the apex of the intussusceptum. As soon as the intussusception has been started the anatomical peculiarities again become of paramount importance, for they determine the character of the intussusception. In the ileo-cæcal forms a wide colon with few and simple ileo-colic folds, devoid of lymphatic glands, will allow the intussusception to run a chronic course, even though the amount of bowel invaginated is very great. Complex fossæ, with numerous glands at the ileo-colic angle and prolongations of mesentery along the end of the ileum will, no doubt, so far steady the ileum as to render its intussusception less likely. But if it should occur, the additional amount of tissue invaginated will render the impaction so peculiarly tight that if gangrene is not produced at once early adhesions will be formed and the intussusception will soon become irreducible.

REMARKS ON THE MEDICAL ASPECT OF A SYSTEM OF COMPULSORY INSURANCE OF THE WORKING CLASSES.

By F. PARKES WEBER, M.D., M.R.C.P.LOND.

As the subject is comparatively little known to the majority of English medical men, in order to make the medical remarks intelligible, I must first give a short account of the German National Workmen's Insurance System, and this account I shall give as nearly as possible in the words of the *Guide to the Workmen's Insurance of the German Empire*,¹ compiled by Dr. Zacher, permanent member of the Reichs-Versicherungsamt. It will, however, be unnecessary to enter into any complicated details or figures.

The work of social reform was practically initiated by the Message of the German Emperor, William I, to the Reichstag on November 17th, 1881. The Message, as communicated by Prince Bismarck, was expressed in the following words:

We consider it Our Imperial duty to impress upon the Reichstag the necessity of furthering the welfare of the working people. We should review with increased satisfaction the manifold successes with which The Lord has blessed Our reign, could We carry with Us to the grave the consciousness of having given Our country an additional and lasting assurance of internal peace, and the conviction that We have rendered the needy that assistance to which they are justly entitled. Our efforts in this direction are certain of the approval of all the federate Governments, and We confidently rely on the support of the Reichstag, without distinction of parties. In order to realise these views a Bill for the Insurance of Workmen against Industrial Accidents will first of all be laid before you, after which a supplementary measure will be submitted providing for a general organisation of Industrial Sick Relief Assurance. But likewise those who are disabled in consequence of old age or invalidity possess a well-founded claim to a more ample relief on the part of the State than they have hitherto enjoyed. To devise the fittest ways and means for making such provision, however difficult, is one of the highest obligations of every community based on the moral foundations of Christianity. A more intimate connection with the actual capabilities of the people, and a mode of turning these to account in corporate associations, under the patronage and with the aid of the State, will, We trust, develop a scheme to solve which the State alone would prove unequal.

Thus the working man, unfitted for work by sickness, accident, invalidity, or old age, was to have a legal right to a provision sufficient to render him independent of public charity or Poor-law relief. This end could only be attained by a system of general and compulsory insurance, based on mutuality and self-administration, and the endeavours to attain this end have resulted in the system of working-men's insurance now employed in Germany. This system consists of three component parts: (1) Insurance against sickness; (2) insurance against accidents; (3) insurance against invalidity and old age. These component parts, which supplement each other to form the insurance system, must be separately considered.

INSURANCE AGAINST SICKNESS.

The insurance is intended to secure the insured sufficient relief in case of illness during at least thirteen weeks. All the insured have a legal claim to:

(a) Free medical attendance and medicines from the beginning of the illness; likewise spectacles, trusses, bandages, etc.

(b) (From the third day of any illness which incapacitates from work) a daily sick pay amounting to one-half the daily

wages on which the contributions have been based; or else (in special cases) free admittance to a hospital, together with half the sick pay for the family.

(c) Burial money.

(d) In the case of women, sick relief during four weeks following confinement.

The insurance against sickness, contrary to that against accidents, is restricted to local organisation, because cases of less importance are continually occurring in which relief to be efficacious must be prompt. The law has therefore authorised the formation of various associations for obligatory insurance against sickness. By the associations being local and self-administrative, the management of their funds is more easily controlled, and simulation on the part of the insured is more difficult. The contributions of the different classes of workmen vary from 1 to 3 per cent. of their average daily wages. The law binds the employers themselves, when depositing the contributions of their workmen, to pay a sum equal to one-half the contributions of the employed, so that two-thirds of the whole are furnished by the workmen and one-third by their employers.

INSURANCE AGAINST ACCIDENTS.

