(No Model.)

# E. BARSALOU.

## SHUTTLE BINDER FOR LOOMS.

No. 388,243. Patented Aug. 21, 1888.

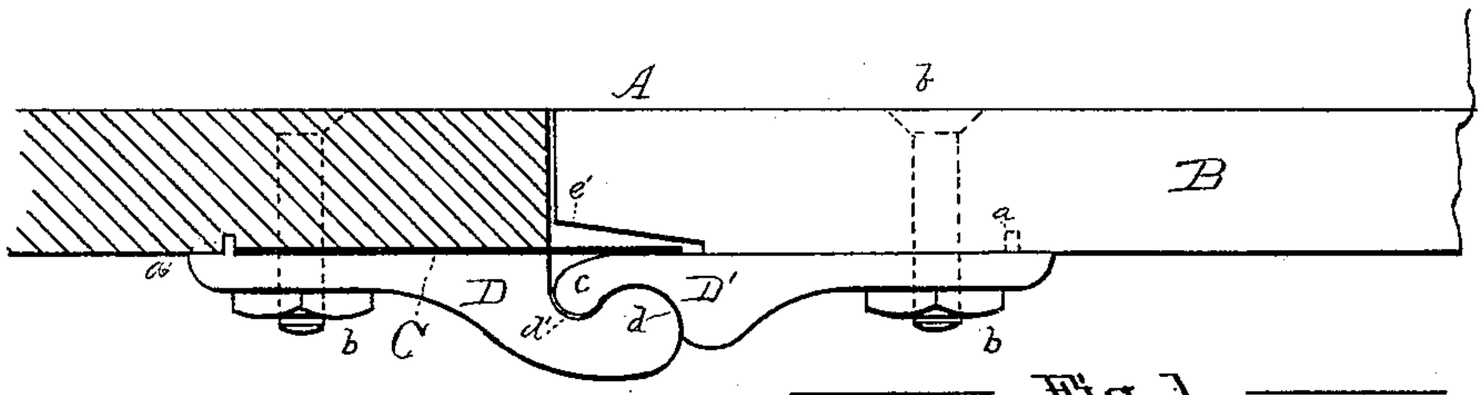


Fig. 1.

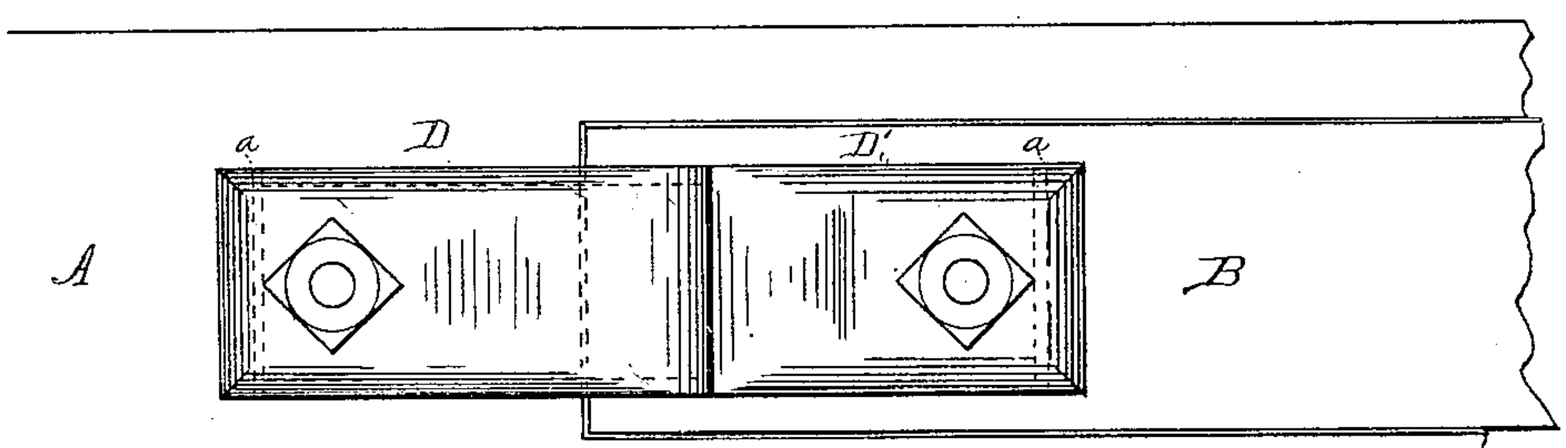


Fig. 2.

