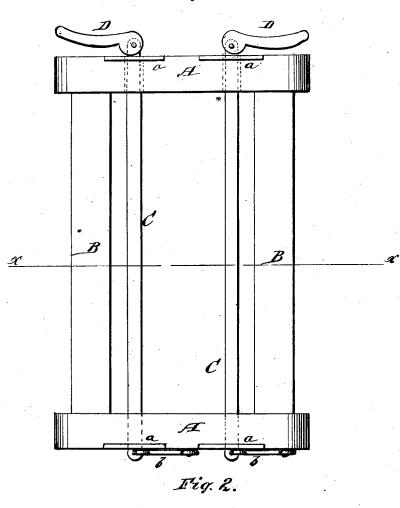
## J. E. CASEY, H. AUEL, & J. JOHNSON. Harness-Frame for Looms.

No. 163,575.

Patented May 25, 1875.

Fig. I.



P. C. Dieterick V. C. M.: arthur James Ee Ceasey Henry Auel James Johnson C. H. Watson Co

## UNITED STATES PATENT OFFICE.

JAMES E. CASEY, HENRY AUEL, AND JAMES JOHNSON, OF MYSTIC RIVER, CONNECTICUT.

## IMPROVEMENT IN HARNESS-FRAMES FOR LOOMS.

Specification forming part of Letters Patent No. 163,575, dated May 25, 1875; application filed April 7, 1875.

To all whom it may concern:

Be it known that we, James E. Casey, Henry Auel, and James Johnson, of Mystic River, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Harness-Frames for Looms; and do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to harness-frames for looms; and it consists in the construction and mode of fastening the rods therein, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is an elevation, and Fig. 2 a detail, of a device embodying our invention.

A A represent the side pieces, and B B the top and bottom pieces, of a harness-frame for looms, and C C represent the flat bars or rods therein. These bars pass through slots or mortises in the side pieces A A, as shown, said slots or mortises being surrounded at their outer ends by metal bars a a let into and secured to the edges of the side pieces. In one end of each bar or rod C is a hole for the insertion of a hook, b, which is pivoted at the outer edge of one of the side pieces A. The other end of the bar C is inserted and pivoted

in the inner split end of an eccentric or camshaped lever, D. The bar is passed through both the side pieces A and the hook b fastened in the hole or eye in the end thereof, when the eccentric lever is turned down, causing its eccentric or cam-shaped end to bear against the metal bar a and fasten the rod or bar C tightly in the frame, so that the hook cannot come out.

By simply reversing the eccentric lever D, the bar C is loosened sufficiently to allow the hook to be taken out of the eye, and the bar can be drawn out.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination, with the harness-frame A B, having slots or mortises in its side pieces, of the rods or bars C C, having eyes at one end, the eccentric levers D D pivoted at the other end of said rods, and the hooks b b, whereby the rods can be readily withdrawn and inserted, the several parts being arranged and operating together, as and for the purpose herein set forth.

In testimony that we claim the foregoing we have hereunto set out hands and seals this 3d day of April, 1875.

JAS. E. CASEY. [L. S.] HENRY AUEL. [L. S.] JAMES JOHNSON.

Witnesses:

F. A. HOLMES, S. P. ALLYN.