The liability law of June 7th, 1871, had not the desired effect, partly because the burden of proof was laid on the poor workman seeking redress, and partly because the person—sometimes a fellow workman—responsible for the accident was often unable to pay damages. Moreover, this law did not provide for accidents caused by chance or by the fault of the workman himself.

The present system of insurance against accidents is carried out under the guarantee of the empire, on the mutual system, by the employers united in trade associations, which may embrace the different branches of industry in certain districts or in the whole empire.

The object of the insurance arrangements is to secure compensation for bodily injury or for death, in consequence of an accident to the workman whilst working for his employer, injuries sustained on other occasions being excluded. As a matter of course the injured man must not have brought about the accident purposely, though the injury may be due to his own fault. The compensation includes the cost of the cure, and in addition a fixed allowance during the period of incapacity for work, or in fatal cases burial money and an allowance to the survivors (widows, children, parents) from the day of death. When the injured person is totally disabled the compensation amounts to two-thirds of his average year's earnings; if only partially incapacitated for work a fraction of this amount will be granted. For the first thirteen weeks after the accident the associations for insurance against sickness (or, in their absence, the employers) have to step in.

In the interest of a fair and suitable treatment of sufferers from accidents the trade associations are, however, legally authorised either to commit at their own costs the care of the injured to the associations for insurance against sickness beyond the thirteenth week, until a complete cure is effected, or they may themselves undertake the charge of the patients at any time during the first thirteen weeks, with the understanding that their outlays of sick pay shall be refunded by the associations for insurance against sickness.

The amount of the compensation is fixed, after a police investigation, by the organs of that trade association in whose district the accident happened. Against this decision an appeal may be made to an arbitration court, composed of two members of the trade association, two representatives of the insured workmen, and a presiding magistrate. This court is invested with the character of a special court of law; in more complicated cases an appeal from its verdict may be made to the Reichs-Versicherungsamt.

Every employer contributes to the burdens of the year in proportion to the risks to which he exposes his association.

As it is evident that both the trade associations and their individual members have a strong interest in diminishing the chances of accidents, the law confers on the associations the important prerogative of prescribing regulations for the prevention of accidents. Through these regulations the employers can be compelled, under penalty of higher assess-

ments, to adopt the necessary measures for safety; the workmen also may be forced by fines to follow the rules.

As regards the participation of the insured workmen in the organisation of the trade associations, they are neither members of the associations nor have they to bear any of the corporate burdens. They have, however, to take on themselves a portion of the aggregated liabilities caused by accidents, in so far as, together with the employers, they contribute to the associations for insurance against sickness, to which, as already stated, for practical reasons, the care of patients during the first thirteen weeks of the illness is left.

Accordingly the law permits representatives of the working men (chosen by the directing boards of the associations for insurance against sickness) to take part in the police investigation of accident cases, and in the discussions of preventive regulations, as well as in the proceedings of the arbitration courts and of the Reichs-Versicherungsamt; on all these occasions the workmen enjoy the same rights as the representatives of the employers.

The Reichs-Versicherungsamt (Imperial Insurance Department) is the supreme court for all that has reference to organisation, administration, and judicature. It is composed of permanent members—a President appointed for life by the Emperor on recommendation of the Bundesrath, and several higher officers similarly appointed; and of temporary members—namely, four delegates of the Bundesrath, and representatives of the employers and employed in equal numbers. Two judiciary officers are added to decide the more important cases, such as appeals to the Reichs-Versicherungsamt and the settlements or adjustments of claims in the case of changes in the composition of trade associations. For some of the federal States, special State insurance offices have been established.

INSURANCE AGAINST INVALIDITY AND OLD AGE.

The money to pay the invalidity and old age pensions is furnished jointly by the empire, the employers, and the employed. The empire contributes to each annuity the fixed amount of 50 marks per annum, and pays the contributions of the workmen while serving in the army or navy. It defrays the expenses also of the Reichs-Versicherungsamt, and effects gratuitously, as in the case of the accident insurance, the payment of pensions through the post-offices. All other expenses are borne in equal shares by the insured and their employers, and are raised by current contributions.

The carrying out of the invalidity and old age insurance is entrusted, under State guarantee, to special insurance institutions, whose districts coincide with the province or State divisions.

The pension for old age is granted, without proof of disability, to all who have completed their 70th year. The pension for invalidity is granted, irrespective of age, to every insured person who is permanently disabled (that is, no longer able to earn even one-third of his average wage), and also to persons, not permanently disabled, but who for an entire year have been unfit for work, during the remaining period of their disability.

REMARKS.

