

artery can yet contract and expand very readily, provided the calcification in its walls be not extreme, and thus a thickened artery may not be as diseased as it seems, for it may be in a condition of what he calls hypertonus. A vessel which does not show any organic change may also be in a condition of contraction, and Russell considers that one may learn to recognize with the finger most, if not all, of these cases. This contraction may be kept up for a long time and may stimulate organic disease; nor is it an entirely innoxious affair, for with its long continuance the vessel intima does begin to thicken and the media to degenerate, whether this hypertonus be the cause or not. This condition of affairs occurs in the vessels largely by reason of the irritation caused by toxic substances in the blood, and it was a very early physiological observation that certain chemicals, such as digitalis and ergot did this very thing, while we are apt to consider the size of a vessel is dependent on the vaso-motor fibres of the sympathetic nervous system, we are not entirely correct, for this very contraction and dilation can be brought about by substances in the contained blood. Now, it has been demonstrated that in an artery contracted, the pressure is not raised, but the pressure is raised somewhere between this area and the heart, so that for our purposes we may reason thus: An artery that is observed to be thickened may be organically affected, or may be merely hypertonic; in either case, there is a raised blood-pressure somewhere short of this area, in the aorta or elsewhere: the hæmomanometer or blood-pressure machine gives us a clue to this raised pressure, the indication to lower blood pressure exists equally in both conditions, the chief difference between the hypertonic and the organically changed artery seems to be that the prognosis is much the more favorable in the former.

Having determined the fact that the "blood-pressure" is heightened, suspecting that arterial degeneration has begun, what is to be done? It may seem that the measures to be proposed lack definiteness, but if they do it is your fault in not insisting on their adoption. They are roughly (1) less to do; (2) less to eat; (3) less to drink. If in doubt as to the adop-