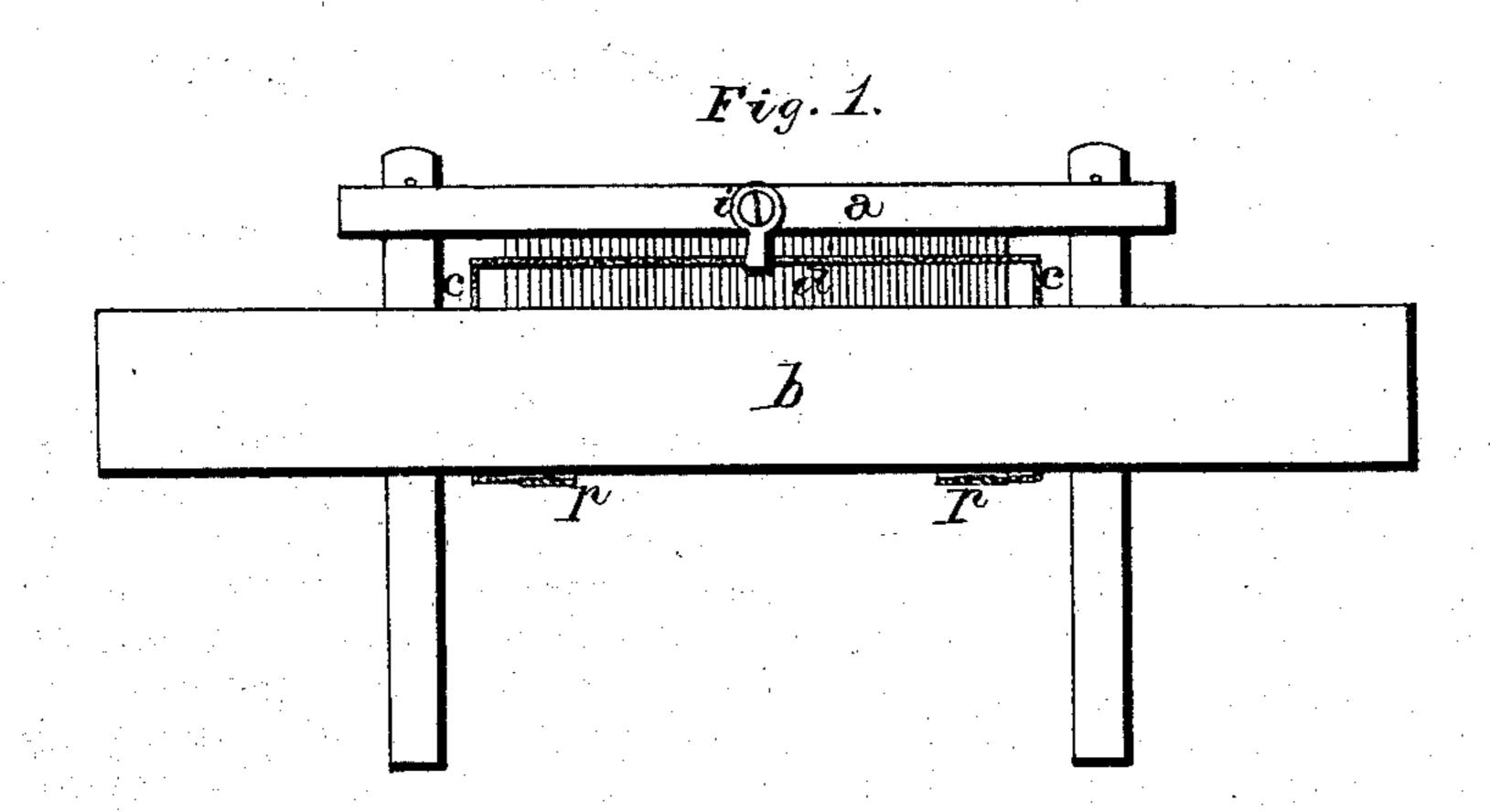
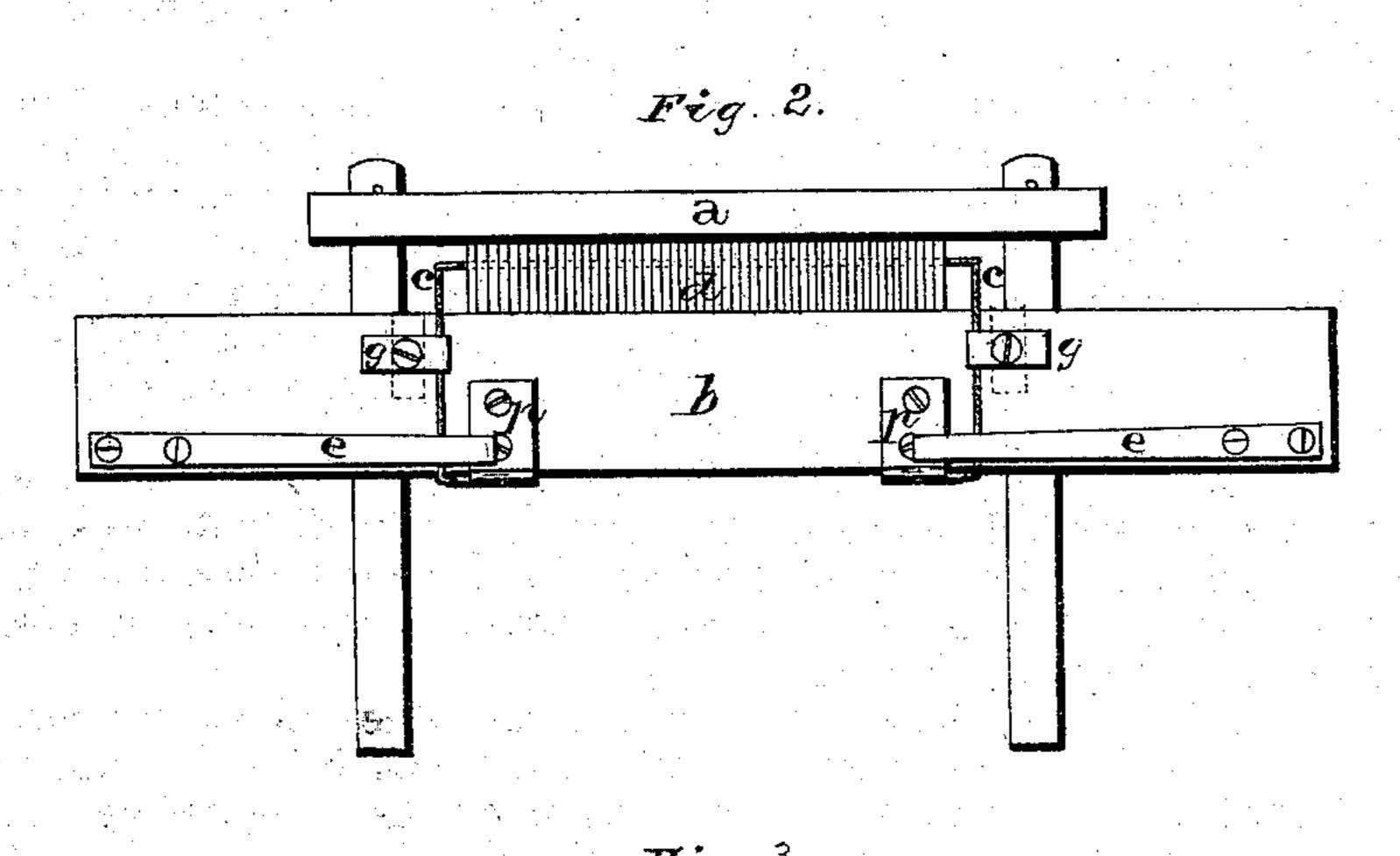
