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INDUSTRIAL ACCIDENTS AND NEW LEGISLATION

SOME IMPLICATIONS OF THE NATIONAL INSURANCE
(INDUSTRIAL INJURIES) BILL, 1945*

BY

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This new legislation is a significant social measure. Its provisions fundamentally change the present system of workmen's compensation, which has frequently tended to retard recovery and interfere with treatment and rehabilitation. Properly administered, and with due regard to the need for the Minister of National Insurance maintaining it as a social service dealing with persons and personalities, the scheme should prove a great improvement over the Workmen's Compensation Acts, which it replaces; it should remove much of the friction which present conditions can stimulate between employee and employer, and should promote a feeling of greater security on the part of the injured worker and thus assist rehabilitation and accelerate his return to work. But new legislation which can materially influence the work of the medical profession—and in which the medical profession will have to take a most active part—needs careful examination; not only are there clinical and social implications in this Bill which should be fully understood, but certain difficulties, some preventable, may well arise when putting it into effect.

A Contributory Scheme

A basic change in principle is that the scheme is to be run on a contributory basis; the workman now, for the first time, becomes a partner in payment. No graded annual premiums will in future be paid by employers to insurance companies, mutual or tariff; nor will employers be permitted to carry their own risk as self-insurers. The employee will contribute to an Industrial Injuries Fund by weekly payments, and from this fund will be paid out all benefits and other expenses—e.g., administrative charges—incidental to the scheme. The weekly payments by insured persons into the fund, by stoppages from wages, will vary from 4d. for men, 3d. for women, 2½d. for boys under 18, to 2d. for girls under 18. The employer will pay similar amounts. (These payments are additional to the weekly contributions to the new National Insurance Fund, and already workers have said that they propose to use this compulsory levy as an argument for increased wages.) The fund will be aided by a contribution from the Exchequer—but only if the Treasury agrees that it is necessary—equal to one-fifth of the aggregate amount collected. It is estimated that, normally, the annual contributions will amount to £23 million; so this, plus the Government's share, will produce an annual income of £27½ million.

Persons Affected

Those to be insured under the Bill are defined as "all persons employed in insurable employment." This group is further defined as "those in employment in Great Britain under any contract of service or apprenticeship, whether written or oral, and whether expressed or implied." Exceptions to this include groups such as those employed in the naval, military, and air Services of the Crown; the police force; and certain workers, not yet prescribed, in other employment under the Crown or under a public or local authority. Nurses are excluded at present, but a plea

has been made for their inclusion. The number of persons classified as "employees" in the social insurance plans of the Coalition Government was approximately 13½ million men and 4½ million women,† so if we exclude the "exceptions" to be decided by Parliament (and postulate, say, 75% employment in the country) the number of persons affected and at risk must be well over 10 millions.‡

A New Basis for Benefit

The benefits to be paid are clearly divided into two categories: (a) an injury allowance, payable for a maximum of 26 weeks; and (b) a disablement pension, "payable where the workman continues to be incapable of work after the 26-week period."§ In both categories dependants' allowances are paid. By previous standards, which have been substantially increased since 1940, the benefits are generous, but an important issue is raised when these rates are compared with the new health insurance benefits proposed in the National Insurance Bill, made public for the first time on Jan. 29, 1946 (see below).

The fact that compensation in future will be based not on loss of earning power but on the character of the physical injury suffered will tend to remove that discouragement of recovery of earning power inherent in any scheme which reduces compensation when earnings increase (*Times*, Oct. 16, 1945). But there may be difficulties. An obvious one can be seen from the fact that the loss of a finger may leave the earning power of one man unimpaired, while it can seriously interfere with the earning power of another man; yet both will receive the same allowance or pension. It seems reasonable to suggest that adequate financial provision should be made for those cases in which a person can neither be reinstated in his own work nor be re-trained for equivalent employment. Such cases are likely to be few in number.

Relation to the National Insurance Bill

The discussion in the House of Commons on Oct. 10 and 11, 1945, revealed a tendency to consider this particular section of the social insurance plan for the country in isolation from the rest of the structure, into which it must ultimately fit (*Times*, Oct. 12, 1945); there was little regard to the cost to the community of the new social insurance system as a whole and of other social services, such as war pensions, and services for restoring and resettling the disabled; such isolationism tended to push the provision for industrial injury payments and their

† Social Insurance, including Industrial Injury Insurance, Guide to Government's Plan (1944), H.M.S.O., p. 6.

