R. M. Dill.
Shuttle Check.

No. 13,217. Patented Jul. 10, 1855.

Fig. 1

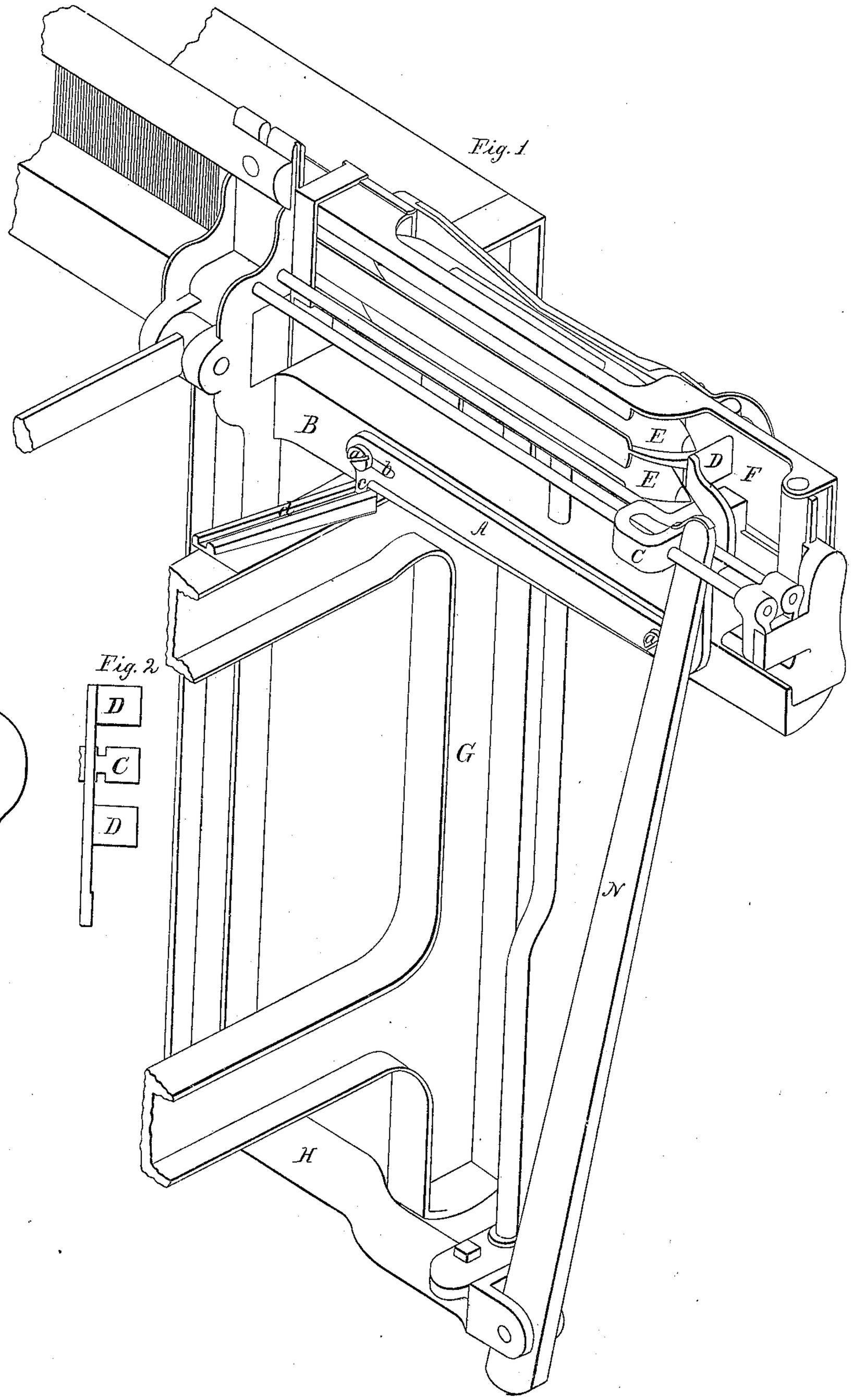
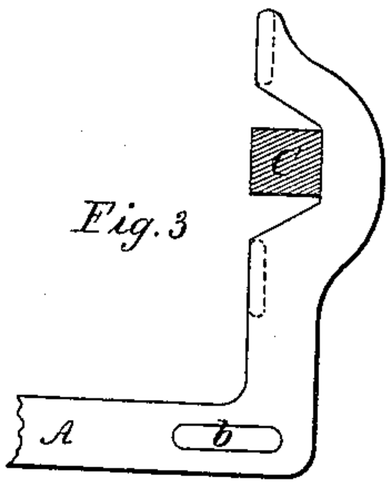


Fig. 2

Fig. 3



UNITED STATES PATENT OFFICE.

RUFUS M. DILL, OF HOLYOKE, MASSACHUSETTS.

LOOM.

Specification of Letters Patent No. 13,217, dated July 10, 1855.

To all whom it may concern:

Be it known that I, RUFUS M. DILL, of Holyoke, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Shuttle-Stops for Looms with Changing Shuttle-Boxes; and I hereby declare that the following is a full and exact description of the construction and operation thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is an isometrical view of a part of the left hand end of a loom, with the shuttle stop in connection with a double shuttle box and its appendages. Fig. 2 is an end elevation of the shuttle-stop detached. Fig. 3 is a front elevation of a part of the same.

The same letters indicate like parts in all the figures.

A, Fig. 1 is the shuttle-stop attached loosely to the arm B, of the lay, by the screws *a*, *a*, passing through the slots *b*, *b*, (one of which is shown at Fig. 1 and the other at Fig. 3) to allow it to slide or traverse on said screws, and in contact with, and parallel to the arm B of the lay, by the action of the stud *c*, traveling in the diagonal groove *d*, (attached to the top of the frame G) as the lay beats back and forth, the top of the groove *d* being the arc of a circle, described from the center of the rocker H. The vertical arm of the stop A, is formed with two projections, D D, projecting inward toward, and into, the shuttle box F the same distance as the picker C, and at such distance apart that when the bottom shuttle is in the position to be acted upon by the picker C, the top shuttle will be horizontally in line with the top projection, (as shown in the drawing Fig. 1) and when the top shuttle is in the position to be acted upon by the picker, the bottom shuttle will be in line with the bottom projection. The face of the projections stands forward over that part of the stop that comes in contact with the picker, the width of the picker, bringing the face of the projections vertically in line with the face of the picker; (see Fig. 3) thus at each beat of the lay making sure that both of the shuttles E, E, are forward in the shuttle boxes to the extent of the forward traverse of the stop A, and the points of the shuttles one directly over the other, rendering it impossible to get either shuttle far enough into the boxes to catch against the picker when the box changes; whether they be thrown into the box by the action of the opposite picker, or placed in by hand after threading, or changing the shuttles. The picker C, is driven outward against the stop by the action of springs attached to the picker staff N, in the usual manner.

I would here say that I do not limit myself to any particular number of boxes in the series, as the stop can be applied to any number and have the effect to keep all the shuttles forward in their places by making one less projections than boxes, both above, and below the picker.

I am aware that a slotted lever, operated by a pin in the lay, has been used in looms with movable shuttle boxes to hold the picker forward and thereby stop the shuttle, and therefore I do not claim such; but

What I do claim and desire to secure by Letters Patent, is—

A sliding bar, attached to the lay, having projections adapted to each shuttle box of a series at its outer end, and actuated from the inner end by a groove attached to the frame of the loom; substantially in the manner, and for the purpose described.

Holyoke May 31, 1855.

RUFUS M. DILL.

Witnesses:

STEPHEN HOLMAN,

WM. GROVER.