answer *should* become available is, "What steps are taken by candidates before examination at the clinic to prevent or postpone *the onset of blindness*?" It is in the sphere, however, of more purely ophthalmological work that the investigation of cases not blind will probably *prove most* fruitful. To take but one example—among cases who have lost an eye from injury, what are the causes of defective sight in *the remaining* eye? Is myopia or any other disease responsible for increased susceptibility to eye injuries?

(To be concluded.)

MEDICINE AND THE LAW

A Profitable Infirmity

SUCH books as those of Sir John Collie on fraudulent claims and malingering are sometimes criticised as presenting too dark a picture of human nature. A case at the Old Bailey on June 29th shows the need of vigilance. Ernest Page, aged 51, described as a coach-builder, pleaded guilty to the charge of having attempted to obtain by false pretences £127 10s. from one insurance company and £6 8s. 6*d*. from another. Ten years ago, it seems, Page discovered that he had a congenital infirmity similar to a broken collar-bone. According to the police statement at the Old Bailey he has profitably exploited it. Up to 1928 he had made 20 claims on insurance companies: one claim was rejected, the rest were paid; the total of his receipts is reported to have been £226 8s. His imposture was then detected and he was sentenced to 12 months' imprisonment in the second division. This year he resumed operations and nearly obtained the sums in respect of which he was charged. Thanks, however, to a fortunate communication between two insurance companies, his bogus claim was detected in time. The case suggests the need for such companies to keep a black list, and the desirability of pooling all material information as to fraudulent claims. In recounting Page's history a detective-inspector stated that medical practitioners had definitely certified the fracture of the collar-bone. Page has now been sent to penal servitude for three years. If he should resume his troublesome imposture after release, he may cause us to regret that modern civilisation has abandoned the ancient method of branding the criminal with letters appropriate to his offence. Indelible stigmata applied to the skin over Page's supposed fracture would warn the innocent doctor that this was a case for suspicion.

Dangerous Drugs Act Conviction

A garage proprietor at Oxford, stated to have been formerly a chemist's assistant, was charged on June 30th with unlawfully supplying a woman with morphia and with being in unauthorised possession of drugs. The police discovered a quantity of morphia pills and chlorodyne in a tin trunk in the garage. The woman named in the charge gave evidence on behalf of the prosecution. The facts of the case have no special interest, but we may note her statement that the accused, who naturally pledged her to secrecy, said "if it was known, the police would give me six months quicker than a stroke of lightning." According to her further evidence he added that there were people who would give any amount of money for what he had in his trunk, and that "doctors who had been struck off the roll" would give him £20 for small quantities. The accused was fined £10 and ordered to pay £13 9s. 6*d*. costs, or two months' imprisonment, for being in unauthorised possession of the drugs. The charge of unlawfully supplying was dismissed.

Lunacy Certification in Northern Ireland

The Mental Treatment Act (Northern Ireland), 1932, which received the Royal Assent last month, contains a provision (Section 67) corresponding to Section 16 of the Mental Treatment Act passed at Westminster two years ago. Anyone who in future presents a petition for a reception order in Northern Ireland, or signs or carries out any such order or any report, application, recommendation, or certificate under the Lunacy (Ireland) Acts or the new Act of 1932, is not to be liable to any civil or criminal proceedings unless he has acted in bad faith or without reasonable care. As in the English precedent, no such proceedings are to be taken against him without leave of the High Court; the Court is not to give leave unless satisfied that there is substantial ground for the contention that the defendant has acted in bad faith or without reasonable care. Thus in Northern Ireland as in England the onus of proof will be on the plaintiff. The person whom it is sought to make the defendant is to have notice of any application to the Court for leave to sue, and may be heard on the application.

The rest of the new Act contains provisions for temporary and voluntary treatment on the lines of the English statute: the expressions "lunatic," "lunatic asylum," "*pauper lunatic*," &c., are to be discontinued also as in England.

GERMAN WORK ON PULMONARY ASBESTOSIS

ALTHOUGH physicians in Germany before the war noted that there was something unusual in pneumoconiosis as seen in the asbestos worker (Fahr[1]), no extensive inquiries were made there until quite recently. Last year, however, Buttner-Wobst and Trillitzsch[2] described eight cases from two factories in the neighbourhood of Dresden. They noted in the radiograms in the early stages of the illness circumscribed patches in the lung the size of a millet seed or linseed, especially obvious in the lower lobes, and that with the progress of the disease confluent shadowing appeared. The physical signs developed at a later stage; they were those of a basal bronchitis, sometimes with dry pleurisy, and it was difficult to exclude the possibility of tuberculosis. The writers, like others, pointed out that tuberculous foci are very liable to be overlooked in all pneumoconioses, and they also found that the more serious cases did not necessarily tend to get worse after removal from their harmful surroundings—in which their experience appears to have differed from the early observations of W. Barron Wood in this country. Examination of the sputum for asbestosis bodies was not made, for Buttner-Wobst and Trillitzsch did not think their presence any more evidence of disease than the presence of coal-dust in the sputum of coal-miners is proof of anthracosis. They hold that asbestosis owes its individual characteristics almost entirely to the chemical composition of asbestos and to the shape of the dust particles, and they raise the question whether the different types of asbestos may show different harmful effects, as in silicosis.

