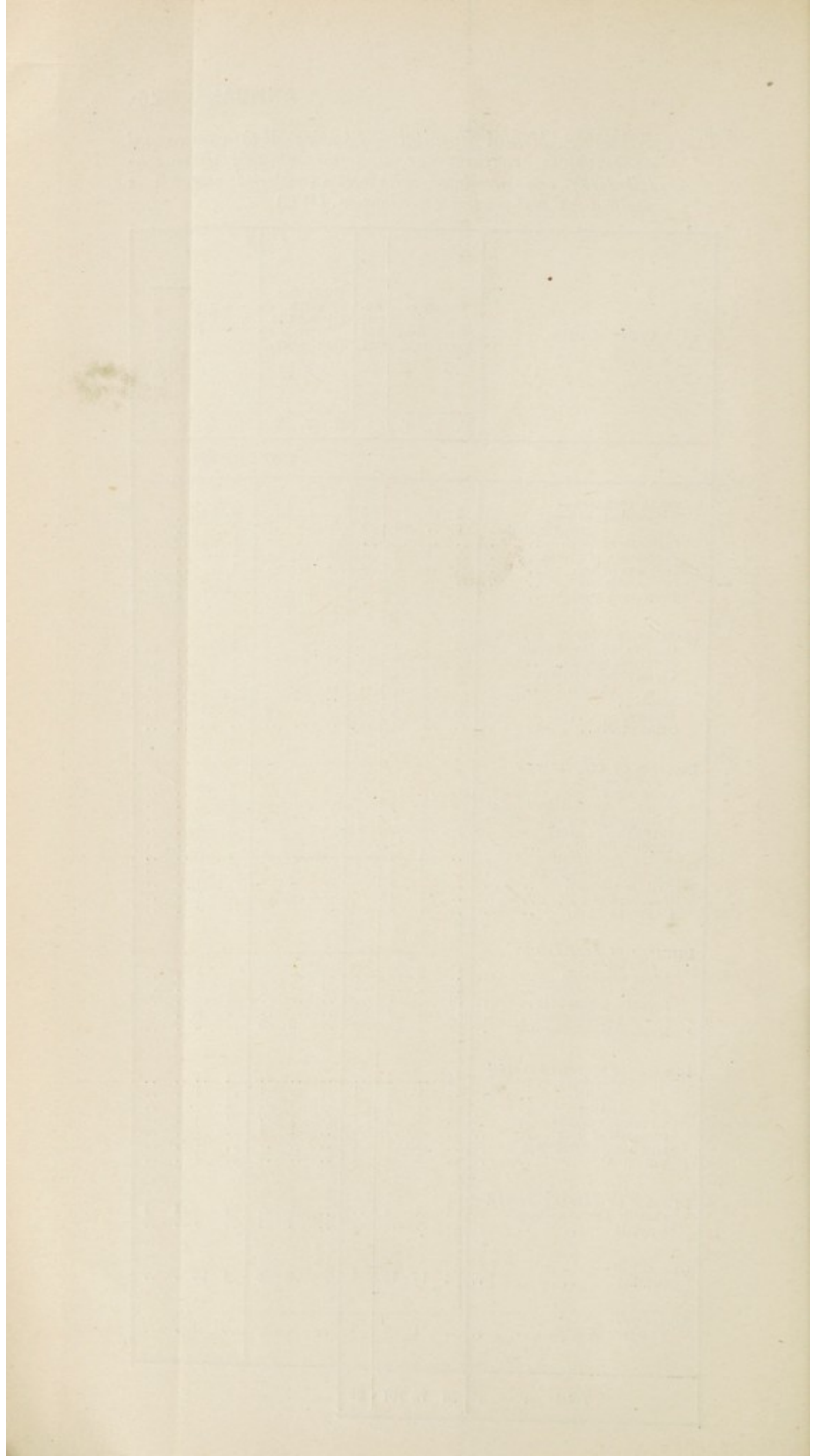


TABLE XXXIX. Mental Hospitals.—Showing all the causes of death that entered into the deaths during the year 1920, arranged as PRINCIPAL, CONTRIBUTORY, and the totals of these; also the number of times each cause (whether principal or contributory) was associated with certain selected causes; and the number of occasions each principal cause of death was verified by post-mortem examination. (D1.)

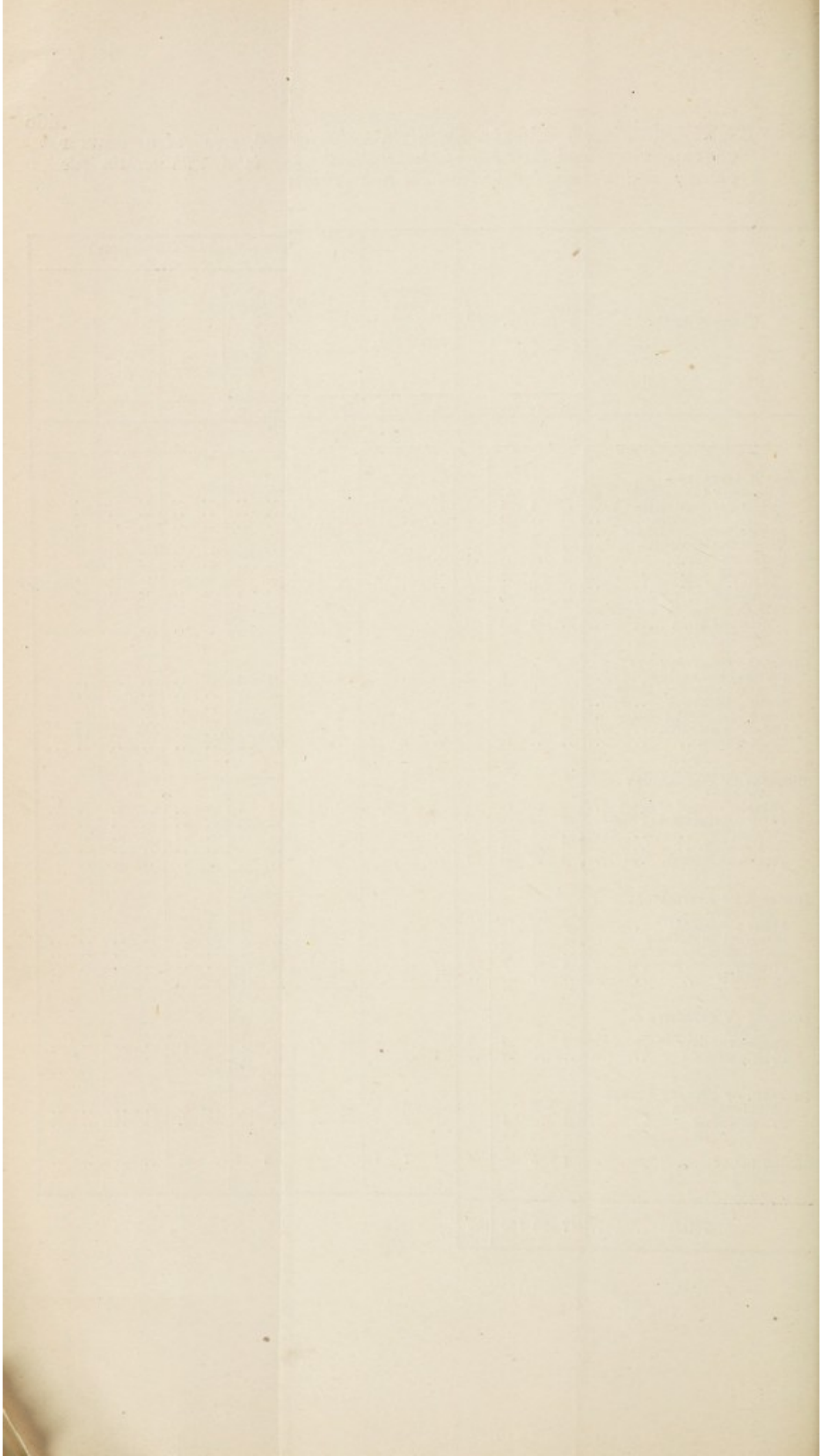
Causes of death.	Instances when returned as PRINCIPAL.			No. verified P.M.	Instances when returned as CONTRIBUTORY.			Total incidence.	Showing the total correlation between any given cause of death (whether acting as principal or contributory) and the subjoined selected causes.												
									Epidemic diarrhoea and infective enteritis.			Dysentery (colitis).	Pneumonia.	Pulmonary tuberculosis.	Exhaustion from mania or melancholy.	Valvular heart disease.	Fatty degeneration of the heart.	Cerebral hemorrhage.	Chronic Bright's disease.		
	M.	F.	T.		M.	F.	T.		M.	F.	T.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
CATERHAM MENTAL HOSPITAL.																					
GENERAL DISEASES—																					
Tuberculosis of lungs	5	10	15	5				5	10	15					5	10					
" disseminated	3		3	1				3		3											
Cellulitis of thigh					1		1	1		1											
Carcinoma of uterus		2						2		2											
Sarcoma of arm	1			1				1		1											
Osteo-arthritis		1						1		1											
Ferocious anemia		1						1		1											
DISEASES OF NERVOUS SYSTEM—																					
Organic disease of brain	1							1		1											
Paralysis agitans		1						1		1											
Cerebral hemorrhage	1	16	17					1	16	17									1	16	
" abscess								1		1											
Mania		1				2		3		3				1							
Epilepsy		4	1	5	2			6		6											
Otitis media		1		1				1		1											
DISEASES OF CIRCULATORY SYSTEM—																					
Congenital disease of heart					1		1	1		1											
Fatty degeneration of heart	2	1	3	1				4		4											
Valvular disease of heart	2	3	5	4				9		9											
Dilatation of heart		2	2	4	1			5		5											
Cardiac debility	1					3		4		4											
" degeneration		1				1		2		2											
Aneurism, abdominal		1		1				2		2											
Arteriosclerosis		1		1				2		2											
Gangrene of lung		1		1				2		2											
Gangrene		1		1				2		2											
DISEASES OF RESPIRATORY SYSTEM—																					
Acute bronchitis		3		3				6		6											
Chronic bronchitis					1		1	2		2											
Broncho-pneumonia		1		1				2		2											
Lobar pneumonia		2		2				4		4											
Hypostatic pneumonia					5		5	10		10											
DISEASES OF DIGESTIVE SYSTEM—																					
Acute enteritis	1			1				2		2											
" gastritis		1		1				2		2											
Appendicitis		1		1				2		2											
Ulcerative colitis		1	1	2	1			5		5											
Cirrhosis of liver					1		1	2		2											
Intestinal obstruction		1		1				2		2											
Volvulus		1		1				2		2											
DISEASES OF URINARY SYSTEM—																					
Chronic Bright's disease	1	1	2					4		4											1
Uremia					1		1	2		2											
OLD AGE—																					
Senility	1	14	15	2				22		22				1							
ACCIDENT—																					
Fracture of thigh		1		1				2		2											
Totals	28	73	101	25				126		126				1							1

