they died sooner than those without any substitute for their blood.
—*DuBois' Archiv*, 1883, 2 and 3 Hft.

VASO-MOTOR NERVES.—Professors Bowditch and J. W. Warren have made a series of experiments upon this subject. The view that the temperature of the skin is only dependent on the degree of the vaso-dilatation forms the groundwork of the most recent observations upon the vaso-motor nerves of the extremities. Although this view is very probable, the opinions of different authors are so antagonistic that a new test of the activity of the nerves concerned, by another method, seemed desirable. They made plethysmographic experiments upon the influence of irritation of nerves upon the amount of blood in a limb. Their results are as follow :

1. Irritation of the peripheral end of the freshly-divided sciatic in a curarized cat, by means of tetanizing induction-currents, can cause, in six to fifteen seconds, increase and decrease of volume.
 2. Induction-currents quickly succeeding each other, 16 to 64 per second, as a rule, caused a contraction of the blood-vessels (decrease of volume in the limb), whilst slow irritation (4—0.2 beats in a second) was followed by a dilatation.
 3. Induction-breaks of great frequency cause in the beginning a contraction, and then a dilatation of the blood-vessels. By forty-two animals, dilatation in one only preceded.
 4. By a few experiments, with especially exact methods, to estimate time, the contraction had a latent period of 1.5", whilst the latent time for a dilatation amounted to about 3.5".
 5. The vaso-dilatation lasts a few minutes after the irritation ceases, whilst the vaso-contraction usually stops with the irritation.
- Centralblatt f. d. med. Wissenschaften*, 1883, No. 29.

THE RELATION BETWEEN THE ACTIVE PHASES OF CONTRACTION AND THE LATENT PERIOD OF SKELETAL MUSCLE.—Drs. Yeo and Cash have made a large number of experiments upon this subject, using the gastrocnemius of the frog. Their results are as follow :

1. Increase in the strength of the stimulus is accompanied by : (a) a steady and gradual shortening of the latent period ; (b) a sudden prolongation of the actual contraction when a certain degree of stimulation is reached ; (c) an elevation of the altitude of the curve with the early and the final parts, of the increase ; and (d) a removal of the summit to a later part of the curve as soon as the elongation of the curve is established.
2. Increase in the weight used as a burden for the muscle is accompanied by : (a) elongation of the latent period ; (b) commonly a slight shortening of the duration of the contraction ; (c) depression of the height of the curve ; (d) no marked change in the position of the summit except in extreme cases.
3. The application of heat causes : (a) very marked and con-