

CERTIFICATES BY MEDICAL PRACTITIONERS

G.M.C.'s WARNING NOTICE

At the request of the President of the General Medical Council we print below a Warning Notice as to certificates given by registered medical practitioners in their professional capacity.

1. The organization of the resources of the nation for the combatant service generally, for the supply of munitions, for the mobilization and use of labour, for public assistance, and for pensions, gives rise to a host of occasions on which registered medical practitioners are requested to sign certificates of fitness or unfitness for persons under their care. Such medical certificates, to be valid, must by law be signed by registered medical practitioners only, and this trust on the part of the State is dependent upon the maintenance of a reciprocal skill and good faith on the part of the practitioners.

2. The State is accordingly entitled to assume that a certificate signed by a registered medical practitioner is completely reliable and an honest and proper fulfilment of his obligation.

3. Unverified assertions made by the patient himself, personal opinions as to his fitness or unfitness for various forms of service, or for particular hours of work, and other statements not founded on a careful examination of the patient immediately before a certificate is given, or supported by ascertained facts or conditions, are not proper material to support a certificate signed by a registered medical practitioner as his testimony to facts within his professional knowledge.

4. It has recently been made to appear to the General Medical Council by information and evidence received from competent authorities that in a number of instances there has been a relaxation of the vigilance with which such certificates are being signed.

5. The attention of registered medical practitioners is therefore drawn to the terms of the Warning Notice issued by the General Medical Council with regard to the granting of medical certificates.

The Notice states that

"Registered medical practitioners are in certain cases bound by law to give, or may be from time to time called upon or requested to give, certificates, notifications, reports, and other documents of a kindred character, signed by them in their professional capacity, for subsequent use either in Courts of Justice or for administrative purposes."

The Notice further states that

"Any registered practitioner who shall be shown to have signed or given under his name and authority any such certificate, notification, report, or document of a kindred character, which is untrue, misleading, or improper . . . is liable to have his name erased from the Medical Register."

6. The General Medical Council desires to impress upon practitioners that any such certificate should be granted *only on medical grounds* and from the practitioner's personal knowledge of the health and physical condition of the applicant, as ascertained by him at the time of granting the certificate.

J. B. Gillespie and J. C. T. Rogers (*Arch. Pediat.*, 1940, **57**, 652), who record a personal case of enterogenous duodenal cyst in a boy aged 4½ years, state that in the nine previously reported cases the patients' ages ranged from the newborn period to 15 years. The recognition of the condition was due to early development of obstructive symptoms. In the newborn period a pre-operative diagnosis of pyloric stenosis was not infrequent. Vomiting had been the only constant symptom. Abdominal distension and vague discomfort occasionally occurred in the older patients. An abdominal mass usually in the upper quadrant has been the predominant physical finding. Of the recorded cases, including the authors', eight were treated by operation and four patients made a good recovery.

Local News

ENGLAND AND WALES

Fracture Treatment under Emergency Hospital Scheme

Mr. Ernest Brown, the Minister of Health, attended the annual meeting of the Central Council for the Care of Cripples on March 28. In the stress of war, he said, the "civilian" cripple, whose condition was due to accident or to one of the crippling diseases, must not be forgotten. He relied upon the Central Council, which had already done so much, to see that this vitally important piece of social welfare was not neglected. Turning to the arrangements for the treatment and rehabilitation of the war-injured, Mr. Brown said that under the Emergency Hospital Scheme nineteen special orthopaedic centres had been established in England and Wales, and to these the majority of serious fracture cases, military or civil, would be transferred. At each centre there was a skilled surgical staff—in one centre an American team of orthopaedic surgeons—and a physiotherapy department with trained masseuses. In addition facilities were being developed at each of these hospitals for physical training, games, and occupational therapy. It was realized that nineteen orthopaedic centres was not enough, and the Ministry was at the moment engaged in bringing into the fracture service a number of other hospitals at which there were surgical staffs competent to treat fractures. After the war some of the special hospitals would disappear as the buildings in which they were housed returned to their normal uses, but others would remain as a permanent addition to the country's orthopaedic services. The new hutment hospitals were not a collection of old Army huts, doomed to dilapidation in the course of a few years, but soundly constructed pavilions, built often in brick and concrete, and medical experts had assured him that they made excellent hospitals of which no country need be ashamed. He added that the Ministries of Health, Labour, and Pensions and the Department of Health for Scotland were in close contact over the question of the further rehabilitation of war-injured in the sense of training for a different job if the disability rendered it impossible for the man to resume his old occupation. He hoped that an announcement would shortly be made as to the proposed plans. At the business meeting of the Central Council Dame Agnes Hunt was re-elected President, and the Earl of Dudley and Sir Geoffrey Peto Chairman and Vice-chairman respectively.

