office is situated. I trust that all my hearers will think over this matter, especially those who are medical officers of health, or members of sanitary authorities.

I now bring my remarks to a close. I have endeavoured to show you the necessary connection between Vital Statistics and Preventive Medicine, and to indicate the main application of Vital Statistics as tests of the health of communities. I trust my sketchy remarks have fulfilled their object and may assist the cause of Preventive Medicine. I have to thank you for the attention you have given to so general a survey of a vast and complicated subject.

ART. XVIII.—*Note on "Relapse" in Scarlatina.* By
RICHARD H. KENNAN, M.D., Dubl.; late Resident
Medical Officer, City Hospital, Park Hill, Liverpool.

THE subject of relapse (so-called) in scarlet fever has excited very considerable attention during recent years. More particularly has it come under the notice of those who are engaged in large isolation hospitals.

One is struck, in looking up the literature of scarlatina, by the fact that the text-books of even recent publication contain little or no reference to its occurrence. Indeed, they are fairly unanimous in the opinion that a relapse, or second attack, of scarlatina is to be ranked amongst the very exceptional experiences in medical life, and that when it does occur it is invariably after some years have elapsed since the first attack. But second attacks taking place so soon after the first as to be actually called relapses were not seen apparently till recent years. It is not reasonable to suppose that such an occurrence, evident as it now is, could have been long overlooked by the many careful observers who had been attracted by the very interesting study of scarlatina. Nor is it probable that the character or life history of this fever is very appreciably changed. It seems as if the practice, which has grown up with the modern developments of public health administration, of isolation of dangerous infectious disease in large hospitals, is directly responsible for it. This may require a word of explanation. In private, and in all cases before isolation on a large scale as at present carried out was

thought of, each patient was subjected to an ever-diminishing intensity of infection. He was himself daily becoming a lessened source of danger to others, and also to himself.

In a hospital ward, however, in which the atmosphere and contents are kept, by the constant introduction of acute cases, charged with infective material, this diminution or attenuation is not obtained. The patient whose attack has left him with but slight protective power may fall a victim to a second attack. Of course it is not to be understood that this is by any means a common occurrence, but more on this point presently.

To obviate this risk, it has been suggested to keep certain wards set apart for the reception of acute cases, others to which these cases will be transferred when becoming convalescent, and others again in which convalescents will be placed for some time prior to their discharge from hospital. I may say that this was the practice at the City Hospital, Park Hill, Liverpool. The systematic disinfection of all wards was carried out as frequently as circumstances permitted.

Now, as to the frequency of relapse, or, as I prefer to consider it, early second attacks—that is, second attacks occurring before all evidence of the first has passed away—Dr. Caiger, Superintendent of the South Western Fever Hospital, under the Metropolitan Asylums' Board, has gone with characteristic carefulness into the statistical as well as the clinical aspect. He finds that a true relapse or early second attack occurs in about .5 per cent. of all scarlatina cases admitted to hospital.

For the benefit of those who have no intimate knowledge of the routine of a large fever hospital, I may point out that the diagnosis made before removal from home is from one cause or another frequently incorrect, and it may be impossible to establish or refute it on the patient's admission to hospital. For instance, a child has a mild febrile attack with perhaps a slight sore throat, for which advice is not sought. The child, however, remains weakly, and a doctor is at last called in. He finds some doubtful evidence of desquamation, and perhaps a trace of albumen in the urine. The tongue may even show some slight papillary enlargement. There is a large family huddled together. The medical

practitioner will scarcely feel justified in allowing the child to remain with the others till he be able to decide definitely. On the reception of such cases to hospital every effort is of course made to isolate them as effectually as possible, but the difficulty of doing so is often extreme, and in times of an epidemic quite impossible. If, then, such a case be seized with undoubted scarlatina after admission, the question immediately suggests itself—Was the first febrile attack a true scarlatinal one? If such cases be accepted in the category of relapses there is danger that the occurrence of true second attacks may appear to be more frequent than is really the case. So Dr. Caiger rejects all cases from his statistics in which the first attack was not absolutely typical and undoubtedly true scarlatina; and, on the other hand, the second febrile attack must also present all the typical features of true scarlatina. But we know that there scarcely exists a disease more “Protean” in its manifestation than scarlatina, and very many cases are met with which, though unquestionably scarlatinal, do not conform to type. The probability is then that statistics, founded on cases which have been subjected to this severe scrutiny and selection, will err on the side of moderation in the estimate of the frequency of relapse cases. Most conscientious men will prefer to underestimate than overestimate in such a matter.

Some authorities regard the tonsillar and faucial inflammation and ulceration, so frequently seen in patients in fever hospitals late in the period of their convalescence, as abortive second attacks, as well as those cases with faint scarlatiniform rash with or without elevation of temperature, and but slight, if any, constitutional symptoms during convalescence. Needless to say after what has been already stated Dr. Caiger does not include such cases.

During the time I was resident medical officer, three cases of undoubted so-called relapse were noted, but the total numbers, unlike those in the Metropolitan Asylums’ Board records, were quite insufficient for statistical purposes. They all recovered, and they were all cases in which the first attack was slight though typical in all features. Dr. Caiger has found that the severity of the second attack is inversely proportional to that of the first.

Two years ago Dr. MacDowel Cosgrave read the reports of two cases of true early second attacks of scarlatina before the Royal Academy of Medicine in Ireland. In the discussion which followed, Dr. J. W. Moore pointed out that such cases were the peculiar product of isolation hospitals, and based on this experience an unanswerable argument for the establishment of convalescent fever hospitals in order that by the removal of convalescents from the vicinity of acute patients the risk of re-infection may be minimised.

ART. XIX.—*Recent Clinical Experiences of Septicæmia and Enteric Fever.*^a By JOHN WILLIAM MOORE, M.D., Univ. Dubl.; P.R.C.P.I.; Senior Physician to the Meath Hospital and County Dublin Infirmary; Professor of Practice of Medicine, Royal College of Surgeons in Ireland; F.R. Med. Chir. Soc. Lond.

IN the belief that much may be learned from simple clinical records, I venture to submit a series of cases of what I believe to be manifestations of septicæmia. The first case was that of an old gentleman, who died of septicæmic endocarditis occurring in the wake of chronic disease of the gall-bladder. The second assumed the form of sapræmic enteritis in the grandson of this gentleman. The third was an instance of acute desquamative dermatitis, apparently caused by contact with toxic graveyard soil.

I have also to present clinical records of two unusual cases of enteric fever. In the former of these, two true relapses occurred within two months. The first relapse ran a course of sixteen days, the second one of fourteen days. In the other patient the brunt of the poison seemed to fall on the tonsils, and, subsequently, on the nervous centres, the intestines apparently escaping. Defervescence took place by crisis on the sixteenth day, the temperature chart in this respect resembling typhus rather than enteric fever.

CASE I.—On Wednesday, November 25, 1896, I was called to see an elderly gentlemen, residing at Rathgar, who had been suffering for a day or two from incessant nausea and vomiting, and agonising

^a Read before the Section of Medicine in the Royal Academy of Medicine in Ireland, on Friday, November 18, 1898.