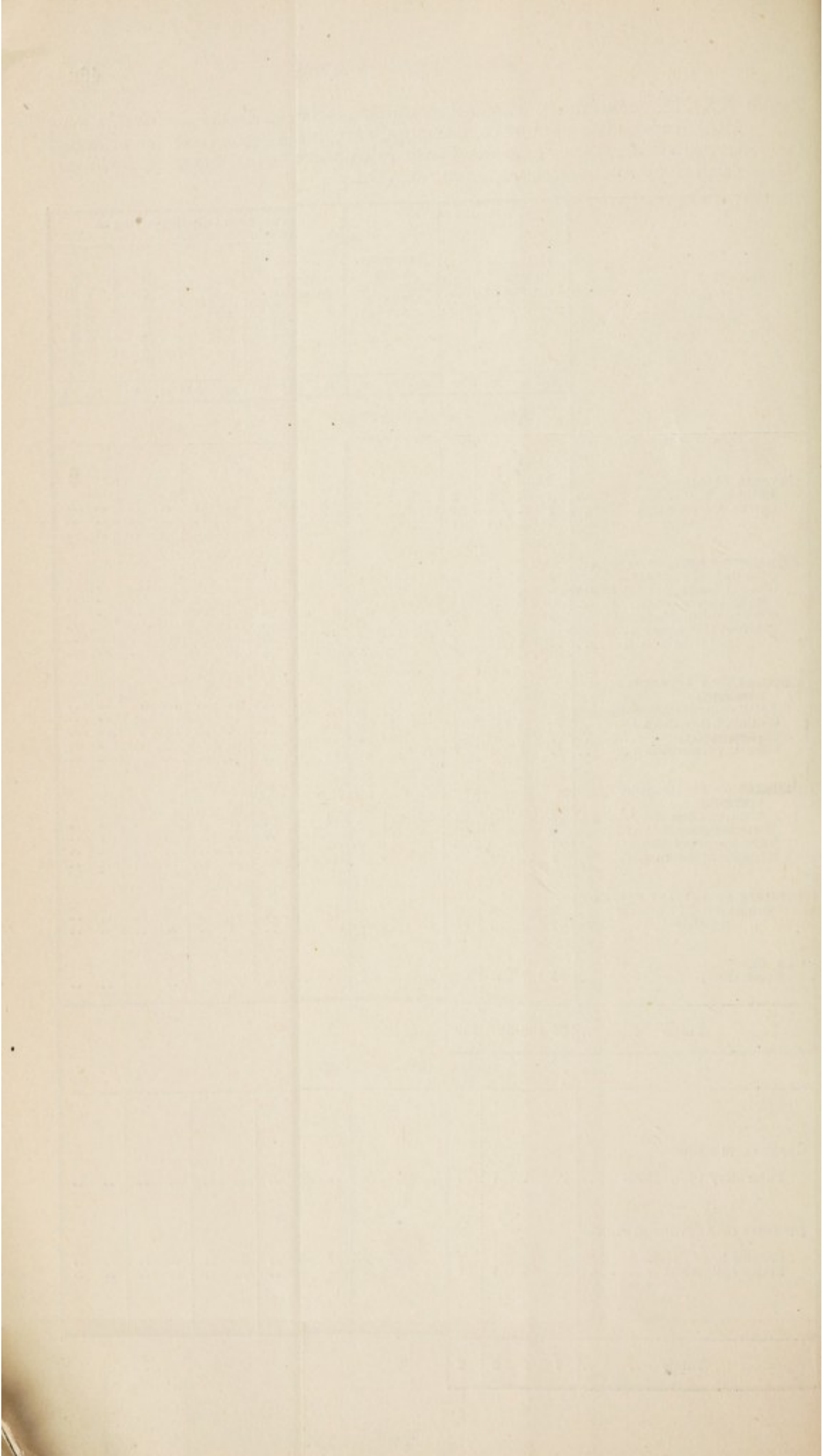


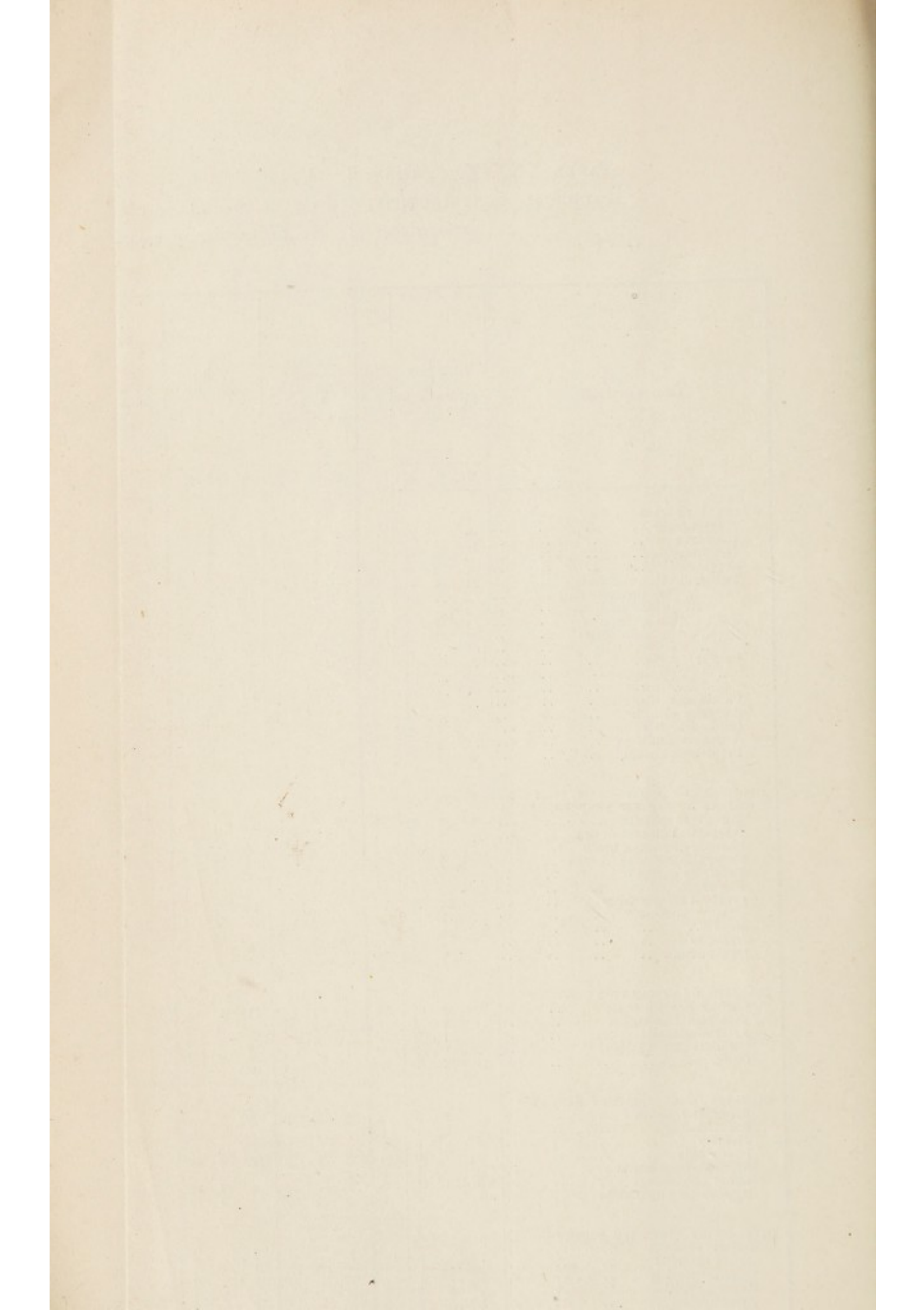
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TABLE XXXIX. (continued). Mental Hospitals.—Showing all the causes of death that entered into the deaths during the year 1920, arranged as PRINCIPAL, CONTRIBUTORY, and the totals of these; also the number of times each cause (whether principal or contributory) was associated with certain selected causes; and the number of occasions each principal cause of death was verified by post-mortem examination. (D 1.)

