

while the man of thirty-five had his slightly lowered. Their systolic pressures were increased twenty-five, twenty and twenty-seven respectively. I saw a patient in consultation this spring with a systolic pressure of one hundred and ninety, a diastolic of ninety and the vanishing point of the pulse beat under the stethoscope was twenty-five. I saw him again in three weeks when his health had markedly improved. His systolic pressure was two hundred and twenty-four, the diastolic ninety-five and the vanishing point twenty. Thus while the systolic increased thirty-four millimeters the diastolic had increased only five. These are not isolated examples of the constancy of the diastolic pressure as may be verified by any one.

A physician is called in consultation and takes only the systolic pressure. The excitement caused the patient by his coming may have run the systolic fifteen or twenty millimeters above that which the attending physician regularly found it; not so would this be found as to the diastolic.

Janeway cites two cases illustrating cardiac strength which also very forcibly show the value of the diastolic pressure. A man, aged twenty-six, while at rest had a systolic pressure of one hundred and thirty-five, a diastolic of one hundred and a pulse pressure of thirty-five. After running up three flights of stairs his systolic was one hundred and seventy-five, his diastolic one hundred and twenty and his pulse pressure fifty-five, showing a good cardiac strength. Another man, whose systolic pressure was one hundred and forty, diastolic one hundred and pulse pressure forty, after two minutes exercise had a systolic pressure of one hundred and fifty-five, a diastolic of one hundred and twenty-five and therefore a pulse pressure of only thirty, which shows a deficient musculature. If the systolic alone had been considered we might have thought the increase from one hundred and forty to one hundred and fifty-five indicated a better heart than that of one hundred and thirty-five to one hundred and seventy-five, but the diastolic had increased disproportionately in the latter, so giving us a lessened pulse pressure and indicating a lack of reserve vitality.

*The Gravity of High Tension.*—One very important effect of high tension is on the arteries themselves. The fibrous coat may be regarded as practically fixed in the matter of distension. Now if the tension in the blood be increased the inner coat of the vessel will be pressed outwards and as the fibrous coat is fixed the vasa vasorum will be compressed between the two coats and