analogy between phosphorus and arsenic. If phosphorus, however, were as manageable and as little disagreeable as arsenic, it would probably, according to Dr. Broadbent's experience, be found superior in efficacy.—*Medical Times and Gaz.*, April 29, 1871.

9. *On the Effect of Iodine in Passive Congestions.*—Dr. J. B. SCHMITT advances (*Schmidt's Jahrbücher der Gesamten Med.*, Dec. 1870) a number of cases of illness in which he employed iodine with the most satisfactory results. In all these cases passive congestion very probably lay at the foundation of hemorrhage, and this appeared to be the indication for the use of iodine. One of the cases was that of a female, who was chlorotic and suffered from nervous headaches, and whose menses returned every fortnight accompanied by depressing diarrhœa. After all ordinary remedies had been employed without effect for seven years, iodine was given every two hours in the form of pill, and in the dose of six milligrammes (a milligramme is $\frac{1}{1000}$ th of fifteen grains). There was very soon a decided improvement in the symptoms, and the diarrhœa also ceased. The use of the iodine was continued for a considerable time, and the menses returned only every four weeks and the patient was cured. When the inconvenience appeared likely to return it was prevented by the use of the iodine. In other cases of profuse menstruation, Dr. Schmitt employed the remedy with equal success, as also in giddiness, headache, and epistaxis resulting from anæmia. He thinks that small doses are more useful than large ones, a drop of the tincture being a sufficient dose. He found iodine especially serviceable in some cases of diarrhœa which appeared to depend upon paralysis of the ganglionic nerves, and in cholera, the cause of which is, perhaps, to be sought in this lesion. (Reference is made to the experiments of Samuel, who found, after extirpation of the solar plexus, great congestion of blood in the intestinal mucous membrane, and a decidedly increased secretion in the intestines.)—*Brit. and For. Med.-Chir. Rev.*, April, 1871.

MEDICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL MEDICINE.

10. *War-typhus and Diarrhœa.*—RUDOLF VIRCHOW, in an article on this subject (*Virchow's Archiv*, Jan. 1871), begins with the statement that the late war has disproved several dogmas which many thought to be established, and one of these is that severe pestilences in armies on the field belong to history. At the beginning of the war this dogma seemed proved, the armies were exceptionally healthy, but when Metz had been invested then there was a change. The region around Metz, as it has been the seat of repeated campaigns, has also been the scene of repeated war pestilences, and, in the present case, already in the middle of October 50,000 had been sent home sick or wounded from before Metz, while at the capitulation 25,000 were found in hospitals inside the city. In previous publications Virchow has shown that in former wars it has been generally exanthematic typhus or our common typhus fever, which has been the pestilence that formed the scourge of armies on the field. But in the case of the American war this general rule was departed from: there it was chiefly typhoid fever, or abdominal typhus, which attacked the armies, and the late war has agreed with the American in this respect, the fever which prevailed in the armies on the field was chiefly typhoid, though in addition there were a few cases of relapsing fever. The discussion as to the distinction between typhoid and typhus fever, or, as the Germans name them, abdominal and exanthematic typhus, is pretty fully gone into, and the essential character of typhoid is made to depend on the infiltration of lymphoid cells into and around the follicles of the intestine and into the mesenteric glands. After such infiltration has taken place resolution may occur, and the disease go through its course without ulceration either in the intestine or in the mesenteric glands. The anatomical

characters of the lesion in dysentery are quite different from those in typhoid fever. Here two kinds of ulceration may occur, the catarrhal and the diphtheritic: in the former there is a simple suppuration of the follicles, followed by a follicular ulcer, while in the latter there is a definite slough of a portion of mucous membrane. These two forms very generally coexist in a case of dysentery, as the catarrhal inflammation is, to a certain extent, always present in the first stage of dysentery. The subject of the etiology of these pestilences is next taken up by the author. He supposes that the first cases of dysentery which occurred previous to the investment of Metz had their origin in alimentary and thermic disturbances, and he lays especial stress on the fact that the soldiers, after being cooped up during a journey extending to hundreds of miles, in good trucks, were often, immediately after, exposed during a prolonged period on the field without shelter. But when dysentery is once established, it soon spreads by contagion. The etiology of typhoid is just as unsatisfactory. It is remarkable that several persons who accompanied "sanitary trains" from Berlin took ill with typhoid after their return, although they had never been exposed to the contagion of typhoid, and had not been placed in any of the conditions which are generally supposed to give origin to typhoid fever spontaneously. Next, as to the etiology of typhus fever, the author is of opinion that it is extremely doubtful whether it ever arises simply from overcrowding. It did not arise in the prisons during the American war, though there was great overcrowding and filth. In Germany, the epidemics of it which occur occasionally seem to have always their origin in the Slavonian provinces. When a war occurs in which the Slavonians are engaged, there are almost sure to be epidemics of typhus; but in the present war two nations in which there is no native typhus were at war, and there was no typhus epidemic. In the Crimean war the French for the first time came in contact with a Slavonian race, and they had an epidemic of typhus, and the French medical men were then for the first time convinced of the actual distinction of the two fevers. It is supposed, therefore, that on the continent typhus comes from the Slaves, just as in Great Britain it seems to come from Ireland.—*Glasgow Med. Journ.*, May, 1871.

11. *Scarlet Fever*.—The materials for the following observations on scarlet fever, recorded by Dr. F. BÖNING, in the *Deutsche Klin*, 1870, were obtained during an epidemic of the disease which prevailed in the summer and autumn of the year 1869, in Einbeck, a city presenting all the conditions most favourable for the spread of an infectious disease. The epidemic was remarkable, from the great number of cases of scarlatina which made their appearance simultaneously at the very outbreak; while, during the succeeding eight or ten days, not a single new case made its appearance. After that a number of persons, residing in different parts of the city, were attacked, without any common source of contagion becoming apparent. Dr. B. denies that the disease was propagated invariably by a contagion. He believes that it often sprang up spontaneously. He repeatedly observed that an increase in the number of cases of the disease coincided with an increase in the amount of ozone in the air. As to what concerns the supposition of a specific fungus as the cause of scarlatina, Dr. B., after the most careful investigation, in no case was able to detect other than the ordinary "*leptotrixreihen*," which is not confined to scarlatina, but is common to all diseases attended with a process of cuticular desquamation. Adopting the cryptogamic doctrine of the origin of scarlatina, as held by Hallier, and favoured by Dr. B., the stage of desquamation is to be received as that during which the infectious character of scarlatina is most strongly evinced, as it is then the maturity of the cryptogam is the most complete, and the dispersion of the spores the most to be anticipated. With this theory accords the observation of Dr. B., that from twelve to fourteen days elapsed between the occurrence in the same family of the first and subsequent cases of the disease; now allowing that, according to his experience, the incubation period lasted from six to eight days, it would appear evident, then, that the infection in these latter cases took place during the period of desquamation of the first cases.

The cryptogam (*micrococcus tilletiae*), by which the propagation of the scarlet