Causes of death.	Instances when returned as PRINCIPAL.		No. verified P.M.	Instances when returned as CONTRIBUTORY.		Total incidence.		Showing the total correlation between any given cause of death (whether acting as principal or contributory) and the subjoined selected causes.												
	M.	F.		M.	F.	M.	F.	Dysentery (colitis).	Pneumonia.	Pulmonary tuberculosis.	General paralysis of the insane.	Valvular heart disease.	Fatty degeneration of the heart.	Cerebral haemorrhage.	Chronic Bright's disease.	Tuberculosis other than pulmonary.	Senile decay.			
	M.	F.	T.	M.	F.	T.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
LEAVESDEN MENTAL HOSPITAL.																				
GENERAL DISEASES—																				
Pulmonary tuberculosis ..	23	24	47	35	..	1	1	23	25	48	..	..	..	23	24	..	..	..	..
Tubercular peritonitis ..	..	1	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
enteritis ..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis of cranium ..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tubercular meningitis ..	1	1	2	2	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery ..	2	7	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cancer ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Septicæmia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Inanition due to congenital defect of brain ..	..	1	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
DISEASES OF NERVOUS SYSTEM—																				
Cerebral hæmorrhage ..	2	4	6	4	..	..	..	..	2	4	..	..	..	..	..	..	..	..	..
General paralysis of the insane ..	..	2	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Status epilepticus ..	2	4	6	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebral softening ..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chronic meningitis ..	1	1	2	2	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
Brain disease ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
DISEASES OF CIRCULATORY SYSTEM—																				
Valvular disease of heart ..	3	10	13	10	..	1	1	3	11	14	..	..	..	..	..	..	..	..	..
Fatty degeneration of heart ..	1	4	5	5	1	1	2	2	5	7	..	..	..	..	..	..	..	..	..
Pericarditis ..	..	1	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
Endocarditis ..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Perniciosa anemia ..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
DISEASES OF RESPIRATORY SYSTEM—																				
Lobar pneumonia ..	3	7	10	8	..	..	..	3	7	10	..	..	..	..	..	..	..	..	..
Catarrhal pneumonia ..	..	1	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
Bronchiectasis ..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pleurisy ..	1	1	2	2	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
Bronchitis ..	..	..	..	..	1	..	1	1	..	1	..	..	..	..	..	..	..	..	..
DISEASES OF DIGESTIVE SYSTEM—																				
Cirrhosis of liver ..	1	..	1	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..
Pyloric stenosis ..	..	..	..	..	1	..	1	1	..	1	..	..	..	..	..	..	..	..	..
DISEASES OF URINARY SYSTEM—																				
Chronic nephritis ..	..	3	3	3	..	2	2	..	5	5	..	..	..	..	..	..	..	..	..
Pyo-nephrosis ..	1	..	1	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..
SENILE DECAY ..	1	5	6	4	4	7	11	12	1	..	..	..	..	..	..	..	..	..	..
Totals ..	47	83	130	102																







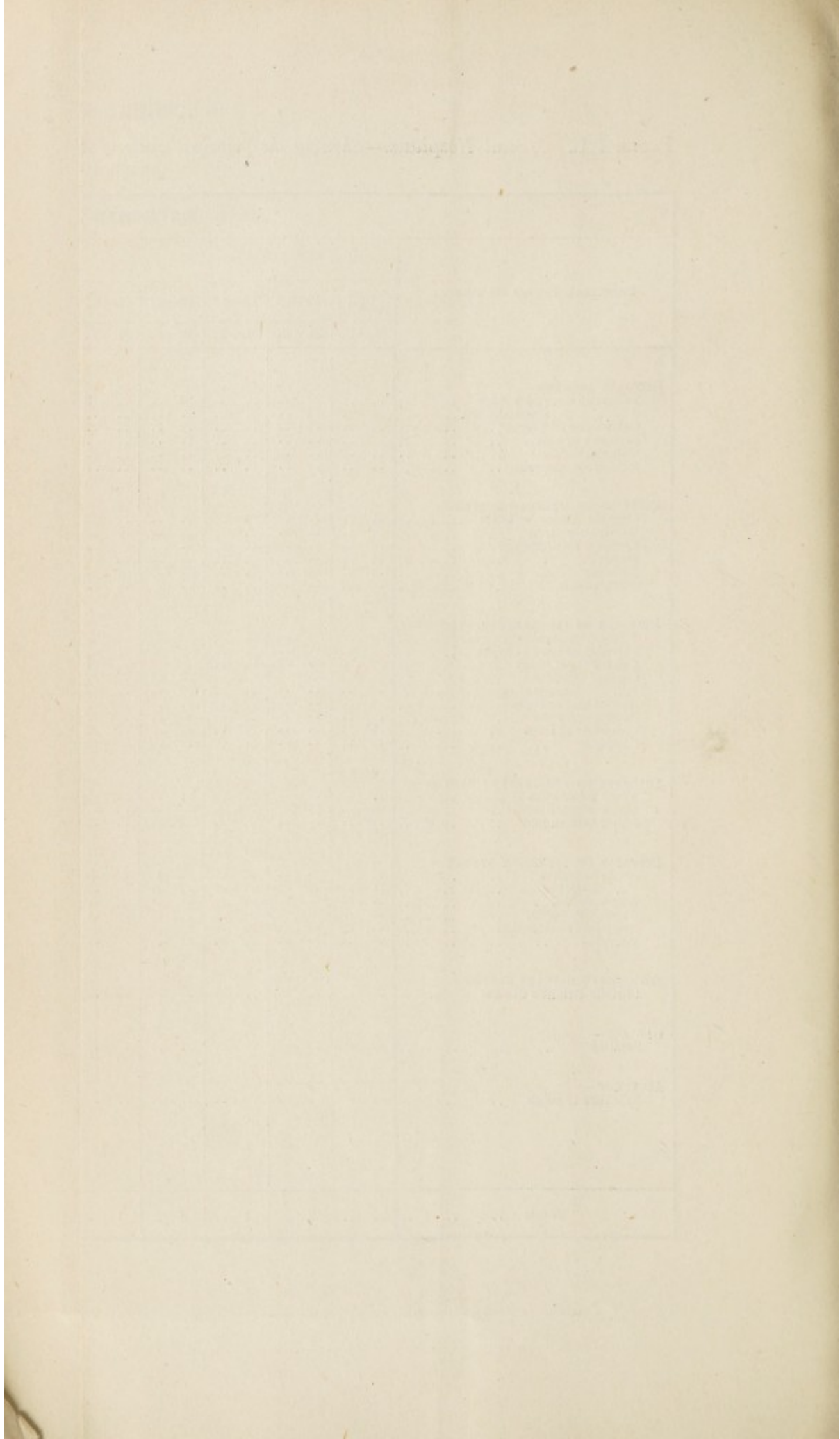
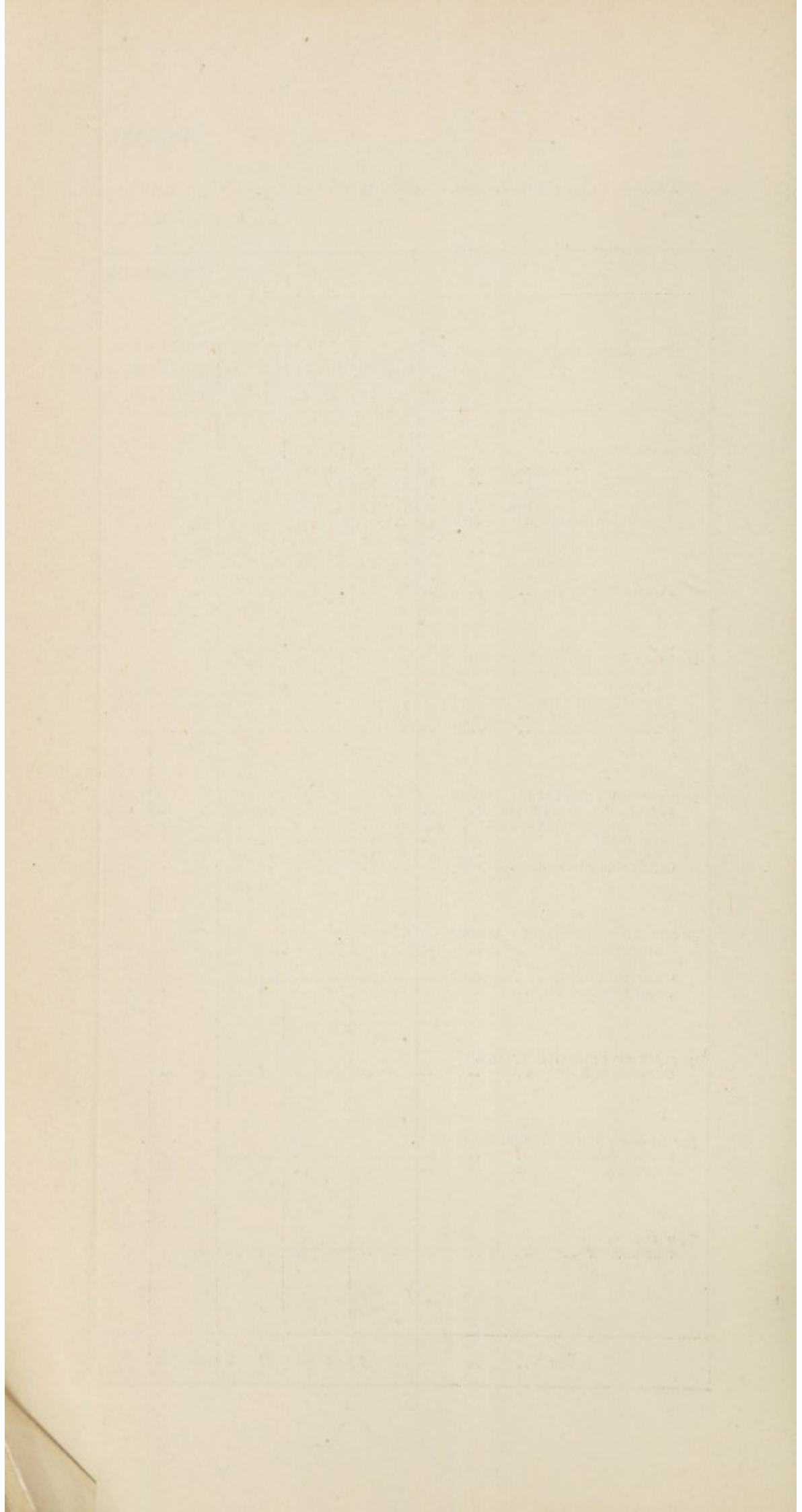


