

chief value, for it is based upon observations of cases of smallpox so varied in this respect that only a wide experience would bring all under observation. Dr. Wanklyn agrees with Dr. Ricketts in saying that smallpox is a disease which seems to present more difficulties in its detection than do most others; but that it is, perhaps, of all diseases, that in which a certain diagnosis can be arrived at in almost every case. It is because of the importance of the subject that we give this notice of Dr. Wanklyn's book. It appears to us that he has rendered useful service in thus making his experience available for the many.

THE LATE DR. HERBERT MANLEY.

OUR June number contained an obituary notice of the late Dr. Herbert Manley, whose death has removed from among us an especially able and zealous worker in public health. It is with much regret we learn that his widow has been left in circumstances which make it desirable that a fund should be raised for her assistance. We commend this proposal to all Fellows and Members of the Society able and willing to contribute.

The following Fellows have already signified their desire to subscribe:—

The President, Dr. E. W. Hope	£5	0	0
Dr. George Reid	5	0	0
Dr. Bostock Hill	5	0	0

The following subscriptions have also been received:—

Dr. F. J. Allan	£1	1	0
Sir Shirley Murphy	1	1	0
Dr. A. Newsholme, C.B.	5	0	0
Dr. L. C. Parkes	2	2	0
Dr. F. E. Rock	1	1	0

The Hon. Treasurer of the Society will be happy to receive any further contributions, which should be addressed to 1, Upper Montague Street, Russell Square, London, W.C.

APPOINTMENTS.

DR. JOSEPH CATES has been appointed medical officer of health to the county borough of St. Helens.

DR. W. M. CLENDINNEN has been appointed medical officer of health and school medical officer for the Cannock U.D.

DR. ALBERT HAROLD GODSON BROWN, assistant medical officer of health for Burnley, has been appointed tuberculosis officer and medical officer of health for Deptford.

DR. S. G. MOORE, the medical officer of health and medical adviser to the local Insurance Committee, has been appointed chief school medical officer to the Huddersfield Education Committee.

DR. J. M. TAYLOR, of Stonehaven, has been appointed assistant school medical officer to the South Shields Education Committee.

DR. JAMES WOOD has been appointed medical officer of health and school medical officer for the urban district of Chadderton.

THE RELATION OF MEDICAL BENEFIT UNDER THE NATIONAL INSURANCE ACT TO THE PUBLIC HEALTH.

By MEREDITH YOUNG, M.D., D.P.H., Barrister-at-Law, County Medical Officer of Health, Cheshire.

IN introducing this discussion I must, in order to develop my thesis or argument, start with two statements of fact, or what I conceive to be fact. The first of these statements is that the medical officer of health is in his present capacity running in far too narrow a groove, and in reality has emerged but little from the rut in which he was placed when his office was first created in 1872 (the natal year of the first real public health service), and when he was endowed with duties which were those of a sanitary inspector pure and simple. True, his scope of work has been enlarged by a generous interpretation of that wonderful Public Health Act of 1875, and particularly by regulations of the Local Government Board; but he still is, as Mr. Sidney Webb puts it, dealing far too largely with the "non-human environment." In this work he is very considerably wasting the special qualifications and training he possesses. This criticism applies to metropolitan medical officers of health in particular, and, having had a short experience of that work, I can testify to the large amount of truth contained in the description of these officers as "merely glorified sanitary inspectors."

The time has come when, as is the case in all the very large towns at present, most, if not all, of the duties appertaining to the "non-human environment" could safely be transferred to a Sanitary Department as distinguished from a Health Department, and the medical officer of health left free to utilise his special qualifications in the sphere of the really human environment, being called in for consultation in cases where special questions of health were involved in connection with sanitary work. The second statement I wish to make is that at the present time there is a deplorable overlapping of public services for the treatment and control of disease. How the public health service has invaded the kingdom of the treatment of disease is as well known to you as it is to me. I leave out the important and valuable voluntary public services which are spreading over the country, for in a properly organised health service there should be virtually no room for such voluntary services which are created by a conjugation of heart and purse