‡ In the year 1938 some 460,000 persons received £6½ million compensation under the Workmen's Compensation Act, out of a population at risk of about 7,800,000.

§ The scales of payment (which may yet be altered in some respects before the Bill finally becomes law) are set out in Sections 11-18 of the Bill as amended by Standing Committee A of the House of Commons. The weekly rate for a single man is 45s.; for a married man an additional 16s.; and for a married man with one child, a further 7s. 6d. Pension rates are 45s. (for 100% disablement), graded downwards to 9s. (for 20-30%), with additional allowances under special circumstances. Where permanent disability is less than 20% a gratuity (up to £100 maximum) may be paid.

* Based on a paper read to the Birmingham Group of the Association of Industrial Medical Officers on Dec. 11, 1945.

costs still further out of line than they already are with the other and larger plans of the new insurance system. This prediction has now proved to be well founded. The *Times* (Jan. 25, 1946) comments as follows:

"The new rates [of sickness benefit] stand in sharp contrast with those now incorporated in the amended Industrial Injuries Bill for a group of disabilities associated with employment; and many will inevitably feel that these have been arbitrarily selected for exceptionally favourable treatment."

Even so, the trade unions are pressing for still higher rates of benefits in respect of industrial injury. The Minister has made the minimum weekly rate 45s., but the T.U.C. asks for 55s. These rates should be compared with the non-industrial disability benefit of 26s. proposed in the National Insurance Bill. Under the National Insurance Bill survivors' benefits are confined to widows; under the Industrial Injuries Bill "unmarried widows," housekeepers, widowers, fathers, mothers, and other relatives are all included in varying degrees.

This gap between ordinary and industrial disability benefits may readily give rise to abuse; the sick worker, comparing the two schemes, may try to obtain the more favourable return for his contributions, claiming that his disability was caused by his work. In time this may cause psychological disturbances among individuals, frustration, obsessions, and anxiety states, and in due course could be detrimental to industrial efficiency and the national health. These points are no argument for reducing in any way the present financial proposals, but they do indicate that unless there is a levelling up there may be social and economic difficulties which could well retard medical treatment and rehabilitation in the non-industrial case.

One other relevant matter is the possibility that an era of increased benefits may lead to a diminished desire to work on the part of certain individuals. There may well be an increase in the number of those who "enjoy" bad health and disablement, frequently using medical reasons as an excuse for absence from work. Malingering may increase. Economically this is important; the nation cannot afford to keep such persons in benefit with no return to the community in the form of productive work. In this connexion the *Times* (Jan. 25, 1946) has summed the matter up thus:

"If the standard of living of those able to work is not to suffer in order to enhance the well-being of those unable to work, the Labour plan for social security (and this includes this Bill) requires more from the nation, and especially from the worker, of effort and sacrifice to enlarge the total national income available for distribution. When the ordinary man comes to reflect on the total weekly contribution required of him under the new system, it may serve as a reminder, which the Government now need to drive home in every possible way, that the price to be paid for social security is efficient productive work."

Some Fears

There is a fear that the new legislation will mean the introduction of more complicated machinery than exists at present. When a claim is made in respect of any industrial accident there will be five persons concerned—the workman, the employer, the Government's insurance officer, a Post Office clerk, and the doctor. The workman must give notice to the employer (as at present); he must also notify the insurance officer, giving particulars of the injury and of his family responsibilities; and this must be accompanied by a certificate from the doctor or hospital authority concerned. The employer is also required to report the injury to the insurance officer, who then can make "such further inquiry as may seem desirable"—presumably investigating circumstances at the place of work to determine liability under the Act—and finally authorize payment of the appropriate allowance through the Post Office. As a large number of injured workmen resume work within a week or two it may happen that these formalities cannot be carried out before disability comes to an end. But even with the present system there is often much delay in payment of compensation—for example, in cases of dermatitis where there is frequent doubt about its occupational origin.

¶ The National Union of Mineworkers has recently put forward a claim that miners should receive a 50% increase in benefits (*Times*, Jan. 29, 1946) because of the dangerous nature of the industry. This should be financed by a levy on the industry, and not by any further direct charge on the miners themselves.

