No. 860,765. PATENTED JULY 23, 1907.

H. RIGBY.

COMPASS BOARD.

APPLICATION FILED JUNE 7, 1906.

Fig.1

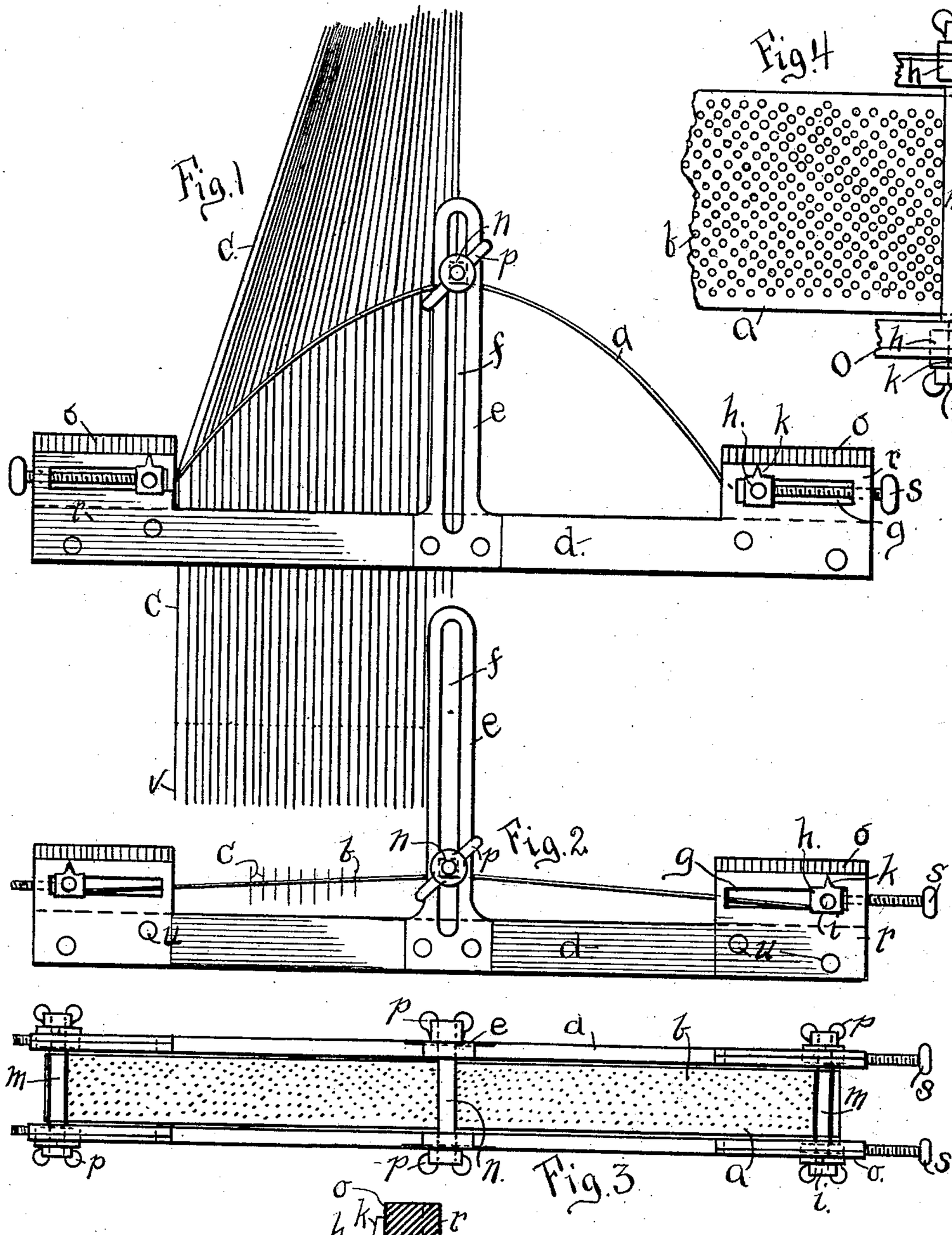
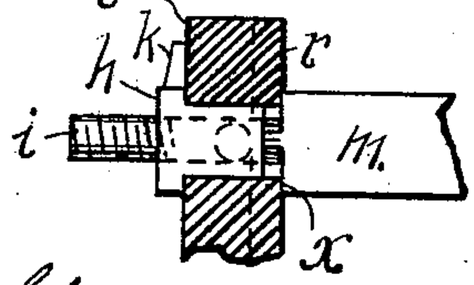


Fig.4

Fig.2

Fig.3

Fig.5



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COMPASS-BOARD.

No. 860,765. Specification of Letters Patent. Patented July 23, 1907.

