it well, and evidence of the absorption of the drug was given by the coloration of the skin and the urine. When such animals were killed the peritoneum was found to be stained, and the dye could be dissolved out from the liver and other organs. In all cases the mice were kept in semi-darkness so as to avoid any possible complication from normal solar radiation. Some of the animals were irradiated through a 4-mm. aluminium filter, receiving a dose of 1¼ Sabouraud B doses. Examples were killed at different periods after the radiation and sections of the organs examined. No differences could be detected between control and fluorescein-fed irradiated animals. Another batch of mice fed with sodium fluorescein were given an ordinary B dose of unscreened radiation. This is the ordinary dose given for producing epilation in the treatment of tinea of the scalp. No differences were observable in the response of mice fed with fluorescein and the controls.

Irradiation of tadpoles and amphibian ova led to a similar lack of difference between examples kept and irradiated in a solution of sodium fluorescein and those kept in ordinary water. One experiment with toad ova, however, led to experiments which it is thought may supply the key to some of the apparently beneficial clinical results. A batch of toad ova had been brought by a kind and enthusiastic friend from a particularly unsavoury pool. When the lid was removed from the container the condition of the contents was at once evident, and further investigation showed that in most cases the " gelatinous " envelope which normally holds the ova in elongated " strings " had decomposed to a diffluent mass. A few intact strings were, however, rescued. These were thoroughly washed in several changes of water and then divided into two batches, one of which was placed in 5 per cent. sodium fluorescein while the other was placed in ordinary water. Both were put into a cool, dark cupboard, and were left for about a week. At the expiration of that time the specimens left in water had suffered disintegration of the " gelatinous " material and become offensive: the specimens kept in sodium fluorescein, on the contrary, still preserved their moniliform arrangement, and had no smell. The " gelatinous " material had absorbed the dye to such an extent that the individual ova could only with difficulty be distinguished. The obvious suggestion from this was that the sodium fluorescein had exercised an antibacterial action.

A series of experiments with different organisms was then carried out with Dr. J. N. Cumings. These need not be here described in detail, but the general conclusion was that sodium fluorescein solutions exert a mild antibacterial action, and a 5 per cent. solution was found to take at least seven and a half hours to kill ordinary organisms, including *Staphylococcus aureus* and *Bacillus coli*. It was, however, found to act as an inhibitor to the growth of these organisms, even in a concentration of 0.5 per cent. A similar antibacterial action was obtained with specimens of normal urine and of urine from a patient suffering from cystitis, the development or increase in ammoniacal odour being somewhat less in the presence of sodium fluorescein.

Now it is well known that septic changes militate strongly against the success of any form of radiation therapy, and it seems possible that the thorough permeation of the ulcerated tissue with the dye, in cases treated with fluorescein, and its presence in the serous discharge, may have had a beneficial effect from the mild antibacterial action. It may be noted that all of the cases of ulcerated breast carcinoma which appeared to have derived any benefit from fluorescein plus radiation as distinct from those merely irradiated were patients of scrupulous personal cleanliness, in whom the ulcerated areas were carefully dressed and where, in short, everything possible was done to ensure a clean condition of the parts. In cases of breast cancer which were ulcerated, but where the same scrupulous cleanliness was not observed, the apparent benefit from fluorescein was not seen, while in the cases of carcinoma of the rectum a similar effect was noted. It seemed therefore possible that the mild antibacterial action of the dye was sometimes able to turn the scale a trifle in the patient's favour.

Memoranda

MEDICAL, SURGICAL, OBSTETRICAL

AN UNUSUAL CASE OF FRACTURE OF THE ATLAS

The report by Dr. A. Ingham in the *British Medical Journal* of December 31st, 1932, of two cases of injury to the cervical spine resulting from a minor degree of trauma in a motor accident aroused my interest, as I recently had a similar case under my care.

On September 28th, 1932, I was called in consultation on a lady, aged 50, who three weeks previously had been travelling on the back seat of a car, when it was involved in a head-on collision. The patient was dazed, and did not remember what happened, but another passenger stated that she was thrown forward against the back of the front seat. She was taken to a nearby hospital in the South of England, and kept in bed there for three weeks. When I saw her she complained of inability to control the movements of her head, and some pain down the left side of the neck. She was, in fact, quite unable to support her head, which rolled about in any direction. Besides this there was only slight tenderness just beneath the base of the skull posteriorly. *X*-ray examination showed a fracture at the base of the posterior arch of the atlas on either side, the arch being displaced slightly backwards. The patient was given a plaster splint which effectually supported the head on the shoulders. Massage and supported movements were started at once, and in a month's time good control had been gained, and an uneventful recovery followed. A radiograph four months after the accident showed no attempt at callus formation.

In this case I would suggest that the fracture was due to muscular violence, resulting from sudden flexion of the neck over the top of the back of the front seat, when the patient was thrown forwards.

Chesterfield. F. J. MILWARD, M.Ch., F.R.C.S.

RECTO-VAGINAL FISTULA AND PERSISTENT LEFT SACRO-POSTERIOR POSITION

It may, I feel, be of interest to publish an account of the following case in view of its unusual nature.

Late one night I was asked by a midwife to see a 7-para who was in labour and had just begun to pass faeces per vaginam. I found a fat patient of low mentality, with marked oedema of legs, vulva, and abdominal wall. She was passing faeces per anum and per vaginam. Anus and perineum appeared normal. Abdominal examination revealed a large baby with its head in the fundus and its back to the left, but no foetal heart was heard. There was marked right obliquity of the uterus and the bladder was much distended. Two ounces of olive oil were passed gently into the rectum, and in one minute oil appeared in the vagina. In spite of this, it was felt necessary to pass a catheter. After a thorough cleansing of the region this was done (under anaesthesia owing to the extreme tenderness and oedema) and much dark-coloured urine obtained, which, on boiling, became nearly solid. The foetal vulva was seen appearing, but no further examination was then thought advisable. Much liquor was still present. The patient only had niggling pains, and after

some hours no advance had been made. A small enema was given with good result, and though the pains became slightly stronger they were not effective. It was reluctantly decided that intervention was necessary. A vaginal examination showed a posterior position of the breech with extended legs. Both legs were brought down. Advance was then rapid, and a 10-lb. macerated foetus was delivered without difficulty, after rotation. The placenta was delivered normally, and haemorrhage was very slight.

