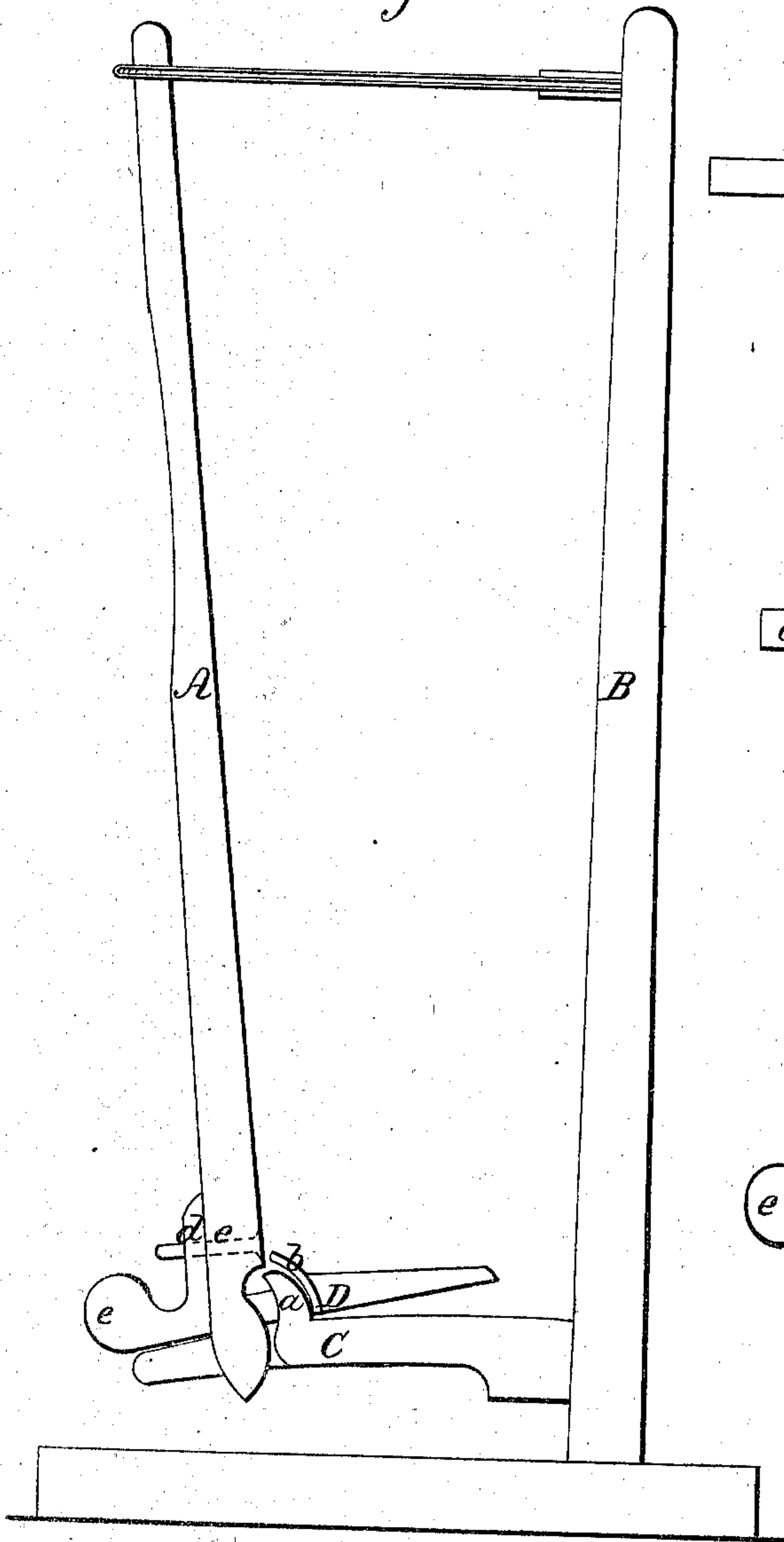


*E. Robbins.*  
*Shuttle Motion.*

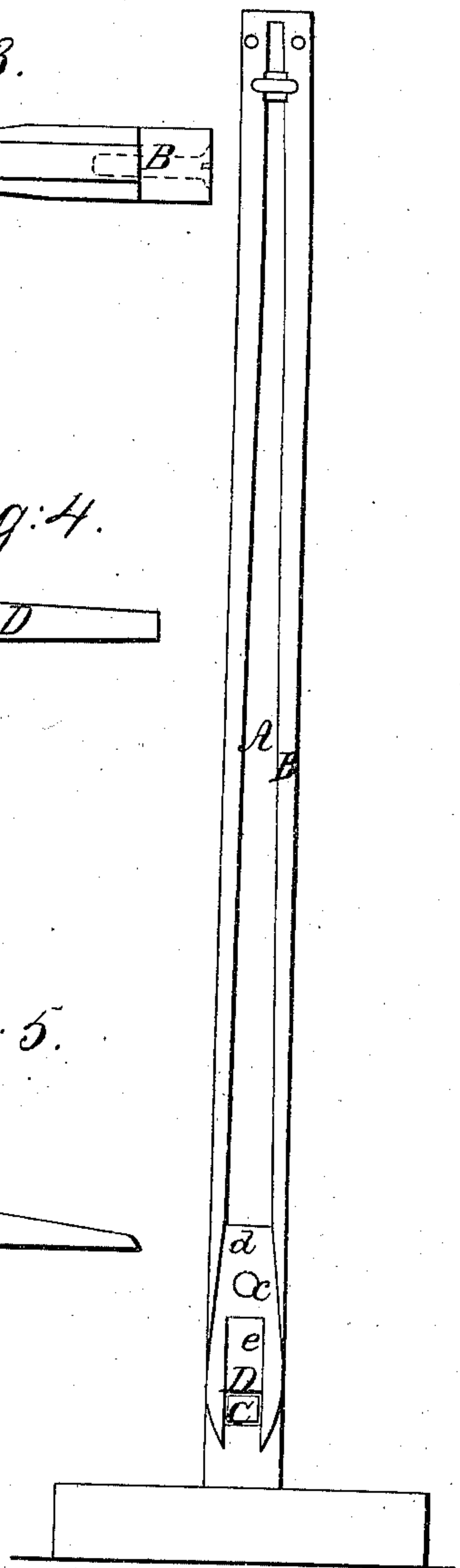
*N<sup>o</sup> 35,395.*

*Patented May 27, 1862.*

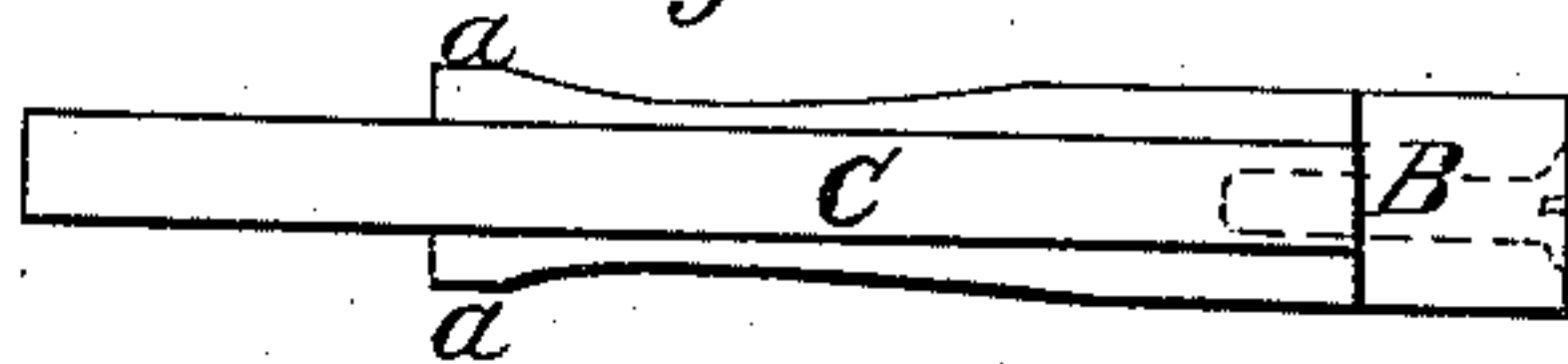
*Fig: 1.*



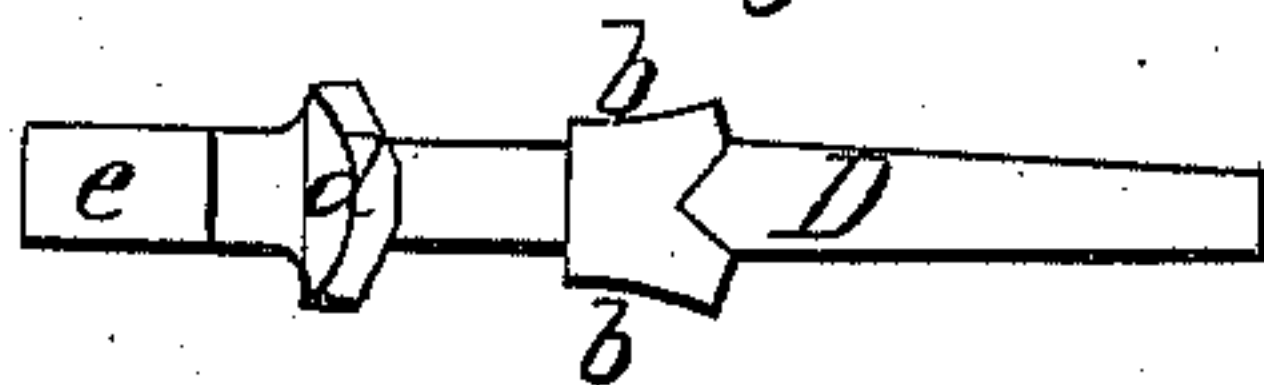
*Fig: 2.*



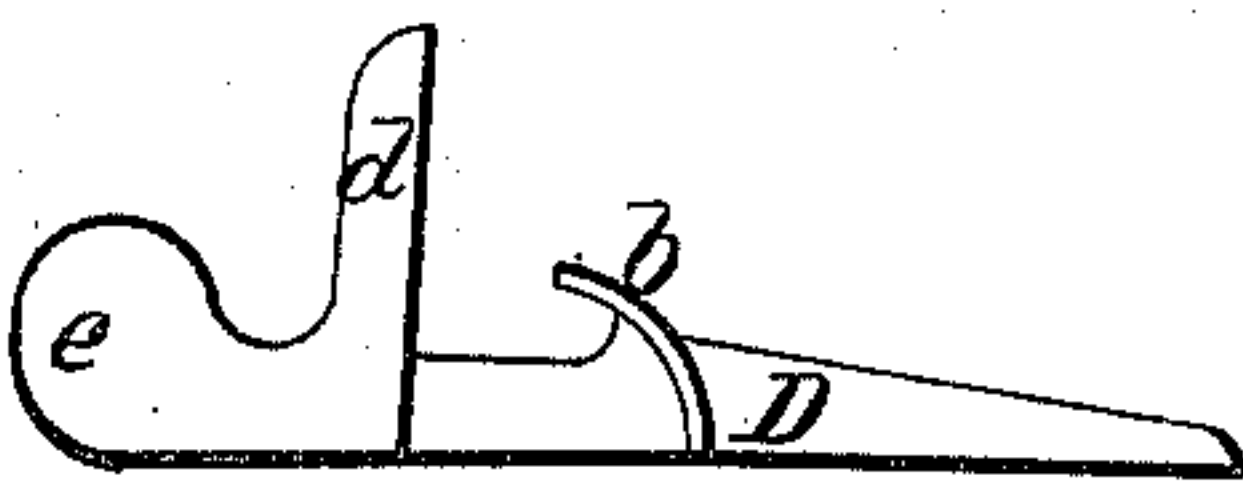
*Fig: 3.*



*Fig: 4.*



*Fig: 5.*



*Witnesses;*  
*A. P. Hall Jr.*  
*J. R. Bampton*

*Inventor;*  
*Elisha Robbins*



# UNITED STATES PATENT OFFICE.

ELISHA ROBBINS, OF HOPEDALE, MASSACHUSETTS.

## IMPROVEMENT IN PICKER-STAFFS FOR LOOMS.

Specification forming part of Letters Patent No. **35,395**, dated May 27, 1862.

*To all whom it may concern:*

Be it known that I, ELISHA ROBBINS, a citizen of the United States of America, and a resident of Hopedale, in the county of Worcester and State of Massachusetts, have invented a new and useful Mechanism for Supporting and Operating the Picker-Staff of a Loom for Weaving; and I do hereby declare the same to be fully described in the following specification, and represented by the accompanying drawings, of which—

Figure 1 is a side elevation of a picker-staff and the sword of the lay of a loom as provided with my invention. Fig 2 is an end or edge elevation of the same. Fig. 3 is a top view of the curved supporter of the picker-staff. Fig. 4 is a top view, and Fig. 5 a side view, of the metallic foot of the picker-staff as separated from the said staff.

