

## BOOK REVIEWS

**The Social Consequences of Pneumoconiosis among Coalminers in South Wales.** By P. HUGH-JONES and C. M. FLETCHER. 1951. Medical Research Council Memorandum No. 25. H.M.S.O., London. Pp. 54. 1s. 9d.

The main South Wales coalfield extends from Newport in the east to Kidwelly in the west, a distance of some 60 miles. It is bounded on the north by the mountains and on the south by the coastal plain and the Bristol Channel. In the plain lie Cardiff and Swansea, the only two large cities of Wales. Rivers run down from the hills, and in their valleys are the mining villages with good transport north and south, but scanty communication from east to west. The miners and their families make up closed village communities, whose existence depends on coal. For generations mining was the only industry, and a trade depression threw the whole male population out of work. The staple industry is itself particularly dangerous, leading to much illhealth and disability. Therefore, even in times of prosperity, the man who is unfit for mining has difficulty in finding another job, and the absence of light industry prevents the women from going out to work when the need arises. Within the last quarter of a century an effort has been made to introduce other types of industry into South Wales, and factories have been established which offer work not only to women, but also to partially disabled miners. Intensive multilateral research has been conducted into the causes and extent of dust disease of the lungs, and into the control of dust in mines. (There is no doubt that the dust hazard is at present increasing as a result of the introduction of coal-cutting machinery.)

That the social and economic problems of the South Wales coal-miner are far from solved is plain from this report from the Pneumoconiosis Research Unit in Cardiff. Between 1931 and 1948, 19,000 men in this area were certified as suffering from pneumoconiosis. In the same period, in the rest of Great Britain, from a total mining population six times that of Wales, only 3,000 cases were certified. This means that pneumoconiosis is forty times as common in Wales as in the rest of the United Kingdom. There are now about 16,000 certified men alive, of whom 5,000 are unemployed. In addition, there are certainly many more uncertified men, many of them also out of work. In October, 1948, 2 per cent. of the insured male working population in Great Britain was unemployed, but in S. Wales the proportion was 5 per cent. Registered disabled persons amounted to 7.3 per cent. in Gt. Britain and 21.6 per cent. in S. Wales, and of the men disabled by pneumoconiosis in S. Wales, 5,000 (40.3 per cent.) were out of work. The authors consider that three-quarters of these could work under normal industrial conditions.

Pneumoconiosis usually takes many years to reach the stage when symptoms impel a man to apply for certification. From 645 applicants in 1938, the numbers have risen yearly, reaching a peak in 1945, when 9,117 men applied, 57 per cent. of them being granted certificates of disablement. By 1947 the applications had dropped to 7,748, of whom only 36 per cent. were certified.

Fletcher has suggested that the great increase in certification during the war years was due to several factors: the introduction in 1943 of the Pneumoconiosis Scheme, under which many men formerly outside the existing compensation schemes could claim benefit; the increasing awareness among miners that chest symptoms might be the result of pneumoconiosis and therefore compensatable; the Essential Work Order under which the easiest way to obtain release from work was on medical grounds; and finally, increased dust concentration from mechanization of mining processes, leading to a real increase in the number of cases.

Until July, 1948, when the National Insurance (Industrial Injuries) Act replaced the old compensation laws, certification carried with it the further disability of suspension from mining. This unfortunate policy led to much bitterness through enforced unemployment and undoubtedly reduced the numbers who might have applied for benefit. Now, certain men are allowed to continue working under "approved conditions", provided they are not also suffering from superimposed tuberculosis.

The South Wales problem is beset with every conceivable adverse factor. The nature of the disease itself presents difficulties. Correlation between radiological appearances and degree of disability is low, and prognosis is uncertain—some cases progress steadily, others remain stationary or may even regress. Because the chief symptom is breathlessness on exertion, many men are unable to manage the long hilly walks which normally separate their homes from the buses running up and down the valleys. If they can surmount this obstacle, the only work obtainable is often heavy, unskilled labouring—quite unsuited to their disability. If they can manage the work, the job, being casual, frequently ends in redundancy. The available light work is often taken up by women, and many employers are reluctant to take on men disabled through pneumoconiosis.

The medical aspects of the disease, including the grading system used in the Cardiff Unit, are discussed and the legal aspects surveyed. The report is concise, well-documented, and informative. It poses many questions, few of them purely medical, the most important problem being the control of dust in the mines without which pneumoconiosis is inevitable. To rehabilitate those already disabled, a far greater national effort is required to establish alternative industries in the mining valleys, for the disabled men must have a chance to be useful members of the community, able and willing to do a reasonable day's work.

This report should be read by all concerned with the social and economic problems of Great Britain as well as by workers in the field of industrial medicine.

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**New Discoveries in Medicine: their Effect on the Public Health.** By PAUL R. HAWLEY, M.D. 1950. Columbia University Press, New York. Pp. 134, 15 illus. (\$2.50; 16s.).

In the Bampton lectures delivered at Columbia University in 1949, Dr. Paul Hawley reviews some of the more dramatic advances made in medical science during the past quarter of a century. His first talks, devoted to what he appropriately calls "our fabulous blood", include an excellent account of the practice of blood transfusion and of the advances made in the two world wars. He gives a clear picture of the mechanism of the Rh factor, but his suggestion that the young man who is an Rh-positive heterozygote should be told this at an early age and advised to "avoid mating with an Rh-negative female" is unlikely to be taken seriously. It is to be feared that love laughs not only at locksmiths but also at biological obstacles.

In other lectures Dr. Hawley describes some modern developments in surgery, especially in thoracic and mental disorders, the latter with particular reference to pre-frontal leucotomy. Finally he discusses the organization of medical services in a community, and briefly describes the various insurance schemes operating in the United States for the prepayment of medical costs. He reviews the National Health Service in Great Britain, and, though endorsing the principle, points out the inevitable early defects of its implementation, showing that increased patient-demands with no corresponding increase in medical personnel have led to more medical attention but less personal medical care. Abuses of the service are impossible to prevent, and its costs have been much underestimated. There is much truth in these criticisms, as three years of nationalized medicine have all too clearly shown, but neither Dr. Hawley nor anyone else seems able, as yet, to suggest a remedy.

This is a readable little book, presenting useful information in an attractive manner.

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