The structure of the active albumen is highly labile, it is easily altered, and transformed into an inert mass. The protoplasm, being equally labile, *possesses its vital force in consequence of the balance between the attractive and repulsive forces of the proteid molecule.* When this balance is disturbed by an excess of the attractive power over the repulsive, we have a disturbance of the vital power. It must be confessed that this theory explains well the death of the living matter.

From this foundation Loew builds up his theory. With wonderful patience he has collected the notes from the literature, and succeeded in bringing together a reference-work of high rank, while, at the same time, original observations are frequently broadening out the scope and giving numerous suggestions for further investigation. As the work is altogether a work of facts, only a general view will find its place here.

The system is the following:

A. General Poisons.
1. Oxidizing poisons.
2. Catalytic poisons.
3. Poisons operating through the formation of a salt.
4. Substituting poisons.

B. Special Poisons.

1. Poisons which affect solely such acting albumen as has a special configuration and lability: toxical proteids.

2. Poisons which have a destructive effect on the structure of the cells, in consequence of their association with the active albumen of the protoplasm.

3. Poisons which have an indirect effect;
(*a*) checking the breathing power,
(*b*) acting by their own decomposition,
(*c*) altering the swelling up of organic bodies.

The toxical proteids (chapter V) are treated in full. "The discovery by Hammerschlag in Nencki's laboratory (1888) that a poisonous proteid could be isolated from the *Bacillus tuberculosis*, was succeeded by the important observation by H. Buchner (1889) that certain proteids are present in the blood of certain animals and have a poisonous effect on bacteria. Emmerich had already, in 1887, shown the destruction of bacteria in the circulation; then he succeeded in showing that the bacteria-killing properties of the blood rested in the albuminoid substances contained therein."

The multitude of facts makes it possible to give only the main features of Loew's theory here. Everybody who is interested in physiology and its progress knows that we must have views as well as facts in order to secure a constant progress. The importance of the new theory will be felt by all who are interested in medical science; it is one of the steps that show us that the time has come for establishing a special general physiology of animals and plants. All this made it a pleasure to the writer to turn the attention of fellow-workers towards it.

SOME OHIO MOUNDS.

BY HAROLD HEATH, DELAWARE, OHIO.

During the last few years several mounds in central Ohio have been entered and some of the data obtained has proved to be of considerable interest. Mounds similar to these have long been described under the title of Funeral Tumuli and Sacrificial Mounds, yet their true function seems to be doubtful even in the present day. They were about of equal size, varying from 40 to 50 feet in diameter and 15 to 20 feet in height, and without exception were situated upon some water course. In the cases where the land was still undisturbed a layer of vegetable mould covered the surface to a depth of between two and three feet. Beneath this covering came a layer of fine sand and gravel similar to that found in the sand bars of streams or rivers. This layer was always four or five feet thick. In making shafts extending perpendicularly through the centre of the mound, after passing through this gravelly layer, a rough altar was reached in four cases out of six, and in the other two ashes and charcoal were found. These altars were constructed of unhewn, waterworn bowlders piled in a rude fashion to form a mass having the average dimensions of 5.3 feet in length; 4.1 feet in width, and 2.4 feet in height. In two other cases, which have come to my notice, skeletons, evidently Indian, were found in this gravelly superficial layer above the altar. One skeleton was especially remarkable for its height, measuring when put up a trifle less than six feet. About and upon the altars were scattered ashes and charcoal, and dark masses of vegetable mould indicated decayed bits of wood. Portions of human skeletons and in one case that of some carnivorous animal were found, many pieces in a charred condition, indicating either human sacrifice or cremation. These altars were built before a rude pavement of stones similar to those composing the altar and were of about the same size, viz., about a foot in diameter. Beneath this lay a mixture of blue and yellow clay and gravel making up the greater portion of the mound. In one case layers of gravel stones about the size of a cricket ball were encountered lying in strata separated by about a foot of this clay-gravel mixture. These layers extended through a depth of nine feet. This "cement" was so compact and hard as to withstand almost like stone the most persistent attacks with pick and shovel. In most cases the work was abandoned after sinking the shaft to a depth corresponding to the height of the mound, although the clayey cement indicated that the lower surface of the structure had not been reached. In only one case when a depth of nineteen feet had been reached by means of excavations and blastings was a skeleton found. This was the skeleton of a man 5 feet 1 inch in height and it was so fragile in the damp tenacious clay that only portions of the bones could be extracted. The body lay partially upon the right side, one hand lying across the breast, the other extended along the side. The left leg was considerably flexed, while the right was extended. Lying at the side of the skeleton were two stone beads, a perforated bit of unio shell and two flakes of mica. A further excavation of six feet, and also large tunnellings at the foot of the shaft, failed to bring to light any more bones or implements.

In two other mounds implements were found in this thick cement—an axe in one and two fleshers and several rough spear heads in the other. In other localities a few cases have been reported where a kind of vault was found a short distance beneath the altar, containing one or more skeletons and generally some implements or ornaments, but so far as I can determine no such report has been made for this section of the country.

AN EYE PROTECTOR TO BE USED WITH THE MONOCULAR MICROSCOPE.

BY L. BREWER HALL, M. D., PHILADELPHIA.

How often have we heard persons exclaim, upon looking into a binocular microscope for the first time: "Oh, how much easier it is to see with this instrument, and how much plainer everything appears;" and this *with one field quite dark*, which provokes a smile from the amateur. I am fully convinced, however, that we cannot ascribe such expressions wholly to dissimulation or flattery, or even self-deception, and for the following reasons:—

When one eye is looking through an instrument like the microscope, and the other, being open, is regarding the objects outside the tube, an image is formed upon each retina, and the normal action of the mind is to blend them into a single picture. This being impossible from