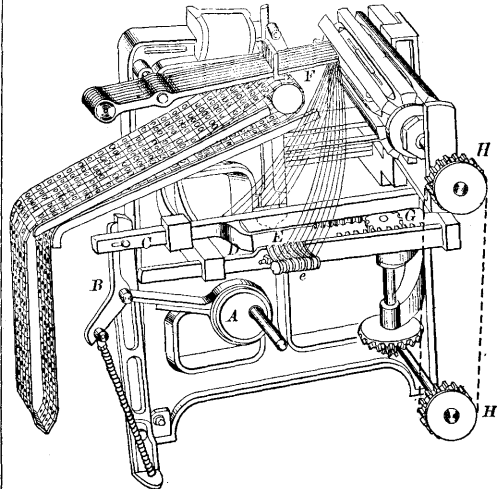


a shuttle, by a chain *H* actuated by gearing *G* in connection with two racks, the amount of motion being regulated by tumblers connected to jacks or levers governed by Jacquard cards.

A is an eccentric connected to a lever *B*, for giving motion to the sliding bar *C*, furnished with projections *D*, which act upon tumblers *E* when

Fig. 1300.



Circular Shuttle-Box Loom.

they are lifted by the cards connected to the jacks or levers *F*, which is whenever there is a blank in the part of the card opposite to the jack or lever. When these tumblers are lifted they fall into slots in the racks, and being caught by the projections *D*, the racks are carried forward and the pinion *G* turned; this gives motion to the upright shaft and bevel wheels, through them to the chain wheels *H H*, one of which is on the axle of the shuttle-box. Each jack or lever *F*, except the two end ones, is connected to two tumblers, one on each rack; and as the racks are on opposite sides of the pinion, the tumbler gives motion to the rack on one side, and the other tumbler acts as a stop, and regulates the exact distance that the opposite rack, and consequently the shuttle-box, moves.

Cir'cu-lar Shut'tle-box Loom. A loom having a box with a number of shuttles, six in the figure, and having means for actuating it so as to bring any one of the six shuttles into operation as required by the pattern. The circular shuttle-box is mounted on an axle at one end of the sley, and has a positive revolving motion given to it, when required to change