Periodic examination of the urine had been carried out by a careful midwife ; and the only explanation I have to offer for the toxaemic condition of the mother and death of the foetus is that the patient had tried to gas herself a few days previously. The attempt failed because, as she put it, "I only had sevenpence, and the gas went off."

Hove. V. E. CLAXTON, M.B., B.S.

Reports of Societies

SUPPURATIVE ARTHRITIS OF THE KNEE

A joint meeting of the Sections of Orthopaedics and Surgery of the Royal Society of Medicine was held on March 7th, under the presidency of Mr. G. R. GIRDLESTONE, for a discussion on acute suppurative arthritis of the knee-joint.

Mr. P. H. MITCHINER said that on looking through the cases of suppurative arthritis of the knee at St. Thomas's Hospital during the last two years he had been able to find only seventeen. The first thing that struck him was that none of these cases followed wounds of the knee-joint. During the last two years there had been six cases of penetrating wounds of the knee-joint in St. Thomas's, but none of these had gone on to suppuration. It was evident that penetrating wounds of the knee were not usually followed, in civil practice, by suppuration in the joint. Of the seventeen cases mentioned, acute suppurative osteitis in the neighbourhood of the joint was responsible for six, and in all those cases the blood culture was positive and staphylococci were present, and were recovered both from the blood and from the joint. The lower end of the femur accounted for three out of these six cases, the patella for two, and the upper end of the tibia for one. In all these cases the joint was treated by making an incision along the front of the biceps tendon on the outer side of the joint ; it was an incision he had found very efficacious. He also applied an extension to the limb. In addition to that the bone lesion was attacked and opened up and pus evacuated. If he found pus under the periosteum in large quantities he did not go on into the bone, but if there was any question that the pus was not free he trephined and let the pus out. The patella cases were not quite so easily dealt with ; in both the cases he was afraid the diagnosis was not established until some three or four weeks after the patient came in, and *x* rays showed an osteitis developing in the patella. In these cases, drainage and extension, with operative treatment promptly on the bone lesion, resulted in a knee-joint which he would class as from 40 to 60 per cent. efficient. His practice was, at the end of about three months, to remove the extension and put the knee in plaster, in which it remained for a further three or four months. Two of the seventeen cases were due to epiphysitis in the lower end of the femur, both in young children. These cases had not done well, and amputation had had to be performed. One case was to be regarded as an acute septicaemia, with the suppurative arthritis as a part of it ; this case proved fatal. There had been two cases of subacute pyaemic joints ; in one the primary focus was an old bone, and in the other a carbuncle, and both did well. He found one case of typhoid, where suppuration had occurred in the knee-joint. He had not been able to ascertain the cases in the venereal department, but he had found three gonorrhoeal cases in the general wards in which suppuration had occurred in the joint. Two of these had settled down under extension, local treatment of the disease, and vaccine, and in one case aspiration had been carried out. In this latter case extensive suppuration resulted in and around the joint, which led to a condition of stiffness and ankylosis. In three cases no cause was given for the suppuration. One of these went steadily downhill in spite of treatment, which consisted first of aspiration, and secondly of opening the joint and washing it out. He could find no record that any extension was applied. That patient, following amputation of the limb, died ; the other two made an uninterrupted recovery after aspiration of the joint with the application of extension and subsequent plaster. Of the seventeen patients, therefore, three had gone to amputation and two had died, so that suppurative arthritis was a fairly serious matter. It would appear that a prompt and rather conservative treatment gave better results than drastic opening up of the joint. The application of extension was extremely valuable. If the condition with such extension did not look like settling down, he thought aspiration should be performed, and when performed this should, of course, be with all aseptic precautions. Again, if drainage had to be done, he thought a simple incision to the outer side of the joint in front of the biceps tendon, laying the whole joint open, was the best procedure. He did not believe in washing out the joint, because he thought it tended to spread the infection into other parts.

Mr. V. H. ELLIS said that the condition was one which must appeal more to the general than to the orthopaedic surgeon. Suppurative arthritis of the knee-joint, once fully developed, was a very serious condition. No treatment could be considered successful unless there was at any rate a fair degree of movement subsequently in the joint. The prognosis as regards life might not be very bad, but as regards regaining full movement of the knee-joint it was gloomy. The condition was not a very common one to-day. He doubted whether there were more than half a dozen cases in any London teaching hospital in a year. The variation in the results depended a good deal on the mode of infection of the joint, whether by penetrating wounds from without, or by the blood stream. A certain number of cases of suppurative arthritis of the knee-joint were evidently blood stream infections but without any apparent primary focus, while in other cases the condition did appear to follow from some single focus of infection such as a boil. Again, there was the blood stream infection in which there was presumably a general septicaemia, or at any rate the pyaemic joint was merely a local manifestation which might have been caused by a septicaemia, and other joints might have been involved at the same time. However good the results of suitable treatment of suppurative arthritis might be, the most pessimistic would agree that prevention was better than cure. It was in the class of infection from without—namely, penetrating wounds of the knee—that prophylactic treatment was most successful. In considering the pathology of the condition, the very important part played by the synovial membrane must be borne in mind. The first stage in acute infection was a hyperaemia of the synovial membrane, which produced an exudate, and that exudate was bactericidal. The washing out of the joint must remove the synovial fluid, which presumably was active and resistant to infection. It was, however, the changes in the articular cartilage produced by the infection which gave the key to progress. This cartilage must retain its life if a movable joint was to be produced. By irrigation the life of the cartilage might easily be jeopardized. One of the things most remarkable about suppurative arthritis was the speed with which the condition might reach a full-blown state of panarthritis. If the condition was not fatal, recovery occurred, but with one of two unfortunate results—either ankylosis or a chronic suppurative condition—and in such cases amputation was practically always required, and would be better carried out at an earlier stage. Suppurative arthritis was not a very common complication of osteomyelitis ; he had seen two cases, in both of which the lower end of the femur was involved. It was interesting to note that a sterile effusion never seemed to give rise to any adhesions in the joint or any displacement. The generally accepted methods of treatment were to open the joint, and to adopt early

