

HISTOLOGY.

Anatomically, the arteries are divided into three types, the large, the medium sized, and the small vessels. Under the large sized vessels are included the aorta and its main branches in the neck and abdomen. The medium sized vessels are the secondary and tertiary branches, arising from the first type, while the small arteries include all the peripheral arteries down to the finest divisions into capillaries. This classification of the arteries is an entirely arbitrary one, without any proper delineations of each particular type, and forms an impossible classification in studying the finer structure of vessels.

On the other hand, the arteries have been classified according to their histological structure, and mainly on the nature of the media. The naked eye appearances of the arteries give no clue to the types belonging to the histological classes. We are bound, therefore, to study the structure of the arteries under the microscope, and to determine the structure of each artery, and to place it in its proper class.

In the main, there are histologically two types of arteries, (1) the elastic type, those in which the elastic tissue is in equal or greater proportion to the muscular tissue in the media, and (2) the muscular type in which the muscle elements are in much greater proportion than the elastic fibres in the media. With these subdivisions, the anatomical classification is of no service. The vessels which are included in the latter classification under the large sized vessels do not necessarily belong to a distinct histological class, and the same is true with the medium and small sized arteries.

On the histological picture of the arteries we, therefore, base the division of our arteries, and, although certain vessels belonging to one or other of these types vary slightly in their characters from the main type, these form only subdivisions under the main headings. I hardly think it is necessary to designate these small differences in vessels of certain organs by separate names, since the characters are isolated to the arteries of the particular organ.

Every artery is possessed of three tunics, the intima, media and