Application filed June 7, 1906. Serial No. 320,583.

To all whom it may concern:

Be it known that I, HOLDEN RIGBY, a citizen of the United States, residing at Paterson, in the county of Passaic and State of New Jersey, have invented a certain new and useful Improvement in Compass-Boards for Jacquard Mechanism, of which the following is a full, clear, and exact description.

This device relates to the pitch of the threads running from the jacquard in a loom.

The object of my invention is to weave the same pattern in different widths of fabric without changing the flexible perforated piece, commonly called a compass-board, through which the threads from the jacquard pass saving the expense of new boards, and the rethreading of the same, thus greatly simplifying the work. I obtain these objects by the mechanism as illustrated in the accompanying drawings, in which like letters refer to similar parts throughout the several views.

Figure 1 is a front view of my invention with the threads passing through one half of the same; Fig. 2 is a front view of my invention as it appears when arranged for wide fabrics; Fig. 3 is a plan of Fig. 2; Fig. 4 is a detail of a part of Fig. 3; Fig. 5 is a detail of the frame and its connection with the perforated compass board.

In the drawings, *d*, represents the frame which supports the slotted pieces, *e*, and the two pieces, *r*, on each end.

The compass-board or plate, *a*, consists of a metal piece with sufficient flexibility to draw it up to a position as shown in Fig. 5 and to straighten out again. This plate has a number of holes placed regularly throughout it, through which the harness threads, *c*, pass, in the well known manner.

The plate can be made of any flexible material such as metal, wood, or fiber but hard brass is preferable.

The ends of the plate are screwed to pieces *m*, the ends of which are inserted in slots, *g*, in the pieces *r* and are secured in place by wing nuts *p*.

The wing nuts clamp the piece, *r*, by means of the shoulder, *x*, on the end of the piece *m* and the washer, *h*, on which there is a pointer *k*.

Across the center of the plate, *a*, there is also a piece, *n*, secured to it. The ends of this piece *n* are also movable in the slots, *f*, in the two pieces, *e*, which are secured to the frame, *d*, and the said pieces *n* are secured in the slots *e* by means of the wing nuts *p* and shoulders on the ends of the part *n*, similar to those on part *m*.

The thumb screws *s* can be, but are not generally used for adjustment.

On the pieces *r* there are graduations for setting the plate to whatever pitch is required, the pointer *k* on the washer *h* on the end of *m*, guiding the operator in setting the plate. Whenever a certain pattern is completed and a different pattern is desired, calling for a different number of threads to the inch, say from twenty four to twenty inch wide goods the change is made as follows: When the wider goods are being woven the threads *c* running from the jacquard through the plate *a* and then connecting the warp to produce the pattern, and regulate the shed, have lingoes on their ends; these threads *c* have a uniform distance apart, and the space occupied by the full number is the same as the width of the fabric. If the six wing nuts *p* are loosened and the center piece *n* raised the end pieces *m* which are free will move in towards each other. They are then given the slight extra adjustment needed as shown by the graduations and the six wing nuts are then securely tightened; this arrangement will throw the threads *c* within the required width, and the distances between the threads will be less than before and uniform in pitch; thus it can be seen that the change from one width of goods to another can be accomplished very quickly and still have a uniform regularity in any of the widths.

Having thus described my invention what I claim and desire to secure by Letters Patent is:

1. In a loom a flexible perforated compass board, the pieces *m* with the wing nuts on their ends, the vertical pieces with the slot in each, the four end pieces with the slot in each and graduations on each as and for the purpose of changing the width of the goods to be woven in connection with the same perforated compass board as set forth and described.

2. In a loom the perforated compass board, the pieces *m* with the wing nuts for securing the perforated compass board in the desired position, the vertical pieces *e*, slots *f* in the same, the end pieces *r* and slots *g* in the same, the graduations on the end pieces the pointer acting in connection with the said graduations the washer to which the said pointer is connected, and the shoulders on the pieces *m* for the purpose of securing same in the slots, and the adjusting screws *s* as and for the purpose as set forth and described.

3. In a loom the combination between the compass board and the frame consisting of the two pieces *d*, and supporting the two upright pieces *e* with their slots *f*, and the slotted pieces *r* located at the ends of the said frame, in connection with the sliding pieces *n* in the upright slotted pieces *e* and the sliding pieces *m* in the end slotted pieces, and the screws *s* for the purpose of regulating the position of the said sliding pieces as set forth and described.

Signed at Paterson, in the county of Passaic and State of New Jersey, this 29th day of May, A. D. 1906.

HOLDEN RIGBY.

Witnesses:
MARTIN GOBLE,
JOHN A. KANE.