

The Physiological Bearing of Waist-Belts and Stays.

To explain the use of any article is not to justify its abuse. In the following pages we deal wholly with the physiological aspect of constriction of the waist, and only refer to the utility of abdominal compression; it must not be thought that we therefore countenance any extreme course, or that we for a moment deny that this constriction may be of such a nature, or be carried to so great an excess, or be employed under such adverse conditions, as to lead to serious bodily harm. Our object is to discuss the *physiology* and not the *pathology* of constriction of the waist.

In the course of a series of investigations with which we have been recently occupied, on the nature of certain forms of heart disease, a number of facts have come to our knowledge, which appear to us to throw much light on the matter expressed by the title of our paper. We think that, with the conclusions which may reasonably be drawn from them, these facts may be of interest to non-medical readers.

Let us begin by saying that the functional activity of any of the tissues of the body is dependent on its blood supply; increased activity, for example, requiring an increased supply of blood. Thus, when a muscle contracts, this contraction is accompanied by an augmented flow of blood through its vessels, these becoming more expanded than when the muscle is at rest. The same fact applies, so far as is known, to all other organs of the body.

The amount of blood pumped out by the heart into the arteries is distributed, by a wonderfully perfect vaso-motor mechanism, to the different tissues of the body in conformity with their requirements at any given time. It may be added, also, that anything which increases the amount of blood sent out by the heart in a given time, will tend, *ceteris paribus*, to increase the activity of the tissues to which the blood is distributed. All this, of course, within certain limits which need not be defined here. The above statements are fully accepted by physiologists, and we only give them here in order that the general reader may see the bearing of what follows.

In our investigations we employed an instrument—a Cardiometer—which permits of the amount of blood sent out by the heart being accurately measured.