without the intervention of head—I speak generally, of course. Municipal fever and small-pox hospitals, the supply of antitoxin, bacteriological examination of secretions and discharges, health visiting, the provision of milk depôts, contributions towards medical aid in child-birth, the hospital treatment of puerperal fever, the subsidising of school clinics for inspection and treatment, the cleansing of verminous persons, the provision of nurses for home visitation—all of these are forms of *treatment*, call them by what pseudonyms of *prevention* you will. That is always our excuse—and a pretty thin one it is in some instances—that our proposals are really preventive in object; that the infectious or contagious case properly isolated or treated is a potential focus of disease removed. Truth—but only half the truth. Year by year we go on annexing, as the Scotch say, first one disease and then another, and calling them (quite rightly) preventable, as though every disease is not in reality preventable in any broad interpretation of that term. The Reports of the Registrar-General demonstrate that over 50 per cent. of all deaths are due to fairly well-known infectious diseases, and the remainder may in a few years be shown to be, at all events, due to controllable causes. We are enlarging our category of preventable diseases at a rapid rate, and, I think, quite properly so. The next victim to our claws (if you will excuse my putting it in this way) will probably be cancer, and after that will follow pneumonia, the group of venereal diseases, acute rheumatism, arterio-sclerosis, endemic goitre, and a number of blood diseases, to mention only a few potentialities. We do not need to wait for the elucidation of the actual cause of disease before we start to eliminate it; typhus fever is an instance of this, for we do not know its *causa causans* even at the present day. Similarly we are making steadily successful warfare on scarlet fever, measles, and whooping cough, though we are as far off knowing their precise *causae causantes* as we were 100 years ago. Other authorities are also dealing with preventable disease—Poor Law Authorities in particular, as you all know. The Home Office is dealing with occupational diseases, and is reaching out its tentacles on the least possible provocation, and scheduling, just like Public Health Authorities, first one disease and then another as preventable, and therefore *to be* prevented by proper appliances and proper conditions of employment. The National

Insurance Act, the limits of which appear boundless, has already coupled us up with the public medical service in the case of tuberculosis, and when the Bill dealing with mentally defective children is placed on the Statute Book we shall most probably be linked up with still another branch of public medicine.

I have, perhaps, said enough to justify the two statements with which I started. To quote them again briefly: they are that, as medical officers of health, we are still caged up in the badly bent bars of the antiquated Public Health Acts, and we are the partial cause of a vast amount of overlapping of preventive treatment and a vast amount of waste of public money. The last-named matter does not annoy me so much as the first, because waste of public money is, or appears to be, inevitable when the general public, who ought to be its conservators, are allowed to have any say in its distribution. But one cannot help being perturbed when, after carrying a case up to a certain point, one has to abandon it to another public body, whose ideas may be wholly different to those one has formed, and as likely as not quite wrong. I am one of those who, to use a golfing phrase, likes to “hole out every hole.”

These are more or less universally conceded premises to what I want to put before you to-day. And they lead up to the two general propositions which form the gist of my introduction to this discussion, viz. :—

(1) That the time has come, and is now opportune, having regard to the immense potentialities of the National Insurance Act, for a unification of the public medical services already in existence, including that concerned with the administration of medical benefit.

(2) That the medical officer of health should, whether the above proposition commends itself for adoption or not, interpret his duties as defined by the regulations of the Local Government Board as dealing with the prevention and administrative control of disease, rather than the amendment of the sanitary environment of the public, leaving the latter largely in the hands of a sanitary service as distinguished from a public medical service.

There are two ways of carrying out the first proposition, *i.e.*, the unification of the public medical services. The first is what the Local Government Board are, in a more or less futile way, striving after now—the combination of offices. That is to say, an endeavour is being made to have the same man appointed

to act as medical officer of health, as district medical officer under the Poor Law, as certifying factory surgeon, as public vaccinator, and the like. The appointments which have been made under this *régime*, few as they have been, have probably done some little towards the desired end. But, to my way of thinking, the root idea is totally wrong: the proper method is the *unification of authorities*, and not merely the unification of offices. No matter how one combines offices in the same person, the officer appointed is still responsible to and cramped by the legal limitations of the various authorities to whom he has to trust for active measures. And it is the possibility of overlapping of the powers of these authorities that one wants to guard against. Given the combination of authorities the combination of offices would be sure to follow, but the reverse will never secure the desirable end—the abolition of overlapping and of undue public expenditure.