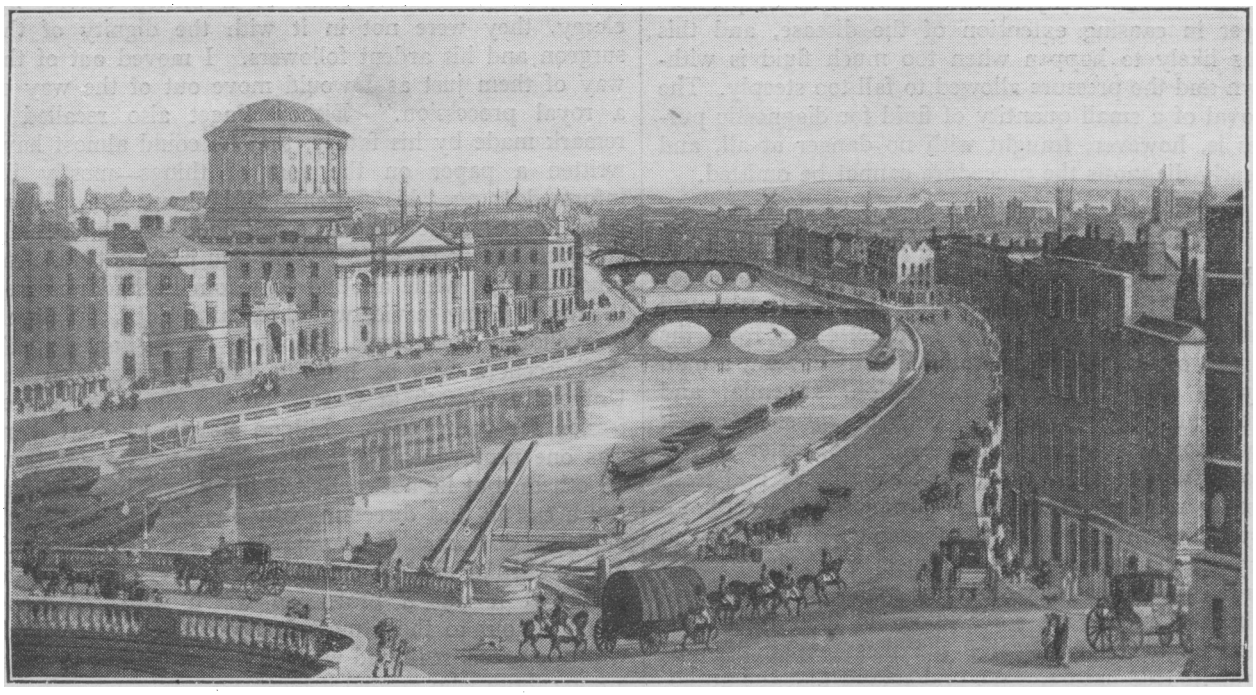
ONE HUNDRED AND FIRST ANNUAL MEETING
of the
British Medical Association
DUBLIN, 1933

THE one hundred and first Annual Meeting of the British Medical Association will be held in Dublin this summer under the presidency of Dr. T. Gillman Moorhead, Regius Professor of Physic, Trinity College, who will deliver his address to the Association on the afternoon of Tuesday, July 25th. The sectional meetings for scientific and clinical work will be held, as usual, on the three following days, the morning sessions being given up to discussions and the reading of papers, and the afternoon to demonstrations. The Annual Representative Meeting for the transaction of medico-political business will begin on the previous Friday, July 21st. The full list of presidents, vice-presidents, and honorary secretaries of the sixteen Scientific Sections was published in the SUPPLEMENT *of March 4th. Other details of the arrangements for the Annual Meeting will appear in later issues. We publish below the first of a series of descriptive and historical articles on Dublin and its medical institutions. A preliminary note appeared in our issue of December 3rd, 1932 (p. 1026).*

HISTORY OF DUBLIN

BY J. J. O'NEILL, M.A.

The English name "Dublin" is a corruption of the Irish *Duibhlin*, the "Black Pool." This pool, in all probability, was situated in the vicinity of the original settlement, whence the name spread to the settlement near by. In Irish records the name is *Ath Claith Duibhlinne*. The Egyptian geographer, Ptolemy, whose work was regarded down to the fifteenth century as a standard textbook, calls Dublin *Eblana* and Ireland *Hibernia*.



THE RIVER LIFFEY AND THE FOUR COURTS, DUBLIN.
(*From an old print.*)

From Jocelyn's *Life of St. Patrick*, a twelfth century record, we learn that the pagan monarch of Dublin was converted to Christianity in A.D. 445; from this it may be concluded that Dublin was a place of considerable importance at that early period. To follow the growth and development of Dublin we must begin with the capture of the city by Scandinavian pirates in the year A.D. 836. The method employed by those early invaders was curious and original. According to one of their historians, Claus Magnus, the city was taken by the stratagem of snaring a number of wildfowl and releasing them each with a lighted turf fastened under its wings; when the birds fell on the roofs of the houses the lighted turf speedily set fire to the thatch and reduced the buildings to ashes. Four years after their entry the Danes erected a large fort, which occupied a position adjacent to the present Castle of Dublin, but when, later, dissension made itself manifest among the invaders, King Malachi seized the stronghold. (It may be of interest to note that this Malachi was the king mentioned in Moore's well-known poem *Let Erin Remember*.) For close on forty years Dublin enjoyed peace, but in 919 the Danes again became masters of the settlement and of parts of the surrounding country. About twenty-five years later a large number of Danes embraced Christianity, and the famous Abbey of St. Mary was erected on the northern side of the Liffey. From time to time the Irish endeavoured to overcome the Danish rule in Dublin, but they were without success until Good Friday, 1014, when the Danish power was finally broken at the Battle of Clontarf.

