REPORT OF A CASE OF CENTRAL COLOUR DEFECT. WITH REMARKS.

RECENT PROPOSED TESTS FOR COLOUR BLINDNESS. BY ANGUS McGILLIVRAY, M.B., C.M., Surgeon to the Dundee Eye Institution.

THE dangers resulting from colour blindness among marine and railway officials have within the past few years attracted the attention not only of the medical profession but also of the general public. In 1890 the Royal Society appointed a committee to investigate the subject of colour blindness, and last year the Council of the British Medical Association appointed a committee "to promote the efficient control of railway servants' eyesight." The reports of both these committees have now been drawn up. Their recommendations are highly practical, and if adopted by railway companies and the Board of Trade are columbted to do good. of Trade are calculated to do good.

According to the recommendations of the British Medical Association, "candidates for the posts of engine cleaner, fireman, driver, signalman, and pointsman," would be considered suitable as to colour perception if they possessed normal colour sense in each eye, and unrestricted fields of vision. "The tests for colour sense should be that of Holmgren, carried out in strict accordance with his directions. After this test has been passed the candidate should be required to recognise and name promptly the colours used in signalling." By this method the colour sense is estimated only qualitatively, not quantitatively.

Now a candidate may arrange the Holmgren tests with per-

fect accuracy, and recognise and name promptly the colours used in signalling, yet, though possessing perfect distant vision, he may be quite unable to tell the difference between a red and green signal at the distance of a few hundred yards.

even in a clear atmosphere.

The following case, which has recently come under my notice, is an example of this:—

The following case, which has recently come under my notice, is an example of this:—

Miss C., a young intelligent lady, was brought to me by my friend Mr. Murray, to be examined with reference to vision and colour perception. She gave the following history: Up till recently she was not aware of having any colour defect. Her attention was first drawn to it in rather a peculiar way. Some friends calling commented upon the redness of certain plums on a tree about fifty yards from her drawing-room window. She was unable to see the plums, as the tree appeared to her quite green. On approaching it, however, the redness of the plums became distinctly perceptible. Her friends told her she must be colour blind, but that seemed scarcely possible, as she was an accomplished colourist on china. The next time she noticed this peculiar defect was while walking with a friend. Her friend remarked that a lady some distance away was wearing a red cloak. She maintained that it was of a dark colour, and only discovered her mistake when she came closer. A few days after I saw her in my consulting room. I found her eyes were normal in every way. Vision, right and left, normal (2). Field of vision normal for white, blue, red. and green. No night blindness. On testing her for colours she had no difficulty in recognising even the faintest shades of difference. She arranged the Holmgren skeins of wool with the greatest ease and accuracy. I then held up before her small discs of red and green colours. 3 millimetres in diameter, which she recognised with some slight difficulty. When the discs were reduced to 1 millimetre she failed entirely to recognise the colour, even after having carefully examined them in her own hands. Again taking two discs of red and green of slightly larger diameter than the first, and holding them about 5 metres away, she could not distinguish the one from the other. On testing her with larger discs, and holding them to begin with at such a distance as to subtend the same angle as in the former cases, she had th

reported in the BRITISH MEDICAL JOURNAL of May 7th, do not materially differ from those of the British Medical Association Committee, and mention no test that would detect such a case as that I have recorded. I would therefore suggest that either Donders's or Nettleship's apparatus be employed in addition to those recommended. These tests would also be more effectual in the initial stages of toxic amblyopia, as the skeins of Holmgren are too large to detect a small central

scotoma for red or green.

A HYGIENIC exhibition will be held in St. Petersburg in the spring of 1893, under the protectorship of the Grand Duke Paul Alexandrovitch.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERA-PEUTICAL, PATHOLOGICAL, ETC.

A CASE BENEFITED BY ADMINISTRATION OF OXYGEN DURING ANÆSTHESIA.

I Am indebted to the kindness of Dr. Frederick Taylor, under

whose care this patient was admitted, for permission to pub-

lish this note.

J. S., aged 26, was admitted into Guy's Hospital on February 1st, 1892, with the left side of the chest full of purulent fluid; large quantities of non-purulent fluid had been aspirated on several occasions during the previous eight months. A few days after admission he was put under A.C.E. mixture; an opening was made by Mr. Jacobson, and a small piece of rib resected. As soon as he was under the anæsthetic he was rolled on to his right side, but as he became black in the face from interference with respiration he had to be turned on to his back, and the operation was finished from below, much to the inconvenience of the surgeon. Three months later it was found that the lung had not expanded at all, and that there were few or no adhesions between it and the chest wall; it was decided to resect several ribs to allow the chest wall tofall in.

Remembering how badly he had taken the anæsthetic during the first operation, we began to think how the risk during the more severe ordeal which was to follow might be diminished. Though not absolutely necessary, it was very important to turn him on his sound side, and it seemed that if the percentage of oxygen in the respired air could be increased the limited movements of the right chest would be

sufficient for the time being.

On May 22nd A.C.E. mixture was given on a cone. It was not long before he stopped breathing on several occasions, and it seemed probable that the operation might have to be discontinued. The tube from the oxygen bottle was introduced the second probability of the second probabi duced under the cone, and a gentle stream turned on. He very soon got right, and the operation, which lasted about forty-five minutes, was finished without further anxiety, the

respiration and pulse remaining good.

I have been able to try it in this one case so far, but in cases such as the above the administration of oxygen with the anæsthetic seems especially suitable and likely to be of service.