The nature of my invention consists in the arrangement of certain ears or cammed bearers, cap-guides, and the picker-staff with the foot thereof, and the supporting arm or rail of such foot; also in the arrangement of a counteracting weight with reference to the picker-staff, its curved bearing, cap-guides, and metallic foot.

In the drawings, A denotes a picker staff, and B the sword of the lay of a loom. From the said sword a curved arm or supporter, C, extends and has its upper surface inclining downward as it proceeds outward.

On each side of the arm or supporter C, and at a distance from its outer end equal to about one-third of the entire length of the said part C, there is affixed an ear or cammed bearer, *a*, the same having the form shown in the drawings.

A long metallic foot, D, having its lower edge straight, or about so, rests on the top of

the supporter and is provided with curved shoulders or caps *b b*, which project upward from it, as well as laterally, and are to rest, respectively, against the inner curved sides of the two cammed bearers *a a* while the foot is between them. The picker-staff is bifurcated at its lower end, and straddles both the foot D and the supporter C, and is fastened to the foot by means of one or more screws, *e*, which should go through it and be screwed into a standard, *d*, projecting upward from the foot.

The heel of the foot D is constructed with a weight or projection, *e*, sufficiently heavy to retract the picker-staff after each throw of a shuttle by it. While the curved shoulders or caps *b b* are to prevent the foot D from slipping off the supporter C in a longitudinal direction during the retraction of the picker-staff, the cammed bearers *a a* constitute shoulders or abutments for the lower part of the picker-staff and to maintain its foot in its proper place on the supporter during the throw of a shuttle. The curve of the upper part of the supporter is intended to be such as will cause the picker, when attached to the head of a staff, to travel in a straight line through the shuttle-box.

My improved arrangement for supporting the foot of the picker-staff has been found to be very efficient, durable, and serviceable in practice.

I claim—

The arrangement of the cammed bearers *a a*, their shoulders or caps *b b*, and the picker-staff with the foot D and supporting-arm C, as described.

ELISHA ROBBINS.

Witnesses:

J. R. BAMPTON,  
F. P. HALE, Jr.