

No. 681,599.

Patented Aug. 27, 1901.

F. A. WARDWELL.  
DROP BOX PICKER FOR LOOMS.

(Application filed Feb. 6, 1901.)

(No Model.)

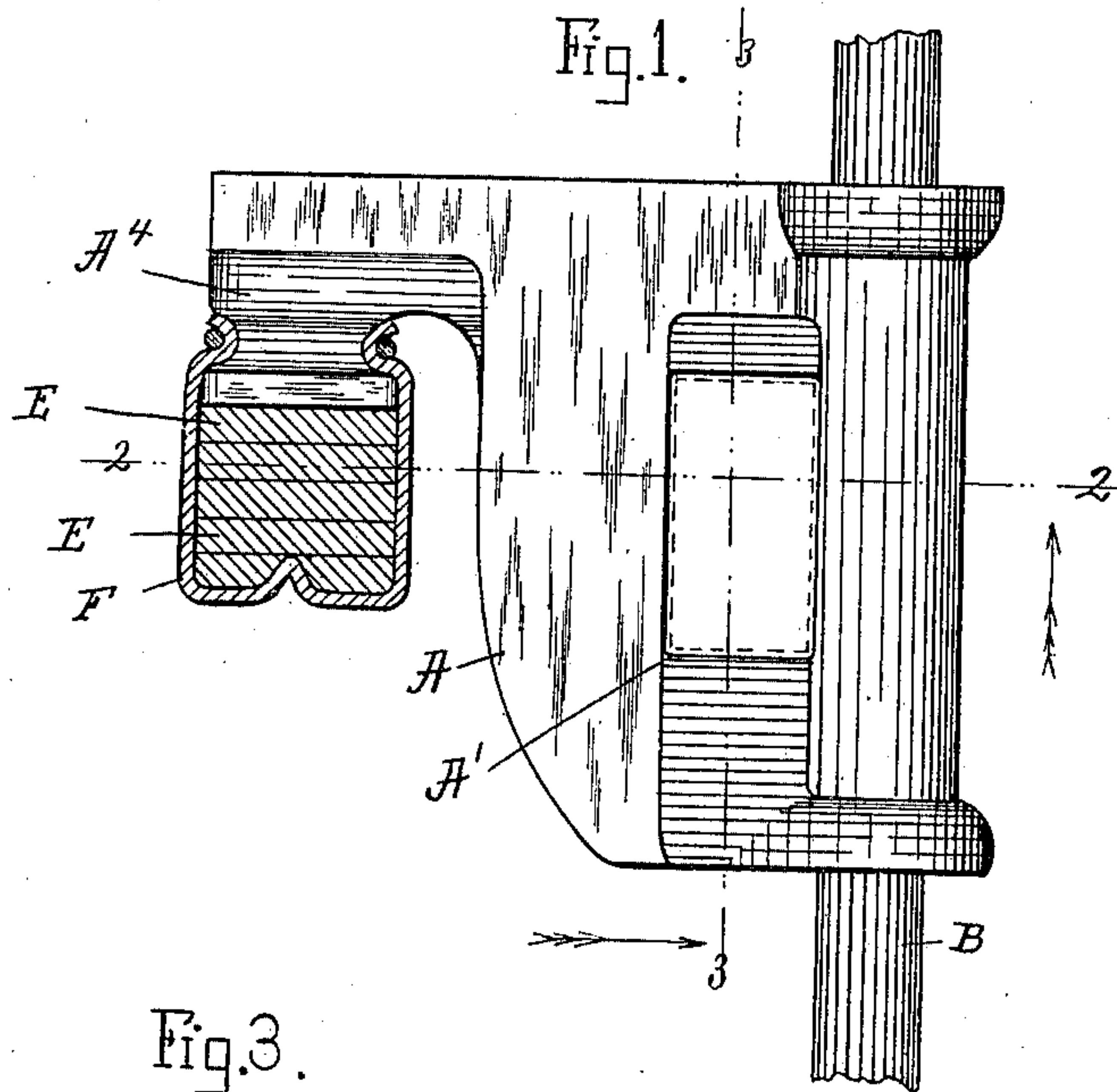
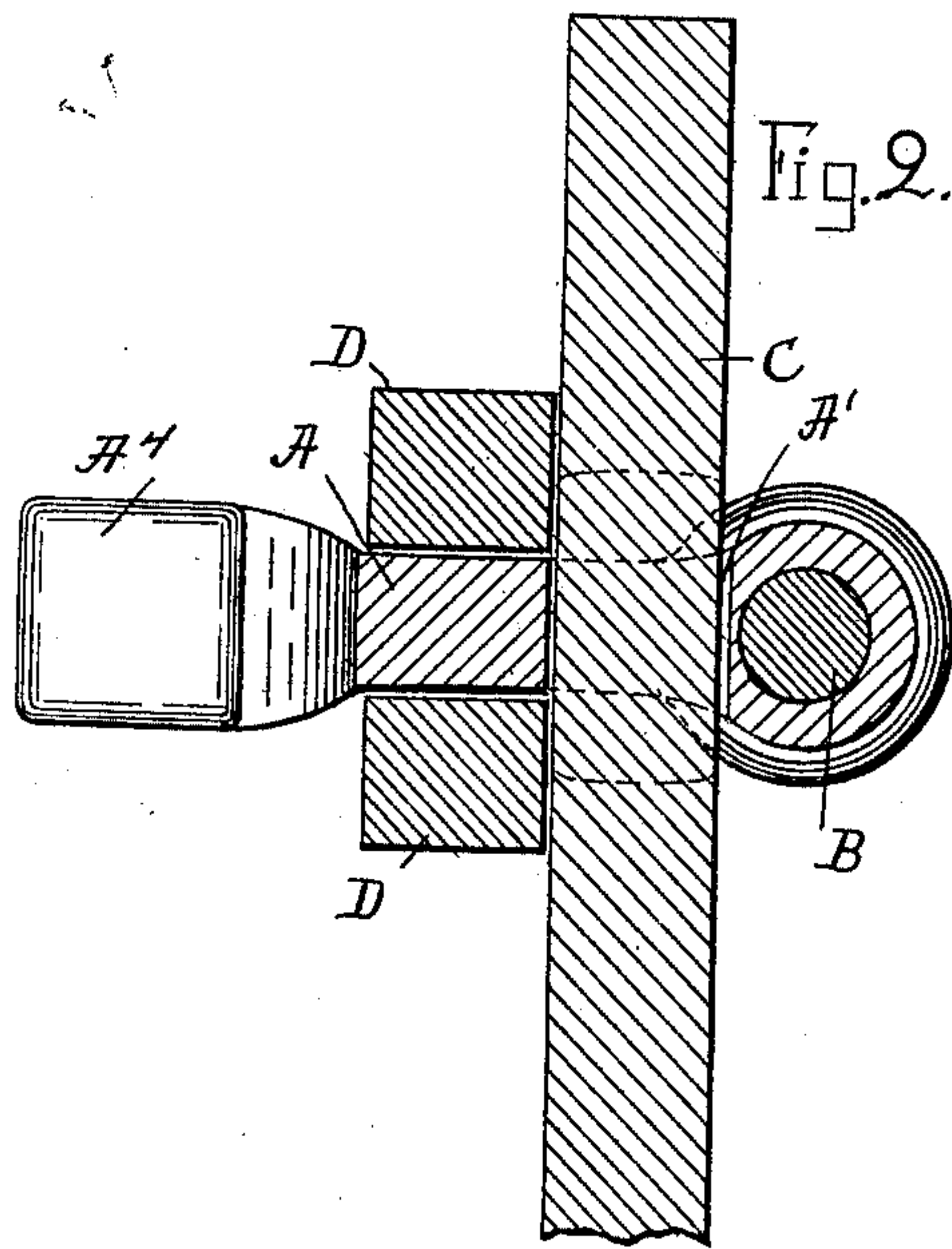