D. S. Long, M.B., B.C.,

Late House-Physician to Guy's Hospital.

DEATH UNDER CHLOROFORM.

On May 31st a man, aged 52, was admitted to the Queen's Hospital, Birmingham, under the care of Mr. Jordan Lloyd. For the past three months he had been suffering from severe pain in the right lumbar region which had incapacitated him from work. The pain was constant and of a gnawing character, was worse when at rest, and rarely shooting down to the inner side of the thigh or into the scrotum. There was scalding pain along the urethra during and after micturition. No history of venereal disease could be obtained. Ten weeks before admission he had noticed a considerable quantity of blood in his urine which lasted about a week. Micturition at this time was very frequent and painful. On admission, urine was 1020 in specific gravity, acid in reaction, contained a very faint haze of albumen, some pus cells but no blood. No abdominal tumour could be seen or felt, but there was acute tenderness both back and front on the right side. The heart sounds were feeble but unaccompanied by any murmur; the apex beat was displaced outwards. Moist râles were heard over both lungs; at the left base were dry crackling sounds which were ascribed to old pleurisy.

On June 11th the patient was placed on the table for an exploratory operation on the right kidney. Chloroform from a bottle out of which three patients had been safely anæsthetised the preceding day, was administered by the house-surgeon on a double fold of lint. For three minutes the man took the anæsthetic well, but then began to struggle, requiring the assistance of three dressers to hold him on the table. The struggling lasted two or three minutes and then ceased; the man breathed well for about another minute and was

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nearly under when, at the end of about seven minutes from the commencement of the administration and after two drachms had been inhaled, he suddenly ceased to breathe and the face turned livid. The tongue was pulled forward, the foot of the table well raised and artificial respiration by Howard's and Silvester's methods resorted to. Under artificial respiration he took one or two feeble respirations, but as he did not revive the diaphragm and phrenic nerve were faradised, and at the same time the external jugular vein was opened. As a last resource the trachea was opened and direct lung inflation tried; finally heart puncture was performed, and as the needle remained quite motionless, further efforts at resuscitation were given up. At the moment of the cessation of respiration the pulse was beating but when next felt for (after

some minutes' interval) was not perceptible. At the post-mortem examination the heart was found fatty, flabby, and dilated; the mitral valve admitted three fingers and the tricuspid five. There was no organic valvular disease. The base of the left lung was extensively bound down by pleuritic adhesions. The other organs, including the kidneys, were healthy except the bladder, which was inflamed and thickened behind a urethral stricture. The pain in the back was accounted for by rheumatoid arthritis of the spine.

DRYDEN STEAD. M.R.C.S., L.R.C.P.Lond., House-Surgeon.

POISONING BY STRYCHNINE: RECOVERY. On June 11th we were summoned in great haste to W. M., aged 65, scavenger, who had, it was alleged, attempted suicide

On arriving at the man's bedside we found that some seven or ten minutes previously he had swallowed a large quantity of strychnine. The following treatment was once instituted: Apomorphine, } gr., was given hypodermically; six tumblers of hot water, with three tablespoonfuls of mustard and three tablespoonfuls of salt, were administered by the mouth for the purpose of producing vomiting, and as a preparation for the stomach pump, which was thereafter employed for more than an hour to evacuate and recharge the stomach repeatedly; as antidotes, 3 ounces of tannic acid were administered by the mouth at an early stage, and after an interval evacuated to a large extent from the stomach by the nump: finally a large dose of bromide of potential and the pump; finally, a large dose of bromide of potassium and 30 grains of chloral hydrate were given, and strict quiet and absence of light and movement enjoined.

Twitchings and jerkings of the muscles of the limbs, and tetanic spasms of the muscles of the lower jaws, with violent contractions of the œsophagus, were the most noticeable sym-The effect of the emetics was very prompt, extremely violent, emesis occurring alongside the œsophageal catheter almost immediately after the introduction of the tube into the stomach. The man was busy at his work four days after his misadventure. His escape is no doubt largely attributable to the thorough evacuation of the stomach effected by the apomorphine, and to the fact that not more than ten minutes elapsed after the strychnine gained access to the stomach (which was full of food) before medical treatment was initiated.

While the quantity of the poison absorbed must have been undoubtedly insignificant, yet there is incontestable proof in our hands that the man swallowed exactly 20 grains of pure sulphate of strychnine.

This case has been published because, so far as can be gathered from the books of authorities on poisoning, it is unique. No instance, so far as we are aware, has formerly been recorded of recovery after the appearance of characteristic symptoms where such a huge dose of strychnine has been taken.

A. WALLACE, M.D. JAMES MCRAE, M.B. Turriff, N.B.

DEATHS IN THE PROFESSION ABROAD.—Dr. Hermann Nasse. who occupied the Chair of Physiology in the University of Marburg from 1837 until 1879, died recently in his 82nd year. He made numerous contributions to the physiology of the blood, lymph, and chyle.—Dr. Ludwig Friedrich Leo, of Bonn, Secretary of the Scientific and Medical Association of the Lower Rhine, has died at Bonn in his 78th year.

 $R\ E\ P\ O\ R\ T\ S$ medical & surgical practice in the hospitals AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BRISTOL ROYAL INFIRMARY.

PARALYSIS OF THE DIAPHRAGM IN TWO CASES OF PERIPHERAL NEURITIS.