Co-ordination of Tuberculosis Services

Regionalization for the tuberculosis services of local authorities was urged in a paper by Dr. G. Lissant Cox, central tuberculosis officer for Lancashire, at a recent meeting of the Joint Tuberculosis Council in London. The main points urged by Dr. Cox were that many local authorities are not large enough to deal adequately with the prevention and treatment of tuberculosis on modern lines, and that some form of combination or regionalization such as already exists in Wales is desirable throughout Great Britain. The county and county borough councils for tuberculosis schemes in England (leaving London out of account) deal with populations ranging from 50,000 to 2,000,000, and although all the authorities are supposed to have schemes similar in efficiency and completeness, this is not in fact the case. There are relatively small counties and boroughs with efficient schemes, but these have been fortunate in having a person of exceptional ability as director or an area with peculiar advantages, and in general it must be said that for so complicated and expensive a work of public health a large authority is in a position to provide a modern scheme more economically than is a small and poor authority. There is already ample legislation to enable local authorities to combine and form general committees or boards for carrying out their statutory duties, but there are only three such combinations in England, those relating to the areas of Staffordshire, Gloucestershire, and Warwickshire respectively, and in those areas the efficiency of combination has been demonstrated. Nine years ago the

Joint Tuberculosis Council recommended that rural areas with a population of 200,000 and urban areas with one of 300,000 could be managed by one whole-time tuberculosis officer with proper assistance, but, of course, the adequacy of areas differs with the aspect of tuberculosis work in view. For isolation, nursing, and some minor surgical treatment a small area may function quite well, whereas it could not function efficiently and economically for more specialized treatment—for example, for non-pulmonary disease, especially of bones and joints, for children and adults, or for major thoracic surgical work. Dr. Cox pointed to examples of regionalization, such as the Welsh National Memorial Association, which conducts the diagnosis and treatment of tuberculosis in Wales and Monmouthshire, and, in more general fields, the scheme of the British Hospitals Association and the Emergency Medical Service, with its twelve regions for Great Britain. These regions, however, do not lend themselves suitably to the purpose of tuberculosis areas, but Dr. Cox urged that some scheme of regionalization, with due regard to the areas of county councils, was highly desirable. Legislation will, of course, be required to enforce a combination of local authorities held to be too small to provide efficient schemes.

Tuberculosis in Shelters

At the same meeting Dr. F. R. G. Heaf presented a memorandum on tuberculosis in shelters. The series of recommendations which it contained, and which were accepted by the council, included the following: that the recommendations of the Horder Committee be carried out as soon as possible; that the provision of special shelter accommodation for the tuberculous in densely populated areas be encouraged; that a special effort be made to examine more frequently contacts of known tuberculosis cases using Anderson shelters; that all children be removed from Anderson shelters used by tuberculous persons; and that no tuberculous person be allowed to use a school shelter. Many of these recommendations, especially those for segregation, can only be applied during periods of comparative quiet, and the point was therefore stressed that action should be taken while it was possible to enforce regulations so that a certain adherence to order and routine may be expected in times of extreme emergency.

Reports of Societies

MASS RADIOGRAPHY AND TUBERCULOSIS

At a recent meeting of the North-Western Tuberculosis Society, held at the Tuberculosis Offices, Manchester, Dr. G. JESSEL, Consultant Tuberculosis Officer, Lancashire County Council, read a paper on "The Role of Mass Radiography in Tuberculosis."