Disease is not just an individual misfortune; taken in mass it is a national disaster, and should be dealt with nationally, and not merely individually. The Insurance Act provides, in a way, for this in the excessive sickness sections; but that hardly goes far enough, in my opinion—the disaster has to happen before the remedy can be applied under these sections. What is wanted is a watchful and ever-vigilant eye, having everything within easy range of its accommodation. And unless we, as medical officers of health, are intimately associated with the working of the medical benefit sections, we shall not be called in to express any opinion until this disaster has actually happened. We must be overseers of the general public health whether the disease is preventable or not. This means that we must have a certain amount of control (I will not venture to define its extent) over infirmaries, municipal hospitals, Poor Law infirmaries, municipal sanatoria, and other institutions for the treatment of tuberculosis, voluntary health agencies, maternity and nursing agencies, and the control of vaccination and death and birth registration. These should be managed and controlled at the head by one supreme Health Authority. The taking over of voluntarily supported or endowed institutions, such as hospitals and infirmaries, would be a necessary part of any scheme for a State Medical Service, but should present no insuperable difficulties. A somewhat similar position arose under the National Insurance Act in the case of existing Sick Clubs and the accumulated funds of Friendly Societies, and

has, I think, been fairly and adequately met. The question of endowments and trusts could be met much in the same way as the Education Act of 1902 met them in the case of elementary schools, and we might have, for instance, with hospitals, as with elementary schools, the provided and the non-provided class, both managed by the same public body. This would certainly simplify matters in the early stages, and prevent the revolution being too drastic for the average conservative Britisher. This all comes very near to a State Medical Service, though it is not by any means the same thing, and I think could be carried out without the actual creation of a State Medical Service. All that is needed is a unification of existing authorities with the medical officer of health as the advisory head, or commander-in-chief. I name the medical officer of health because, if you leave him out, I cannot see where you are to go for an administrator. When this opinion is propounded there will at once arise a chorus of protest, and I should not wonder if the leader of the orchestra were to be the British Medical Association, which for some years has not been the whole-hearted supporter of the medical officer of health that one would have expected it to be, and had every right to expect it to be. It will be said by this chorus that the medical officer of health is not sufficient of an expert to be able to administer a programme such as this—that he knows nothing of hospital management, that he has forgotten all he ever knew about surgery and midwifery, that the sum total of his clinical knowledge is next to *nil*, and so on.

But, of course, we all know that in order to administer an organisation of this kind it is not necessary for a head to be able to carry out every detail himself; the power of administration consists in essence of being able to see things in perspective, and to delegate duties and organise different units in an orderly manner, dealing out specialist work to specialists and dovetailing the whole into a smoothly working machine. The head of a cotton-spinning concern would probably be a very indifferent spinner or boiler-tenter, and the commander-in-chief of an army would assuredly make a fool of himself if he meddled with the mechanism of a Maxim gun. Administration is the special *métier* of the medical officer of health, and, given a fair chance, no one has any well-founded doubt about his rising to the occasion.

There are all sorts of wild ideas prevailing in connection with this question of a State Medical Service. One of the commonest is that private practice would be swept out of existence and all persons, whatever their position or means, would have to employ State doctors. Prof. J. A. Lindsay, in the *Lancet*, of April 12th, falls into this error and writes:—"Her Ladyship might, without undue snob-bishness, hesitate to discuss her ailments with the doctor who was in attendance on her cook or her footman." No one who has really given the question any thought imagines for one moment that any such possibility is likely to arise. Only people below a certain income limit would come under the benefits of a State Medical Service, and there would always be a large residuum left for the purely private practitioner who did not care to accept office under the State. The social difficulty would have to be recognised on the one side, and on the other side we should have always a large body of men who would not lightly surrender lucrative and possibly specialist practices built up at considerable expenditure of labour and capital. Any State Medical Service must be an army, and must be organised on army lines with a gradation of officers and with special corps to deal with special matters as well as special institutions for various diseases and for research work. As Dr. Benjamin Moore puts it, we must have "central control and a national co-ordination." Promotion must be made to depend entirely on merit and ability, otherwise we shall degenerate into what has been called, with some truth I fear, "the bottle of medicine" of the Poor Law. There may be a need for the application of some system of Imperial grants-in-aid of such a service, such grants to be dependent on local efficiency and intended to encourage effective and energetic administration. And there would probably have to be a reorganisation of the Local Government Board and the creation of a Ministry of Public Health—both of them highly desirable, if not actually necessary, at the present moment. Amongst the advantages of a State Medical Service (and it may even follow the operation of the medical benefits of the National Insurance Act) I think we may fairly reckon a heightening of the standard of general medical practice. The rational parcelling out of work, which would be an essential feature of a State Medical Service, would leave more time for individual study and the attractions of promotion would act as a stimulant in the direction of