(By HENRY WALDO, M.D., M.R.C.P.Lond., Physician to the Infirmary.)

A FEMALE patient was admitted in January, 1890, with acute ascending paralysis. It was one of those cases which during life may be explained upon the spinal myelitis theory, or upon that of peripheral neuritis. The patient died six days after admission, and at the post-mortem examination the spinal cord and medulla oblongata were saved, as well as some of the peripheral nerves.

The patient was a spinster, aged 40, a West Indian, darkcomplexioned, and rather sallow. Her family history was good, but she had never enjoyed good health. For some years she had complained of pain in the stomach and low down in the bowels, as well as in the hips and thighs. Her memory had been defective, and she had long complained of insomnia, for which she had taken large quantities of different narcotics. She could not procure enough sleeping draught at one chemist and so was in the habit of patronising two or three. The last drug she took a fancy to was sulphonal, of which she had taken large quantities. I asked her when she was first admitted if she had tried bromide, and she said "that drug is not a bit of use."

She was anæmic, and, apparently, could with difficulty rouse herself to answer questions. Her friends told us that it was first noticed that her legs were getting weak four days before admission. Her arms gradually got weak a day or two after. The extensors were more paralysed than the flexors, especially in the legs, and there was distinct ankle drop, although the great toes did not bend over into the soles of the feet. The muscles were quite flaccid. The knee-jerks were totally absent, as were the superficial reflexes.

There was no affection of sensation—no girdle pain, no tenderness of nerve trunks, no numbness, no tingling. Handling the calf muscles did not produce any discomfort. The electrical reactions were never ascertained, owing to a mistake. The temperature was a little raised; there were no rigors; the skin was dry. The heart's impulse was felt in the nipple line, and $2\frac{1}{2}$ inches below it. No murmur was audible. The pulse was 160. There was no cough or expectoration, and air entered the lungs well. The voice was exceedingly feeble; she could scarcely pronounce words, and it was most difficult to understand her. Headache was com-plained of. There was no pain or tenderness of the spine. The pupils were slightly unequal, but acted to light and accommodation. She said she had occasional loss of sight. She usually slept well. The sphincters were paralysed, and a catheter was passed night and morning.

The urine, specific gravity 1030, acid, contained no albumen. It was of a reddish-pink colour, and had all the naked-eye appearances of containing blood. There were, however, no blood cells present, and upon testing for blood it was quite absent. It was, I take it, owing to the presence of purpurine, one of the pathological pigments. Purpurine has an intense affinity for uric acid and the urates, and when the latter are thrown down as a deposit, which occurred in this urine, it communicates to them a beautiful pink colour. It is said to be abundant in poisoning by lead and other metals. After a day or so the urine became alkaline, specific gravity 1025, and contained a trace of albumen and mucous deposit. I may say the bladder is very seldom indeed affected in cases of peripheral neuritis, and the fact that there was no affection of sensation is also a condition somewhat unusual.

After she had been in three days I noticed that the dia-

phragm was paralysed on both sides; the epigastrium flopped inwards during inspiration: at the same time the intercostal muscles were acting vigorously. This fact was much in favour of the lesion being peripheral and not spinal, since

JULY 23, 1892.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 6,471 births and 3,491 deaths were registered during the week ending Saturday, July 16th. The annual rate of mortality in these towns, which had been 17.1 per 1,000 in each of the preceding two weeks, rose to 17.9 during the week under notice. The rates in the several towns ranged from 9.8 in Croydon and in Birkenhead, 10.7 in Brighton, 13 5 in Hull, and 13.6 in Oldham to 19.8 in Halifax, 20.0 in Salford, 21.3 in Blackburn, 21.5 in Liverpool, and 22.6 in West Ham. In the thirty-two provincial towns the mean death-rate was 17.1 per 1,000, and 1.8 below the rate recorded in London, which was 18.9 per 1,000. The 3,491 deaths registered during the week under notice in the thirty-three towns included 598 which were referred to the principal zymotic diseases, against numbers increasing from 477 to 503 in the preceding three weeks; of these, 260 resulted from diarrhosa, 131 from measles, 80 from whooping-cough, 60 from diphtheria, 44 from scarlet fever, 23 from "fever" (principally enteric), and not one erom small pox. These 598 deaths were equal to an annual rate of 3.1 per 1,000; in London the zymotic death-rate was equal to 4.2, while it averaged only 2.2 per 1,000 in the thirty-two provincial towns. No fatal case of any of these diseases was recorded last week in Brighton: in the other towns they caused the lowest death-rates in Hull, Leeds, Derby, and Norwich, and the highest rates in London, Sunderland, Leicester, and West Ham. Measles caused the highest proportional fatality in Birkenhead, Huddersfield, Halifax, West Ham, Oldham, and Sunderland; scarlet fever in Swansea; whooping-cough in West Ham, Nottingham, Preston, Huddersfield, Halifax, West Ham, Bristol, Preston, London, and Leicester. The mortality from "fever" showed no marked excess in any of the large towns. The 60 deaths from diphtheria recorded during the week under notice in the thirty-three towns included 33 in London, 4 in West Ham, and 3 in Birmingham. No f

HEALTH OF SCOTCH TOWNS

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, July 16th, 880 births and 480 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had declined from 19.3 to 17.8 per 1,000 in the preceding three weeks, further declined to 17.2 during the week under notice, and was 0.7 per 1,000 below the mean rate during the same period in the large English towns. Among these Scotch towns the lowest death-rates were 13.2 in Greenock and 14.1 in Edinburgh, and the highest rates 18.3 in Glasgow and 20.1 in Leith. The 480 deaths in these towns included 62 which were referred to the principal zymotic diseases, equal to an annual rate of 2.2 per 1,000, which was 0.9 below the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Leith and Paisley. The 235 deaths in Glasgow included 9 from measles, 9 from whooping-cough, 6 from scarlet fever, and 4 from diphtheria. Two fatal cases of diphtheria were recorded in Aberdeen. The death-rate from diseases of the respiratory organs in these towns was equal to 2.3 per 1,000, against 2.1 in London.