TABLE XL. (continued). *Mental Hospitals.—Showing the principal cause of death in each death during the year 1920, together with the ages at death in quinquennial periods. (D 2).*

PRINCIPAL CAUSES OF DEATH.	AGES AT DEATH IN QUINQUENNIAL PERIODS.														Totals		
															70 and over		
	Less than 10	10—14	15—19	20—24	25—29	30—34	35—39	40—44	45—49	50—54	55—59	60—64	65—69	M. F.	M. F.	M. F. T.	
GENERAL DISEASES—																	
Septicæmia .. .. .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Pulmonary tuberculosis ..	1	1	..	3	..	2	..	..	..	..	..	..	..	..	..	4	8
Acute rheumatism .. .. .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1
DISEASES OF NERVOUS SYSTEM—																	
Epilepsy	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
DISEASES OF CIRCULATORY SYSTEM—																	
Pericarditis .. .. .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1
Valvular disease of heart ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1
DISEASES OF RESPIRATORY SYSTEM—																	
Broncho-pneumonia .. .. .	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1
DISEASES OF DIGESTIVE SYSTEM—																	
Gastro-enteritis .. .. .	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1
DISEASES OF URINARY SYSTEM—																	
Chronic Bright's disease ..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1
OLD AGE—																	
Senility .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Totals	2	1	1	2	3	3	..	..	..	1	..	..	..	..	1	10	21

TABLE XL. (continued). Mental Hospitals.—Showing the principal cause of death in each death during the year 1920, together with the ages at death in quinquennial periods. (D 2.)

LEAVESDEN MENTAL HOSPITAL.																												
PRINCIPAL CAUSES OF DEATH.	AGES AT DEATH IN QUINQUENNIAL PERIODS.															Totals												
	Less than 10	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70 and over														
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	T.											
GENERAL DISEASES—																												
Dysentery		1							1	1		3	1	1	1	2	7	9										
Septicæmia		1											1				2	2										
Pulmonary tuberculosis			3	3	3	1	2	2	2	3	2	1	2	2	1	1	23	24	47									
Tuberculosis of cranium			1														1	1										
Tuberculous meningitis			1														1	1										
Chronic meningitis		1															1	1										
Tuberculous peritonitis																	1	1										
Tuberculous enteritis																	1	1										
Cancer								1									1	1										
Pernicious anæmia						1											1	1										
DISEASES OF NERVOUS SYSTEM—																												
Inanition due to congenital defect of brain		1															1	1										
General paralysis of the insane		1	1														2	2										
Status epilepticus			1	1						1							2	4										
Cerebral softening												1					1	1										
DISEASES OF CIRCULATORY SYSTEM—																												
Valvular disease of heart							1		1		1	1	3		2	1	2	3	10	13								
Fatty degeneration of heart															1		1	4	5									
Pericarditis																	1	1										
Endocarditis			1														1	1										
Cerebral hæmorrhage								1					1	2	1		1	2	4	6								
DISEASES OF RESPIRATORY SYSTEM—																												
Bronchiectasis								1										1	1									
Pleurisy																1		1	1									
Catarrhal pneumonia		1																1	1									
Lobar pneumonia			1	1		1							2	1	1	1	2	3	7	10								
DISEASES OF DIGESTIVE SYSTEM—																												
Cirrhosis of liver			1															1	1									
DISEASES OF URINARY SYSTEM—																												
Chronic nephritis												1	1		2			3	3									
Pyonephrosis												1						1	1									
OLD AGE—																												
Senile decay													1	1	2	2	2	1	5	6								
Totals	2	4	6	7	5	5	3	1	3	2	2	8	2	5	2	5	2	3	9	4	12	4	10	6	12	47	83	130



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No.	Name	Age
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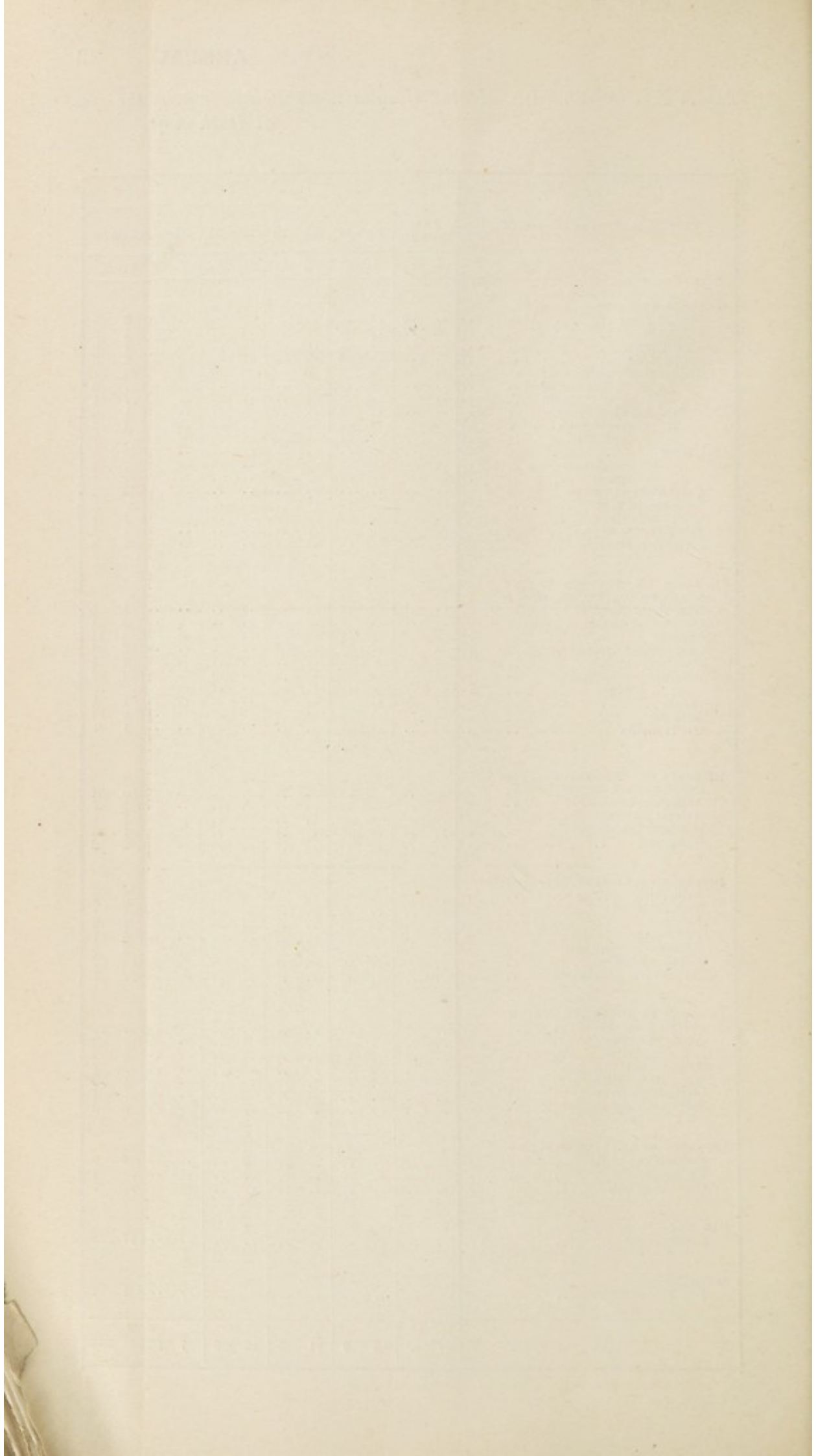


TABLE XLI.—Showing the form of mental disorder on 31 December, 1920, of those on the registers at that date at the Mental Hospitals. (E 2.)

