

Claims, appointed under the National Insurance Act to inquire into alleged excessive claims in regard to sickness benefit, showed a great deal of anæmia and debility directly attributable to the conditions of employment, and proved that the impression among medical men that the amount of sickness was greater among women than among men was justified beyond a doubt. Further evidence received by the War Cabinet Committee has supported and emphasised the fact. Again, an indication of the injury to health which may follow increased industrialism among women is suggested by the rise in the tuberculosis death-rate during the war. A Special Committee of the Medical Research Committee, under the chairmanship of Dr. LEONARD HILL, has, in the columns of THE LANCET,¹ discussed recently the high incidence of phthisis in the urban male population, and Professor BENJAMIN MOORE, a member of this Special Committee, pointed out that after the thirtieth year of age there was found a great preponderance of the disease among urban males not shared by females, attributing the circumstance to the conditions of daily occupation. Since 1914 the mortality rate of tuberculosis among urban women is shown by Dr. T. H. C. STEVENSON, Superintendent of Statistics, General Register Office, in a review of the vital statistics of the country for 1916, to have undergone substantial increase, and there is no doubt that the subjection of women, at a susceptible age, to increased risks of infection has had a serious outcome. Dr. JANET CAMPBELL'S general conclusions cannot be summed up by stating that the average woman is physically weaker than the average man, but her opinion that she cannot compete with him satisfactorily in operations requiring considerable physical strength will be generally accepted. Competition between the average man and the average woman in operations of even a less arduous and exacting character may be detrimental to the woman's health, in that her power of endurance and her reserve energy are usually less than a man's, while she is often obliged to spend time and strength on domestic tasks which do not fall to his lot. That is the great point, and this valuable report teems with information to us all as to the various social difficulties which underlie the situation, their causes, their fostering influences, and their remedies.

The Hygienic Conscience in Relation to Coal-getting.

THE Coal Industry Commission as they proceed with their deliberations are clearly establishing one fundamental matter—viz., the absence of reliable and scientifically collected information relating to the social conditions and well-being of miners, and yet, after agriculturists, they form numerically the largest industrial group in the kingdom. When the question of their hours of labour was under review no information was forthcoming as to the interdependence in the mining industry of fatigue and output; or as to the effect upon working capacity of the high humid temperature often

existing in mines. The housing conditions are now admitted to be bad, but no investigation has established the number of miners' families domiciled in one, two, three, or four rooms; but the conditions were drawn attention to in CHADWICK'S reports as long ago as 1842. Beat knee, beat hand, and beat elbow occur, but their distribution according to process is not worked out. The miner is compensated, the owner is insured; there the matter ends. The miner works in darkness, and may say with Wên T'ien-hsing: "My dungeon is lighted by the will-o'-the-wisp alone; no breath of spring cheers the murky solitude in which I dwell"; nystagmus follows; the miner is compensated; the owner is insured; no remedy is found. Explosions and accidents occur, and these are considered in a fashion. They are intimately associated with getting the coal upon which dividends and royalties depend, and they must be kept in check somehow.

Evidence is presented that the mortality of miners, apart from accidents, compares not unfavourably with that of agriculturists. True; but mortality rates do not tell of oscillating eyeballs and crooked joints. Compare rather a miner 70 years of age—there are a few—with an agricultural labourer of that age. Yet evidence has declared that the miner must once have been strong in wind and limb in order to have become a miner. Appeals to statistics resemble the waters of the Dead Sea—buoyant, indeed, but brackish: no amount of figures will make us think well of the social conditions at present existent in the mining industry. Whatever step may be taken with regard to the nationalisation of mines, we would urge with all emphasis that immediate action be taken on the lines suggested by Dr. FRANK SHUFFLEBOTHAM, who gave evidence out of his experience in the Ministry of Munitions. His recommendations were:—

1. That provision be made for reducing the temperature of hot seams in the coal-mines, and that a temperature of greater than 77° (Fahr.) (wet bulb) be regarded as injurious to the health of the worker.
2. That the question of increased candle-power of the miners' safety lamp be considered without delay.
3. That the housing question of miners be dealt with in a practical way, and with all possible speed.
4. That investigations be made by a Research Committee as to the causation and prevention of miners' diseases.
5. That means be taken to ensure the best possible after-treatment for miners who sustain injuries or contract diseases which are directly due to their employment in the mines.