The next important event was the capture of Dublin by Dermod MacMurrough and his Norman ally, Richard

FitzGilbert, Earl of Striguil, who was known by the sobriquet "Strongbow." Henry II arrived in Dublin in November, 1171, and for close on three months held court in a wicker palace erected near the site of the present St. Andrew's Church. A charter, still preserved in the municipal archives, was presented to Dublin, and Hugh de Lacy was appointed governor. Following the departure of Henry, a determined effort was made by the Irish of Leinster to capture the town, but the attackers were driven off after sustaining severe losses. In 1185 a great part of the town was destroyed by fire, and in the same year the building of the Cathedral Church of St. Patrick was begun. The Castle of Dublin was erected in 1197 under the direction of Miles Fitz Henry, the justiciary. In 1209 the O'Byrne and O'Toole clans swept down on the city and caused great havoc among the inhabitants. During the succeeding years Dublin grew in size and importance, and the chief magistrate was dignified by the title of Provost. A public water supply was introduced, and many improvements were effected in the life of the community.

COLLEGE GREEN AND THE HOUSES OF PARLIAMENT, DUBLIN
(From an old print.)

In 1315 Edward Bruce planned to lay siege to the town, but the preparations made by the inhabitants appear to have daunted his followers, and after a brief skirmish at Castleknock he withdrew to Limerick. Five years later, in 1320, Pope Clement V. established a university in the Cathedral Church of St. Patrick, where it continued until the suppression of the monasteries by Henry VIII. Among the various references to Dublin during the fourteenth century are some which allude to sittings of Parliament. Richard II, who visited Ireland in 1394, held a Parliament in Dublin during the winter months of that year and, we are informed, "redressed many grievances." A Norman writer who accompanied Richard to Dublin says:

> "Dublyn is a good town, the best in the Realme, seated upon the sea, and rich in merchandise, where we found such plenty of victuals to relieve our army, horse and foot, consisting of thirty thousand or thereabouts, that the prices of the same did not much increase."

Early in the fifteenth century the townspeople equipped a warlike expedition which was sent to invade Scotland and Wales. The soldiers, we are told, "fought valiantly, and ravaged the shores of those countries." They returned amid scenes of great popular rejoicing, and among their spoils were the relics of St. Cubic, which were deposited in the vaults of Christ Church. Lambert Simnel's rebellion was supported by the citizens, who afterwards made humble apology to Henry VII for their action. The next event of importance was the rebellion of "Silken Thomas," the son of the Earl of Kildare. He laid siege to Dublin, which was captured after a short resistance; but later he was defeated and was taken prisoner to London, where he forfeited his life. An outstanding event in the history of Dublin in the sixteenth century was the establishment in 1591 of Trinity College under the title of "The College of the Holy and Undivided Trinity, near Dublin"; it was opened in the winter of 1593–4.

In 1613 a Parliament representative of all Ireland was held in Dublin. During the reign of Charles I a Catholic University was established in Back Lane, but this was closed by Government order in 1632. The outbreak of the war of 1641–2 saw Dublin closely invested by Eoghan Ruadh O'Neill, but lack of provisions and of the necessary war supplies compelled him to withdraw his forces. At the restoration of the Stuarts, Dublin citizens were rewarded with a gift of a gold chain from the King, and the title of Lord Mayor was bestowed upon its first citizen. From this time began the development of Dublin as we know it to-day. Houses were erected outside the mediaeval walls, and the space between the Castle and Trinity College was built upon. The Green at Oxmantown was laid out in building lots, and four new bridges were erected over the Liffey. The close of the seventeenth century was a period of great excitement in Dublin. James II arrived in 1689, and the capital remained his headquarters until his final defeat at the Boyne in July, 1690. A royal mint was set up in Capel Street, and a Catholic was appointed provost of Trinity College. When William III came he presented a mayoral chain to replace that which had been given by Charles II, and which had disappeared along with its wearer, Sir Michael Creagh, during the confusion which marked the flight of James II.

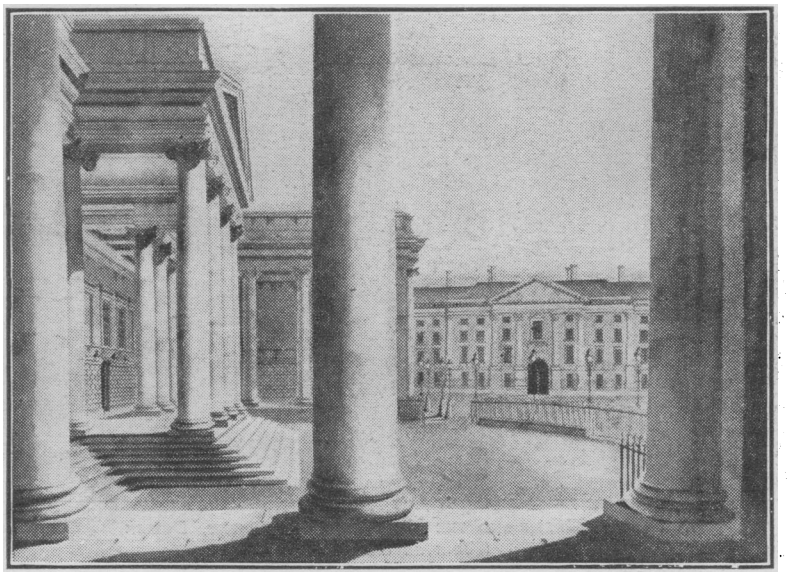
The first agitation for an autonomous legislature marks an important epoch in the story of Dublin. William Molyneux in his *Case of Ireland,* and Swift in his *Drapier Letters,* published respectively in 1698 and 1724, presented a new conception of the political relations of England and Ireland. Notwithstanding the severe restrictions under which Irish trade laboured during the eighteenth century, there appears to have been a considerable advance in Dublin's commercial life. The linen trade progressed to an astonishing degree, and in 1726 a Linen Hall was erected. Towards the middle of

the century the population had grown to nearly 100,000. Local and municipal institutions extended their spheres of influence, and a very thriving silk industry was firmly established. During the second half of the century many fine public buildings and private residences were built. Art, literature, science, painting, and the drama were encouraged by the brilliant and hospitable society of the period. Packet boats were running regularly between Dublin and England, and no fewer than twenty stage coaches connected the city with the provincial towns. The brilliance of the social life of Dublin at this time was unequalled in any Continental capital. In 1731 a music hall was opened in Crow Street, and theatres were erected in Rainsford and Aungier Streets. Four years afterwards the first performance of Handel's *Messiah* was given in the Fishamble Street Music Hall, the great composer himself conducting. Charitable institutions have always been well supported in Dublin, and it is interesting to note that one of the earliest of the Dublin charities—the Rotunda Lying-in Hospital—was founded as far back as 1745, by Dr. Bartholomew Mosse, in George's Lane (now Great George's Street). At the end of the century Dublin had a population of 172,084 and an area of 1,264 acres.