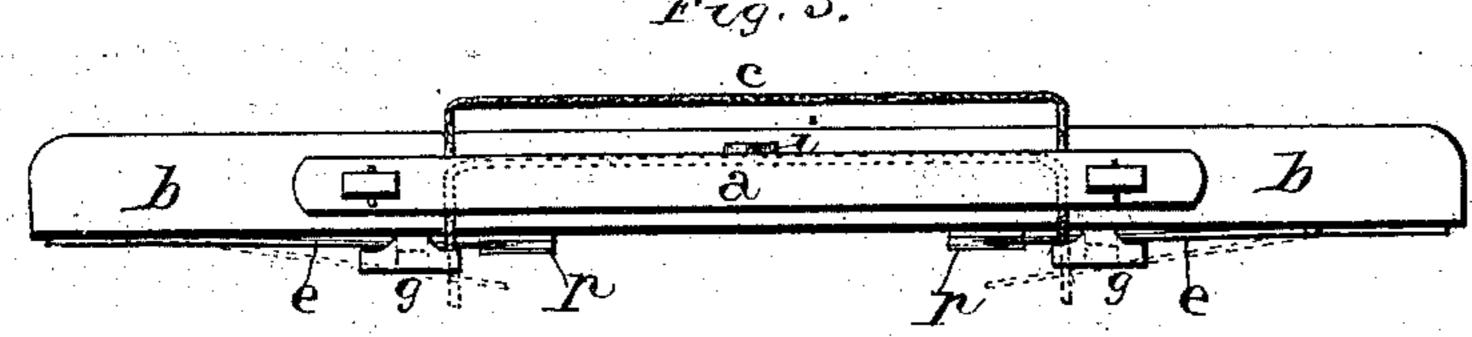
W. A. HASTINGS & M. C. GERALD. Shuttle-Guides for Looms.

