

versal ulcerations, the long axis of which is at right angles to that of the intestine, you may affirm that you have to do with tubercular lesions; the diagnosis may be made at arm's length. The mechanism of the formation of these ulcerations is explained by the development of the tubercles along the course of the vessels of the intestine, which have, as you are aware, a circular (annular) direction; the effects of thrombosis are added to those of the tuberculosis. These annular ulcerations often give rise to strictures of the intestine.

If the tubercular ulcerations of Peyer's patches were always accompanied by annular ulcerations in other parts of the intestine the diagnosis of the nature of ulcerations would be easier; but such is not the case: lesions of Peyer's patches may be general in the absence of any annular ulceration, and you have under such circumstances lesions which present a great analogy with those of typhoid fever. The small intestine, in fact, presents a series of elongated ulcerations, the long axis of which is parallel to that of the intestine, and which are located opposite to the insertion of the mesentery, occupying, in short, Peyer's patches. These ulcerations are generally more numerous and more extensive in proportion as you descend towards the ileocaecal valve; sometimes a dozen may be counted strictly confined to Peyer's patches. In the interval between the chief ulcerations hypertrophied closed follicles, and these frequently ulcerated, are found. The mucous membrane of the large intestine presents a series of small ulcerations which appear to be located in the closed follicles. At first sight it appears almost impossible to differentiate these lesions from those of typhoid fever; nevertheless, an attentive examination of the intestinal ulcerations almost always enables one to recognize their true nature. The differences which exist between tubercular ulcerations of Peyer's patches and typhoid ulcerations may be summed up as follows:—

1. Tuberculosis of Peyer's patches is not accompanied by a tumefaction *en masse* of these patches, as in typhoid fever; there is, moreover, no typhic material on the surface of the ulcers; the ulceration occurs *in separate points*, and, in the intervals between the little ulcera-

tions, patches of Peyer sometimes preserve an almost normal appearance.

2. On inverting the intestine again and examining the peritoneal surface corresponding to the ulcerations, small tubercular granulations are often seen, which, it is unnecessary to say, are wanting in typhoid fever; sometimes, even, islets of granulations are detached from the white tracts of tubercular lymphangitis.

3. As a last resort in this differential diagnosis, there remains the histological examination, which, in those cases in which the ulcerations depend upon tuberculosis, reveals the existence of the typical granulations. For this examination fragments of intestine are hardened by the ordinary methods, and sections made. It is often necessary to examine a considerable number of sections before discovering well characterized granulations: these granulations are not seated in the superficies of the ulcers, but in the cellular tissue or even the serous membrane. To sum up, from an anatomical point of view, I believe that it is necessary to admit a variety of intestinal tuberculosis located in Peyer's patches, one which presents a great analogy with the characteristic lesions of typhoid fever:—*L'Union Médicale*.

Book Notices.

On Gastro-Elytrotomy. By HENRY J. GARIGUES, M.D. New York: D. Appleton & Co.

Annual Report of the Pennsylvania Free Dispensary for Skin Diseases. No. 920 Walnut Street, Philadelphia, U.S.

Fifty Years Ago. An Address to the Graduating Class of the Medical College of the Pacific for 1878. By HENRY GIBBONS, Sen., M.D.

The Index Medicus, a monthly classified record of the current medical literature of the world, compiled under the supervision of Dr. John S. Billings and Dr. Robert Fletcher, is announced to appear in January, 1879, F. Leypoldt, 37 Park Row, N.Y., Publisher. This will be a useful journal for reference.

Prescription and Case Record. By JOEL A. MINER, M.D., Ann Arbor, Michigan. Price 75 cents.

This is a very useful pocket prescription book. By using a carbon paper a copy of every prescription is recorded without the trouble of writing it twice.