It can hardly be doubted that a general system of insurance of the labouring classes, rendered compulsory by law (such as the German system) must exercise a beneficial effect on the mass of the poor people, and through them on the whole nation. By such a system every labourer is assured of a certain amount of support in case of illness, accident, or infirmity. The insurance subscriptions (paid partly by the empire, partly by the workmen themselves, and partly by their employers) are reduced to a minimum owing to the immense number of individuals thus clubbed together. Some, indeed, may object that a State institution of this kind is "too paternal" or rather "too socialistic," but such terms mean little in themselves. A system which gives the poor workman a certain just sense of security, and, when sick, the feeling that he has contributed something to his medical treatment, must deserve attention. Moreover, it doubtless reduces in number those who having lost employment by illness of various kinds become paupers.

An insurance system of this kind presents special points of interest in regard to medicine and the medical profession. The mutual obligation of the different parties concerned in

such a system must help towards the proper carrying out of sanitary regulations. It becomes at once the duty of an employer, not only towards his workmen but towards other employers, to see that his workmen do their work under the most hygienic conditions possible. The workmen, moreover, are bound to carry out directions as to personal hygiene, etc., and when ill or injured must submit to be treated by the approved methods, and cannot so easily go wandering about from one hospital to another, as they sometimes do in England.¹

It is obvious that the collection of statistics of medical importance must be greatly furthered by an insurance system of this kind. By the necessary registration of cases knowledge must be gained as to the exact relative frequency of various illnesses and injuries amongst workmen employed in different kinds of work, and living in different places.

The statistics must also help in deciding which methods of treatment, at least which practical methods, give the best results when employed on a large scale. By the aid of the insurance associations more hospitals and sanatoria for treatment of the consumptive poor could be erected, both in suitable parts of the country, somewhat after the model of the new sanatorium for poor consumptives at Rupertsheim in the Taunus, and in towns, like the hospitals for consumption at London, Frankfurt, etc. In fact, not only sanatoria for consumption, but sanatoria for various classes of convalescents might be profitably established by such an insurance system. Similarly, institutions for Swedish gymnastics and massage might be instituted (or, as in some German towns, private ones might be hired by contract during certain hours of the day) for the use of working men, considered by the insurance doctors likely to be benefited (for example, after injuries to joints, etc.) by such means.

These are some of the advantages which might accrue from such a general system of working men's insurance. On the other hand, it must be acknowledged that medical men are not likely to be well remunerated for their most important share in the work. Medical men would naturally, as in Germany, be found to do the work for very little, partly to have a share in the great undertaking, and partly, doubtless, for the sake of the experience to be gained. After all, however, the medical clubs in England are probably just as bad for the doctor's pockets, do less good to the working classes, and are more liable to be abused by those who could quite well pay the ordinary medical fees.

REFERENCES.

¹ New edition, published by A. Asher and Co., Berlin and London, 1896. See also *Die Arbeiterversicherung in den Europäischen Staaten* (Leipzig, 1895), by Dr. T. Bödiker, President of the Reichs-Versicherungsamt; and *Les Assurances Ouvrières en Allemagne* (Paris, 1895), by Maurice Block. ² I do not mean that poor patients should necessarily be prevented from changing hospitals when they really fancy themselves badly treated; it would be sufficient if those who now change hospitals for some trivial question of convenience, should have a practical inducement not to do so. Knowledge as to the sequelæ of disease, ultimate results of operations (such as radical cure of hernia, etc.), recurrence of tumours, etc., would be thus facilitated. Certain classes of patients would probably continue to wander, for instance, many neurasthenics, including the *malades imaginaires* of the poor.

THREE CASES OF RUPTURED GASTRIC ULCER TREATED BY LAPAROTOMY, SUTURE, AND WASHING OUT OF THE PERITONEUM.¹

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THE history of the three following cases that have occurred in my practice will, I hope, prove of interest to the profession.

CASE I has been already fully recorded.² The more prominent points were as follows: The rupture took place on December 7th, 1893. The operation was performed five hours after the first onset of symptoms. The details as to suturing the ulcer and washing out of the peritoneum were very similar to those of Cases II and III, about to be related. The patient recovered completely in a month, and has ever since been, and is at the present time, quite free from all symptoms.

CASE II. Miss E. P., aged 21, had been under treatment for dyspepsia the two previous winters, being always better in the summer time. Her sister

¹ Read before the East Anglian Branch of the British Medical Association.

² *Medico-Chirurgical Transactions*, vol. lxxvii, and *BRITISH MEDICAL JOURNAL*, March 17th, 1894, p. 576.