

J. H. KNOWLES.  
Stop for Picker-Staffs.

No. 131,354.

Patented Sep. 17, 1872.

Fig. 1.

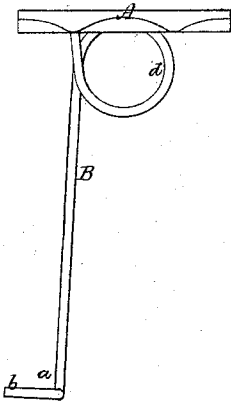


Fig. 2.

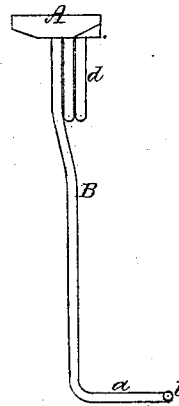


Fig. 3.

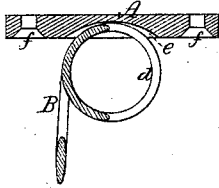


Fig. 4.

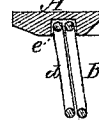
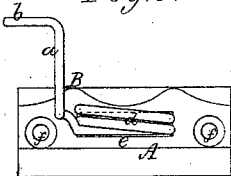


Fig. 5.



Witnesses  
S. N. Piper  
L. N. Woollen

Jacob H. Knowles.  
by his attorney  
R. H. Eddy

# UNITED STATES PATENT OFFICE.

JACOB H. KNOWLES, OF LAWRENCE, MASSACHUSETTS.

## IMPROVEMENT IN STOPS FOR PICKER-STAFFS.

Specification forming part of Letters Patent No. **131,354**, dated September 17, 1872.

*To all whom it may concern:*

Be it known that I, JACOB H. KNOWLES, of Lawrence, in the county of Essex and State of Massachusetts, have invented a new and useful Elastic Stop for the Picker-Staff of a Loom; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a side elevation; Fig. 2, an end elevation; Fig. 3, a longitudinal section; Fig. 4, a transverse section; and Fig. 5, a lower end view of it.

When in use it is to be fastened to the lower side of the lay of a loom, and in a position for the picker-staff near the expiration of its retreat to strike the foot of the spring.

The article consists of a grooved or slotted base-plate, A, and a helical spring or leg, B, provided with a foot, *a*, and toe *b*. The spring is formed of wire coiled near one end helically, as shown at *d*, the wire at such end being inserted and fixed in the grooved or slotted base-plate or carrier A, whose slot or recess *e* receives the coils, and has a width corresponding with the width of the coils, all being as shown. The wire near its other end is also bent twice at a right angle, in manner as repre-

sented, so as to form the bearing or foot *a* and the toe or guard *b*. Holes *ff* are also made through the carrier for fastening it to the lay by screws.

With the article so made the wire spring, after the carrier may have been fixed in place in the lay, can be bent and adjusted readily to the picker-staff, so as to gradually break at the proper time the force of its retreat as well as that of the picker. The toe serves to preserve the spring in its normal position or from being thrown aside laterally by the picker-staff. Were it not for the toe the spring would be liable to be bent laterally by the picker-staff on striking it, and, as a consequence, to slip by the staff. The recess, slot, or groove in the carrier prevents the coils from being thrown out of place while the article is in use.

I claim as my invention—

The picker-staff "elastic stop," as described, composed of the recessed carrier, and the coiled spring formed with the foot and toe, all constructed, combined, and arranged as set forth.

JACOB H. KNOWLES.

Witnesses:

R. H. EDDY,  
J. R. SNOW.