The first of these recommendations embodies the actual standard adopted in France, and every one of them requires only a moment's attention to see that it embodies a practical reform. That improvements in conditions of labour are possible of attainment under State control has recently been demonstrated by the pioneer work of the Ministry of Munitions during only three years. Workers were housed; canteens were erected; washing accommodation and cloak-rooms were provided; personal supervision was established; and doctors working whole-time were appointed to different factories, directed in their work by a medical headquarters staff associated with a

research branch—nine doctors in all. The contrast between these activities and pre-war formal enforcement of the minimum requirements of the Mines and Factory Acts is startling; for example, the total medical staff then numbered three, none of whom were concerned with mines.

The creation of an adequate expert organisation is not in itself enough; it must be given adequate power and direct access to the Minister concerned. Possibly in the past lack of this power, while control lay with officials who sat in high places with no technical training and no personal acquaintance with the social life of the community, somewhat explains why the hygiene of industry has fallen behind the times; it may also explain why so little has been done to foresee and prevent the industrial crisis through which we are now perilously passing; the warnings were clear for those who ran to read, but perhaps not for those who sat. Considerations such as these should weigh with the Commissioners, who may justly find themselves as critical of the miners as of their employers in regard to the cardinal fact that each side holds the call to health in absolute contempt. In relation to coal-getting there is no hygienic conscience which is moved to action either among employer or employed.

The Brain-worker's Diet.

OFFICIAL food control comes to an end, so we are led to suppose, during the course of the present year. The change will be enormous, as recently 85 per cent. of the total food of the country has been bought and sold by the Government. Milk has been singled out as a special object for continued official attention, while the Labour Party are the only dissentients from the return to the old principle of survival of the fittest among food products, for they desire to maintain food control. Their desire for control at first sight seems curious, but the attitude is dictated by a share-and-share-alike principle. But whatever happens to wholesale official control, the question of individual control, thrust upon the notice of many people for the first time during the war, must continue to receive attention. The brain-worker, using the term in its widest sense, has especial need to give the matter thought. For the purposes of nutrition the brain-worker may be defined as one who does not earn his living by muscular work; whether he uses his brain little or much is immaterial from the physiological standpoint, for brain-work has never been shown to increase metabolism or, therefore, to justify per se an increase in food intake. The group in consequence is a large one. The brain-worker's diet has been made the object of concern by the National Food Reform Association, which has issued at a penny a leaflet making suggestions for his guidance. The recent Report of the Food (War) Committee of the Royal Society also deals scantily with the same subject. The report, indeed, frankly emphasises the inadequacy of the material available for forming conclusions or framing advice. Special data on the diet of the over-fed are badly needed.

It is of common observation that of two men of similar physique and similarly sedentary habits one may take in with his food about double the number of calories that the other takes, both apparently remaining healthy. What happens to the excess of food in the first case? If the observation is correct, and it rests more on general impressions than on precise observation, it is probably because there are degrees of the sedentary life. The brain-worker who travels by tram or other vehicle from his residence to his place of work, where he sits all day in an atmosphere which makes little demand on his heat production, riding home again in the evening and spending his leisure time by the fireside, is in a very different position from another who walks rapidly to and from his office, where he stands or walks at his work and where the conditions of ventilation make his environment stimulating. A nominally sedentary occupation may be accompanied by a restless habit of body in which the muscles retain the capacity of metabolising considerable quantities of carbohydrate and fatty food. Many brain-workers, from lack of athletic training, use their muscles, when they use them at all, in an inefficient way. Experience shows how rapidly they become tired and stiff under these conditions. Probably a small kinetic result in the brain-worker is sufficient to produce a large amount of muscular metabolism, and it is more than possible that a period of active exercise before office hours begin may set the pace of muscular metabolism for some considerable part of the day. Associated movements occur in many active brain-workers; some write with the tip of the tongue and probably with other muscles not directly required for the purpose. With others mental concentration is attended with a general tenseness of the muscles.

The ideal diet for the pure brain-worker has still to be devised. It has even to be determined whether the condition of pure brain-work is consistent at all with healthy existence. Notable instances of politicians who take no exercise worth mentioning will occur to mind, but they are admittedly exceptional. With most sedentary workers the desire for food is in excess of the caloric needs of the organism, and human nature, although heroic in emergency, will nearly always break down before the constant temptation of an appetite which can be readily gratified. During the war in certain quarters exercise was discouraged for brain-workers on high patriotic grounds, that there was, in fact, no supply of food available for the athletic gratification of drones. Now that this reason is no longer cogent brain-workers may well consider whether, with increasing opportunity of dietary licence, they will not find it more expedient to adopt an active habit of life rather than to practise an almost impossible self-denial. The matter is not by any means one of theoretic importance only. The unfitness of office livers has been brought home to the nation by the evidence of the National Service Boards, and probably the low animal physique of the urban brain-worker in this country before the war was more deplorable in its aggregate sum than all other conditions of disease or disorder put together. The brain-worker should mind his ways.