HEALTH OF IRISH TOWNS.

In sixteen of the principal town-districts of Ireland the deaths registered during the week ending Saturday, July 9th, were equal to an annual rate of 19.7 per 1,000. The lowest rates were recorded in Armagh and Dundalk, and the highest rates in Sligo and Newry. The death-rate from the principal zymotic diseases averaged 3.2 per 1,000. The 146 deaths registered in Dublin were equal to an annual rate of 21.8 per 1,000 (against 27.4 and 24.6 in the preceding two weeks), the rate during the same period being 17.2 in London and 14.8 in Edinburgh. The 146 deaths registered in Dublin included 20 which were referred to the principal zymotic diseases (equal to an annual rate of 3.0 per 1,000), of which 13 resulted from messles, 3 from diarrhesa, 2 from whooping-cough, 1 from diphtheria, and 1 from enteric fever. enteric fever.

OBITUARY.

WILLIAM EDWARD BALKWILL, M.R.C.S.ENG.

WILLIAM EDWARD BALKWILL, a descendant of the well-known George Fox, was associated for over twenty years with the Royal Orthopædic Hospital, of which he was one of the surgeons. A victim in the early part of the present year to a second attack of influenza, he did not allow himself the necessary respite from work fully to re-establish his strength, and succumbed after a few hours' illness on the morning of July 11th.

A skilful operator and devoted to the speciality he had adopted—orthopædic surgery—he has left behind many friends both in England and America who will mourn the loss of an ardent and zealous worker. Snatched away at the early age of 43, in the midst of hard and incessant toil, his life must always remain (happily not unique in the annals of the medical profession) a monument of disregard of self, and an unselfish devotion to the needs of others, and none will |

miss him more than the poor, whether at the hospital or in his daily round, who always found a sympathetic friend and showed his tender thought for their infirmities, and helped them in their suffering by a cheery word or a genial smile. Mr. Balkwill, who was educated at St. Bartholomew's Hosdital, was a member of the British Medical Association, and had looked forward with great interest to taking part in the forthcoming annual meeting at Nottingham, where it was his intention to have given a demonstration on orthopædic

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS SCHOOL OF SURGERY, IRE-LAND.—The "Mayne Scholarship" of fifteen pounds has been awarded to Mr. G. Hamilton.

It is officially announced by the authorities of the St. Petersburg Military Medical Academy that stammering will in future be considered a disqualification in candidates for admission.

The annual meeting of the Austrian food analysts and microscopic experts will be held this year at Vienna, between October 15th and 20th. The committee entrusted with the preparation of a "Codex Alimentarius" is making progress with its task.

A BREAKFAST will be given at the Exchange Hall, Nottingham, on Wednesday next, when Dr. H. Martyn Clark, of Umritsur, Punjaub, and Dr. Hoernle will give a short account of medical mission work. Dr. Roberts Thomson will take the

LITERARY INTELLIGENCE.—Drs. Beely and Kirchhoff have published a book on *The Human Foot: its Care and Covering*. The authors, after considering the anatomy and the functions of the human foot, proceed to ask how a "rational" modern shoe should be constructed, and then discuss the "rational stocking.

THE Gesellschaft deutscher Naturforscher und Aerzte will assemble for its 65th meeting on September 11th, in Nuremburg. The business of the Congress will commence on the following morning. Among those who will take part in the Congress and read addresses are Professors von Helmholtz, Ziegler, His, Strümpell, and Hueppe. The Sections will meet on Tuesday and Thursday, the general sessions, at which the addresses are given, being held on Monday, Wednesday, and Friday.

A QUARTERLY court of directors of the Society for the Relief A GUARTERLY court of directors of the society for the tener of Widows and Orphans of Medical Men was held on July 13th, Sir James Paget, President, in the chair. Two new members were elected. The deaths of two widows receiving grants were reported. It was resolved to distribute the sum of £1,296 among the fifty-six widows and eighteen orphans now in receipt of grants. No fresh applications for assistance were read. The expenses of the quarter amounted to £51 11s.

WE desire, says the Citizen, to honour an act of unselfish devotion to humanity and duty performed by Dr. Jones, of the Earlswood Asylum. A little girl, 6 years of age, named Ethel Sargent, was admitted to the infirmary of the Asylum on Sunday evening, July 10th, suffering from diphtheria. Her condition was so serious that tracheotomy had to be performed. The accumulation of matter threatened the life of the little sufferer, and after being warned by his colleague of the danger, Dr. Jones sucked the tube and relieved the patient.