Dr. Jessel said that the diagnosis of early tuberculosis still left much to be desired, despite the marked increase in x-ray facilities in recent years. This was largely inherent in the pathology of the disease. Radiography was only capable of recording the shadows of the moment, which might be characteristic of one or more diseases, and, in the case of tuberculosis, did not necessarily indicate activity. A full clinical investigation of suspicious cases was essential. Mass radiography could be carried out in several ways: fluoroscopy was the cheapest but did not provide a permanent record; miniature screen photography overcame this defect, but its use on a large scale necessitated special apparatus and very careful organization. Miniature mass radiography could provide, under favourable conditions, a rapid method of weeding out those who presented abnormal skiagraphic appearances, and these suspects should be referred to a tuberculosis dispensary for detailed investigation. Persons classed as healthy should be re-examined at intervals, especially in the so-called dangerous industries. Miniature mass radiography of entrants into industry, the Army, etc., had already been tried, and, subject to financial considerations and with certain reserva-

tions, might be more generally used as the necessary centres, apparatus, and personnel became available. Definite standards of technique and interpretation would be essential for comparable results of value. The interpretation should be made by teams of experienced radiologists and tuberculosis officers or chest specialists. The examinations should be regarded as part of a general health survey and should not be related in the public mind specifically to tuberculosis. The work should not be carried out at a tuberculosis dispensary, which should remain the centre for detailed examination of suspects.

Dr. A. K. MILLER referred to the economic aspect of this health survey, which would certainly throw workers out of employment, and on that account would probably meet with some opposition. Provision should be made for these unfortunates. Dr. J. CRAW said that of approximately 1,800 lead miners examined by mass radiography, 0.64%, who had previously said they were fit, were found to be tuberculous. Dr. WYNNE-EDWARDS said that experiments he had made so far with a Leica camera had been unsatisfactory owing to distortion. He added that mass radiography of Storm Troopers in Germany had revealed that 8% were tuberculous.

Wartime Problems of Tuberculosis

At the same meeting Dr. D. P. SUTHERLAND, Senior Tuberculosis Officer for the city of Manchester, spoke on "Some Observed Effects of the War to Date." He said that enemy action and E.M.S. requirements had caused a diminution of approximately 10% in the number of beds available. The general evacuation of the towns at the beginning of the war was, on the whole, probably beneficial; children, for example, were dispersed widely and were in many instances removed, at least temporarily, from heavily infected relatives. A later evacuation resulting from war damage to the dwellings of the tuberculous was unfortunately less innocent. There was danger of infection, as the dispossessed tenants were rehoused either in empty houses or in houses already occupied generally by non-tuberculous persons. Concentration and crowding resulted, not only in individual houses but in the immediate vicinity of the bombed town. The fact that the economic circumstances of the general population were now much better than for years might lead to improved nutrition and increased resistance to the results of infection. Rationing might, however, counteract this. The removal of so many cases from hospitals had been associated with an increase in notified cases so far. In a recent broadcast appeal for more nurses for fever and tuberculosis work the Ministry of Health had emphasized the danger of possible increase in the so-called infectious diseases; no less important was the danger from endemic tuberculosis. The difficulties of staffing sanatoria had been steadily increasing for years before the outbreak of war, and competition with Service requirements had since aggravated the position. There was a very large reservoir of trained staff waiting to deal with casualties as yet non-existent; they had nothing to do and were in most cases anxious to be usefully employed. In addition there were thousands of partly trained personnel, many of whom could be, but were unwilling to be, usefully employed in helping with the treatment and care of the tuberculous, who had great need of their services, preferring instead to do alternative work for which there was no call. As a result there was a diminution in treatment and isolation at a time when these things were most necessary.

In the discussion which followed Dr. Sutherland's paper members were unanimous that long hours in crowded munition works and loss of rest due to A.R.P. and Home Guard duties had resulted in the relapse of old quiescent cases. There were many "T.B. minus" cases in the Home Guard.

W. F. Burdick (*J. Pediat.*, 1940, **17**, 654), who reports ten cases in children aged from 3 weeks to 13 years, illustrates the rarity of peptic ulcer in childhood by the fact that out of 21,231 admissions to a children's hospital there were only 8 cases, 6 of which were duodenal and 2 gastric. He advocates a freer use of x rays in children suffering from anorexia, retarded growth, vague abdominal distress, and constipation. By so doing the diagnosis may be made before haemorrhage or perforation occurs.

