the first introductory lecture to which I listened. The lecturer brought before us a little history of medicine with short sketches of the lives of some of the great ones of the past. He fired my young mind with enthusiasm; most earnestly do I desire that what I have said to-day may have had in some degree a like effect on yours. I have endeavoured to place before you a high ideal, and have tried to present to you the profession which you have chosen as one of the noblest of man's vocations. I hope I have said nothing to discourage any. If it has seemed my duty to insist on a comprehensive range of study, it has been from a deep conviction that it is the only sure road to success. Let me beg of you to take courage, to give to the profession of your choice your whole hearts, and to feel assured of victory. The pursuits of medicine do not as a rule lead either to public honour or to great wealth. Should there be anyone here whose heart is set on either of these, let me advise him at once to seek another calling. If, however, a moderate competence and the gratitude of your patients are sufficient, if high thinking and plain living have their charms for you, then I believe that there is no vocation in which your life's ideal may be pursued with greater confidence. To all of you to whom these limitations are acceptable I desire in the old-fashioned phrase to wish most heartily God-speed.

ON A DOUBTFUL CASE OF RECURRENT SMALL-POX.

By ARTHUR NEWSHOLME, M.D.LOND.,
Medical Officer of Health, Brighton.

EARLY in 1895 a case of small-pox was notified to me, the patient being a needlewoman, who started with small-pox on February 20th. The only clue discoverable was that she was employed in mending the carpets in the rooms occupied by Mr. W. L., who a short time previously had come to the town after being discharged from a metropolitan small-pox hospital. That this was the true clue was in a few days rendered more probable by the notification of a case of small-pox in the person of a charwoman living in a different part of the town from the first patient. The onset of this second case was on February 25th, and making due allowance for the period of incubation, she could not have acquired the disease from the first charwoman. Both women had been employed in the room occupied by Mr. W. L. There were no other cases of small-pox in the town at the time. The history of the gentleman who appeared to be responsible for these two cases was as follows. I am informed by Dr. Sykes, M.O.H. St. Pancras, in whose district the patient lived, that "Mr. W. L. was taken ill with small-pox on December 29th, 1894, at his office in the City, and was sent direct from his office to the Highgate Small-pox Hospital. This hospital is in Islington. I presume that the clothes he went in were disinfected by the hospital authorities. His room was fumigated on January 1st. All the clothes, bedding, and other articles in the room were disinfected by steam on January 3rd. In the course of next week the room was stripped, cleansed, and redecorated. He was discharged from hospital on February 2nd, and left London on the same day."

The resident medical officer of the Highgate Hospital wrote to me: "W. L. was admitted here with small-pox (modified confluent) on December 29th, 1894, and discharged on February 2nd, 1895. Every precaution was taken, and all his things were disinfected. I am unable to explain, if he is the cause (of the above two cases), why he should have carried the infection. Relapse from small-pox is rare, I believe."

On February 5th Mr. W. L. went to the house of a Dr. X. to consult him on account of a papular rash. The papules were scattered about the trunk, and were probably less than twenty in number. Dr. X. writes me that "those which afterwards developed upon the face, though more crowded, were also about the same number. I feel sure there were none on the limbs. My first impression was that they suggested chicken-pox.....What they most resembled was ordinary acne papules becoming pustular, and most of them were on the face and back of shoulders where acne is commonly seen. There were none on the face on February 5th. On the 6th they first appeared on the face, and because of this Mr. W. L. remained in the upstairs drawing-room. The

carpet woman worked for some time in this room while he was sitting at the opposite side of the room. The eruption on the trunk was dying upon February 8th, that on the face was disappearing on the 11th.....I examined a sebaceous cyst on Mr. W. L.'s back in the above-mentioned drawing-room on February 6th, and some of its contents spirted on the carpet. Mr. W. L. had gonorrhoea before he had variola, but it was nearly well when he entered hospital. On February 6th the discharge reappeared, and continued up to the 12th, when I last saw him, though but scanty. The temperature on February 5th was 97.8°; 6th, 97°; 8th, 97°. As regards vaccination, I regret that at this distance of time, I can only state that my recollection is that Mr. W. L. had indistinct marks of infantile vaccination, but had not been revaccinated."

The alternative theories appear to be that either (a) there had been some accidental omission in the measures of disinfection taken, or that infection had lurked in the sebaceous cyst mentioned above; or that (b) the patient had not small-pox when admitted into the Highgate Hospital, but caught it while there, developing a very mild attack after his discharge; or that (c) the patient had a *bonâ fide* second attack after his discharge.

The carriage of infection by articles of apparel, etc., which had not been efficiently disinfected, appears highly improbable, in view of the preceding statements by the Medical Officer of Health for St. Pancras and the resident medical officer of the hospital. Nor do I think that the view that the infection lurked in the contents of the sebaceous cyst is likely to be correct.

The second supposition involves an error of diagnosis on the part of both the notifying practitioner and of the resident medical officer of the hospital, which is highly improbable. The third supposition is, in my opinion, the correct view of the case.

If the patient had a secondary attack of small-pox he might presumably have caught it from other patients in the hospital, or it might be a case of auto-reinfection. In Dr. Ross's case (see below) the latter supposition appears to be the only tenable one. So it is also in relapses of typhoid fever, and in some cases of relapse of scarlet fever.

I was under the impression that recurrent cases of small-pox were unknown until Dr. Davies sent me the case recorded below, and appended extract from Dr. Edwardes's work (see p. 1033). Dr. Gayton, a well-known authority on the subject, wrote me in connection with the above case that "I never heard or read of such a thing as the possibility of a relapse in small-pox, nor do I believe that this ever takes place." The possibility of such relapses is ignored in all the textbooks on medicine and on fevers to which I have had access.

ON A CASE OF RECURRENT SMALL-POX.

By G. S. DAVIES, M.D.LOND.,
Medical Officer of Health for Bristol.

G.C., aged 28, was admitted to the St. Philip's Hospital on November 17th, 1887, suffering from a discrete attack of small-pox. He had been vaccinated in infancy, and was stated to have been unsuccessfully revaccinated some years before this attack. On admission the eruption was well developed, and the patient progressed favourably until November 24th, when initial symptoms, comprising intense headache with high fever, occurred. A second crop of typical papules appeared in due course. These vesiculated and pustulated, the pustules remaining out until December 7th, when they commenced to dry away; in fact, he passed through an ordinary second discrete attack. He ultimately made a good recovery, and was discharged cured December 31st, 1887. No marked secondary fever occurred in either of these attacks.

ON RECURRENT CASES OF SMALL-POX.¹

By THE LATE J. HARRIS ROSS, M.D.

It has generally been considered that an attack of any of the zymotic diseases gives immunity for life from further attacks; but I think that the cases which I am about to relate will prove that this is not always the case.

¹ A paper read at the Brighton Medico-Chirurgical Society in 1887.