self-improvement. The one query which will at once occur to all of you is whether under a unified medical service the general public are going to be better off and the public health improved. I think the answer to this must of necessity be in the affirmative. Leaving out what I have just alluded to—the personal improvement of the general practitioner—I think the public will eventually be the gainers. They will have the advantage of consultants' opinions, of special research work adequately organised, of easy transference from one institution to another, and, what is of the highest importance, of having their bad social habits pointed out and compulsorily cured by people who are at once healers and health-missioners. There will, moreover, be no need for false modesty or hesitation in speaking frankly and openly about venereal diseases, alcoholism, drug habits, mental deficiency, early malignant disease, early tuberculosis and the like. That these are evaded or slurred over at the present day is acknowledged, and such evasions or negations are all too common a cause of disaster to the public health.

Naturally a State Medical Service must not be made too attractive to the public, or we shall have one and all abusing it as they now abuse voluntarily supported hospitals, and the result will be that the pocket of the nation or the practitioner will continue to be picked. The almoner system must be rigorously applied in order to avoid any risk of this abuse.

I spoke a short time ago of the waste of money owing to overlapping of public, medical and hygienic services. There is another waste of medical energy and money going on, and probably a more serious one. As you all know, there are many large hospitals at which research work of one kind and another is being carried on, and the staffs at these hospitals are working more or less as self-contained centres, elaborating methods and carrying out experiments which are largely unobserved (to say the least) by others similarly engaged. Surely a co-ordination of specialised work of this kind would lead to less waste of energy and money and conduce to more rapid and more certain progress. One must commend most highly all such work, but, at the same time, one cannot but regret the waste of energy caused by inco-ordination.

Since the coming into operation of medical benefit I am told there has been a slight, but fairly general increase in the attendances at the out-patient departments of infirmaries, the

reason being probably that doctors are being more consulted, and consulted, moreover, at earlier stages of disease. There is the hope—if this be true—that such diseases as cancer, tuberculosis, heart disease, etc., will come earlier under treatment and have an increased chance of cure.

If any use is to be made in the future of statistics to be gleaned from the data which the Act should make available, I think the present is the time our claim should go in to the Government for access to these data. There should be available for the first time in the history of public health the chance of working out tables of expectation of sickness for various ages, classes and localities and of checking statements which are made from time to time, often on somewhat slender foundation—as to the healthiness or otherwise of certain occupations and places. But it is hoped that what may be termed pseudo-strikes amongst the medical profession, such as, for instance, have recently been taking place in Hyde and parts of Lancashire, where the doctors have declined to state on the patient's certificate the nature of his illness, will not continue, for such a practice will destroy this excellent statistical opportunity.

In making any estimate of sickness prevalence under the present Act considerable allowance will, I am confident, have to be made for malingering which is reported to be fairly generally in evidence. As regards malingering I am perhaps too hopeful, for I cannot bring myself to think that many men are going to pretend to be ill on 10s. a week or many women on 7s. 6d. per week, though one has heard of occasional cases. There has been experienced in Germany what will undoubtedly be experienced here, namely, a considerable increase in the claims for medical benefit during times of reduced employment. At such times there is a strong and very human tendency to exaggerate mere *malaise* into actual organic disease and to convert the sickness benefit into a form of unemployment insurance. There are, as we all know, plenty of "Weary Willies" and "Anæmic Annies" in the world, and the danger will have to be carefully guarded against alike for the purpose of preventing improper encroachments on the available funds and of avoiding vitiation of statistical returns. A distinction will have to be carefully drawn, too, between various grades of illness—totally incapacitating, partially incapacitating, and even non-incapacitating (as, for instance,

the tuberculous case with arrested lesions who is able to do a full day's work though still, for example, receiving tuberculin injections). In the case of sanatorium benefit a generous interpretation of the Act has enabled the tuberculous person to be provided with adequate food and adequate clothing in suitable cases, and in the case of the person receiving medical benefit a similar extension of the benefit in the matter of special diet would undoubtedly be of advantage, for example, in cases of diabetes mellitus, albuminuria, gout and the like. It is somewhat questionable, however, whether the available funds will stand this.

One hopes that before entering on a Life Insurance Branch of the present venture, as appears to be proposed, the Government will endeavour to find a means of extending the sickness, sanatorium and medical benefits of the Act to those whose needs seem to me to be just as urgent as those of employed contributors, *i.e.*, that large section of the population consisting of gentlefolk who are in straitened circumstances, and whose income and expenditure accounts show a very slender margin to provide for attendance and medical necessities during time of illness.