Another fear, shared by medical members of both political parties, is that the introduction of a Government department into what is really an intimate health circumstance, and a private matter between man and master, will make for difficulty because of the lack of the personal approach. How far this will be the case it is impossible to determine, but its potential significance should be appreciated. It is generally accepted that Government departments tend to slowness of action and anonymous hard-heartedness; there is often a lack of the human touch in dealings with the ordinary citizen, which in this scheme will be so vitally important. The Minister of National Insurance has therefore a serious responsibility in seeing that officialdom is not exploited at the expense of the injured worker. This fear is appreciated by others, for here is an extract from a recent report on resettlement by P.E.P.

"Although Government departments realize the need for a truly human relation between their officers and the individual, very little progress has been made towards achieving it. Yet some means must be found of breaking down the subhumanity of Authority if we are to avoid a reaction against official rigidities which will land us in individualist anarchy."

There is need, therefore, for those members of the new Ministry who are to deal with the human problem of compensation for injury—the insurance officers—not only to be carefully selected on personality grounds as well as technical, but to be given wider social training by, among other agencies, University Departments of Industrial Health. This is necessary because their duties will bring them into daily contact with sick and injured workers, industrial managers, and hospital staffs. They will have powers to settle claims, perhaps after difficult interviews with relatives—widows, for example; powers to refer an individual man or woman to medical boards; and powers to require workers to submit themselves to medical examination, to undergo "appropriate" medical treatment, or to attend vocational training or industrial rehabilitation courses provided under the Disabled Persons (Employment) Act. The insurance officer now becomes a member of the rehabilitation team, for his influence over the injured worker—for better or for worse—will obviously be considerable.

Medical Certification

While the words "arising out of and in the course of," used at present to define an accident where benefit is paid, are not to be changed, a modification in favour of the workman is now proposed to the extent that "an accident arising in the course of an insured person's employment shall be deemed, in the absence of evidence to the contrary, also to have arisen out of that employment." This will have repercussions, for example, in cases of dermatitis and hernia. The medical profession have at present much certification for fitness or unfitness for different jobs. This obligation must obviously still continue—and possibly in greater amount—as the only person able in law to assess capacity for work is the doctor. Some method may have to be evolved (and this may be the view of the Minister) to make certification more accurate and based on a better appreciation of the physical and mental requirements of different jobs. In this respect further research is necessary into problems such as job-analysis in respect of capacity for work, and methods whereby information regarding patients can be passed from one doctor to another in the different branches of medicine. In the new legislation the fact that the system of contracting out through insurance companies is to be abolished will eliminate the need for reports to those companies, but it is obvious that the Ministry of National Insurance will demand written evidence from doctors no less than under the old scheme.

Effects on the National Health Service

Some of the demands which will be made by the new Ministry will affect the medical profession as follows:

Effect on Hospitals

For the purposes of the Act "medical treatment" means "medical, surgical, and rehabilitative treatment, including course of diet

¶ It is suggested that this be termed "job-selection analysis," which would become, in part, a responsibility of medicine. Job-analysis, on the other hand, is the primary responsibility of industrial management.

or other regimen." The Bill goes on to use the phrases "approved hospital treatment" and medical treatment given "with the approval of the Minister." Regulations may also provide for determining "in what cases" and "for what periods" treatment is to be carried out. Is there therefore to be some selective method of treatment? Are some hospitals not to be approved? Who, on behalf of the Ministry, will advise approval or disapproval? Will hospitals with inadequate facilities for accident treatment remain outside the scheme? Will the Industrial Injuries Fund itself contribute to the treatment of patients? The time is obviously now opportune for a scheme to be prepared in detail for an accident treatment service for the country, and for a more critical survey of the accident-treatment facilities in different areas than those already carried out.

The Minister can arrange with the Minister of Labour that persons entitled to benefits under the Act are to take full advantage of "industrial rehabilitation courses" under the Disabled Persons (Employment) Act. Does this mean that he would have the power to remove a person under treatment by a certain physician or surgeon to a course or centre where he would come under other care and supervision? Who will advise him in such cases? Are the Ministry of National Insurance, the Ministry of Labour, the Ministry of Fuel and Power, the Ministry of Pensions, and the Ministry of Health—presumably the body to be responsible for the new national health service—still to operate independently in respect of rehabilitation? In the interest of the patient there appears to be good reason for better integration of rehabilitation services, and this should become a responsibility of hospital administration in the new health service.

