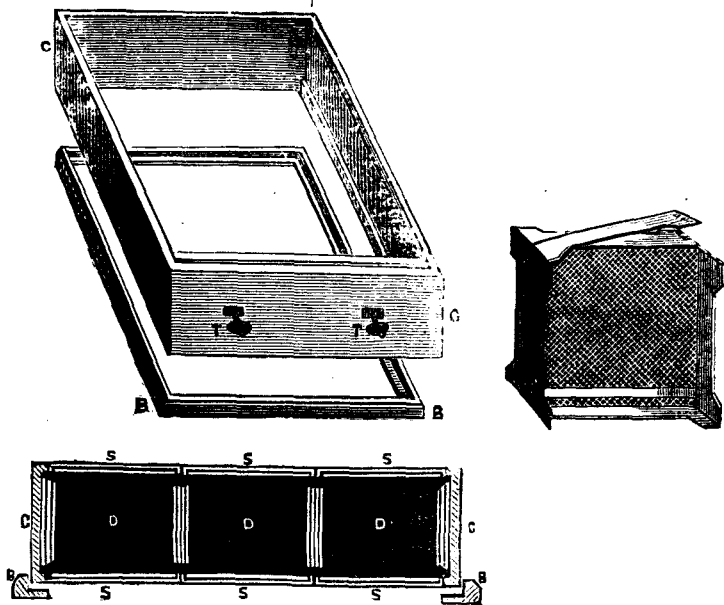


to illustrate through the courtesy of the Editor of the *B. B. J.* It consists of four pieces of wood $4\frac{1}{2}$ deep to take 21 sections $4\frac{1}{2} \times 4\frac{1}{2} \times 2$, the size generally used in England, in fact they look on this size as a kind of "trade mark" of British honey. On the inside of the two sides of the crate are tacked two fillets $\frac{5}{16}$ of an inch square to form a bee-space around the ends of each row of sections. In the front end of the crate are fitted two iron thumb-screws, T. fig. I., with brass thumb-pieces and nuts, which, when screwed tightly against a sliding board, shown in the engraving, pressed the latter tightly against the sections and dividers, and

about their separators. A glance at the illustration will show that the dividers are as wide as they possibly can be and allow the bees room to pass, in fact, a section case fitted with dividers as here shown, would prevent the queen from entering almost as effectually as a honey board fitted with metal.

Years ago we experimented with these inner pieces in various ways, in connection with supers and sections, and after we had used them and explained their uses in the *C. B. J.* in connection with sections, some one invented and exhibited them in England, taking a prize or medal. We find that if we press sections too tight when dry they become



so held all in position by pressure. English bee-keepers contend wood screws will not suit their climate. The sides of the crate being only exactly the depth of the sections, a bee-space is provided separate, to place on the top of the brood-frames. Mr. Sambels contends 'inverting' will not increase the amount of honey stored in a hive if the bees are kept at work by other methods. But he 'inverts' to prevent 'pop-holes.' The dividers (D fig. II.) which are made of zinc have 'slots' cut in them to allow the bees free access from one row of sections to another; they are cut short at the ends for a similar purpose. English bee-keepers do not use queen excluder zinc, but they are very particular

unnecessarily tight after they have expanded. It appears that the moisture from the brood-chamber causes them to swell, and when they expand $\frac{1}{8}$ or $\frac{1}{4}$ inch in the length of the super it requires considerable strength to support them in position.

Mr. Sambels also exhibited a plan of fixing foundation as shown at Fig. III. It consists of cutting one-quarter of the section in half with a fine saw, and having put the piece of foundation in position, closing the piece down on it tight thus holding the foundation firm. This is not new, as Mr. Cowan used it in 1874 in England, but as it has never been illustrated before, it may be new to some of our readers.