Forms of mental disorder on 31 December, 1920.	Caterham Mental Hospital.		Darenth Training Colony.		Fountain Mental Hospital.		Leavesden Mental Hospital.		Tooting Bec Mental Hospital.			Tooting Bec Receiving Home for Children.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.			
1. Intellectual { a. With epilepsy b. Without epilepsy	117	114	111	95	43	51	137	145	6	6	232	6	12			
2. Moral	345	423	492	396	89	144	373	381	49	56	754	7	14			
1. Insanity with epilepsy	6	30	36	..	..	..	19	33	11	6	52	11	17
2. General paralysis of the insane	..	1	1	..	..	..	..	5	6	1	5	7	7
3. Insanity with grosser brain lesions	..	2	2	..	..	..	6	3	..	7	9	7	7
4. Acute delirium	..	..	..	..	..	..	..	..	1	1	..	1	2
5. Confusional insanity	2	1	3	..	..	..	..	..	..	2	..	2	2
6. Stupor	..	..	..	..	..	..	..	..	..	..	..	..	..
7. Primary dementia	17	13	30	..	..	..	..	..	18	9	..	27	..
8. Mania { a. Recent b. Chronic c. Recurrent	19	60	79	..	..	..	1	21	1	5	22	6	6
9. Melancholia { a. Recent b. Chronic c. Recurrent	12	40	52	..	..	..	2	11	3	7	13	17	24
10. Alternating insanity	1	..	1	..	..	..	2	2	..	..	4	..	..	
11. Delusional insanity { a. Systematised b. Non-systematised	..	11	11	..	..	..	9	13	12	12	22	37	49
12. Volitional insanity { a. Impulse b. Obsession c. Doubt	..	18	29	..	..	..	4	3	7	4	7	6	10
13. Moral insanity	15	45	60	..	..	..	11	62	260	385	73	645	8
14. Dementia { a. Senile b. Secondary	81	131	212	4	6	..	157	283	440	8	440	8	8			
Totals	626	891	1,517	575	495	1,076	722	967	1,689	375	546	921	7	8	15	
Prospect of mental recovery { Favourable Doubtful Unfavourable	30	20	50	7	8	15

Insanity occurring later in life.

Constitutional or infantile mental deficiency (idiocy or imbecility) occurring early in life as it can be observed.

TABLE XLI. (continued).—Showing the form of mental disorder on 31 December, 1920, of those on the registers at that date at the mental hospitals. (E 2.)

SUMMARY.

Forms of mental disorder on 31 December, 1920.		M.	F.	T.
Congenital or infantile mental deficiency (idiotcy or imbecility) occurring as early in life as it can be observed.	1. Intellectual { a. With epilepsy	414	412	826
	{ b. Without epilepsy	1,325	1,407	2,732
	2. Moral .. .. .	..	..	..
Insanity occurring later in life.	1. Insanity with epilepsy	36	69	105
	2. General paralysis of the insane	6	7	13
	3. Insanity with grosser brain lesions	6	12	18
	4. Acute delirium	1	1	2
	5. Confusional insanity	2	3	5
	6. Stupor .. .. .	..	..	..
	7. Primary dementia	35	22	57
	8. Mania { a. Recent	1	1	?
	{ b. Chronic	21	86	107
	{ c. Recurrent .. .. .	..	3	3
	9. Melancholia { a. Recent .. .. .	..	3	3
	{ b. Chronic	21	68	89
	{ c. Recurrent	2	2	4
	10. Alternating insanity	1	..	1
11. Delusional insanity { a. Systematised	21	61	82	
{ b. Non-systematised	19	27	46	
12. Volitional insanity { a. Impulse .. .. .	..	..	..
{ b. Obsession .. .. .	..	..	..
{ c. Doubt .. .. .	..	..	..
13. Moral insanity .. .. .	..	..	..
14. Dementia { a. Senile	286	492	778	
{ b. Secondary	240	426	666	
Totals		2,437	3,102	5,539
Prospect of mental recovery	{ Favourable .. .. .	..	..	..
	{ Doubtful	30	20	50
	{ Unfavourable	1,700	2,464	4,164

TABLE XLIII.

Showing the admissions, deaths and discharges of feeble-minded patients during the year 1920.

	DARENTH TRAINING COLONY.				BRIDGE TRAINING HOME.				EDMONTON EPILEPTIC COLONY.				
	M.	F.	Total.	Total.	M.	F.	Total.	Total.	M.	F.	Total.	Total.	
Remaining 31 December, 1919	...	254	310	...	...	...	132	...	...	...	24	...	...
Direct admissions	...	39	37	...	...	...	11	...	...	...	...	...	...
Transfers from other institutions of the Board for feeble-minded	...	1	...	...	...	...	16	...	...	...	...	...	...
Total cases under treatment during the year	641	...	...	...	...	159	...	...	...	24
Discharged	...	17	8	...	...	...	7	...	...	...	1	...	...
Transferred to other institutions of the Board for feeble-minded	...	16	...	...	...	...	1	...	...	...	...	...	...
Died	...	3	4	...	...	...	...	...	...	...	...	...	...
Total transferred, discharged, and died	48	8	1
Remaining 31 December, 1920	...	258	335	593	151	23	23

* Includes 2 escapes.

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TABLE XLII. (continued).—Summary of admissions, deaths, and discharges of feeble-minded patients during 1920.

	M.	F.	Total.	M.	F.	Total.
Remaining 31 December, 1919				410	310	720
Direct admissions	50	37	87	50	37	87
Total cases under treatment during the year ...				460	347	807
Discharged	25	8	33			
Died... ..	3	4	7			
Total discharged and died				28	12	40
Remaining 31 December, 1920				432	335	767

TABLE XLIII.

Showing the admissions, transfers, discharges, and deaths of patients admitted under the provisions of the Mental Deficiency Act, 1913, during 1920.

Mental Hospital.	Remain- ing 31 Dec., 1919.			Admitted.			Transfers from other mental hospitals			Total cases under treatment during the year.			Dis- char- ed.			Trans- fer- red to other mental hospitals.			Deaths.			Remain- ing 31 Dec., 1920.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Caterham	10	35	45	93	64	157	84	12	96	187	111	298	5	6	11	9	1	10	3	5	8	170	99	269
Darenton T.C.	20	182	402	89	98	187	4	2	6	313	282	595	17	16	33	37	38	75	4	2	6	255	226	481
Fountain... ..	89	74	163	86	118	204	6	17	23	181	209	390	9	2	11	68	15	83	7	18	25	97	179	276
Leavesden	69	25	94	31	9	40	22	23	45	122	87	179	8	3	11	2	...	2	8	3	11	104	51	155
Totals	338	316	704	299	289	588	116	54	170				39	27	66	116	54	170	22	23	45	626	55	1181

* Includes 3 escaped cases, and 10 on leave.

TABLE XLIII. (continued).—Summary of admissions, discharges, and deaths of patients during the year 1920, admitted under the provisions of the Mental Deficiency Act, 1913.

	M.	F.	Total.	M.	F.	Total.
Remaining 31 December, 1919	388	316	704	...	...	...
Total cases admitted during the year	299	289	588			
Total cases under treatment during the year ...				687	605	1292
Discharged during the year	39	27	66			
Died	22	23	45			
Total cases discharged and died during the year ...				61	50	111
Remaining 31 December, 1920				626	555	1181

TABLE XLIV.—Showing the admissions, deaths, and discharges of sane epileptic patients for the year 1920.

	EDMONTON EPILEPTIC COLONY.					
	M.	F.	T.	M.	F.	T.
Remaining 31 December, 1919	...	...	...	239	20	259
Direct admissions	67	3	70	67	3	70
Total cases under treatment during the year	...	...	...	306	23	329
Discharged	47	3	50	...	...	...
Died	5	...	5	...	...	...
Total discharged, died	...	...	...	52	3	55
Remaining 31 December, 1920	...	...	...	254	20	274

TABLE XLV.—VENEREAL DISEASES.

Sheffield Street Hospital (opened 21 June, 1920), for women suffering from venereal diseases.

Table of admissions, discharges, deaths, and number born in the hospital during 1920.

	Women.	Babies.
Remaining under treatment 31 December, 1919	—	—
Admissions	103	1
Born in hospital	—	3
Discharges	68	2
Deaths	—	—
Remaining under treatment 31 December, 1920	35	2

TABLE XLV. (continued).—VENEREAL DISEASES.

Thavies Inn institution for parturient women suffering from venereal diseases.

Table of admissions, discharges, deaths, and number born in the institution during 1920.

	Women.	Babies.
Remaining under treatment 31 December, 1919	16	6
Admissions	69	—
Born in hospital	—	66
Discharges	75	69
Deaths	—	1
Remaining under treatment 31 December, 1920	10	2

TABLE XLVI.—OPHTHALMIA NEONATORUM.

Showing the admissions, discharges, and deaths of patients during 1920.

Hospital.	Remaining 31 Dec., 1919.			Admissions.			Discharges.			Deaths.			Remaining 31 Dec., 1920.		
	Women.	Babies.	Total.	Women.	Babies.	Total.	Women.	Babies.	Total.	Women.	Babies.	Total.	Women.	Babies.	Total.
St. Margaret's	7	31	38	138	252	390	134	256	390	—	9	9	11	18	29

TABLE XLVII.—Return of work of the Land Ambulance Service during 1920.