No.156,347.

Patented Oct. 27, 1874.







WITNESSES

Min Larner,

J F Lehmanns

INVENTORS.

Ma Mastings

M. G. Gerald

Fa. Lehmann, atty

UNITED STATES PATENT OFFICE.

WILLIAM A. HASTINGS AND MILES C. GERALD, OF THORNDIKE, MASS.

IMPROVEMENT IN SHUTTLE-GUIDES FOR LOOMS.

Specification forming part of Letters Patent No. 156,347, dated October 27, 1874; application filed September 19, 1874.

To all whom it may concern:

Be it known that we, Wm. A. Hastings and MILES C. GERALD, of Thorndike, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Shuttle-Guides; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in shuttle-guides; and consists in a simple mechanism by which the guide is made stationary or rendered movable, as may be desired, and offers other advantages, hereafter set forth.

The accompanying drawings represent my

invention.

a represents the hand-rail, and b the beam, of ordinary construction. Attached to the rear side of the beam by the plates p is the bent guide c, which extends vertically upward to about half-way between the rail a and the beam b, where it is bent at right angles, so as to extend in front of the reeds d. Bearing against this guide, near its lower ends, are the two springs e, which hold it pressed forward into position, but at the same time allow the horizontal part in front of the reeds to be pushed backward until it rests against them. Pivoted to the rear side of the beam, just above the springs e, are two buttons, g, which can be turned, so as to pass over the guide, and thus clamp it rigidly in position in order to prevent it from being moved backward, as described. Upon the front side of the hand-rail a is another button, i, which catches over the top of the guide when it is pressed against the reeds and holds it in that position.

The operation is as follows: By simply bearing with one hand against the guide c it may be bent backward, and either thus held or pressed against the reeds, and fastened by button i, so as to allow the operator to make any repairs upon the work before him without being interfered with by the guide, as is the case when stationary. Removing the hand, or unfastening the button i, the guide will at once reassume its former position. Again, if it be desired to use a rigid guide, the turning of the button g over the lower end of the guide will effect it.

We are aware that guides of various kinds and forms have been in use, but none of them, as far as our knowledge extends, combine elasticity with rigidity, as either may be required.

This simple contrivance is applicable to all looms, and will be found very useful.

Having thus described our invention, we

claim— 1. The guide c, in combination with a spring or springs and holding devices, substantially as described, whereby the guide can at will be made elastic or rigid when in position, as set forth.

2. The movable guide c, in combination with the button or catch i on the hand-rail, whereby the guide is held pressed against the reeds, as specified.

3. The combination of the guide c, buttons or catches g i, springs e, hand-rail, and beam,

substantially as shown.

In testimony that we claim the foregoing we have hereunto set our hands and seals this 17th day of September, 1874.

WM. A. HASTINGS. L. S. MILES C. GERALD.

Witnesses:

A. R. MURDOCK, LUCY M. KNOWLTON.