day during six weeks I took a bath to which 50 grammes of iodide of potassium had been added. After the fifth bath I recognized the presence of the iodide in the urine, this condition persisting for twelve days after all treatment had ceased, excretion being, in this case, as slow as the absorption. 3. A bath was taken every third day during a month, to which 5 kilogrammes of marine salt had been added, and the chlorides of the urine rose progressively from 2.15 grs. to 3.47 grs. per litre. The general conclusions arrived at from these and other experiments are: (1) Chemical and other agents, dissolved in water, penetrate very slowly, but still manifestly, into the economy by the channel of the external integuments; and it is only when the blood and other liquids have become saturated with them that they are excreted by the economy. (2) All medical agents are not absorbed in the same degree. (3) The contradictory results hitherto obtained are solely due to the fact that the experiments upon which they have been founded have not been pursued for a sufficiently prolonged period."—*Med. Times and Gazette*, April 20, 1867.

5. *Innervation of the Heart*.—A valuable series of researches has been conducted by MM. E. and M. Cyon, of St. Petersburg, with a view to clear up our knowledge of the above subject. The experiments were conducted late last year in M. Du Bois Reymond's laboratory at Berlin, and the results are published in the *Comptes Rendus* for March 25th. Some of the authors' conclusions are of interest. Amongst others are the following: 1. Electric irritation of the third branch of the inferior cervical ganglion produces in rabbits an acceleration of the beats of the heart and a diminution of their force. 2. The first two branches of the same ganglion are the sensitive nerves of the heart. 3. Irritation of the fourth branch of this ganglion, which passes above the subclavian artery, produces a slight increase of the mean pressure of the blood, without altering the number of pulsations. 4. In dogs it is the second branch of the inferior cervical ganglion whose irritation produces the same changes as the irritation of the third in rabbits. MM. Cyon propose to call these nerves the *accelerator nerves of the heart*. They formulate the following conclusions as to their action: 1st. They are not ordinary nerves terminating in the muscles of the heart. 2d. They are not nerves acting on the vessels of the heart, because the complete occlusion of these does not change the number of pulsations. 3d. They are nerves terminating in the ganglia of the heart. 4th. They are antagonists of the pneumogastric. Irritation of the latter diminishes the pulsations of the heart while increasing their force, while these accelerating nerves increase the number of pulsations while decreasing their force.—*Lancet*, April 13, 1867.

6. *On the Mode and Duration of the Contraction of the Heart in Health and Disease*.—DR. BURDON-SANDERSON, in a lecture recently delivered before the Royal College of Physicians, pointed out the relation between the form of the arterial pulse as revealed by the sphygmograph and the movements of the heart in health and disease.

In every arterial pulsation four events may be distinguished.

I. *The sudden or primary expansion of the artery*.—It was shown that the primary expansion does not express an increase in the quantity of blood contained in the artery, but is due to a sudden jerking forwards of the particles of liquid, and is, therefore, of the nature of a commotion or shock in which each particle communicates its movements to its neighbour.

II. *The more gradual distension of the artery by impletion*.—The moment of greatest impletion occurs at a variable interval never exceeding a fifth of a second after the primary expansion. The time at which it occurs, and the degree in which it is marked, depend on the quantity of blood transmitted by the contracting heart to the artery.

III. *The sudden collapse of the arterial wall*.—This is a movement of the same nature and produced in the same way as the primary expansion—that is to say, by a sudden impulse of the particles of liquid contained in the arterial system in a direction towards the heart, the effect of which depends, not on its extent, but its velocity.

IV. The fourth event constitutes the *diastolic expansion or second beat*, the