

the baths are only good adjuncts to psychotherapy. In many myocardial lesions, marked changes in murmurs have been produced, and in four cited anginal cases, the results in the disappearance of attacks are wonderfully good. Diminution of albumen in cases of renal insufficiency, and the lessening of insomnia and vertigo have also been very encouraging. Without particularizing further his cases, which partake of many different forms of hypertension, from that of neurasthenia to that of gout, his results are very good.

As contra-indications, aneurysm stands first; the imminence of a gouty attack is a warning to desist, and a quick drop of pressure in a sclerotic means so great cardiac effect as to be dangerous. Pulmonary oedema, much cardiac asthma, and arteritis of the coronaries or great myocardial change all counsel care in administration; if there be much albumen and many casts, or if renal insufficiency be indicated by poor elimination of methylene blue, there is no use in attempting the treatment, for in such cases the result may be a rise of blood pressure. Careful observation and systematic use of the blood-pressure instrument are absolutely essential.

J. McC.

PATHOLOGY.

UNDER THE CHARGE OF J. G. ADAMI.

MACFADYEN. "An Antityphoid Serum Obtained from Goats. *Centralblt. f. Bact.*, 1906. XLI. Heft. 2.

The author prepared the anti-typhoid serum by immunizing goats with the juice of the typhoid bacilli. This cell juice he prepared by growing the organism on large surfaces of agar, and after incubating 18 hours, collecting the virulent bacilli. The bacilli were frozen with liquid air and ground to a fine powder from which an emulsion was made. In this way the liberated endotoxins were dissolved and obtained in concentrated solutions. Such endotoxin solutions were highly toxic for animals, but it was found that an anti-substance could be produced in administering it in small doses. From goats a potent anti-toxic serum was obtained. The serum is not truly antitoxic, as the term is used for anti-diphtheritic serum, but rather anti-endotoxic,—for it not only contains antibodies to the endotoxin, but also possesses agglutinating and bacteriolytic properties.

JAGIC. "Cirrhosis of the Liver." *Wiener Klin. Wochensh.* 1906. XIX p. 1058.

Though cirrhosis of the liver has for many years been ascribed to alcohol, the experimental results obtained by alcohol have not entirely