

350 diameters. Each student is required to draw what he sees before him in the field of the instrument, and the sketch is corrected, if wrong, when the Professor comes round. I may state here "en passant" the best way to examine crystals with the microscope. Take crystals not too large for the field of the glass, place them on the glass plate, and a drop or two of a liquid, water will not do as it dissolves them generally. The best fluid by far is the saturated mother water from which they have been formed, or a liquid in which they are insoluble, then put the small thin glass cover over it, and use the lowest power to commence with, and then gradually pass to the highest. By this means you find which power answers, best for your particular specimen.

I shall conclude this communication with a few words on the following simple experiment, which I saw at our practical physiological lectures and can be performed by even the most unskilful hand without difficulty, and will serve to print on his memory several facts in physiology, (which are in general thought only to be proved by those men who devote all their time to such pursuits,) more firmly than weeks of reading. It shows, 1st. That the liver, as proved by Bernard, has the power of forming sugar, when only animal food is taken. 2nd. That what we see in certain diseases, viz., venous regurgitation, is only an exaggeration of a natural phenomenon, existing both in arteries and veins. 3rd. That the pause in the contraction of the heart is between the two contractions of the auricle and ventricles, and the next two following. 4. How sudden the action of the auricles is compared to the ventricles; their very sudden contraction and dilatation, and continued dilatation, and also for what a long time they keep up their action after cessation of either ventricle. 5. How irritation of the phrenic nerves causes contraction of the diaphragm, and when they are cut in two, that irritation of the distal extremity causes contraction, and when the central is touched no effect is produced. 6th. The lacteals conveying the chyle towards the receptaculum and passing through the glands. 7. How the vermicular motion of the intestines is carried on during life, and after this has been observed if you irritate one part, it will cause action through nearly the whole length of the canal; also how the action of the distinct sets of muscular fibres proceeds separately, one contracting the circular dimensions more than half, and then the tube appearing to grow shorter when the longitudinal fibres act. The intestine itself becoming quite rigid. 8th. The particular action of these sets of fibres in the large intestine. 9th. The natural movements of the stomach, and that irritation does not produce so sudden effects as in the intestines, but very slow first, one set of fasciculi and then another, shortening until every irritated fibre is contracted, and