One has to look somewhat afar in estimating the benefits of sickness insurance, and I therefore crave your indulgence for alluding to an aspect of the matter which appeals somewhat strongly to me, as it probably will to many of you. This aspect of the case is one concerned with the cost of living. It is an admitted fact that since the introduction of the Insurance Act the cost of living has gone up. Manufacturers tell one, quite frankly, that their contributions under the Act are booked to the wages account or general expenses account, and, being thus naturally counted as part of the cost of production, eventually and inevitably appear in the price of the goods. The wholesaler and retailer look at the matter in the same light, and the result is that the purchaser in the end pays the contributions of the manufacturer, the wholesaler and the retailer. The net result is that, though a certain class benefits, it benefits largely at the expense of the class just above it, and of a class which is already taxed in many instances far beyond what it can fairly stand, with the result that the health and well-being of this superior class is going to be further strained, and possibly strained beyond the limits of reasonable endurance.

As bearing upon this aspect of the question, I was much struck by the perusal of a White Paper issued whilst the Insurance Bill was in the throes of parturition dealing with opinions of employers in Germany on the benefits of sickness and invalidity insurance. One and all of these people spoke with the greatest commendation of the increased working capacity of their employees which had resulted from this form of insurance. And well might they be pleased, for the increased productive power of their workers was being purchased, largely at all events, not by them, and not by the class who were manual workers or artisans, but by the classes just above that level. Glad as one is to know of any increased productive power when it is an index of increased public health, one wants the burden to rest on the proper shoulders, and one does not see much *national* benefit resulting from the mere shifting of sickness incidence from one section of the population to another.

The claim that a few years' operation of the medical benefits of the Act, coupled with the provision for old-age pensions, will result in the virtual closure of the Poor Law infirmaries—a claim which is being made by a few of its very ardent supporters—is one which I venture to think will be viewed with a considerable amount of scepticism by most of us. I do not think that the Poor Law infirmary is or ever has been largely fed by the class now known as insured persons, though I must grant that the unemployment insurance provisions of the Act will prevent destitution to a large extent, particularly by protecting the worker dependent on season and weather. Actual experience alone will show whether these rosy prognostications are to be realised.

The work of the Poor Law is not that of building up a healthy population, but, cut down to its really narrow basis, is of preventing the destitute from dying as long as possible, and possibly also of building up the broken-down destitutes so that they may once more, for a short and intermittent period, become capable of more or less self-maintaining work.

One cannot help noticing in the White Paper (Cd. 5679), issued during the debates on the Insurance Act, the very guarded nature of the opinions extracted from Poor Law institutions in Germany on this question. Almost every one of these German opinions on the relief afforded to the Poor Law is accompanied by the statement that "this relief cannot be set forth figuratively"—"cannot be stated

in figures"—"it is impossible to show this statistically"—"it is impossible to prove it by figures"—"cannot be stated statistically"—"difficult to advance statistical proof"—and so on. The reasons for this impossibility are, to my mind at least, too vague to be satisfactory, and I prefer, therefore, to maintain the position of Thomas a Didymus on this aspect of matters. I say this, in spite of the statements which one sees in the public Press in the reports of meetings of Boards of Guardians, that the number of applicants for medical relief is less since the coming of the National Insurance Act. No one will be more pleased than myself to see such statements verified by statistics. The private practitioner will be one of the first to benefit by such a change if it should occur. A considerable number of non-paying patients will, if this happens, be placed in a position of independence, and will naturally go to their private practitioner for advice and assistance.

It has always seemed to me that an extension of periodical medical inspection to adults would be an excellent thing. Many sensible people nowadays visit their dentists once a quarter or once every six months, so that they may know whether their teeth are in a satisfactory state; but they do not seem to realise that hearts and lungs, and livers and kidneys are of any special importance, and unless disease prompts them to seek medical advice, or they present themselves as life insurance candidates, or are up for an appointment where medical examination is a *sine quâ non*, these important organs are left to look after themselves, and incipient disease fails to be detected. How much more rational it would be to have periodical and systematic medical examinations carried out and a kind of health census taken annually. The present Act, with a very slight modification, could ensure this benefit at no great expense for all insured persons, and I hope that it may be possible to introduce this feature into any amending Act.