Discussion of Secondary Cataract

SIR.—Most ophthalmologists at some time or other have found difficulty in dealing with an after-cataract by means of a needle or a Ziegler's knife. The difficulty is in getting a *point d'appui*, and the fibrous membrane often simply moves in front of the instrument and is neither torn nor cut. Mydracaine is well known as a powerful mydriatic which does its work efficiently without raising the tension, but it is not sufficiently recognized that if 2% solution of cocain. hyd. is instilled, and after an interval of three or four minutes a sub-conjunctival injection of 5 minims of No. 2 mydracaine (Moorfields) is given, the discission can be done easily. The membrane becomes taut and the operation then presents little difficulty.—I am, etc.,

Wanstead, E.11, March 28.

FRANCIS E. PRESTON.

Pulmonary Oedema

SIR.—With reference to the annotation (March 22, p. 447) on Luisada's view of the reflex origin of acute pulmonary oedema, may I point out that the idea is by no means a new one. It was put forward, for example, by S. Wassermann in the *Wien. Arch. inn. Med.*, 1933. The earliest reference I can find is nearly thirty years old. In the *Lancet* of May 27, 1911, A. E. Carver gives an admirable and detailed description of two cases, and concludes that certain features observed in these cases "raise the question whether reflex vagus stimulation was not a factor in determining the onset of the attacks, and this element of nervous influence would account for the beneficial effects of treatment with morphine and chloroform, an experience which coincides with that of other observers in similar cases."—I am, etc.,

Paignton, March 31.

ATHELSTANE HILL.

Medico-Legal

MURDER OR ACCIDENT?

The medico-legal evidence decided the question of guilt or innocence in a recent murder trial.* A woman had been found lying on her back in a bedroom. There had been a small blood-stained area on the carpet, and the body had various bruises and abrasions on the scalp, forehead, left eye, arms, and legs. Pressure had been applied to the tissues of the neck; some of the abrasions looked as though they might have been caused by finger nails. Her upper denture had two teeth broken recently, probably by a blow in an upward direction. Her husband was put on trial for her murder.

Prof. John Glaister gave the opinion that she had died of cardiac arrest during asphyxia. The character and distribution of certain of the injuries, particularly on the neck and arm, he considered to be inconsistent with self-infliction or accident. Although, if the injuries were taken individually, many of them were quite consistent with accident, yet if they were taken collectively he could not account for them in that way. Cross-examined, he said it was highly improbable that the bruises on her arms were caused by a clumsy attempt to lift her from the floor on which she was lying face downwards. She had taken a large quantity of alcohol not long before her death—nearly a whole bottle of whisky. She was probably very drunk, and if she fell might lie in a helpless and comatose condition. He agreed that in that condition she might be more liable to sudden cardiac collapse than if she had been sober. In answer to the judge, Lord Wark, he said he thought the pressure to the neck had been applied by human hands and could quite easily have been applied from the front with the right hand. Her condition, if she was unused to alcohol, would have tended to coma rather than to violence, but she might have needed restraint to prevent her from injuring herself or someone else. He agreed that her injuries might have been caused by being caught momentarily by a person who was endeavouring to restrain

her or fend her off. Dr. A. P. Husband said that the fracture of the artificial teeth was consistent with violence, and he did not agree that they had been broken by striking the edge of a fender, for then they would have been more shattered. He also thought it highly improbable that they had been broken by a fall on a hard surface.

After the case for the Crown had been completed, Mr. G. R. Thomson, K.C., the Advocate-Depute, reduced the accusation to one of culpable homicide. Prof. Sydney Smith, giving evidence for the defence, developed the possibility that the woman might have died of alcohol. Regurgitation might have passed from the stomach to the windpipe and caused suffocation, which if death resulted would leave symptoms of asphyxia. The bruising could have been produced by a fall, and the damage to the denture could have been caused by the woman falling on her face. He had conceived the idea that she had been very drunk, unable to stand and falling about. If there had been another person in the house, that person was probably in the same condition. It was hardly possible that the wife would go on drinking by herself in the presence of the husband without being stopped, unless they were both drinking. She might have fallen on the fender so that her face and head, and possibly her heart, struck the kerb. Another thing to consider was that she had fallen forward on her face, and her husband might have tried to lift her by the shoulder and pull her up. Very considerable force was required to lift a limp body, and the scratches might have been caused by the attempt. The jury were absent only seven minutes before they brought in a unanimous verdict of Not Guilty.

The Services

HONORARY PHYSICIAN TO THE KING

Major-General J. A. Manifold, D.S.O., late R.A.M.C., has been appointed Honorary Physician to the King, vice Major-General J. W. L. Scott, C.B., D.S.O.

