

disease. He was under my observation in the hospital for about five months. For many weeks I kept him in bed and took the blood pressure myself with the same instrument at the same time of day and under precisely the same conditions nearly every day. There were frequent variations up to twenty-six millimeters. Now, if in by no means a small proportion of cases there may be considerable normal fluctuations from day to day, we should be very careful in coming to conclusions in regard to the action of drugs on blood pressure in man. It should never be forgotten that any changes observed after the administration of a drug in disease may be due to the natural course of the malady." To this I would add the question, How much of the variations may be physiological?

*Pathological Variations.*—Each disease has its own particular effect on the system, and the blood pressure so varies that it must be studied in connection with the disease. But if in an apparently healthy person it is found that the systolic pressure is constantly ten millimeters or more above normal, or the diastolic ten below, the diet, mode of living, etc., should be carefully investigated, and if after proper regulation of these the hyper or hypo-tension continues we may be pretty safe in concluding, even in the absence of other evidence, that some pathological process is at work, and it will be wisdom to examine the case from time to time to ascertain what it is and in the meantime add some medicinal treatment which will be referred to later.

*The Relative Importance of Diastolic and Systolic Readings.*—The constant load the vascular system has to carry is of first importance, and hence no matter what other information is obtained as to the arterial pressure, this should, if possible, be found. The diastolic pressure is the measure of this load and therefore should be regarded as the measure of arterial tension. It is also the most constant and indicates the load the arteries have all the time to carry and the resistance the heart has to overcome as it begins its ventricular systole. Its variations also correspond more closely to the mean pressure.

The following illustrates the constancy of the one and the variableness of the other. Three men ran a race and their systolic pressures were increased ten, eighteen and thirty-seven millimeters respectively, while the diastolic remained the same. In another race, in which the ages were thirty, thirty-five and fifty, the diastolic remained the same for ages thirty and fifty,