PARTICULARS OF WORK.		Patients, &c. removed.	Journeys made.	Miles run.
I.—INFECTIOUS CASES.				
REMOVALS FROM HOME—				
To the Board's hospitals	Fever cases	34,285	32,608	406,287
	Smallpox cases ... ..	...	...	...
	Tuberculous cases	244	200	4,107
To the Board's wharves	Venereal cases	67	47	601
	Fever cases	1,823	1,774	27,186
To general hospitals	Smallpox cases	57	49	1,223
OTHER REMOVALS—				
From general hospitals to homes, owing to want of room in the Board's hospitals, or to the patients being extra metropolitan residents				
		402	396	3,390
Patients returned home, mistaken diagnosis	Fever cases	21	21	200
	Smallpox cases	6	5	81
Patients sent for but not removed (lost journeys) ... ..		...	728	5,908
Patients' friends brought from homes to hospitals ... ..		...	...	...
" " taken from hospitals home ... ..		...	2	22
TRANSFERS BETWEEN HOSPITALS—				
Fever patients to	Northern	4,129	481	13,589
	Southern	8,689	780	31,216
	Joyce Green	2,106	263	9,960
Transfers between other hospitals of the Board		3	3	64
Other transfers between hospitals and wharves		222	42	595
DISCHARGED PATIENTS—				
From hospitals to homes				
		457	378	6,274
To ambulance stations	From Northern	3,904	271	10,131
	" Southern	8,072	478	22,524
	" Joyce Green	4,160	307	11,616
From ambulance stations to ambulance stations		655	212	3,442
" " homes		12	9	57
" wharves to ambulance stations		831	70	1,144
" " homes		1	1	19
CONVEYANCE OF PATIENTS—				
To places other than the Managers' institutions (private removals)		4,194	2,955	59,403
Lost journeys ... ..		...	66	791
		74,340	42,242	612,830
II.—NON-INFECTIOUS CASES.				
BOARD'S CASES—				
Imbeciles		960	133	6,233
Ringworm (children)		906	113	2,087
Ophthalmia (children)		20	12	259
Defective children		13	7	341
Sick and debilitated children		1,467	232	9,723
Casuals		32	29	260
Staff and other persons		59	42	676
Lost journeys ... ..		...	207	1,800
Other cases		82	23	1,058
PRIVATE CASES—				
To other than the Managers' institutions (private removals)		14,632	8,740	127,870
Naval and military cases		1	1	12
		18,181	9,539	150,319
III.—OTHER WORK—				
CONVEYANCE OF COMMITTEES		154	51	598
CONVEYANCE OF STAFF		117	48	781
SERVICE REQUIREMENTS AND CONVEYANCE OF GENERAL STORES ... ..		...	3,057	69,658
		271	3,156	71,037
Total for 1920		92,792	54,937	841,186
" 1919		60,068	39,022	580,424
" 1918		43,238	30,276	417,697
" 1917		42,019	29,022	430,722
" 1916		53,467	30,906	468,327
" 1915		66,807	38,848	590,448
" 1914		81,305	43,269	634,332
" 1913		70,266	35,883	481,239
" 1912		56,964	30,390	419,207
" 1911		49,183	28,506	355,945
Totals for 1886 to 1910 inclusive		833,331	542,255	5,871,339
Grand totals		1,449,440	904,504	11,090,867

In addition to the above work 91,667 miles were run by motor vehicles attached to outlying institutions.

TABLE XLVIII.—RIVER SERVICE.

Number of patients, visitors, staff, etc., conveyed to and from Long Reach during the year 1920.

MONTH.	Patients conveyed to Long Reach.	Recovered cases conveyed from Long Reach.	Visitors conveyed to and from Long Reach (including Managers).	Staff, etc., conveyed to and from Long Reach.	Totals.
January	47	147	..	38	232
February	34	97	2	27	160
March	9	3	7	20	39
April	16	14	..	20	50
May	2	12	1	6	21
June	6	..	11	13	30
July .. .. .	..	2	..	..	2
August .. .. .	..	..	..	..	..
September	38	160	4	42	544
October	707	274	6	74	1,061
November	848	476	..	86	1,410
December	599	675	..	75	1,349
Totals for 1920	2,606	1,860	31	401	4,898
Totals for 1919	202	391	40	161	794
Totals for 1918	210	37	19	137	403
Totals for 1917	426	..	24	246	696
Totals for 1916	994	..	53	365	1,412
Totals for 1915	1,552	563	538	106	2,759
Totals for 1914	4,619	2,963	2,750	625	10,957
Totals for 1913	1,368	1,381	19	449	3,217
Totals for 1912	5	4	5	287	301
Totals for 1911	61	50	21	365	497
Totals for 1910	7	11	37	402	457
Totals for 1909	15	10	19	829	873
Totals for 1908	1	1	13	799	814
Totals for 1907	458	2	5	412	877
Totals 1884 to 1906 (inclusive)	26,143	22,336	13,905	34,853	97,237
Grand totals	38,667	29,609	17,479	40,437	126,192

STEAMERS.

STEAMER	Fires alight.		Under steam.		Under way.		Coal consumed.		Number of days when steam raised.	Distance run. Miles.
	Hours.	Mins.	Hours.	Mins.	Hours.	Mins.	Tons.	Cwts.		
"Albert Victor"	3,178	..	2,077	..	113	49	59	..	42	1,221
"Geneva Cross" .. .. .	..	..	..	..	..	..	..	..	..	..
"Maltese Cross"	3,129	..	1,370	..	230	36	94	8	81	2,346
"White Cross"	7,673	..	4,713	..	186	36	55	..	78	1,974
"Red Cross"	1,056	..	414	..	71	20	60	12	29	765
Totals	15,036	..	8,574	..	602	21	269	..	230	6,306

Quantity of stores, parcels, etc., conveyed to and from Long Reach.

Weight, 22 tons, 6 cwt., 1 qr., 14 lbs.

TABLE XLIX.—SICK CHILDREN.
QUEEN MARY'S HOSPITAL.—GENERAL STATISTICS.

Year.	Admitted.	Total under treatment.	Discharged.	Transferred to other institutions of the Board.	Died.	Remaining at end of year.
1920	695	1,319	455	61	57	746

TABLE L.

CHILDREN'S INFIRMARY,

DISEASES FOR WHICH CHILDREN WERE ADMITTED TO THE CHILDREN'S INFIRMARY.

A.—SURGICAL.

TUBERCULAR DISEASE—				RESPIRATORY SYSTEM—			
Spine	..	..	1	Empyema	..	..	3
Glands	..	..	2	Enlarged Tonsils	..	..	10
Fingers	..	..	1				
DEFORMITIES—				DIGESTIVE SYSTEM—			
Bow legs	..	..	3	Rectal Polypus	..	..	1
DISEASES OF THE EAR—				Total			
Otitis media	..	..	235				256

B.—MEDICAL.

DISEASES OF METABOLISM—				URINARY SYSTEM—			
Marasmus	..	..	32	Albuminuria	..	..	2
Debility	..	..	17	Nephritis	..	..	1
Anæmia	..	..	3				
RESPIRATORY SYSTEM—				NERVOUS SYSTEM—			
Bronchitis	..	..	2	Infantile paralysis	..	..	5
Broncho-pneumonia	..	..	1	Chorea	..	..	31
CIRCULATORY SYSTEM—				GENERAL—			
Valvular disease	..	..	27	Rickets	..	..	22
Endocarditis	..	..	13	Rheumatism	..	..	9
Congenital heart	..	..	2				
DIGESTIVE SYSTEM—				Total			
Enteritis	..	..	3				170

TABLE LII.

Summary of admissions, discharges, and deaths at the hospitals, schools, and homes for sick children during 1920.

Institution.	Remaining at beginning of year.	Admissions.		Discharges.		Deaths.	Remaining 31 Dec., 1920.
		Direct.	From other institutions of the Board.	Direct.	To other institutions of the Board.		
I. HOSPITALS FOR CHILDREN.							
(i) Queen Mary's Hospital for Children, Carshalton, Surrey	624	590	105	455	61	57	746
(ii) The Children's Infirmary, Cleveland Street, W.	158	355	71	285	118	16	165
Totals	782	945	176	740	179	73	911
II. SEASIDE AND CONVALESCENT HOME.							
S. Anne's Home, Herne Bay	106	404	94	446	64	2	92
*White Oak, Swanley (part)	...	98	38	94	9	1	32
Totals	106	502	132	540	73	3	124
III. CONTAGIOUS DISEASES OF THE SKIN OR SCALP.							
Goldie Leigh Homes, Abbey Wood	170	524	114	476	133	5	194
IV. OPHTHALMIA.							
White Oak School, Swanley	160	135	26	114	6	1	200
Grand totals	1,218	2,106	448	1,870	391	82	1,429

* Opened 31 July, 1920.

† Includes the tuberculous children in Table XXX.

TABLE LIII.—Summary of direct admissions in 1920 of children to the several hospitals, schools and homes under the Board's control, according to Poor Law areas.