The Act of Union dealt a severe blow to the fortunes of Dublin during the early years of the nineteenth century. The transfer of legislation from College Green to Westminster meant a greater loss to Dublin than was at first apparent. The nobility, who had acquired or built magnificent residences in or near the city, now betook themselves to England, and for a period it seemed as if the capital of the nation was destined to sink into a sleepy and decaying provincial town. Great efforts were made, however, by the citizens to stem the tide of ill fortune, and by degrees improvements were effected. In 1808 the policing of the streets was reformed, and what was previously Parliament House was opened as the Bank of Ireland. In 1815 the General Post Office in O'Connell Street was erected, and in the following year the Pro-Cathedral Church of St. Mary in Marlborough Street was begun. The railway between Dublin and Dun Laoghaire (Kingstown) was opened in 1834, and municipal life was improved by the introduction of democratic representation in 1841. An electric telegraph between Dublin and Holyhead was laid down in 1852, and in the following year there was a great industrial exhibition in Merrion Square. The railway between Dublin and Bray was opened in 1854, and in the autumn of the same year the Catholic University was established under the direction of John Henry (later Cardinal) Newman. In 1865 an International Exhibition was held in Earlsfort Terrace on the site of the present University College ; 1868 saw the completion of the Vartry water supply for the city, and February, 1872, the inauguration of the Dublin tramway system. St. Stephen's Green, which was enclosed about 1678, was reopened for public use about this time. The Municipal Free Libraries were inaugurated in 1884, and six years later the National Museum and Library, Kildare Street, were opened. The National Museum contains the Royal Irish Academy's unique collection of Irish antiquities. The first performance was given at the Abbey Theatre in 1904. In 1908 the Royal University of Ireland was incorporated with the National University: there are now three constituent colleges—Dublin, Cork, and Galway—and the handsome building which at present houses the first of these was erected on the site of the old Royal University buildings in Earlsfort Terrace. April, 1916, saw an insurrection in Dublin. The General Post Office and other public and private buildings were garrisoned by the Irish Republican Army and the Citizen Army ; the city was the scene of fierce engagements for nearly a week, and much destruction was caused.

During the last century there has been a steady advance in Dublin's intellectual and commercial life. The high order of Irish scholarship received fresh stimulus from the establishment of the National University, and it may be of interest to note that the originators of the Shannon Electricity Scheme and the Drumm electric train are graduates of the Dublin College of the National University.

The trade of Dublin has considerably increased in size and importance since the creation of the Irish Free State. During the last ten years many industries have been launched, and it is pleasing to learn from official statistics that they all show a steady upward tendency. Brewing, baking, printing, malting, tobacco, and the manufacture of woollen and worsted goods and of boots and shoes are the chief industries of Dublin, but practically all others are represented. Protective tariffs have helped to no small extent, and as most of the new protected industries have been established in or near the city, it is certain that Dublin in the future will be the centre of no inconsiderable manufacturing activity.



TRINITY COLLEGE, FROM THE HOUSES OF PARLIAMENT, DUBLIN.
(*From an old print.*)

[The illustrations in this article are reproduced by the courtesy of the Irish Tourist Association.]

HEALTH OF THE ARMY

The report on the health of the Army for 1931[1] conforms to a set standard initiated early in the post-war era. It is divided into three sections: a succinct survey of the health of the Army at home and abroad among officers, gentleman cadets, soldiers, boys, women, and children ; an account of the work carried out by the special departments ; and detailed statistics of the health of the troops in the various commands. Statisticians, in all walks of life, in preparing tables are apt to forget the dictum of a business man that " Statistics warn the wise." The Army Medical Department cannot be accused of this fault, as they endeavour to explain any increase or decrease of disease in the Army, and their report is therefore interesting. It impresses by accepting the uncontrovertible fact that certain diseases cannot be prevented by administrative measures until medical knowledge is further advanced. It indicates that medical officers of the R.A.M.C. engaged in the practice of medicine, surgery, and their branches are skilled in professional duties, and work under good conditions and in hospitals well equipped for the treatment of patients. In due course the Army, no less than the civil authorities, will recognize that many preventive measures may be expected to result from the

[1] H.M. Stationery Office. 1933. (2s. 6d. net.)

investigations and studies of the general practitioner. When this is fully realized enthusiasm will weld a groping band of hard workers into a compact force for the furtherance of medical science in the Army.

In reading this official publication one can visualize the high ideals of the Army doctor, so well described in a lecture to the students at Camberley by that great soldier the late Field Marshal Sir William Robertson. "Remember that when the day for fighting comes the qualifications demanded of you, whether on the staff or in command, will include, in addition to a good theoretical knowledge of your professional duties, the possession of a quick eye, a good digestion, an untiring activity, a determination to close with your enemy, and a firm resolution not to take counsel of your fears."

The sick admission ratio among officers was 204.3 per 1,000 of strength, as compared with 196.1 for 1930, and, among soldiers, 467.7 as against 428.4. The increase, 39.3, in the admission ratio for soldiers was almost entirely due to influenza during the early months of the year. This disease was responsible for the admission to hospital of 8,324 warrant officers, non-commissioned officers, and men, compared with 1,564 in 1930—an increase of 37.1 per 1,000 of the strength. The admission ratios for the ordinary diseases due to infection, with the exception of influenza and meningococcal infections, were normal. They were: diphtheria, 1.0; enteric fever, 1.2; influenza, 45.9; measles, 0.6; meningococcal infection, 0.5; mumps, 0.8; pneumonia, 3.3; scarlet fever, 0.6; pulmonary tuberculosis, 1.3. So, too, were the common ailments, and in most cases the figures correspond closely with those for 1930. The admission ratios were: diseases of the digestive system, 54.7; local and general injuries, 54.3; malaria, 39.6; diseases of the areolar tissue, 35.5; venereal diseases, 32.2; diseases of the skin, 24.1.