HONORARY SURGEONS TO THE KING

Major-General O. W. McSheehy, D.S.O., O.B.E., late R.A.M.C., and Colonel (temporary Brigadier) C. M. Finny, O.B.E., late R.A.M.C., have been appointed Honorary Surgeons to the King, vice Major-General F. D. G. Howell, C.B., D.S.O., M.C., and Colonel B. Biggar, respectively.

NAVAL MEDICAL COMPASSIONATE FUND

A meeting of the subscribers to the Naval Medical Compassionate Fund will be held on April 30, at 3.15 p.m., at the Medical Department of the Navy, 64, St. James's Street, S.W.1, to elect six directors of the Fund.

MENTION IN DISPATCHES

Surgeon Commander William Flynn, R.N., has been mentioned in dispatches for courage and devotion to duty when H.M.S. *Liverpool* was damaged during an attack by enemy torpedo-carrying aircraft.

CASUALTIES IN THE MEDICAL SERVICES

Colonel EDWARD MEREDYTH MIDDLETON, O.B.E., late R.A.M.C., was killed by enemy action in March, aged 60. He was the eldest son of the Rev. F. E. Middleton, late Rector of Hayesford, Norfolk, was born on October 10, 1880, and was educated at Toronto University, where he graduated M.B. in 1905, and at St. Thomas's Hospital, taking the M.R.C.S., L.R.C.P. in 1906. Entering the R.A.M.C. as lieutenant in 1907, he became colonel in 1935, and retired in 1937, when he joined the Reserve of Officers, in which he was serving as Assistant Director of Medical Services, Western Command, at the time of his death. He was on his way to a hospital when he was killed by a bomb. He served in the war of 1914-18 and was mentioned in dispatches in 1916.

ROYAL ARMY MEDICAL CORPS

Lieut. JOHN INGLEBY WILSON is posted as "Died" in an Army Casualty List published on April 7. He was 33 years of age and qualified M.R.C.S., L.R.C.P. in 1933. Before the war he was in practice at Knaresborough, Yorkshire.

* *Glasgow Herald, Scotsman*, Feb. 27, 28.

Medical Association twelve years ago, and at the time of his death was a member of the Council of the East Yorkshire Branch.

Dr. JOHN TAYLOR died at Dunfermline House, Elgin, after a few days' illness, on March 31. He had been a member of the British Medical Association for nearly fifty years and was a past-president of the Northern Counties of Scotland Branch. His professional training was at the University of Aberdeen and the School of the Royal College of Surgeons of Edinburgh. He graduated M.B., C.M.Aberd. in 1886 and proceeded M.D. in 1891. After qualifying Dr. Taylor returned to his native town, Elgin, and built up a large general practice. He held many local appointments in and around Elgin and was consulting surgeon to the Fleming Hospital at Aberlour. During the greater part of his career he had close associations with Dr. Gray's Hospital, of which he was for many years visiting medical officer. On retiring from the active staff of the hospital in 1938 the managers placed on record their high appreciation of the services he had given to that institution, and made him an honorary consulting surgeon. He was also a Justice of the Peace for Morayshire.

Dr. THOMAS HARTIGAN, who died on April 2, studied medicine in Dublin and Newcastle and graduated M.B., B.S. of Durham University in 1893, proceeding M.D. in 1907. He practised in London for many years, at Gloucester Terrace, W. "F. N. R." writes: The news of Dr. Hartigan's death will be received with very real grief by his friends, colleagues, and patients. With his quiet reserve, he was not an easy man to get to know, but behind this lay a fund of endearing qualities, not the least of which was his dry and never-failing sense of humour. He was the epitome of what a doctor ought to be: the kind physician with a power of imparting confidence and a sense of trust, given only to those possessed of real ability and a great human understanding. Neither rash nor too conservative in outlook in his dealings with patients, he held to the single objective of what was the very best which could be done for each one; added to this was a real kindness of heart, such as is rarely met. I saw him quite recently, and his preparations for the inevitable had been made with that calm consideration for others so characteristic of all his utterances and actions. Those of us who were honoured by Thomas Hartigan's friendship will count ourselves fortunate, grieve at his departure, and look back upon his example.