Shortly afterwards Krüger, Rostoski, and Saupe[3] also recorded a collection of cases seen in and around Dresden. Their series consisted of 18 males and

34 females, of whom 30 showed definite changes in the lungs. The longest exposure to the dust was 31 years, in a worker aged 60. The commonest initial complaint was dyspnœa, and there was cough in 43 of the cases; night-sweats were present in 12, and rheumatic pains, headaches, and general nervous symptoms in 15. Further, conjunctivitis was noted in 16 cases—a symptom which has not attracted much attention in this country, though asbestos fibres in lacrymal secretion have been described by Burton Wood and S. R. Gloyne. Sputum was obtained in 28 cases and in eight of them contained asbestosis bodies. Among other new observations on the blood and circulation it was found that there was a fall of hæmoglobin. The radiograms showed three stages: (1) an increase of the normal lung striation with the appearance of a fine not very clearly defined network; (2) a thicker network with delicate, sharply defined opaque spots; (3) an intensification of this network to form a shadowy veil covering the lung. The signs are first seen and are most marked in the mid zone and lower lobe areas. The contour of the heart shadow becomes ill-defined in the second stage; the root shadows were not affected in this stage but show enlargement in the third stage. The statistical tables appear to indicate that moderately severe asbestosis takes some five years to develop, while none of the workers examined who had had ten years or more exposure was free from signs of the disease. The most advanced cases were found in the spinning section of the factories.

Beintker [4] records two cases with an account of post-mortem examinations from a factory concerned with the crushing, cleansing, and spinning of the asbestos and the manufacture of insulation materials in Münster. He believes that the morbid anatomy of the condition depends upon the distribution of the asbestos fibres in the lung tissue, and that the fibres which gain access to the body probably do not begin their development into asbestos bodies until they reach the tissues. The bodies are apparently the accumulation of the silica-containing material.

Gerbis and Ucko [5] record the examination of 33 asbestos workers in another German factory in Berlin. Nearly all the cases showed the usual symptoms—e.g., cough and sputum with dyspnœa, especially on exertion or in foggy weather; 16 complained of lack of appetite, 10 of loss of weight, 5 had pain in breathing, 5 had palpitation of the heart; others complained of faintness and of increasing pallor. Cough was present in 23 cases. The sputum was tenacious, scanty, generally mucoid, and occasionally mucopurulent. Previous history included pulmonary catarrh in four cases, pleurisy in two, and peritoneal tuberculosis in one case. In only one (a female) was there any family history of tuberculosis and the authors have been unable to trace any close connexion between asbestosis and tuberculosis. The clinical and X ray findings noted appear to correspond closely with those of Buttner-Wobst and Trillitzsch, and of Krüger, Rostoski, and Saupe. The authors noted that the severity of the disease did not appear to be dependent on the age of the worker, but rather on the number of years he had been in the factory and on the amount of asbestos dust inhaled, which varies considerably in different processes. Whenever a patient had been working for more than ten years, asbestosis could be demonstrated radiologically. Personal disposition appeared to play a part in the production of the changes. With regard to the asbestosis bodies, Gerbis and Ucko quote the views of Beintker [4] and Timmermans [6] to the effect that the bodies arise through the deposition, due to the solution of the asbestos, of a colloidal form of liberated silicic acid on the central core of the asbestos fibre. They regard the discrepancy between the clinical appearances and symptoms on the one hand, and the X ray picture on the other, as a characteristic peculiar to asbestosis. Even the most severe cases of asbestosis did not give as pronounced a radiological picture as that of silicosis; in fact, in the third stage of asbestosis the degree of shadowing present would have little clinical significance in silicosis. They believe that in asbestosis the silicic acid acts as a chemical irritant which leads to fibrosis. Connective tissue is regarded as particularly sensitive to the action of silicic acid, and it is suggested that when the silicates of the asbestos are dissolved in the lung tissue, silicic acid is liberated, is taken up by the connective tissue, and stimulates increased growth. Gerbis and Ucko give no support to the statement that asbestosis is formed on the soil of a tuberculous infection; indeed, this theory is contradicted by their observations. The fact that the patient suffering from asbestosis is more liable to pneumonia gives rise to a bad prognosis.

Finally, Timmermans [6] gives a short disquisition on the formation of the asbestos body. He thinks the two main types of body, the "handle-form" with a knob at both ends, and the "carrot-form" with one end tapering, are an indication of some difference in formation. He suggests that the shape of the asbestos body is conditioned to a large extent by the surrounding tissue, the handle-forms being produced in places where there is no movement, and carrot-forms where the tissue fluid is in motion.

REFERENCES

1. Fahr: Münch. med. Woch., 1914, lxi., 625.
2. Buttner-Wobst, W., and Trillitzsch, O.: Die Tuberkulose, 1931, xi., 11.
3. Krüger, E., Rostoski, and Saupe: Arch. f. Gewerbepath. u. Gewerbehyg., 1931, ii., 558.
4. Beintker, E.: Ibid., 345.
5. Gerbis and Ucko: Deut. med. Woch., 1932, lviii., 285.
6. Timmermans, F. D., Zentr. f. Gewerbehyg. und Unfallverhütung, 1931, viii., 280 and 307.

UNITED STATES OF AMERICA

(FROM AN OCCASIONAL CORRESPONDENT)

MEDICAL BENEFITS TO EX-SOLDIERS

MORE than $450,000,000 a year could be saved by the federal government if present benefits to ex-soldiers who are not suffering from war disabilities were eliminated from the national budget. This is the conclusion of a report by its committee on public health relations, approved for publication by the Council of the New York Academy of Medicine. "The injustice and wastefulness is only fully realised," they add, "when one contemplates the improvement in the health of the people of the entire country which could eventually be obtained with a fraction of this colossal sum."

During and immediately after the war, Congress passed legislation providing for medical care and compensation for veterans (as our ex-soldiers are called) who had been sick or disabled as a result of war service. In the post-war years, however, there developed an ex-service men's lobby, fostered by the American Legion and the Veterans of Foreign Wars, which undertook to widen the scope of existing benefits and to seek others. They have been highly successful, for there is a large ex-soldier vote as well as a popular patriotic sentiment which Congressmen dare not