The ratios for diseases of the respiratory system, 20.2, and inflammation of the tonsils, 31.7, are lower than were to be expected in a year when the influenza rate was high. Among Eastern diseases the ratio for dysentery increased to 9.4 from 7.6 in 1930; pyrexia of uncertain origin, 1.3 against 0.9; while sandfly fever shows a slight decrease, 17.1 against 17.9.

Attention is drawn to the recorded cases of gastric and duodenal ulcers and the figures for venereal disease. A special scrutiny was made of all cases operated on for gastric and duodenal ulcers. These diseases are comparatively common in the Army, and, while a yearly survey is interesting, the time is now opportune to examine and publish the results of treatment over a period covering the last five years, in view of the statement that operation only rarely renders a man fit for military duty at home and abroad.

The figures for venereal diseases are remarkable. There is a decrease in the general incidence (32.2) which is noteworthy, but a very high ratio of 221.9 per 1,000 of strength in China, which is regrettable. The British soldier of to-day is usually a clean-living man, and by his healthy conduct impresses his personality on his fellow citizens. Abroad, when carefully looked after, he is an ambassador for peace. If he is cut off from wholesome amusements, recreations, and sports he may fall a victim to boredom, leisure, and vicious pursuits. It is evident from the published reports and statistics that, if headway is to be made in China, stricter attention to sociological factors should be paid by regimental officers.

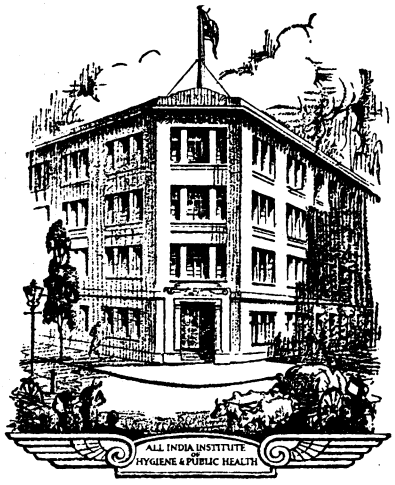
The death ratio was 2.58 per 1,000, against 2.32 in 1930; while the invaliding rate, an indication of good doctoring, fell to 8.19 per 1,000, against 9.28 in 1930—the lowest yet recorded since 1921. Nervous and mental diseases, pulmonary tuberculosis, and inflammation of the middle ear are still the principal causes of invaliding. The numbers invalided from these diseases were: nervous, 192; mental, 175; pulmonary tuberculosis, 181; and inflammation of the middle ear, 131.

Section II deals with departmental organization and the work which has been carried out during the year. Many old problems, such as clothing and equipment, physical training, and rations, are discussed. Here are seen the different standpoints of the medical enthusiast in advocating more hygienic uniforms and lighter equipment, and the "practical soldier" who evidently for the present accepts the acid test of a great war and is guided mainly by questions of policy and finance. In Section III the full account of the health of the troops in India merits careful reading. It shows that the medical authorities in India are taking stock of the medical situation, and are subjecting the important diseases to a critical analysis.

India

All-India Institute of Hygiene

The opening of the All-India Institute of Hygiene at Calcutta some three months ago was the sequel to collaboration between Major-General Graham, Public Health Commissioner with the Government of India, Sir J. W. G. Megaw, formerly head of the Calcutta School of Tropical Medicine and now Director-General I.M.S., and Dr. W. S. Carter, Associate Director of the Rockefeller Foundation. The Foundation offered to the Government of India to bear the cost of securing the site selected, and to build and equip the Institute, provided that the Government would agree to meet the cost of staffing and maintenance subsequently. The site was acquired and cleared in 1930, and in the autumn of that year the process of building began. The new Institute almost adjoins the Calcutta School of Tropical Medicine, and comprises six departments—namely, public health administration, sanitary engineering, vital statistics and epidemiology, biochemistry and nutrition, malariology and rural hygiene, and maternity and child welfare and school hygiene. Each department is staffed by a professor and his assistant, with laboratory or other workers. The primary object of the Institute is to bridge over the gulf between the results achieved by pure research and their practical application to the community; its chief function will be instruction, therefore. The subjects for the first part of the Diploma of Public Health will continue to be taught by the staff of the School of Tropical Medicine, but the specialized subjects in public health will be taught by the staff of the Institute, each professor being in charge of his own subject. The examination for the D.P.H. is conducted by the University of Calcutta, with which the Institute will be duly affiliated. It is also intended to provide short post-graduate courses in special subjects for public health workers who desire to take up advanced study, and the University has now brought into being a doctorate in public health science for which a year's training in the new Institute in some special branch of this subject will be required. In view of the importance of maternity and child welfare work and of public health nursing it is contemplated that special courses in these subjects may be arranged for women graduates and nurses respectively. The work at the Institute will also be co-ordinated with the various aspects of practical hygiene and public health all over India. It is hoped that it will thus be able to render assistance to public



the carriage to remote villages of anti-cholera and anti-typhoid vaccines, and the supply of food to famine-stricken tribes in Trans-Jordan.

In the course of the debate Mr. WHITESIDE said that the danger in the next war would come not from explosives, but from germs and gases. It might be that war would not even be declared, but that one nation, wanting to destroy another, would infect rats with anthrax and plague and send them to the country it was desired to destroy. They might send through the post a parcel containing germs so potent that a whole nation might be wiped out. No peace pact in the world could prevent that.

Poisoning from Enamel-ware. Sir HILTON YOUNG informed Mr. Hutchison, on March 9th, that he had no power to lay down a standard of safety for enamel-ware of British manufacture, nor could he prohibit the importation of foreign enamel-ware which did not come up to this standard. He had recently issued a circular on antimony poisoning from enamel-ware. (See *British Medical Journal*, March 11th, p. 423.)