Medical Boards and Appeal Tribunals

The Bill states that medical boards and appeal tribunals are to be set up. The boards are to decide whether an injury has resulted "in the loss of a faculty," whether this loss is permanent, and at what stage of treatment the extent of disablement is to be assessed. It has already been noted that insurance companies are to disappear from workmen's compensation, and this means that individual doctors will no longer act in an advisory capacity to them in this connexion. The new legislation, and in particular the setting up of these boards, may have unfortunate repercussions, therefore, on the income of certain doctors, but it cannot fail to be a great improvement on the present state of affairs. The medical boards will be appointed by the Ministry, and will consist of two or more medical practitioners, one of whom shall be chairman. It has been suggested—and the Bill evidently allows for this—that the Ministry of Pensions may take this over. What then are the implications? Although the Ministry of Pensions doctors are no doubt able assessors of incapacity states relative to fixed standards, are they sufficiently skilled in the question of disablement *vis-à-vis* work? (It may be argued, however, that this particular skill is not necessary under the new scheme.) Has this Ministry got adequate staff, or will it have to increase its staff still further? Should special training facilities be provided for the doctors who will serve on these boards? What links will the Boards have with hospitals, disablement rehabilitation officers, local industries, industrial medical officers, and general practitioners?

Medical appeal tribunals will also be appointed by the Minister and will consist of two medical practitioners and a chairman, who does not need to be a doctor but can be the chairman also of a local appeal tribunal. What doctors are to do this work, and what training and experience are necessary? Are they to be whole-time? Is the Ministry of Pensions also going to take this over?

The amount of work to be done by boards and appeal tribunals is difficult to assess, but in a busy industrial area, and certainly at the beginning of the scheme, their task will not be easy. Employers may dispute more claims for disablement benefit than they have in the past, but disputes may diminish when it is appreciated that the new Act favours the worker in respect of claims. It has already been observed that workers will soon know that more benefit is paid if the injury occurred at work, or under certain circumstances when going to or from work, than if it happened at home. Abuse is therefore possible.

"Single" Medical Practitioners

The Minister may, with the consent of the claimant for disablement benefit, refer the case, where disablement is likely to be less than three months, to a "single medical practitioner appointed by the Minister, instead of to a medical board." What are the implications of this? The Bill leaves room for further provisions and regulations to be made under this heading. There still would be the right of appeal to and review by boards and tribunals. These "single" doctors might be (a) surgical and medical specialists, (b) general practitioners, (c) industrial medical officers, or (d) members of the staff of the Ministry of Pensions.

One or more medical practitioners may sit with local appeal tribunals as members or assessors. These doctors will be appointed by the Minister. The Minister may also appoint "medical officers for the purposes of the regulations" concerning prescribed or occu-

pational diseases. The Bill is, intentionally or otherwise, vague in this connexion (see Section 55 (3) (b)), but it may be reasonable to inquire further into the Minister's intention and to ask for more specific detail of these appointments.

The Industrial Medical Officer

It is reasonable to suppose that a new industrial health service will eventually be set up to cover all occupations and be integrated with the new national health scheme, although the Minister of Health has clearly said that this will not take place at once (*B.M.J. Supplement*, 1946, 1, 16). "The major task must be accomplished first, and after it is completed then the industrial health services must be looked at separately and assimilated into the health structure as a whole." Because of future developments this Bill should therefore be viewed from the angle of the industrial medical officer in a properly organized service; it will be seen at once that his help is necessary if the new legislation is to be fully implemented.

One of the important jobs which can well be carried out by the industrial medical officer (and, in fact, is being carried out now in a number of firms) is assessment of capacity for work, both of new applicants for employment and of workers returning after injury and illness. He is in a better position to do this than the hospital surgeon or physician, or the general practitioner; but assessment should ideally be made by team-work between the two: one has knowledge of the patient's general function following disability, the other has or should have knowledge of work, so that he can place the man into a suitable occupation. Placement at work after accident, provision of alternative work, supervision during these phases, close contact with hospitals, and supervision of "industrial rehabilitation" schemes envisaged in the Disabled Persons (Employment) Act are other matters which are his concern.

The extension of insurance to occupational diseases also closely affects the industrial medical officer. The diseases for which benefit will be paid are to be "prescribed." If the Government prescribes diseases other than those at present scheduled under the Workmen's Compensation Act it must provide evidence of a high scientific and technical order. The trade unions have insisted from time to time that other diseases should be scheduled, and production (or otherwise) of evidence in this respect may well form part of the work of research units attached to a national industrial health service.

