

achromatic condenser. The full beauty of the specimen can only be seen with a binocular microscope; and few objects are better fitted to show the advantage of that kind of instrument. The crystals then stand out in perfect relief, and are seen to be equally complicated in all directions.

Few objects of the kind are more easily prepared than the crystals of borate of magnesia deposited from borax saturated with magnesia. They first form as thin prisms, and smaller crystals are afterwards deposited, so as to give rise to objects very much like a handle with a brush at each end.

Zircon or zirconia fused with borax yields crystals of the borate. In their most rudimentary state they are small prisms with a simple cross at each end, which afterwards becomes complicated.

The crystals of molybdate of zirconia, formed by fusing zirconia in borax with molybdic acid, are extremely elegant and beautiful objects. They are so delicate that their own weight would probably break them, if they were in an aqueous solution; but being supported in solid borax, like the insects enclosed in amber, they are secure from all injury.

Scheelite — native tungstate of lime — fused in borax, is deposited in crystals of great beauty, and is an object easily prepared.

The molybdate of strontia, produced by fusing strontia and molybdic acid in borax, crystallizes in long spindle-shaped crystals; whereas the molybdate of lime yields very different crystals, of an intermediate form.

Apatite—native phosphate of lime—fused with borax, deposits in crystals which vary much in shape. Six-sided stars are often formed on the surface, and needle-shaped crystals grow from their centres into the interior of the borax, so that they look like nails with highly ornamented heads driven down into the bead. When formed with their axis parallel to the surface, the crystals are sometimes much like *diatomaceæ*. The addition of phosphate of soda to a borax bead containing lime, in almost any state of combination, gives rise to similar crystals.

On adding a certain amount of carbonate of soda to quartz or various silicates dissolved in borax, crystals are deposited, which vary much according to circumstances: but they all seem to be due to the variable growth of many small six-sided prisms with