bands made of vulcanized India-rubber will answer for thicker objects, or the glass rings or cells that have previously been described to contain objects mounted in fluid, will all do equally well for such as require to be mounted dry.

Mr. Darker's Method.—Objects, such as sections of wood, that do not require a high power for their examination, may be mounted in a very neat way after an excellent plan first practised by Mr. Darker. The following description, abridged slightly from that given in a recent work, entitled Microscopic Objects, will convey a good idea of the method to be adopted for this purpose:—" Two slides of equal size being selected, the edges of each should be bevelled off on the metal plate, as represented by fig. 194, so that when they are put



Fig. 194.

together, a groove or channel is formed, as shown at b in the figure. The surfaces having been cleaned, the bevelled parts are to be coated with a thin layer of sealing-wax varnish; when this is dry, a label, if required, may be gummed to the bottom slide, and then the objects may also be laid on it; if it be necessary to keep them in place, the smallest possible quantity of gum may be applied to one corner; the top plate is now to be laid on the specimens, one of the edges is then to be heated in the flame of a spirit lamp, and the groove filled with sealing-wax, as shown at a; when one edge is done, the others are to be heated in the same manner, until the entire groove is filled with the wax, which thus acts two purposes, one to keep the slides together, and the other to prevent the access of air. The excess of wax may be cleaned off from the edges by rubbing them upon sandpaper laid on a flat board, until they are smooth; if bright edges be required, they may be passed quickly through the flame of the spirit lamp. It must, of course, be borne in mind that all objects mounted in this way should be made perfectly

dry before they are sealed up. The author, some years ago, was presented with a collection of sections of wood by Mr. Darker, which have not only kept in their places, but are as perfect and as free from conferva as when they were first received. They are all labelled after a very excellent plan, viz., by having the generic and specific name on one side of the label, and the popular on the other.

## CHAPTER IX.

## MOUNTING OPAQUE OBJECTS.

OPAQUE objects may be mounted in various ways:—on discs, on cylinders, on glass slides, or in cells.

On Discs.—The discs consist of circular pieces of some soft material, through which a pin is passed; they may vary in diameter from a quarter to one inch; one kind may be conveniently made by glueing together two pieces of card-board, with a piece of rather thick chamois leather between them, and then cutting out with a punch discs of any required size. Through the chamois leather a long but strong pin is to be passed in the direction shown by fig. 195; the discs may



be made black with lamp-black (that sold in shops in the moist state in little oblong saucers will be found the best); or with lacker in which lamp-black has been mixed; in this latter case they should be warmed either before the lacker is applied or afterwards, to dry it. The felt which is used as gun-wadding, or the pellets that are sold already cut out for guns, may be substituted for the card-board and chamois leather, or even leather itself may be used with advantage.

Fig. 195. Transverse slices of small phial corks are very good, but to make them look well, they should have their cut surfaces covered with black paper, which renders their manufacture rather more troublesome.