Parishes and unions.	Hospitals for children.					Seaside and convalescent home.	Home for contagious diseases of the scalp.	Ophthalmia and convalescent.		Total.
	Queen Mary's Hospital, Carshalton.		The Children's Infirmary, Cleveland St.	Princess Mary's Hospital, Margate.		St. Anne's Home, Herne Bay.	Goldie Leigh Homes, Abbey Wood.	White Oak School, Swanley.		
	Under 3	Over 3		Males	Fe-males			Ophth	Con	
Bermondsey ...	2	36	6	3	5	27	11	5	6	101
Bethnal Green ...	—	3	1	—	1	3	31	1	1	41
Camberwell ...	—	12	4	4	1	29	17	1	10	78
Chelsea ...	—	4	—	2	—	5	7	—	1	19
Fulham ...	2	11	12	5	4	22	7	3	5	71
Greenwich ...	—	9	10	2	4	19	20	3	4	71
Hackney ...	—	19	6	2	1	9	15	2	8	62
Hammersmith ...	2	10	7	2	3	13	20	4	—	61
Hampstead... ..	1	—	1	—	—	1	2	—	—	5
Holborn ...	4	19	2	3	1	32	26	7	6	100
Islington ...	5	34	11	3	4	19	36	6	6	124
Kensington... ..	2	13	3	2	5	9	31	10	3	78
Lambeth ...	3	30	41	4	6	50	63	3	6	206
Lewisham ...	—	11	6	3	2	10	6	1	—	39
London, City of ...	—	—	—	—	—	—	1	1	—	2
Mile End ...	—	11	—	—	1	15	8	1	9	45
Paddington ...	6	20	12	2	2	14	22	6	3	87
Poplar ...	9	23	44	2	5	39	10	30	8	170
St. George-in-East ...	—	—	2	—	—	2	3	—	—	7
St. Marylebone ...	—	15	4	1	—	6	8	3	2	39
St. Pancras... ..	2	5	1	2	2	6	37	3	2	60
Shoreditch ...	—	12	6	1	3	5	38	7	5	77
Southwark ...	2	47	17	5	—	21	21	10	3	126
Stepney ...	2	4	19	2	1	7	2	3	3	43
Wandsworth ...	7	39	29	4	1	15	18	6	2	121
Westminster, City of ...	3	3	12	2	—	12	20	3	—	55
Whitechapel ...	—	3	2	—	1	5	4	3	1	19
Woolwich ...	—	10	7	3	1	5	23	1	4	54
L.C.C. ...	4	109	86	86	54	—	—	—	—	339
Extra-Metropolitan ...	—	17	4	1	1	4	17	12	—	56
Non-Poor Law ...	—	5	—	—	—	—	—	—	—	5
Totals ...	56	534	355	146	109	404	524	135	98	2,361

TABLE LV.—TRAINING SHIP "EXMOUTH."

Number of boys admitted from each of the metropolitan parishes and unions and total number of boys admitted from country unions and other sources during 1920 and during the whole time the ship has been established.

Year ending 31 Dec., 1920.	PARISH OR UNION.	From 31 March, 1876, to 31 Dec., 1920.
	Number of boys in ship when taken over by Managers	12
	<i>Metropolitan parishes and unions—</i>	
—	Bermondsey	318
2	Bethnal Green	399
9	Camberwell	839
—	Chelsea	181
3	Fulham	392
—	George, St., in-the-East	138
1	Greenwich	510
—	Hackney	400
3	Hammersmith	64
1	Hampstead	44
1	Holborn	389
2	Islington	475
5	Kensington	264
9	Lambeth	565
2	Lewisham	805
—	London, City of	139
5	Marylebone, St.	576
—	Mile End	274
—	Paddington	215
1	Pancras, St.	545
—	Poplar	498
—	Shoreditch	168
2	Southwark	589
—	Stepney	129
2	Wandsworth	460
—	Westminster	466
—	Whitechapel	206
13	Woolwich	531
61		10,591
29	<i>London County Council</i>	96
17	<i>Non-Poor Law cases</i>	119
109	<i>Country unions</i>	3,218
216	Andover 1, Barnsley 1, Basford 2, Bedford 1, Birmingham 1, Blofield 1, Brackley 1, Bradford 1, Brighton 3, Bromley 1, Brentford 15, Bristol 1, Bucklow 1, Burton-on-Trent 1, Colne 2, Canterbury 1, Chipping Norton 2, Croydon 4, Colchester 1, Dartford 3, Derby 3, Eastbourne 1, Edmon-ton 2, Fylde 1, Godstone 1, Gravesend 1, Great Yarmouth 1, Guildford 2, Hemel Hempstead 1, Hartismere 3, Hastings 3, Henley-on-Thames 1, Hitchin 2, Isle of Wight 1, Kingston-on-Hall 3, Kingston-on-Thames 1, Leeds 1, Leighton Buzzard 2, Leicester 1, Mitford and Launditch 2, Mutford and Lothingland 2, Nottingham 2, Northampton 1, North Brierly 1, Peshore 1, Plomsgate 1, Pontypridd 1, Romford 3, Rugby 1, Sculcoates 1, Seisdon 1, Solchill 1, Stockport 2, Strood 2, Tamworth 1, Teesdale 1, Tetbury 1, Thame 2, Wantage 1, Whitehaven 1, Weatherby 1, West Ham 1, Weymouth 1, Willesden 1, Worcester 1.	14,024

CHART No. LVIIa. showing the number of inmates in Metropolitan Casual Wards on Friday night in each week during the 9 years ended 1920.

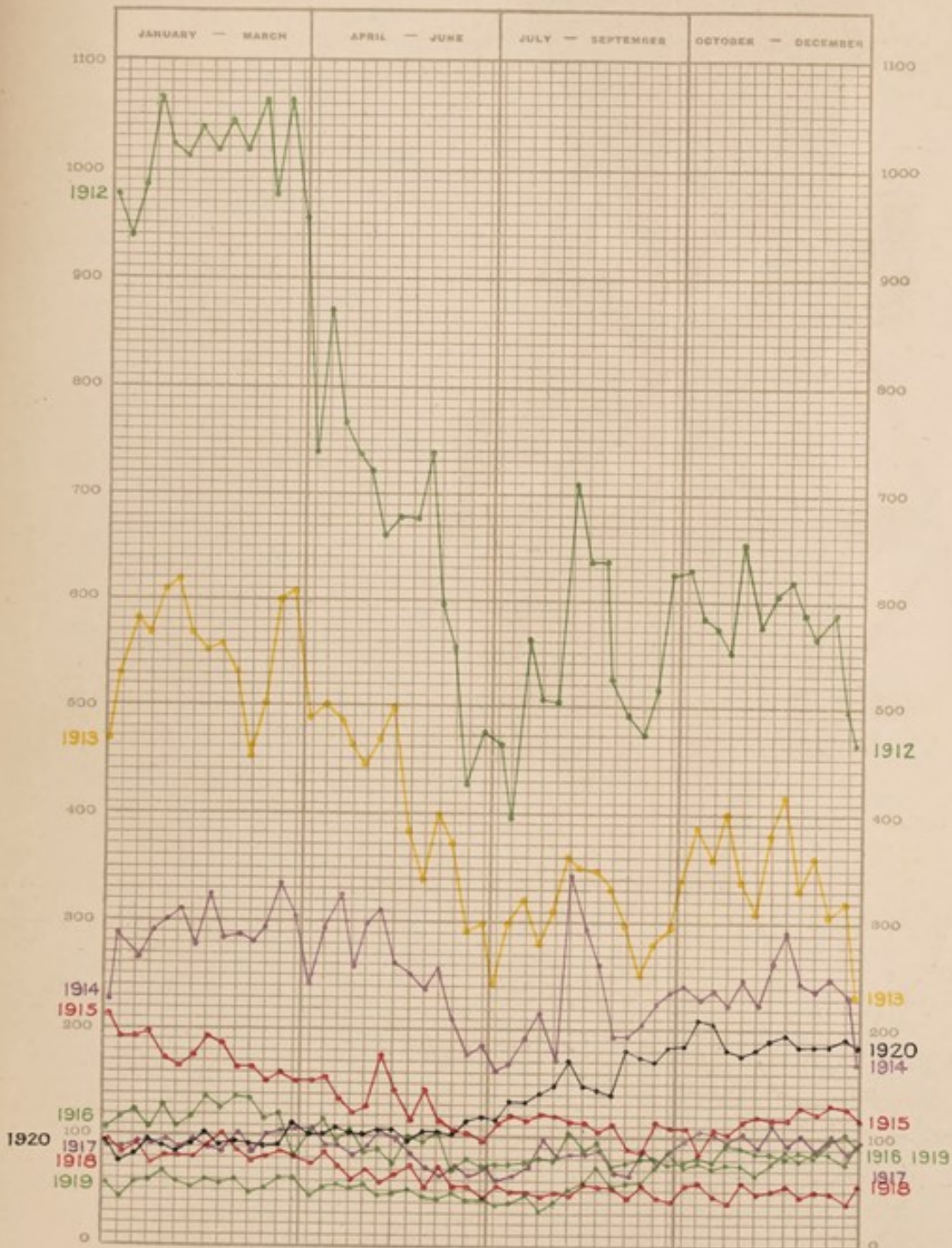


TABLE LVI.—CASUAL WARDS.
Admissions and discharges during 1920 (casual poor).