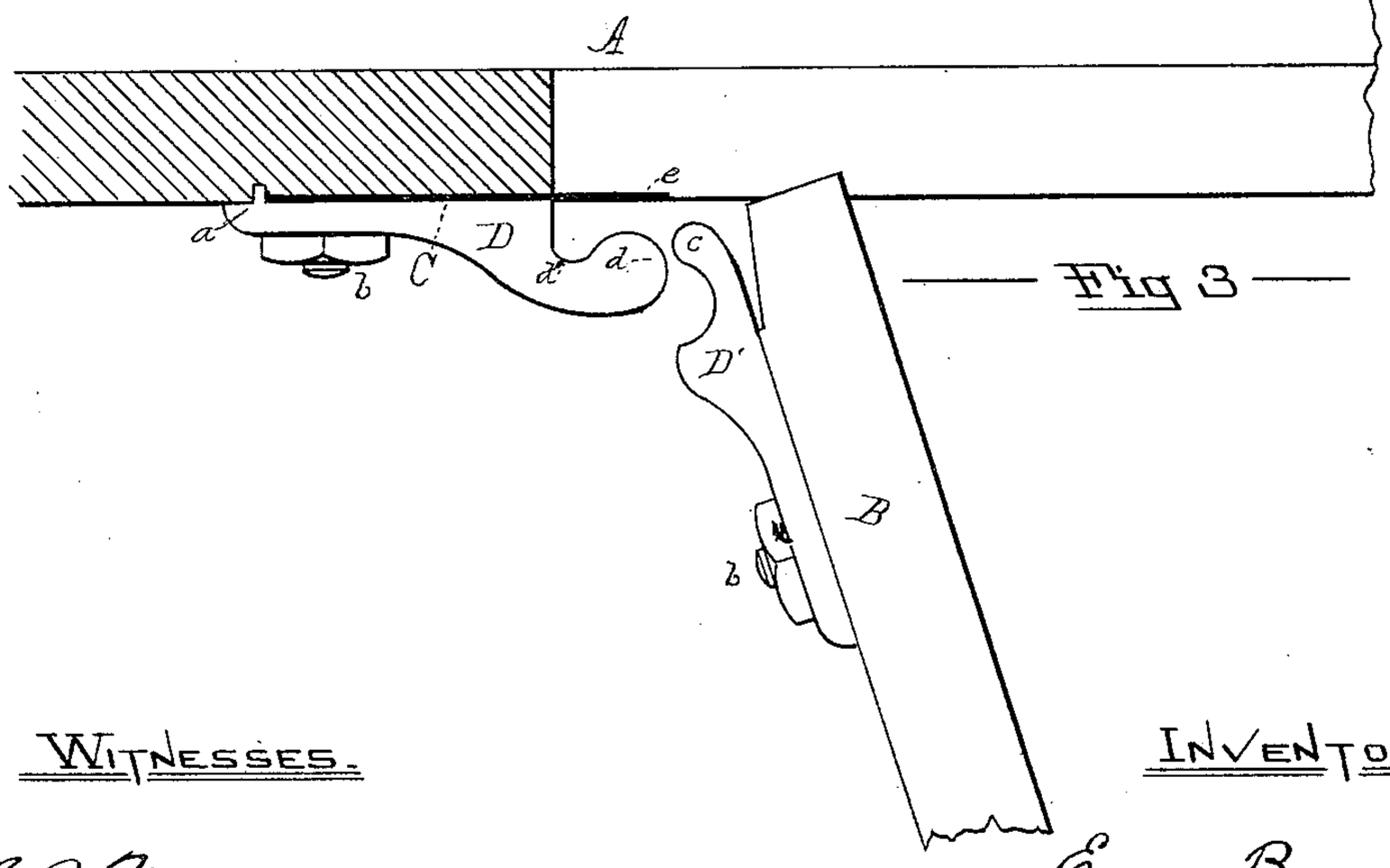


Fig 3

WITNESSES.

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# UNITED STATES PATENT OFFICE.

EUGENE BARSALOU, OF WOONSOCKET, RHODE ISLAND, ASSIGNOR OF ONE-HALF TO THOMAS C. GONYER, OF SAME PLACE.

## SHUTTLE-BINDER FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 388,243, dated August 21, 1888.

Application filed November 26, 1887. Serial No. 256,228. (No model.)

*To all whom it may concern:*

Be it known that I, EUGENE BARSALOU, a citizen of the United States, and a resident of Woonsocket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Shuttle-Binders for Looms; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a broken plan view, partially in section, of a shuttle swell or binder of a loom and part of a shuttle-box with my invention applied. Fig. 2 is a side view thereof; and Fig. 3 is a view similar to that in Fig. 1, with the swell or binder swung outward and detached.

The invention relates to improvements in shuttle binders or swells for looms; and it consists of a binder or swell having a hinged joint so constructed as to render the parts removable without the application of a wrench or other tool.

Ordinarily a pin-connection is used for holding the swells or binders in position in shuttle-boxes.

The object of my invention is to provide a joint simple in its construction, easily adjusted, and presenting very little friction.

Referring to the drawings, A represents a portion of the shuttle-box of a loom, and B the swell or binder thereof.

D D′ show the extensions or leaves of the hinge-joint, the leaf D having the head *d* rounded in cross-section and provided with the reversedly-curved portion *d′*. The head *c* of the leaf D′ corresponds in curves to the curves *d d′*, and normally works therein. The leaves D D′ are secured to the respective parts A B by the bolts and nuts *b*, and are prevented from turning by the ribs *a* thereon seated in the wooden portions.

C is a spring-plate secured between the leaf D and the box A, its end *e* extending over and pressing against the inner surface of the portion *c* of the leaf D′, the outer end, *e′*, of the swell B being beveled, as shown, to allow the spring to bend inward as the opposite end of the swell is turned outward by the shuttle, and also to allow space for the play of the end of the spring when it is desired to remove the swell, the curves of the head *c* turning on the curves *d d′*.

It is obvious that the swell may be removed by pulling the swell sufficiently outward to disconnect the joint of the hinge.

Having described my invention, what I claim is—

The combination, with the box A and the swell B, having the beveled end *e′*, of the removable hinge-leaves D D′, having the ribs *a a*, and the swell head portions *c* and *d d′*, the spring-plate C, secured between the leaf D and the box and having its end extending upon the portion *c*, the bolts *b*, and the nuts, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

EUGENE BARSALOU.

Witnesses:

JEFFERSON ALDRICH,

GEORGE W. SPAULDING.