THE DENTAL HOSPITAL.—On July 15th, at Prince's Hall, a conversazione was given in connection with the distribution of prizes to the students of the Dental Hospital. Mr. Morton Smale (Dean of the hospital) read during the evening a very smale (Dean of the hospital) read during the evening a very satisfactory report in reference to the progress of the school during the past year. Professor St. George Mivart, having distributed the prizes, briefly addressed those present. He observed that human happiness depended largely upon matters with which the hospital had to deal, for personal goodness was intimately connected with perfect digestion. Dentistry was a very ancient art, having been practised by the early Egyptians. Although it held its own thoughout the

centuries, it was not until some twenty-five years ago that it was recognised as one of the learned professions. In that matter the Dental Hospital had played an important part. programme of vocal and instrumental music, with other entertainments, occupied the remainder of the evening.

COLOUR BLINDNESS.-Mr. R. Brudenell Carter delivered a lecture at the United Service Institution on July 15th, upon Colour Blindness. The chair was taken by Captain Abney. The lecturer said, with regard to the best way of preventing colour-blind persons from undertaking duties which they could not discharge with safety, that the chief points to be remembered were that colour blindness was a matter of formation, were frequently of in blindness was a matter of formation, very frequently of in-heritance, and that it was absolutely incurable and unalterable. Examinations of some sort or other had now been in operation for several years, both in the Royal and in the mercantile navy, and in the general railway service of the country, but the results had not always been entirely satisfactory. The examination now required of candidates for the Royal Navy left little, if anything, to be desired; but that of the railway companies and of the Board of Trade for the mercantile marine had been very defective. A discussion followed.

THE LONDON AND COUNTIES MEDICAL PROTECTION SOCIETY, LIMITED.—A meeting of the members of the medical profession in Hampstead and the neighbourhood was held recently at Dr. Bensley's house, 127, Fellows Road, South Hampstead, to establish a division of this Society for the north-western district of London. Dr. Bensley was elected chairman, and briefly sketched the usefulness of such a society, dwelling especially on the advantage of its Central Council being situated in London, where it was in close touch with the large mass of both consultants and general practitioners, whose interests in this matter were identical, both classes being equally exposed to attack. The Central Council had, under their articles of association, very large powers, of which they only retained such as were absolutely necessary to secure the solidity of the Society; all other powers were transferred to the Branch Councils, which were thoroughly representative of their respective districts, including most of the leading members of the profession in these districts. The Central Council had as its president one of the most popular and respected medical men, and the vice-presidents and Council were men of distinction, representing all branches of the pro-fession, and commanding therefore the confidence of both the profession and the public. Dr. Hugh Woods went minutely into details regarding the formation of the Society, its constitution and mode of working, especially the relation of the District Councils to the central authority, and showed the large powers handed over to the District Councils, their autonomy and representative basis, securing justice to every member, and guarding an aggrieved member from the risk of finding himself at the mercy of any one man or clique. The success the Society had met with was remarkable, both as regards the members joining and their position in the profession. Several questions having been answered by Dr. Bensley and Dr. Woods, resolutions were unanimously passed con-"North-West London Division," and appointing E. C. Bensley, F.R.C.S., L.R.C.P., president; and the following, with power to add to their number, vice-presidents—namely: Dr. Cooper Rose, Dr. Blackstone, Dr. Ford Anderson, and Dr. Norman Kerr; and as members of the Council: Drs. Milson, Pidcock, Aydon Smith, and H. C. Shaw, with Dr. Hugh Woods as honorary secretary pro tem.

MEDICAL VACANCIES.

The following vacancies are announced:

ANCOATS HOSPITAL, Manchester.—Senior House-Surgeon; doubly qualified. Salary, 280 per annum, with board and washing. Applications to Alex. Forrest, Honorary Secretary, by July 26th.

BRADFORD CHILDREN'S HOSPITAL.—House-Surgeon. Salary, 270 per annum, with board, residence, and washing. Applications to C. V. Woodcock, Secretary, by July 27th.

ECCLES AND DISTRICT MEDICAL ASSOCIATION.—Dispenser. Applications to James Ramsdale, 15, Byron Street, Patricroft.

ECCLES AND PATRICROFT HOSPITAL.—House-Surgeon. Salary, 260 per annum, with board and residence. Applications to the Honorary Treasurer, H. J. Reiss, 11, Quay Street, Manchester.

FULHAM UNION. -Assistant Medical Superintendent of the Union Infirmary; doubly qualified; unmarried. Salary, £100 per annum, increasing £10 yearly to £130, with board, furnished spartments, attendance and washing. Applications, on forms to be obtained at the Clerk's Office, to T. Aplin Marsh, Clerk to the Guardians, Fulham Palace Road, Hammersmith, by July 23rd.

GENERAL HOSPITAL, Birmingham.—Two Assistent House-Surgeons.
Board, residence, and washing provided. Applications to the House
Governor by August 1st.

GREAT NORTHERN HOSPITAL, Holloway Road, N.—House-Surgeon.
Salary, 250 per annum, with board and lodging. Applications to the
Secretary by July 25th.
HORTON INFIRMARY, Banbury.—House-Surgeon and Dispenser.
Salary, 260 per annum, with board and lodging. Applications to
C. H. Davids, Honorary Secretary, 27, Marlborough Road, Banbury,
by July 20th. by July 30th.

NOOLN ODDFELLOWS' MEDICAL INSTITUTE.—Qualified Assistant. Salary, £120 per annum. Applications to the Secretary, W. Coulson, 12, North Parade, Lincoln, by July 26th. VERPOOL STANLEY HOSPITAL.—Honorary Physician. Applications to the Honorary Secretary, J. E. Bennet, Esq., Meadowcroft, Aintree, by July 26th.

by July 30th.

