

these lines. In this connection the series of articles published in *Heart* on May 20th, last, "On the after effects of rest-exercises and slight exertion on pulse rate and systolic pressure and the P-R interval in irritable and healthy hearts;" "On the occurrence of hyperalgesia in irritable hearts of soldiers;" and "On the effects of atropine, digitalis, amyl nitrate and pilocarpine nitrate on such cases," are of immense interest (13).

The history of the subject of soldier's heart is as follows. The "Irritable Heart of the Soldier" is no new condition, but was recognized as far back as the American Civil War, when it attracted wide attention. A classical description, corresponding in all respects to the picture as presented to-day, is given by Dr. Hathorn in the *American Journal of Medical Sciences* for 1864, and in the same journal for 1871 Da Costa reviewed the subject upon the basis of a series of three hundred cases collected in a hospital in Philadelphia. The condition is characterized by signs of vasomotor instability, aching precordial pain, a sense of exhaustion amounting often to giddiness or faintness, general malaise, rapid pulse on exertion, slight breathlessness, at times slight oedema of the feet, mental depression, and nervous irritability. There is usually a slight rise of temperature especially at the onset, which is often with diarrhoea and other digestive disturbances.

An interesting discussion upon the etiology of Soldier's Heart has occupied several of the British journals during the past two years. Sir James Mackenzie with W. Bezley Thorne (6), R. McD. Wilson, and others, regarded it as one symptom of a general physical exhaustion, the result in the majority of the cases of a latent infection which becomes active under the effect of strain or shock and produces effects of a toxæmia, which yields to the raising of the resistive powers of the individual by good hygiene, fresh air, and cheerful occupation.

The application of this theory of latent infection to all the cases was disputed by Poynton (7), Morison (8), and others. They pointed out that identical symptoms come on quite suddenly after shell shock and other states in which the predominant feature is nervous or physical strain, and raised the question as to whether, under these circumstances, the shock itself might not generate toxins within the body producing a similar result upon the tissues as those having a true infective origin. In this connection an interesting suggestion has been brought forward by Young, (15), that toxins from the numerous insect parasites