It is a matter of interest that the Bill refers specifically to pneumoconiosis. Medical examinations are to be carried out in various groups of workers, and no doubt the present Silicosis Board will continue to operate, with, it is hoped, wider terms of reference. But will this Board come under the Ministry of National Insurance? Will it have increased powers—for example, such as those of factory inspectors? How far will industrial medical officers, appointed say to potteries and coal-mines, take part in the new pneumoconiosis scheme? Pneumoconiosis, for the purposes of the new Act, "means fibrosis of the lungs due to silica dust, asbestos dust, or other dust, and includes the condition of the lungs known as dust-reticulation." This raises a point of much importance, for dust-reticulation is found in certain apparently healthy foundry-workers, and among workers in factories where silicates are used—for example, in the ceramic industry. How far, in the new scheme, will these men be eligible for disability benefits and pension? Here is an example of the need for more adequate research facilities and a closer link between research and legislation.

Finally, the industrial medical officer will have a new opportunity to practise preventive medicine. The whole structure of the Bill depends for its financial success on the prevention of accidents. So the various ways in which the profession can contribute to this should be further explored by the Industrial Health Research Board or some other competent body. It is possible, in this connexion, that industrial managements may show lack of interest, thus impeding the doctor's work. This suggestion is based on the fact that there will be no reduction in the employer's contribution to the Industrial Injuries Fund even if the firm has a low accident rate; firms with high rates and those with low rates will make the same weekly payments. This is an important matter for discussion: what are to be the incentives to industry to reduce its accident rate?

Research

Section 72 of the amended Bill introduces a novel line of thought into an otherwise prosaic though stimulating document: "The Minister may promote research into the causes and incidence of, and methods of prevention of, accidents, injuries, and diseases against which persons are insured under this Act"; and he can employ research workers to work in his Department, or can contribute towards the expenses of other research workers. For economic and financial reasons this is an obvious corollary to the new legislation, and it raises important issues. How will this affect the policy of the Medical Research Council? Will the Industrial Health Research Board expand or will it continue as at present, understaffed and with inadequate

premises? Will the Ministry set up its own industrial medical research department? If so, from whence will come adequate staff? And who will advise the Minister in this direction? Are the problems at present being investigated by the Medical Research Council or its Industrial Health Research Board those of most importance in relation to the national economy; or should a better priority be determined?

It may be relevant to inquire whether the general insurance scheme against ordinary illness should also empower the Minister to carry out research, so that by its application sick absence could be prevented and costs to the country reduced. This seems a logical sequence, and the amounts of money so directed could well be proportionately greater. So far, nothing to this effect has been proposed. But if it were to be specifically included the impact on present medical teaching and research would, to say the least of it, be stimulating.

There are few statistics available to-day concerning accidents among the civilian population, apart from certain facts given by the Chief Inspector of Factories in his annual reports. We have seen, however, that in the last pre-war year some 460,000 persons received £6½ million in compensation among the seven great industries; but these figures have financial significance only, and are of little value to the medical or social research worker. If the Minister institutes research into the incidence of injuries and industrial injuries on any adequate scale he will find it necessary to create a national health statistical department either within his own Ministry or in collaboration with the Minister of Health. He should have no difficulty in financing this, for his Industrial Injuries Fund will have an annual income, under stabilized conditions, of at least £23 million. It may well be that the Minister will have to spend £1 million a year on research if he wishes later to save £2 million or more. Has the Medical Research Council, or any other branch or department of medicine for that matter, given this matter thought? It is more than possible that, because of the large sums of money involved, we are entering a new era of applied medical research, for which the present machinery is inadequate to meet the demands of a modern State.

Medical Advisory Committee: A Recommendation

There are signs on many grounds, therefore, that the work of the doctor *because* of the new scheme will increase rather than decrease; and *in* the new scheme he will play a supremely important part, whether in hospital, in industry, in general practice, in research, or as a member of boards, tribunals, or advisory councils. So for this reason the Rehabilitation Committee of the British Medical Association (during examination of the new Bill in relation to rehabilitation) has proposed (*B.M.J. Supplement*, 1945, 2, 108) that, in addition to the Advisory Council to be set up by the Minister (see Section 60), there should be established a medical advisory committee composed entirely of doctors to advise the Minister on the many and varied medical problems which will arise. The assessment of prescribed industrial diseases should be the responsibility of this committee. The wisdom of this recommendation is obvious in the light of the various implications which have been discussed. Only thus can the contribution of the medical profession to this new and important social service have its full effect and be adequately co-ordinated.

