

for very many months, and at times even for many years. The good that is obtained by mercury in syphilis, by salicylic acid in acute rheumatism, by quinine in malarial fevers is no more striking than the action which digitalis possesses in steady-ing and contracting an irregular and dilated heart.

Digitalis preparations have a disagreeable bitter taste, and when taken in large medicinal doses may give rise to nausea and vomiting and even to purging. The last effect, however, is very unusual.

The active constituents diffuse readily into the blood, but what if any influence they exert on it is not known.

*Action on the Circulation.*—The effect of small medicinal doses (10 minims of the tincture every twelve hours) of digitalis is to make the heart beat with an increased vigour. The left ventricle especially beats more powerfully. Coupled with this increased vigour of the heart's contractions, there is a slight rise in the blood pressure, which has the direct effect of sending more blood to the ventricles and the indirect effect of further stimulating them in their contractions. If larger medicinal doses are administered, we have in addition to an increase in the effects already described, a slowing of the heart. The ventricles now beat not only more vigorously, but also slower. This slowing from full medicinal doses may amount to forty or even fifty beats per minute, but it is only in cases of cardiac failure that such a marked reduction takes place, and then only when the patient is confined to bed. Slight exercise readily quickens the pulse reduced by digitalis. That digitalis can slow the movements of a healthy heart to a considerable extent there is no doubt, but just to what extent it can do this, short of too high doses, I am not able to tell you. Some people's pulses are much easier reduced than those of others. The pulse of the feeble is much more easily reduced than the pulse of the robust. It has very little power in reducing the pulse of fever. If the temperature is high it practically may be said to have no influence at all. The reason of this will be referred to presently, when I come to discuss through what mechanisms it produces its different effects on the circulation. If the dose of digitalis be