

3. *Deglutition as observed by Autolaryngoscopy*.—M. GUINIER, in a note presented to the Academy of Sciences, arrives at the following conclusions. 1. Deglutition may be effected without occlusion of the pharynx, by the application of the base of the tongue to the posterior wall. 2. The preliminary application of the epiglottis over the larynx is not necessary during the passage of the morsel of food from the pharynx into the œsophagus. 3. The morsel may come into direct contact with the mucous membrane of the glottis; and the mere contraction of the vocal cords is sufficient to prevent it from entering the larynx. 4. The mucous membrane of the base of the tongue, of the epiglottis, and of the interior of the larynx, appears to be endowed with a special sensibility; here the contact of food produces no painful sensation, but merely the need of deglutition, while the contact of a foreign body gives rise to cough or attempts at vomiting.

At the same meeting, a note was presented from Dr. KRISHABER, in which the following conclusions were given: 1. During the act of deglutition, the alimentary morsel passes into one of the pharyngeal grooves along the side of the epiglottis tilted up by the elevation of the larynx; it thus reaches the œsophagus at the moment when, by the action of its constriction, the pharynx is narrowed. 2. Deglutition of liquids is effected in the same way; but they frequently pass over the epiglottis. 3. A small quantity of liquid comes into contact with the mucous membrane of the larynx and even of the vocal cords. 4. In gurgling, the larynx being widely open, a large quantity escapes into the organ. 5. The alimentary morsel is easily tolerated in the larynx as far as the vocal cords and even in the trachea. 6. The sensibility of the trachea to foreign bodies is much less than that of the larynx. 7. Hard cold bodies—a probe for example—are not tolerated in the air-passages; while soft bodies, having a temperature equal to that of the parts with which they come into contact, may remain in the trachea several minutes without producing cough.—*Gazette Médicale de Paris*, July 15, 1865.

4. *Influence of Galvanism on the Heart*.—Dr. EMILE FLIES, of Berlin, has lately studied, in twenty-four cases, the influence of the constant galvanic stream on the impulse of the heart when increased in frequency and force. In some of the cases, the increase of the heart's action was distinctly traceable to organic disease, and in other cases was probably connected with an increased excitement of the sympathetic nerve-fibres of the heart, which, according to Bezold, act on its musculo-motor central organ, increasing its activity. Starting from the physiological fact, that the vagus fibres of the heart have an action antagonistic to that of the sympathetic—*i. e.*, a depressing influence on the moving power of the organ—he endeavoured to act upon the vagus in the neck at the inner border of the sterno-cleido-mastoid muscle. Dr. Flies found that, after the galvanic current had been employed several times, the intensity of the heart's action was diminished.—*Brit. Med. Journ.*, Sept. 9, 1865, from *Ber. Klin. Woch.*, June 26.

5. *Experiments on Congelation of Animals*.—M. POUCHET, of Lyons, has communicated to the French Academy of Sciences a long series of experiments made by him on this subject. The following are his conclusions:—

1. One of the first phenomena produced by the action of cold is the constriction of the capillary vessels, immediately made visible by the microscope. So great is the contraction that no globule of blood can gain admission, so that these vessels remain entirely empty, whence the pallor of frozen parts. 2. The next phenomenon is the changed condition of the globules. The alterations observed are of three kinds. (1) The nucleus quits its envelope and swims freely in the plasma, the free nuclei having a granular appearance and being more opaque than in the normal condition. The envelopes of the nuclei become flaccid and torn, or they are dissolved and disappear. (2) The nucleus still remaining within its envelope has become opaque, and is more or less excentrically situated. (3) The globules may be simply more or less indented at their edges and of a deeper colour. It is especially in the blood of reptiles that the nuclei are found expelled, the globules of mammalia presenting indentations. The number of globules which undergo these alterations and re-enter the circulation is propor-