VERPOOL STANLEY HOSPITAL.—Honorary Surgeon. Applications to the Honorary Secretary, J. E. Bennet, Esq., Meadowcroft, Aintree, by July 30th.

by July 30th.

METROPOLITAN ASYLUMS BOARD.—Clinical Assistant at the Darenth
Schools and Pavilions for Imbeciles, near Dartford; doubly qualified.

Applications, on forms to be obtained of the Clerk, to T. Duncombe
Mann, Clerk to the Board, Norfolk House, Norfolk Street, Strand, W.C., by July 25th.

W.C., by July 25th.

NORTH BIERLEY UNION.—District Medical Officer. Salary, £25 per annum, with extra fees for midwifery and surgical operations; will also be appointed Public Vaccinator. Applications, endorsed "Medical Officer No. 4 District," to N. W. Wright, Clerk, Union Offices, 52, Leeds Road, Bradford, by July 28th.

PHARMACEUTICAL SOCIETY OF IRELAND.—Examiner in Practical Pharmacy; to hold office for one year, but eligible for re-election annually for four additional years. Applications to Arthur Ferrall, Registrar, 67, Lower Mount Street, Dublin. Election on August 37d.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL, 137, Queen Street, Gosport.—Assistant House-Surgeon; appointment for six months. Board, residence, and washing provided, and honorarium of £15 15s. at expiration of term of office. Applications to J. A. Byerley, Secretary, by July 28th.

ROYAL SEA-BATHING INFIRMARY FOR SCROFULA, Margate.—Resi-

Byeriey, Secretary, by July 2sth.

YAL SEA-BATHING INFIRMARY FOR SCROFULA, Margate.—Resident Surgeon, doubly qualified. Salary, 2100 per annum, with board and residence. Applications to the Secretary, Arthur Peirce, at the Offices, 30, Charing Cross, S. W., by July 27th.

LUKE'S HOSPITAL.—Resident Clinical Assistant. Appointment for six months. Board and residence provided. Applications to the Secretary by July 28th.

SHEFFIELD GENERAL INFIRMARY.—Assistant House-Surgeon, doubly qualified. Salary, £80 per annum, with board, lodging, and washing. Applications to the Medical Staff, care of the Secretary, by July 23rd.

Applications to the Medical Staff, care of the Secretary, by July 23rd.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Senior Assistant
House-Surgeon. Salary, £65 per annum, with board, lodging, and
washing. Applications to the Honorary Secretary of the Medical
Staff by July 25th.

CTORIA INFIRMARY OF GLASGOW, 22, Carlton Place, Glasgow. Superintendent and Resident Medical Officer. Salary, £150 pe Superintendent and Resident Medical Officer. Salary, £150 per annum, with apartments and board. Applications to the Secretary by

WEST KENT GENERAL HOSPITAL, Maidstone.—House-Surgeon; unmarried. Salary, \$2150 per annum, with furnished apartments, coals, gas, and attendance. Applications to J. Spooner Hardy, Secretary, by July 28th.

MEDICAL APPOINTMENTS.

DREW, Albert, M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the Glossop District of the Glossop Union, vice W. H. Hunt, deceased.

BANNATYNE, Gilbert A., M.D.Glas., appointed Honorary Medical Officer to the Bath Royal United Hospital.

Benson, Annette M., M.B., B.Sc. Lond., appointed Resident Medical Officer to the Victoria Hospital for Children, Hull.
 Bell., Dr., appointed Medical Officer for the Shaldon District of the Newton Union, vice H. F. Corbould, L.R.C.P. Lond., deceased.

CAUDWELL, Henry, L.R.C.P., L.R.C.S.Edin., appointed Medical Officer to the No. 2 District of the Woodstock Union, vice George Frederick Welsford, M.B., M.R.C.S.Eng., resigned.

Collings, Edward B., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer to the Workhouse of the Barnsley Union, vice J. Fletcher Horne. M.D.St. And., resigned.

EVANS, A. Ernest, M.B., C.M.Glas., appointed House-Physician to the City of London Chest Hospital.

FOOT, Ernest George, M.R.C.S.Eng., L.S.A., appointed Medical Officer for the No. 4 District of the Petworth Union.

FULLER, John R., M.R.C.S., L.R.C.P.Lond., appointed Senior Resident Medical Officer to the Birmingham Children's Hospital.

GRAMSHAW, James Henry, M.D.St. And., F.R.C.S.Eng., reappointed Medical Officer of Health for Gravesend.

GREEN, A., M.B.Lond., L.R.C.P., M.R.C.S., appoin Chesterfield and North-East Derbyshire Hospital. appointed Surgeon to the

HARRIS, Alfred E., L.R.C.P., L.B.C.S. Edin., a spointed Medical Officer of Health for the Parish of Islington, vice C. Meymott Tidy, M.B., C.M. Aber., deceased.

- HILL, Walter J., M.R.C.S., L.R.C.P.Lond., appointed House-Surgeon to
- the Bristol Royal Infirmary.

 HIRST, Walter, L.R.C.P., L.R.C.S. Edin., L.F.P.S.Glas., appointed Assistant Medical Officer of the Workhouse, Infirmary, and Schools of the Leeds Union, vice Samson Geo. Moore, M.B., resigned.