The Ministry of Health has circulated to county councils, county borough councils, and joint cancer committees a valuable memorandum by Prof. Matthew Stewart, of Leeds, entitled "Notes on Conditions which may lead to a Provisional Diagnosis of Cancer but which Prove to be Non-malignant Histologically." This pamphlet, which runs to 14 pages, is a reprint from the *Monthly Bulletin of the Ministry of Health and the Emergency Public Health Laboratory Service*, January, 1946. It is intended primarily for the guidance of medical officers of health and others who may have to assess liability for payments under the Cancer Act; it will also be of service to pathologists and clinicians. The non-malignant conditions are grouped under (1) lesions of the skin, (2) lesions of the subcutaneous tissues, (3) breast lesions, (4) lips and tongue, (5) stomach and intestines, (6) lymphatic glands, (7) larynx, (8) lungs and bronchi, (9) salivary and lacrimal glands, (10) intracranial lesions, (11) tumours of bone, (12) adrenal tumours, (13) thyroid, (14) urinary tract lesions, (15) testicular tumours, (16) penis, (17) ovarian tumours, (18) uterus, (19) vagina, (20) vulva.

THIOURACIL IN THE TREATMENT OF THYROTOXICOSIS

FURTHER EXPERIENCES

BY

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A year or so ago a preliminary report on 27 thyrotoxic patients treated with thiouracil was published in this *Journal* (Nussey, 1944), and an account is now given of their subsequent course and of others who have since augmented the series. The total treated up to October, 1945, has risen to 53, but details are given here of only 50, the remaining 3 having been under observation for less than 6 weeks. In Table I the cases are grouped according to the length of time they have been observed.

TABLE I

	Period of Observation in Months								
	Over 24	21-24	18-21	15-18	12-15	9-12	6-9	3-6	1-3
Number of cases	3	6	6	7	5	4	9	5	5

Of the patients 45 were females and 5 males, and their ages ranged from 19 to 72. The initial B.M.R. readings varied from +17 to +84, and, of those, 13 were under +30 and 18 over +50. Judged by the degree of thyrotoxicosis, they may be divided into: 9 very severe (including 7 with cardiac complications), 19 severe, 13 moderate, and 9 mild. More than half of the total number had a diffuse goitre, about a third had nodular thyroid, and, of the remainder, a few had scarcely any enlargement of the gland and 4 had had operations before. No attempt is made here to draw any distinction between primary and secondary thyrotoxicosis, because many of the patients were uncertain whether the thyrotoxic symptoms came on with or preceded the goitre; but as a general rule those with nodular goitres were somewhat slower in responding to thiouracil than those with the diffuse type.

Subsequent Course of the Cases Treated in 1944

It proved possible to follow the course of all 27 patients mentioned in the first paper, and a few details may be of interest. As before, the patients are referred to numerically in the order they presented themselves for treatment.

No. 1, who had treatment for a year, relapsed after five months without thiouracil, and had to have another course of it for 5½ months. It was possible to discontinue her treatment once more for another two months. No. 2 had to have treatment on and off for 21 months, but she has now remained well for three months without it. No. 3 was negligent in her attendance. She had thiouracil for two months at the end of 1943, for another two months at the end of 1944, and during April, 1945. When visited recently her condition was found to be fairly satisfactory. No. 5, who had psychopathic tendencies and a bad family history, proved uncooperative after leaving hospital and could not be relied on to continue the treatment at home. He relapsed into a state of severe thyrotoxicosis after an attack of sinusitis and developed an obsessional psychosis. He could not be persuaded to accept either medical or surgical treatment, and eventually had to be admitted to a mental hospital, where he died from exhaustion on June 3, 1945. No. 11 was missed for a whole year after a successful six-months course of treatment. She was able to work throughout, and now shows evidence of slight relapse (B.M.R. +31). No. 12, who had five months' treatment, and whose auricular fibrillation stopped spontaneously, had a slight recurrence of thyrotoxicosis and of fibrillation 11 months later, but both these conditions were easily restored to normal with another course of thiouracil and she now keeps fit on 0.05 g. daily. No. 14 has maintained a satisfactory condition and is still on a small dose of thiouracil. No. 18, although originally rather resistant to treatment, eventually did extremely well. When her treatment was stopped after a year her B.M.R. was still +31, but it continued to drop after that and reached normal level. This patient has now