CASUAL WARDS.	Remaining 1 Jan., 1920.				Admissions.				Discharges.				Remaining 31 Dec., 1920.			
	Men.	Women.	Children.	Totals.	Men.	Women.	Children.	Totals.	Men.	Women.	Children.	Totals.	Men.	Women.	Children.	Totals.
	Bethnal Green
Hackney	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stepney	..	..	..	7	1,928	104	3	2,035	1,901	105	3	2,009	33	..	..	33
Poplar	6	1	..	7	1,472	176	15	1,663	1,457	175	..	1,647	20	3	..	23
Holborn	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bloomsbury	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chelsea	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fulham	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
†Wandsworth	..	..	..	..	21	..	..	21	14	..	..	14	7	..	..	7
†St. Pancras	6	..	..	6	1,812	33	8	1,853	1,791	33	8	1,832	27	..	..	27
St. Marylebone	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paddington	16	..	..	16	3,500	258	26	3,784	3,475	253	25	3,753	41	..	1	47
*Lambeth	34	..	..	34	3,908	..	..	3,908	3,911	..	..	3,911	31	..	..	31
Southwark	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Camberwell	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Greenwich	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lewisham	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Woolwich	11	1	..	12	2,112	90	12	2,214	2,100	90	12	2,202	23	1	..	24
Totals	78	4	..	82	14,753	661	64	15,478	14,649	656	63	15,368	182	9	1	192
Totals for 1919	52	5	..	55	5,583	335	17	5,935	5,557	334	17	5,908	78	4	..	82

* Used for men only.

† Used for men only as from and including 14 November, 1920.

‡ Re-opened for men only 19 December, 1920.

TABLE LVIII.—Table showing totals of antitoxin, &c., supplied and examinations made from 1909 to 1920.

Year.	ANTITOXIN SUPPLIED.				MEDIA SUPPLIED.			BACTERIOLOGICAL EXAMINATIONS.						
	Number of doses each containing 3,000 units.	Number of doses each containing 4,000 units.	Number of doses each containing 6,000 units.	Total number of antitoxin units supplied.	Serum tubes.	Swabs.	Other media tubes.	Diphtheria.	Typhoid.		Agglutinations.		Sputa.	Other examinations.
									Faeces.	Urine.	Widal.	Para-typhoid		
1909	—	20,342	12	81,980,000	38,625	20,038	Normal horse serum 22 litres	683	953	949	542	15	—	99
1910	—	16,777	—	68,488,000	28,235	15,323	774	551	1,226	1,223	663	7	—	121
1911	—	26,358	—	107,172,000	37,516	20,092	987	616	479	485	826	8	—	146
1912	—	24,234	—	97,816,000	42,542	30,712	618	1,736	393	400	2,300	10	—	475
1913	—	27,130	—	108,520,000	48,725	34,262	2,015	1,388	83	81	1,046	29	—	239
1914	—	37,115	—	148,560,000	54,450	41,550	383	999	70	70	520	92	—	135
1915	—	40,111	—	160,444,000	52,550	27,660	584	1,105	260	253	507	140	—	261
1916	—	37,251	—	150,084,000	44,311	19,600	214	510	58	59	384	171	—	333
1917	—	36,237	—	144,948,000	38,100	21,806	138	445	16	15	327	166	—	316
1918	—	32,250	—	129,000,000	31,050	27,850	45	387	13	12	306	215	—	287
1919	—	40,273	—	161,092,000	41,250	36,412	63	168	2	3	296	248	—	226
1920	74,242	5,200	—	243,526,000	78,330	68,574	263	619	4	4	258	236	—	231

TABLE LIX.—*Results of bacteriological examinations, 1920.*

(i) DIPHTHERIA.	Totals.
Virulent diphtheria bacilli	23
Probable non-virulent diphtheria bacilli	22
Rods present resembling diphtheria bacilli unable to be separated in a pure culture	120
No rods resembling diphtheria bacilli present	404
Total	569

(ii) AGGLUTINATION.				
	Widal.	Paratyphoid "A."	Paratyphoid "B."	Totals.
Complete clumping in all dilutions ($\frac{1}{20}$; $\frac{1}{40}$; $\frac{1}{80}$)	3	—	—	3
Complete clumping in $\frac{1}{20}$ and $\frac{1}{40}$ dilutions, and incomplete clumping in $\frac{1}{80}$	6	—	4	10
Complete clumping $\frac{1}{80}$ dilution only, and incomplete clumping in $\frac{1}{20}$ and $\frac{1}{40}$ or in $\frac{1}{80}$ only ..	10	—	6	16
Incomplete clumping $\frac{1}{20}$ and $\frac{1}{40}$ or $\frac{1}{80}$ only ...	65	20	66	151
Negative in all dilutions	174	216	160	550
Totals	258	236	236	730

(iii) FÆCES AND URINE.			
	Positive.	Negative.	Totals.
Fæces	—	4	4
Urine	—	4	4

TABLE LX.—*Summary of bacteriological examinations, 1920.*

Institutions.	Diphtheria.	Typhoid.		Widal reaction.	Para-typhoid reaction A. B.	Sputa.	Other examinations.	Totals.
		Fæces.	Urine.					
Mental hospitals ...	22	1	1	3	1	—	19	47
Infectious hospitals ...	157	3	3	254	234	243	83	977
Children's institutions	428	—	—	1	1	739	90	1,259
Sanatoria	11	—	—	—	—	5,942	39	5,992
Totals	*620	4	4	258	236	6,924	231	8,277*

* Total includes 2 examinations carried out for Paddington Public Health Department.

MEDICAL SUPPLEMENT.

TRACHEOTOMY AND INTUBATION STATISTICS, 1920.

TABLE LXI.—Number of cases and deaths at different ages of all cases of tracheotomy performed for primary diphtheria, secondary diphtheria, also for other causes, at all hospitals, exclusive, however, of those cases which were previously intubated. (Cases operated on before admission are not included in body of table, but a footnote is made giving the number of cases and deaths.) Compiled from cases completed during the year, that is, cases that have been discharged, or have died, or have been transferred from the acute to the convalescent infectious hospitals during the year 1920.

AGES.	PRIMARY DIPHTHERIA.			SECONDARY DIPHTHERIA.			OTHER CAUSES.		
	Cases.	Deaths.	Mortality per cent.	Cases.	Deaths.	Mortality per cent.	Cases.	Deaths.	Mortality per cent.
Under 1	30	17	56.66	..	..	..	..	..	..
1 to 2	42	21	50.00	1	1	100.00	2	0	..
2 ,, 3	39	16	41.02	3	2	66.66	1	1	..
3 ,, 4	46	13	28.26	1	0	0.00	1	0	..
4 ,, 5	46	18	39.13	1	1	100.00	2	0	..
5 ,, 6	26	8	30.76	..	..	..	..	..	..
6 ,, 7	18	5	27.77	..	..	..	..	..	..
7 ,, 8	9	2	22.22	..	..	..	..	..	..
8 ,, 9	6	2	33.33	..	..	..	..	..	..
9 ,, 10	5	0	0.00	..	..	..	..	..	..
Over 10	6	4	66.66	..	..	..	..	..	..
Total	273	106	38.82	6	4	66.66	6	1	..

Tracheotomy before admission—

Cases.	Deaths.	Mortality per cent.
28 ..	6 ..	21.42

TABLE LXII.—Summary of cases of mistaken diagnosis admitted during 1920; also of deaths during 1920. Shows the number of cases admitted, in which the diagnosis was not confirmed on admission or after a period of observation.

Disease as certified on admission but not confirmed.	BROOK HOSPITAL.		EASTERN HOSPITAL.		GROVE HOSPITAL.		JOYCE GREEN HOSPITAL.		NORTH-EASTERN HOSPITAL.		NORTH-WESTERN HOSPITAL.		PARK HOSPITAL.		SOUTH-EASTERN HOSPITAL.		SOUTH-WESTERN HOSPITAL.		WESTERN HOSPITAL.		TOTAL.	
	No. of cases.	No. of deaths.	No. of cases.	No. of deaths.	No. of cases.	No. of deaths.	No. of cases.	No. of deaths.	No. of cases.	No. of deaths.	No. of cases.	No. of deaths.	No. of cases.	No. of deaths.	No. of cases.	No. of deaths.	No. of cases.	No. of deaths.	No. of cases.	No. of deaths.	No. of cases.	No. of deaths.
Scarlet fever..	106	2	65	1	65	..	76	..	127	..	188	2	68	1	121	2	73	3	42	2	931	13
Diphtheria ..	134	2	342	9	84	1	40	..	322	3	297	4	139	6	177	2	66	1	91	6	1,692	34
Enteric fever ..	3	1	28	5	..	..	..	..	..	..	11	2	1	..	6	4	28	8	7	4	84	24
Typhus fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Measles ..	1	..	3	..	..	..	..	..	..	..	8	1	2	..	..	..	13	1	6	..	33	3
Whooping cough ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	6	1	7	1
Cerebro-spinal fever ..	2	1	8	2	1	1	2	2	2	1	6	2	1	..	2	1	8	7	5	4	37	21
Acute anterior polio-myelitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	2
Encephalitis lethargica ..	2	1	3	..	..	..	..	..	1	..	3	1	..	..	1	..	..	..	1	..	11	2
Puerperal fever ..	1	..	..	..	..	..	..	..	..	..	2	..	..	..	4	..	..	..	..	..	17	..
Chickenpox ..	1	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..
Rubella ..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..
Erysipelas ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Mumps ..	..	..	4	..	..	..	..	..	..	..	1	..	..	..	..	..	4	..	..	..	9	..
Dysentery ..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Malaria ..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..
Uncertified ..	6	1	11	1	2	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	45	2
Admitted with mother ..	..	..	..	..	..	..	..	..	13	..	..	..	..	..	..	..	..	..	21	1	60	2
Total ..	257	8	471	19	155	2	118	2	466	4	520	12	211	7	338	10	235	22	181	19	2,952	105



