

then again slowly relaxing, if this be performed near the pyloric orifice; the duodenum or commencement of the intestine will quickly act from the excitement and the fibres of the stomach not for some time afterwards. I may also state that you can find sugar in the urine likewise, that other circumstances may be noticed, but they are not worth the while mentioning.

Take a puppy of about one month old, and to prove the first experiment mentioned, be sure that it has always fed on an animal diet. It must be sacrificed by pithing, namely, put the edge of the common flat pointed awl, if no better instrument be at hand, behind the occipital protuberance, care must be taken not to direct it towards the brain, and when it has passed through the medulla oblongata, work it laterally across the canal, so that the medulla is divided, the animal dies instantly, but all the extremities are moved convulsively from the irritation, and to stop this if you think fit direct the instrument down the canal, and destroy the chord when they cease. This being done, let an assistant take hold of the fore, and another the hind legs, and open up the animal by a longitudinal incision from the neck to the pubis. Care must be taken not to wound the intestines, because if so you cannot see their natural motions so well; then open the chest as is usually done, and expose the heart, and in doing so you will see the natural contractility of muscle, when you cut the pectoral muscles. Having done so, you will find the heart still acting naturally, and by examination will perceive what I have described under sections two, three and four, namely, that during the contraction the impulse is communicated to the arteries and veins, &c., &c., which being done you may perform experiment 5 by irritating the phrenic nerves if the diaphragm be not too much injured, as it is not likely to be with care in manipulating. By looking closely you will be able to see the lacteals, as little white vessels resembling nerves and quite distinct. I may state, however, to do this the animal should have been killed shortly after taking a full meal. Next do as stated in 7 and 8, but first watch the intestines closely to see their natural actions of contraction and their several movements. Then part 9 can be performed as regards the stomach, by proceeding in the same way, first watching the natural action. Now as to the first experiment with the liver, tie the portal vein to test the portal blood for sugar, likewise if you choose cut the organ into very small pieces, or bruise it in a mortar, have a dish at hand full of boiling water, then add the liver when thus prepared, by this means you get a colorless solution, whereas if the water were cold when it was added, and then boiled, all the coloring matter would be dissolved out, with the blood proceed in a similar way. Then filter and apply the tests.