of this disease Allingham's method yet stands unequalled, yet for the extensive conditions of hæmorrhoidal disease met with in the preceding cases, and which have been hitherto treated by tying off three, four, and sometimes more masses. I believe that greater efficacy and greater permanence of cure will be accomplished by the resort to Whitehead's method, and that less after-discomfort to the patient will be felt than by the well-known method of ligature as practised by Mr. Allingham. It is true, with this rather brief experience, the admission is to be made that the operation of Whitehead has taken me much longer time to accomplish than the older operation of tying and removing hæmorrhoids. Increased experience has, however, taught me that greater rapidity of execution can perhaps be accomplished by a manœuvre which doubtless Mr. Whitehead practises, as it is so self-evident, but which he does not mention. It is this: after separating the mucous membrane at the anus by scissors, all around, then at one limited place conduct the dissection deeper, and in an upward direction, until the normal mucous membrane of the bowel is reached. From that point, by means of the finger-nail, or by the end of a blunt-curved scissors, the mucous membrane can be stripped from the external tissues down close to the circumferential initial incision about the anus, when any intervening tissues can be cut through quickly with the scissors. In this way, proceeding right and left, the separation of the bowel in the last two instances has been brought about with decidedly increased rapidity and cer-

I have been surprised to find how small, after dividing the mucous membrane, the arteries entering the piles become. Palpation of the same through the rectum, prior to their section, had led me to expect them to be of a decidedly increased volume; but with the open section they have not only shown themselves quite small, but they will often spontaneously cease to bleed. It is seldom that they require to be twisted or tied with catgut; certainly not more than one or two in the course of the operation, and these have, in one or two instances, been closed permanently by the pressure of a clamp for a few minutes.

After quite an extensive separation of the rectum, even to some distance above the line of section, it has been found unnecessary to introduce any drainage. In none of my cases have I dusted them with iodoform, as Mr. Whitehead has suggested, and when placed in position prompt union occurred, though the parts were bathed with the usual sublimate solutions—1 to 5,000. The tabs of skin that have been preserved for the final union of their edges to the mucous membrane often remain swollen for a week or ten days after the operation, and may excite some apprehension on the part of the surgeon for the patient that a mass

of external reminiscences of the sufferer's past troubles might remain. In three cases where this condition has been watched they have in time disappeared.

As to the possibility of the formation of a stricture, especially where, as in one of my cases, a certain failure of primary union occurred in two spots in the circumference of the wound, I felt some apprehension; especially as this is a condition of affairs that I have encountered a number of times in patients who had been operated upon by surgeons of a past era, by the older method of ligation, so zealously carried out that no mucous membrane was left between the various hæmorrhoidal tied-off bunches. But Mr. Whitehead's positive statement must be kept in mind that this has not been observed in any of his large number of cases. He, however, lays stress upon the necessity of making the primary incision in the mucous membrane near to the skin of the anus, and not in the skin itself, since he believes, and I should think with justice, that undue contractions are more apt to take place when the annular cicatrix is formed at the expense of the integument.

A slight caution I may give, based upon an experience in rectal operations generally, that the bowels should not be moved by any purgative the day of the operation, as is commonly advised. This had better be done the day previously, if at all. Should this error have been brought about, as sometimes it has occurred to me, from a too zealous nurse, it is better to thrust a sponge some distance up the bowel at the beginning of the operation. This preserves the wound from infection, and the surgeon perhaps from profanity.—The Medical Record.

## HEART TONICS.

## BY J. C. MULHALL, M.D., KANSAS.

To present you with even an abstract of all that has been written within the last two years concerning the subject of my paper would impose on you a wearying and confusing detail. A number of entirely new drugs have been introduced, and the more intelligent use of several almost forgotten ones has been revived. Observers, the world over, having tested these various drugs, have rushed pell mell into print with their conclusions, and the proverbial disagreement of doctors has resulted. In the case of each drug, I have taken into consideration the conclusions of one or more admitted authorities, and have tested for myself such conclusions, only, however, at the bedside.

That there exists a necessity at times for a substitute for digitalis, equally powerful with that magnificent drug, will be readily admitted by every one who has been much concerned with the