The following well-known foreign medical men have died: Dr. JAN SCHOEMAKER of The Hague, twice president of the Dutch Medical Association and President in 1935 of the International Surgical Congress at Cairo, aged 69; and Dr. CHARLES LAUBRY, professor of cardiology in the Paris faculty of medicine, aged 69. Both were Honorary Fellows of the Royal Society of Medicine.

Universities and Colleges

ROYAL COLLEGE OF PHYSICIANS OF LONDON

At a meeting of the Royal College of Physicians of London on April 7 Sir Charles Wilson was elected President.

The Licence of the College was granted to Mohamed Abdul Hafeez of Osmania University and West London Hospital.

Diplomas in Ophthalmic Medicine and Surgery were granted, jointly with the Royal College of Surgeons of England, to the three candidates whose names were printed in the *Journal* of March 22 (p. 465); as were the names of the nineteen successful candidates for the Diploma in Tropical Medicine and Hygiene.

SOCIETY OF APOTHECARIES OF LONDON

The following candidates have passed in the subjects indicated:

SURGERY.—E. W. Crews, C. Farès, S. Wetherell.

MEDICINE.—M. M. El Garrahy.

FORENSIC MEDICINE.—M. M. El Garrahy.

MIDWIFERY.—P. L. McN. Armstrong.

The diploma of the Society has been granted to E. M. Crews, M. M. El Garrahy, and S. Wetherell.

Medical Notes in Parliament

Mr. Ernest Brown on April 10 received a deputation on the Medicine Stamp Duty. The members of the deputation were Captain Elliston, Sir Francis Fremantle, Mr. Keeling, Sir Robert Bird, and Lord Wolmer. All were in favour of the retention of the tax. Mr. Brown is to bring in a Bill proposing its abolition. A further deputation is projected to Sir Kingsley Wood.

Insurance Practice of Casualty Service Doctors

Mr. ERNEST BROWN, on April 1, told Mr. Groves that an insurance practitioner was required to make all necessary arrangements for securing the treatment of his insured patients where prevented from giving such treatment himself by urgency of other professional duties or other reasonable cause. If neither the practitioner nor his deputy was available any other insurance practitioner could be required to give it. A fee was payable to the last-mentioned practitioner, subject to the claim being passed by the panel committee. The fee was recoverable from the patient's own practitioner unless the panel committee was satisfied that there was reasonable cause for not summoning him.

In reply to another question by Mr. Groves, the Minister said that in a number of areas a rota of doctors for duty at first-aid posts, medical aid posts in public shelters, and food and rest centres had been arranged. Similar arrangements for providing medical attention for insured persons was a matter for agreement between the panel committee and insurance committee of each area concerned, and detailed information was not available.

Registration of Alien Doctors

Mr. BROWN explained on April 2, that the Medical Practitioners (Temporary Registration) Order, 1941, and the Defence Regulation under which it was made provided for the registration of doctors of certain alien nationalities not possessing British medical qualifications, if they were employed or had been selected for employment in an approved hospital or other institution or service not involving domiciliary practice. He said it was not intended to fix a maximum number of doctors who should have the benefit of the Order. Up to date twenty-eight doctors of enemy nationality had been selected for employment in accordance with the Order.

Accommodation for Fracture Treatment

Answering Mr. Magnay, Mr. BROWN on April 3 said he proposed to provide for fracture cases occurring among industrial workers so far as possible under the Emergency Hospital Scheme. The hospital accommodation available included a large number of beds in hospitals and orthopaedic centres which were, or would shortly be, specially equipped for dealing with fractures and for giving the most modern forms of physiotherapy and occupational therapy. For war casualties, both military and civil, these facilities were welded together into a comprehensive organization, supervised by the consultants in orthopaedic surgery employed by the Ministry of Health and the Department of Health for Scotland, so that the patient's could be sent to the hospitals best suited for dealing with their injuries and, if necessary, transferred from one to another. The treatment of casualties was and must remain the primary purpose of the Emergency Hospital Scheme, but, to secure the fullest possible use of the organization, the Government had decided that in so far as there were vacant beds not likely to be required for the treatment of war casualties, they should be made available for fracture cases occurring among certain classes of the civil population whose early return to work was of special importance to the national cause. These, whether the injury was sustained in the course of their duties or not by manual workers engaged in munition work (including ship-building and ship repairing), building and civil engineering, mining, agriculture, fishing, public utility undertakings, shipping and transport, would be eligible for treatment in hospitals