My final comment on this Act may perhaps be deemed irrelevant by some, but that it is warranted I have not the slightest doubt; it is that, if the State had granted a similar contribution to that which it is giving to insurance committees to sanitary authorities, for the purpose of improving the housing conditions and general hygienic environment of the people, the public health of the nation would have been raised more certainly, more lastingly, and to a much higher level than it is ever going to

be raised by the present programme. The money spent on sanatorium benefit, leaving out the special sixpenny grant for domiciliary treatment, would most certainly have been better spent on housing, for, with it in our hands, we could have made every workman's house the next thing to a sanatorium, at all events.

I am all too conscious of not having dealt with this subject in as thorough a manner as might have been done. Recent illness has disorganised my work, and the effort of bringing it up-to-date has been a strenuous one. Moreover, I have approached the subject with some diffidence. I think it would have been better dealt with by someone having not only experience of public health work, but, coupled with that, a larger experience of general practice than has fallen to my lot. I felt as I wrote my remarks somewhat in the position of the old man Krook—a character well-known to all readers of "Bleak House"—when he was chaffed about his slow but sure method of learning to read:—

"I don't know what I may have lost by not being learned afore. I wouldn't like to lose anything by being learned wrong now."

I have tried to look on this matter in a purely general manner, and I may have failed to get the proper perspective. Nothing is to be gained *at first*, in my opinion, from a descent into details—they can be adjusted later. We have here a large body of men well qualified to speak on both the general aspect and its details, and I hope the fullest discussion will take place on what is, in my view, one of the most important public health opportunities that has yet come our way.

RESEARCHES ON ANTI-CHOLERA VACCINATION.*—Sebastiani records the results of a series of observations on guinea-pigs treated with anti-cholera vaccines of various types. Reference need here be made only to two of his conclusions, viz., that to produce immunity to five minimal lethal doses of the cholera vibrio at least two injections of vaccine were necessary; and that the blood serum became strongly bacteriolytic subsequent to vaccination with Kolle's or Wright's vaccine.

VACCINE TREATMENT AND THE OPSONIC INDEX IN LOBAR PNEUMONIA.*—Palmerini treated nine cases of pneumonia with vaccines, in some cases autogenous, in others a stock vaccine. He concludes on the strength of this series that the use of vaccines does not perceptibly advance or retard the crisis, but that the opsonic index rises at an earlier stage and more markedly than when no vaccine is given, and that at the same time the disease becomes clinically of a milder type.

THE OUTDOOR TREATMENT OF SCARLET FEVER.

By HERBERT M. CARGIN, M.B., D.P.H., Assistant M.O.H., Birmingham, late Medical Superintendent, City Hospital, Birmingham; and T. GRAHAM SHAND, L.R.C.P., (Ed.), D.P.H., Assistant M.O.H., Wakefield, late Medical Superintendent, City Hospital, Witton, Birmingham.

THE outdoor or "open air" method in the treatment of scarlet fever, though occasionally referred to during the past few years, has not received the attention and trial it has deserved, and apart from the eucalyptus oil method of Dr. Milne, the tendency seems to be rather to continue on the old lines.

For the past two years the outdoor treatment has been in constant use at the above institutions for all the severe and septic types of scarlet fever, for some of the milder cases, and also for a considerable number of the complications resulting from this disease.

It seems to us that, in view of the apparent benefit accruing from this method, some good might obtain from the publication of the results.

The cases chosen were especially the anginose, septic, and severe types of the disease. It will, of course, be appreciated that as the majority of the malignant types are admitted practically moribund, it was only possible to subject a very few of them to this treatment.

A number of mild cases were also treated in this manner, more for the purposes of control, besides many patients suffering from the various complications, such as albuminuria, rhinorrhœa, otorrhœa, adenitis, and joint pains.

Method.—The wards in this hospital, like those in most other hospitals, have not been adapted for the outdoor treatment of infectious diseases, and although there are covered verandahs at each end of a few of the wards these are considerably exposed, and are not protected sufficiently to allow of the patients remaining there during stormy wet weather.

Consequently the cases under consideration were, with a few exceptions (five per cent.), taken out in the morning between the hours of 8 and 10 o'clock and were again brought inside in the evening at dusk. In dry weather the verandahs were for the most part discarded, and the beds placed quite in the open, in the paths and grass plots separating the various wards, the most sheltered side of the block being chosen in boisterous weather.

Particular attention was paid to see that these patients were protected by clothing from the cold, and instructions given that each one should be visited frequently by one of the staff

*Annali d'Igiene Sperimentale, vol. xxii. (Nuova Serie) Fasc. iv., 1912.