Physique of Applicants for Motor Licences.—Mr. STANLEY, in reply to Mr. Ross Taylor on March 1st, said he had no evidence that false declarations under the Road Traffic Act, 1930, were frequently made by applicants for licences to drive motor vehicles in regard to physical fitness, including eyesight. He thought it would be well to have longer experience of the operation of the Act before coming to any conclusion on the need for imposing further requirements in the matter of physical fitness.

Sanitation in Stirlingshire.—Replying to Mr. Leonard on March 2nd, Mr. SKELTON said he was aware that groups of inhabitants of the villages of Strathblane and Blanefield, Stirlingshire, demanded a public inquiry into the non-observance of sanitary and health regulations. He had no information regarding the condition of certain basement houses there, but would have the matter investigated.

Functions of Coroners.—The Home Secretary does not think it necessary to appoint a departmental committee to review the powers and functions of coroners, or to introduce legislation revising those powers.

Notes in Brief

Sir John Gilmour announced, on March 9th, that the British Government intends to ratify, before April 13th, 1933, the Convention for Limiting the Manufacture and Regulating the Distribution of Narcotic Drugs, 1931.

Sir John Gilmour holds out no hope of legislation at present on the lines of the Performing Animals (Regulation) Amendment Bill of 1930.

Universities and Colleges

UNIVERSITY OF OXFORD

An election of two members of the Board of the Faculty of Medicine, vice Mr. E. L. Pearce-Gould and Dr. J. J. Conybeare, will be held on Friday, June 2nd; the members elected will hold office for two years from the first day of Michaelmas Term, 1933. The General Medical Electorate consists of all Oxford graduates in medicine who are members of Convocation. The Board of the Faculty of Medicine includes four members elected by the General Medical Electorate, who must be members of that body, and of whom three at least must be persons engaged in teaching one or more of the clinical subjects of the Faculty. Nominations of duly qualified candidates for election will be received by the Secretary of Faculties at the University Registry, Oxford, up to 10 a.m. on Friday, May 12th. Each nomination must be signed by six members of the General Medical Electorate, and no candidate will be eligible whose nomination has not been received before that date.

UNIVERSITY OF CAMBRIDGE

The Appointments Committee of the Faculty of Biology "B" has appointed Joseph Needham, M.A., Ph.D., Fellow of Gonville and Caius College, to be Sir William Dunn reader in biochemistry as from March 1st, 1933, in succession to Mr. J. B. S. Haldane, M.A., F.R.S., now professor of genetics at University College, University of London.

At a congregation on March 11th Professor W. Langdon Brown, M.D., was appointed to represent the University at the sixth Imperial Social Hygiene Congress, to be held in London from July 3rd to 7th, 1933.

The following medical degrees were conferred:

M.D.—N. M. Goodman, R. Pearce.
M.CHIR.—R. Marnham, T. K. S. Lyle.
M.B., B.CHIR.—L. C. Cook.
M.B.—W. H. G. Jessop, M. A. Rushton.
B.CHIR.—S. E. Birdsall.

UNIVERSITY OF LONDON

The King, accompanied by the Queen, will lay the foundation stone of the new University buildings on Monday, June 26th, at 3 p.m.

The University Court, at its meeting on March 8th, learnt with gratification that the Armourers and Brasiers' Company and the Carpenters' Company had decided to make grants to the University of £2,000 and £1,000 respectively in the shape of annual payments extending over ten years, and that the Ironmongers' Company had granted £500 and the Dyers' Company £105. These benefactions will be applied towards meeting the cost of the new Ceremonial Hall to be erected on the University's site in Bloomsbury. A munificent bequest made to the University by the late Mr. Arthur L. Leon has been accepted with great appreciation. The bequest, amounting to some £20,000, is for the promotion of post-graduate or advanced research work.

Mr. H. V. Ellis has been recognized as a teacher of surgery (orthopaedic) at St. Mary's Hospital Medical School. Professor Geoffrey Hadfield has been appointed staff examiner in pathology for 1933.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

Council Election

The secretary of the Royal College of Surgeons has sent out the usual announcement, which on this occasion states that, on Thursday, July 6th, at 11 a.m., there will take place an election of five Fellows into the council in the vacancies occasioned by the retirement in rotation of Lord Moynihan, Sir John Lynn-Thomas, Mr. A. H. Burgess, and Mr. V. Warren Low, and by the death of Sir Percy Sargent.

A voting paper will be sent by post to each Fellow whose address is registered at the College on April 4th. Fellows are requested to give notice without delay of any change of address, in order that voting papers may not be mis-sent.

An ordinary Council meeting was held on March 9th, when the President, Sir Holburt Waring, was in the chair.

Diplomas and Licences

Diplomas of Membership were granted to G. P. Goodwin and E. K. James.

Licences in Dental Surgery were granted to twenty-six candidates.

Diplomas in Ophthalmic Medicine and Surgery were granted, jointly with the Royal College of Physicians, to the following fifteen candidates:

A. J. Boase, A. J. Cameron, J. L. Connacher, K. G. Das, L. P. J. Evans, F. S. Flynn, G. S. Forrester, N. C. Ghosh, A. L. Kiow, Djung-Lin Lu, C. A. Pittar, V. B. Purvis, S. V. Rao, O. L. Senaratne, S. P. Srivastava.

Appointments

Mr. C. P. G. Wakeley was elected a member of the Court of Examiners in the vacancy occasioned by the death of Mr. H. S. Clogg. Mr. E. W. Hey Groves was elected a member of the Court of the University of Bristol in the vacancy occasioned by the death of Sir Percy Sargent.

Receptions

The President reported that arrangements had been made to hold a reception for the Société Internationale d'Urologie at the College on Tuesday, July 11th, at 9.30 p.m. to 12 o'clock. It was also agreed to hold a reception at the College on Thursday, July 20th, at 8.30 p.m., for members of the Congress of the International Society of Orthopaedic Surgery.

ROYAL FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW

At the monthly meeting of the Royal Faculty of Physicians and Surgeons of Glasgow, held on March 7th, the following were admitted Fellows: A. J. Hutton, J. Dunbar.

