

brachial, the pressure would be, according to these authorities, 140 to 150 mm. Hg. From this anywhere from 30 to 45 for pulse pressure would yield about 105 to 110 mm. Hg. for the diastolic.

Sir Lander Brunton did much good work on this subject, and the following are his words: "Diastolic pressure, under normal conditions, is to systolic pressure as 3 to 4, or, in other words, pulse pressure is one-fourth of the systolic." By this rule a man with a systolic pressure of 144 mm. Hg. would have a diastolic pressure of 108 mm. Hg.

With regard to what the normal pulse pressure should be the following eminent authorities may be quoted: Erlanger gives it as 30 to 40 mm. Hg.; Hirschfelder puts it at 30 to 45 mm. Hg.; and Young records his observations as yielding 25 to 30 mm. Hg. These figures, subtracted from the usual systolic pressure, would give a higher systolic pressure than is generally set down.

Many of the largest life insurance companies have found that the diastolic pressure is so faultily taken that they do not now ask for it. If the systolic is in conformity with the average, and the candidate all right in other respects, it is assumed that the diastolic would be satisfactory. Van Wageningen's insurance figures for 4,400 accepted risks between the ages of 14 and 70 were from 115 to 137 systolic, and yielding an average of 128. Mackenzie's statistics of 18,637 risks accepted by the Prudential from the ages of 19 to 66 gave an average systolic of 125. The very interesting fact is brought out by him that from 19 to 39 the average pulse pressure was 28, and from 40 to 66 it was 30. In the ages 35 to 40 the systolic was 126 and the pulse pressure 35.

The findings of Mackenzie, of the Prudential, are most important. By his records the pulse pressure for ages from 40 to 66 averaged 30. This so closely corresponds with my observations on healthy males that I accept it as correct. Another thing that I have satisfied myself upon is that the pulse pressure keeps very closely this ratio to the systolic pressure in healthy persons. In other words, the average systolic from ages 40 to 66 was 133, and this gave an average pulse pressure of 30. Now, if the systolic becomes 150 and the person in perfect health, the pulse pressure should be about 35. I have known perfectly healthy persons of about 50 to carry a constant systolic of 145 to 155 mm. Hg. Practically one-fourth of the systolic is the pulse pressure.

Thomas E. Sutterthwaite, of New York, gives the formula 3, 2, 1, as setting forth the ratios between the systolic, diastolic and pulse pressures. This I do not accept. Take the case of a perfectly healthy young man of the age of 20, and with a normal systolic pressure of 120. According to the foregoing formula his diastolic pressure would be 80, and the pulse pressure 40. If one takes a healthy man of 40 years, with a