

fever heart than in chronic cardiac diseases. Mackenzie says: "That apart from the probably specific action of salicylate in rheumatic cases the employment of cardiac or other drugs is of little avail. The heart is already in possession of a poison far more powerful than the drugs at our command, and these in medicinal doses are without effect. The man who puts his faith in drugs exclusively neglects too often the most useful methods."

I believe that the value of the salicylates in protecting the heart in rheumatism is very questionable, and may be a source of danger, if by relieving the pains which necessitate the patient's keeping at rest, he is allowed up sooner than would otherwise be possible.

I do not propose to enter into a discussion of the difference of opinion among pharmacologists as to the action upon the heart, medullary centres and vessels of the various drugs recommended for their beneficial influence, nor of the fallacies involved in applying the knowledge of their action on the healthy organs of experimental animals to the diseased organs of man. The question of their value, after all, is a practical one, to be ultimately determined by critical investigation and accurate clinical observations in hospital wards and private practice. In this direction much work yet remains to be done.

I have never seen any benefit from drugs of the digitalis group in the cardiac weakness of fevers. They do not, ordinarily, slow the pulse, they may interfere with digestion, or produce vomiting, and in cases of intermittency of the pulse from involvement of the auricle-ventricular bundle, may induce heart block.

There is also a growing pessimism in regard to the value of strychnia, though it undoubtedly is a stimulant to the medullary centres and possibly exerts a favorable influence on the tone of the heart muscle.

Camphor, acting principally upon the nerve centres, has been a more recent favorite. I have used it extensively and have thought it of some use, though its effect is not striking.

Caffeine is a stimulant to the medullary and cerebral centres, and so increases the feeling of well-being, but in large and repeated doses may tend to induce sleeplessness.

I have never seen any benefit from the hypodermic administration of ether, which formerly was so extensively used in circulatory failure.

Adrenalin, intravenously or subcutaneously, may be used in cases with low blood pressures, though its influence is transient.

Despite the results of pharmacological investigations and the opin-