Medical News

The annual meeting of the Mental After-Care Association will be held at 141, Harley Street, W. (by invitation of Lord and Lady Horder), on Thursday, March 23rd, at 3.30 p.m., with Lord Wakefield of Hythe in the chair. The speakers will include Sir Robert Armstrong-Jones, Sir Hubert Bond, Sir John Broadbent, Miss Elizabeth Haldane, Bishop Paget, Dr. Nathan Raw, Sir Humphry Rolleston, and Dr. Reginald Worth. Tea at 4.30 p.m.

The annual meeting of the Royal Medical Benevolent Fund will be held at 11, Chandos Street, W.1, on Thursday, March 23rd, at 5 p.m. The annual report and financial statement for 1932 will be presented and the officers and committee for the current year elected.

The Royal College of Physicians and Surgeons of Canada at its third annual meeting conferred honorary Fellowship upon the Governor-General (Lord Bessborough), Mr. I. H. Cameron of Toronto, and Dr. John Stewart of Halifax.

The Royal Institute of Public Health announces that, in view of the interest aroused by the publication in last week's *British Medical Journal* of the article by Dr. E. Cronin Lowe of Liverpool on "A quantitative modification of the Bendien reaction in sero-diagnosis of malignancy," he will give a demonstration of his technique in the lecture hall of the Institute, 23, Queen Square, W.C., on Friday, March 24th, at 8 p.m.

The main discussion of the British Congress of Obstetrics and Gynaecology, to be held in Birmingham on April 5th, 6th, and 7th, will be "The mechanism of uterine action and its disorders." The secretary of the congress is Mr. W. E. Barnie-Adshead, 89, Cornwall Street, Birmingham.

The next monthly clinical meeting for medical practitioners will be given at the Hospital for Epilepsy and Paralysis, Maida Vale, W.9, on Thursday, March 23rd, at 3 p.m., when Dr. F. L. Golla will demonstrate. Tea will be provided, and it will be a convenience if those intending to be present will notify the secretary.

The last of the sessional meetings in London, arranged by the Royal Sanitary Institute for the present session, will be held at 90, Buckingham Palace Road, S.W., on Wednesday, March 29th, at 5 p.m., when a discussion on "Standards in the milk industry: a joint responsibility of medical officers of health, producers, distributors, and the veterinary services," will be opened by Lieut.-Colonel C. Waley Cohen, with Viscount Astor in the chair.

The last lecture in the series on Practical Problems in Medicine and Surgery, arranged by the Fellowship of Medicine and Post-Graduate Medical Association, will be given on March 21st, at 4 p.m., on effects on the heart of disease of other systems, and indications in treatment (free to members and associates of the Fellowship). There will be a demonstration of medical and surgical cases of general interest at the Lambeth Hospital, Brook Street, on March 24th, at 2 p.m., when selected cases will be demonstrated. There will be a week-end course in clinical surgery at the Royal Albert Dock Hospital, on April 1st and 2nd. All-day instruction will be given, with special reference to the relation of technique and end-result. Demonstrations of medical ophthalmology specially suitable for M.R.C.P. candidates have been arranged as follows: March 21st, 8.30 p.m., in-patient department of the West End Hospital for Nervous Diseases; March 22nd, 5 p.m., and March 30th, 8.30 p.m., Royal Westminster Ophthalmic Hospital.

An election of Junior Fellows under the Beit Memorial Fellowships for Medical Research will take place in July next. They are of the annual value of £400, and the usual tenure is for three years. The elected Fellows will be required to begin work on October 1st. Applications should be received by May 18th, though late entries will be accepted up to June 1st. Forms of application and all information may be obtained by letter only, addressed to Professor T. R. Elliott, M.D., F.R.S., honorary secretary, Beit Memorial Fellowships for Medical Research, University College Hospital Medical School, University Street, W.C.1.

The following members of the medical profession have been nominated members of the General Nursing Council by the Ministry of Health: Dr. M. A. Collins, medical superintendent of Kent County Mental Hospital; Mr. H. L. Eason, medical superintendent of Guy's Hospital; Dr. Marguerite Kettle, an assistant editor of the *Lancet*; and Dr. Charles Porter, M.O.H. for Marylebone.

It is only a very short time ago that the Epsom College Act of 1932 was passed extending the benefits of the Royal Medical Foundation of the College to medical women *pari passu* with medical men. The council has now taken the first opportunity of asking two medical women to serve, one as a member of the council, the other as the representative of the Medical Women's Federation on the conjoint committee of the College, which now elects the pensioners and foundationers. To Mrs. Robert Hutchison, M.B., and Dr. Christine Murrell, respectively, falls the distinction of being the first lady members to serve in the above capacities.

Mr. Leslie Paton, who is already an honorary member of the French, Spanish-American, and Japanese Ophthalmological Societies, has been elected an honorary member of the Hungarian Ophthalmological Society.

The annual congress of the French Society of Gynaecology will be held at Luxeuil on June 3rd, 4th, and 5th, under the presidency of Dr. L. M. Pierra of Luxeuil, when the subject for discussion will be pain in gynaecology. Further information can be obtained from the general secretary, Dr. Maurice Fabre, 6, Rue du Conservatoire, Paris, IXe.

Professor D'Arsonval has resigned his chair of physiology at the Collège de France on the occasion of his eighty-first birthday.

Letters, Notes, and Answers

All communications in regard to editorial business should be addressed to **The EDITOR, British Medical Journal, B.M.A. House, Tavistock Square, W.C.1.**

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The **TELEPHONE NUMBERS** of the British Medical Association and the *British Medical Journal* are MUSEUM 9861, 9862, 9863, and 9864 (internal exchange, four lines).

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QUERIES AND ANSWERS

Nail-biting

Dr. J. KERR MUIR (West Hartlepool) writes: Can any reader inform me of an effective treatment for nail-biting in a child (aged 8)?

Sweating at the Menopause

Dr. A. PATTON (Widnes) writes: In reply to "H. N. B." I have found elixir bromo-valerian (Gabail) in full doses when required of considerable service in several of these cases.