 HUNTER, Edwin John, L.R.C.P.Edin., L.M., L.F.P.S.Glas., reappointed Medical Officer of Health to the Gosport and Alverstoke Local
- McDonnell, Michael Sweeny, M.R.C.S.Eng., L.S.A., appointed Medical Officer for the First District of the Southampton Incorporation.
- March, Geoffrey Colley, M.R.C.S.Eng., L.R.C.P.Lond., appointed Medical Officer for the Gosforth District of the Whitehaven Union.

 NASH, Mr. C., appointed District Medical Officer and Medical Officer to the Workhouse of the Catherington Union.
- Ninnis, Belgrave, Deputy Surgeon-General, M.D., appointed Principal Medical Officer at Melville Naval Hospital, Chatham, vice Deputy Inspector-General T. S. Burnett.
- ORMEROD, Henry Lawrence, M.R.C.S., L.R.C.P., appointed House-Physician to the Bristol Royal Infirmary.
- RAINY, Harry, M.A., M.B., C.M.Edin., appointed Resident Medical Officer to the Chalmers Hospital, Edinburgh, vice R. P. Mackenzie, M.B.
- RENTON, George, M.D. Edin., reappointed Medical Officer of Health to the Consett Local Board.
- RICHARDSON, G. Q., L.R.C.P., L.R.C.S.Irel., appointed Junior Resident Medical Officer to the Birmingham Children's Hospital.

 SAUNDBY, Robert, M.D.Edin., F.R.C.P.Lond., appointed Professor of Medicine in the Queen's Faculty of Medicine, Mason College, Birmingham, vice Sir Walter Foster.
- SIXSMITH, Dr., appointed pro tem. Medical Officer for the Leekfrith District of the Leek Union, vice John A. Gailey, M.D. Edin., deceased.
- SMITH, Priestley, M.R.C.S.Eng., appointed Lecturer on Ophthalmology at Mason College, Birmingham.
- STREETEN, Friend Edward, L.R.C.P., L.M.Edin., M.R.C.S.Eng., appointed Medical Officer of Health to the Rural Sanitary District of the Faringdon Union.
- SUTHERLAND, John Russell, L.R.C.S.Edin., L.S.A., reappointed Medical Officer of Health of the Southern Division of the Houghton-le-Spring Rural Sanitary Authority.

 WATSON, J., M.B.Durh., F.R.C.S.Edin., L.R.C.P.Lond., appointed House-Physician to the Wolverhampton and Staffordshire General Hospital.
- WETHERELL, J. A., M.D., C.M.Edin., appointed Resident Medical Officer and Government Resident at Wyndham, Western Australia.
 WILLEY, Charles Henry, M.D., B.Sc.Edin., M.R.C.S., appointed Honorary Medical Officer to the Children's Hospital, Sheffield.
- WILLIAMS, Thomas O., L.R.C.P., L.R.C.S. Irel., appointed Medical Officer for the Third Anglesey District of the Bangor and Beaumaris Union. WILSON, Arthur H., M.R.C.S., appointed Honorary Surgeon to the Liverpool Northern Hospital, vice George Gibson Hamilton, F.R.C.S. Ed., resigned.
- VERNON, Mr. H., appointed Assistant Medical Superintendent to the Paddington Infirmary.

DIARY FOR NEXT WEEK.

MONDAY.

NATIONAL ORTHOPÆDIC HOSPITAL, Great Portland Street, 5 p.m.—Mr. A H. Tubby: On Rickets.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office orders or stamps with the notice not later than Wednesday morning, in order to insure insertion in

MARRIAGES.

- COLE-BAKER—LYSTER.—On July 13th, at St. Peter's Church, Dublin, G. Cole-Baker, M.B., Assistant Master, Coombe Hospital, 28, Lower Baggot Street, to Florence, widow of the late Philip T. Lyster, R.N. KELLETT—BARCLAY.—On July 14th, at Moseley, by the Rev. F. Kellett, father of the bridegroom, assisted by the Rev. W. Wilson, of Manchester, Alfred F. Kellett, M.B., B.S. Cantab., of Lewisham Road, Lewisham, S.E., to Margaret Eleanor (Nellie), second daughter of Thomas Barclay, of Arncliffe, Moseley, Birmingham.

 PRICE—PLAYFAIR.—On July 16th. at St. Thomas's Church. Regent Street.
- Thomas Barciay, of Arnchine, Moseley, Birmingham.

 PRICE—PLAYFAIR.—On July 16th, at St. Thomas's Church, Regent Street, by the Rev. Philip T. Bainbrigge, Vicar, assisted by the Rev. Charles Stuart Playfair, cousin of the bride, William Arthur Price, eldest son of the Rev. the Master of Pembroke College, Oxford, to Edith Octavia, eldest daughter of W. S. Playfair, M.D., LL.D., of 31, George Street, Hanover Square.
- THORNYON—CLIVE.—On July 18th. at St. Mark's, North Audley Street, by the Hon. and Rev. Canon Bridgeman, uncle of the bride, assisted by the Right Rev. the Lord Bishop of Ripon and the Hon. and Very Rev. the Dean of Hereford, John Knowsley Thornton, of 22, Portman Street and Hildersham Hall, Cambridge, to the Hon. Mary Agnes Windsor Clive, youngest sister of Lord Windsor.

DEATHS.

- GAILEY.—On July 13th, at Stockwell Street, Ieek, Staffordshire, John Alexander Gailey, M.D., in his 40th year. No cards.

 HASSARD.—On July 2nd, suddenly, at Southsea, Henry Bolton Hassard, C.B., Surgeon-General (retired) Medical Staff, aged 63 years.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

- CANCER, Brompton (Free). Hours of Attendance. Daily, 2. Operation
- Days.—Tu. S., 2.

 CENTRAL LONDON OPHTHALMIC. Operation Days.—Daily, 2.
- CHARING CROSS. Hours of Attendance.—Medical and Surgical, daily, 1.36; Obstetric, Tu. F., 1.30; Skin, M., 1.30; Dental, M. W. F., 9; Throat and Ear, F., 9.30. Operation Days.—W. Th. F., 3.
- HOSPITAL FOR WOMEN. H. Operation Days.—M. Th., 2.30. Hours of Attendance. - Daily, 1.30. CHELSEA
- EAST LONDON HOSPITAL FOR CHILDREN. Operation Day. F., 2.
- GREAT NORTHE RN CENTRAL. Hours of Attendance.—Medical and Surgical, M. Tu. W. Th. F., 2.30; Obstetric, W., 2.30; Egg, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. Operation Day.—
- Guy's. Hours of Attendance.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30: Eye, M. Tu. Th. F., 1.30: Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 9; Throat, F., 1. Operation Days.—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.
- HOSPITAL FOR WOMEN, Soho. Hours of Attendance.—Daily, 10. Operation Days.—M. Th., 2.

 KING'S COLLEGE. Hours of Attendance.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. Operation Days.— Tu. F. S., 2.
- LONDON. Hours of Attendance.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. Operation Days.—M. Tu, W. Th. S., 2.

 LONDON TEMPERANCE HOSPITAL. Hours of Attendance.—Medical, M. Tu. F., 2; Surgical, M. Th., 2. Operation Days.—M. Th., 43.

 METROPOLITAN. Hours of Attendance.—Medical and Surgical, daily, 9; Obstetric, W., 2. Operation Day.—F., 9.

 MININGERY. Hours of Attendance.—Medical and Surgical, daily, 1.30;

- Obstetric, W., 2. Operation Day.—F., 9.

 MIDDLESEX. Hours of Attendance.—Medical and Surgical, daily, 1.30;
 Obstetric, M. Th., 1.30; o.p., M. F., 9, W., 1.30; Eye, Tu. F., 9;
 Ear and Throat, Tu., 9; Skin, Tu., 4, Th., 9.30; Dental, M. W.
 F., 9.30. Operation Days.—W., 1.30, S., 2; (Obstetrical), Th., 2.

 NATIONAL OUTHOPEDIC. Hours of Attendance.—M. Tu. Th. F., 2. Operation Day.—W., 10.

 NOETH-WEST LONDON. Hours of Attendance.—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F., 9. Operation Day.—Th., 2.30.

 BOYAL FREE. Hours of Attendance.—Medical and Surgical, daily, 2

- ROYAL FREE. Hours of Attendance.— Medical and Surgical, daily, 2;
 Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th., 9.
 Operation Days.—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.
 ROYAL LONDON OPHTHALMIC. Hours of Attendance.—Daily, 9. Operation
- Days.—Daily, 10.

 ROYAL ORTHOPÆDIC. Hours of Attendance.—Daily, 1. Operation Lay.—
- M., 2.
 ROYAL WESTMINSTER OPHTHALMIC. Hours of Attendance. Daily, 1.
- Operation Days.—Daily.

 St. Bartholomew's. Hours of Attendance.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; 0.p., W. S., 9; Eye, W. Th. S., 2: 30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. Operation Days.—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.
- St. George's. Hours of Attendance.—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th., 2; o.p., Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu. S., 9. Operation Days.—Th., 1; (Ophthalmic), F., 1.15.

 St. Mark's. Hours of Attendance.—Fistula and Diseases of the Rectum, males, W., 8.45; females, Th., 8.45. Operation Day.—Tu., 2.
- males, W., 8.45; females, Th., 8.45. Operation Day.—Tu., 2.

 St. Mary's. Hours of Attendance.—Medical and Surgical, daily, 1.45; o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electro-therapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. Operation Days.—Tu., 1.30; (Orthopædic), W., 11; (Oplthalmic), F., 9.

 St. Peter's. Hours of Attendance.—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. Operation Day.—W. 2.

 St. Thomas's. Hours of Attendance.—Medical and Surgical, Cally, exc. W. and S., 2; Obstetric, Tu. F., 2; o.p., W. S., 1.30; Eye, Tu., 2; o.p., daily, exc. S., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. Operation Days.—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2; (Gynæcological), Th., 2.

 EAMARITAN FREE FOR WOMEN AND CHILDREN. Hours of Attendance.—

- SAMARITAN FREE FOR WOMEN AND CHILDREN. Hours of Attendance.— Daily, 1.30. Operation Day.—W., 2.30.
- THROAT, Golden Square. Hours of Attendance.—Daily, 1.30; Tu. and F., 6.30; Operation Eay.—Th., 2.

 University College. Hours of Attendance.—Medical and Surgical. daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30; Operation Days.—W. Th., 1.30; S., 2.
- WEST LONDON. Hours of Attendance.—Medical and Surgical. daily, 2; Dental, Tu. F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopedic: W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F, 2; Throat and Nose, S., 10. Operation Days.—Tu. F., 2.30.
- VESTMINSTER. Hours of Attendance.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear. M., 9; Skin, W., 1; Dental, W. S., 9.15. Operation Days.—Tu. W., 2.