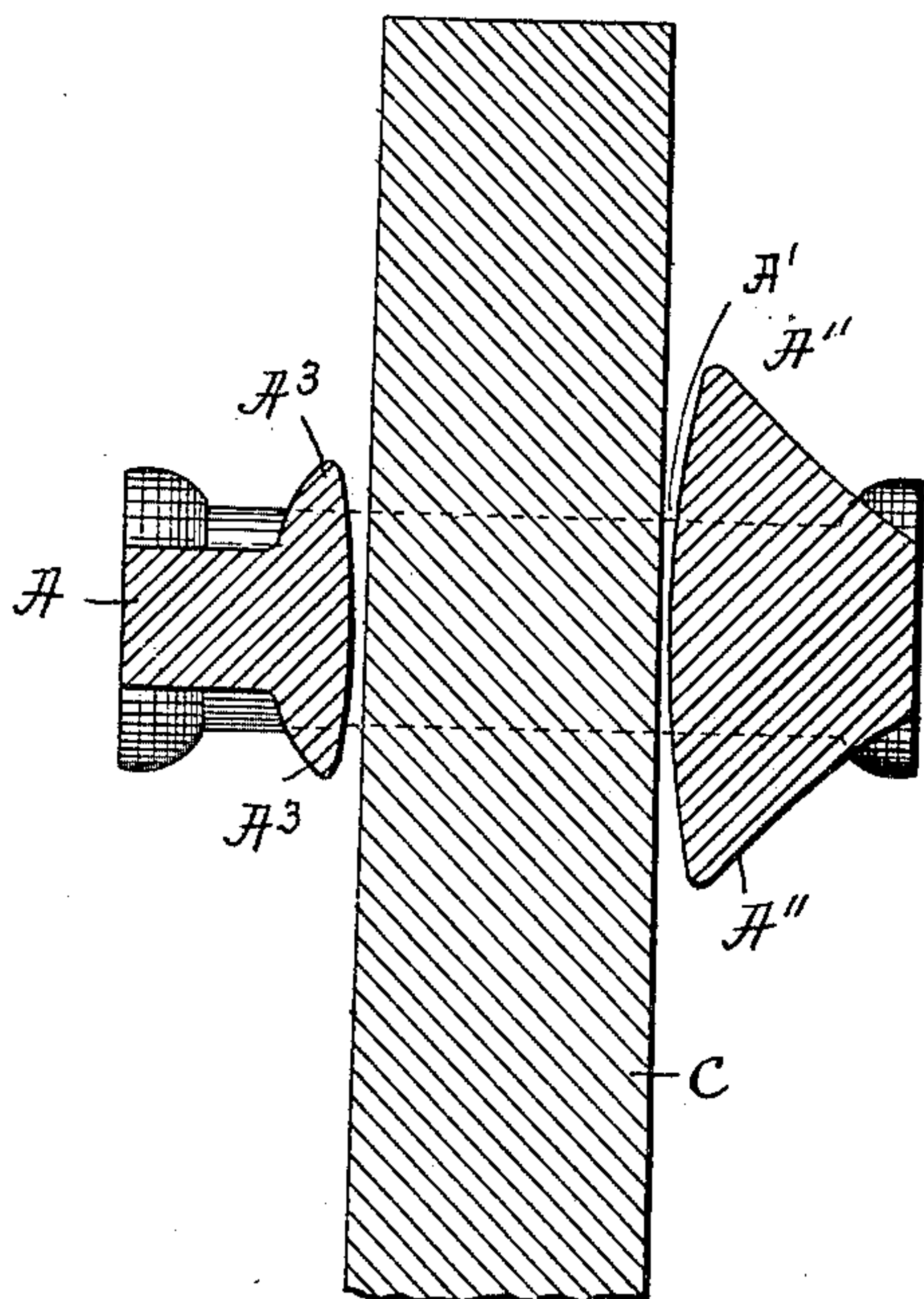


Fig. 3.



Witnesses.

Lauritz N. Möller  
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# UNITED STATES PATENT OFFICE.

FRANK A. WARDWELL, OF METHUEN, MASSACHUSETTS.

## DROP-BOX PICKER FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 681,599, dated August 27, 1901.

Application filed February 6, 1901. Serial No. 46,209. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK A. WARDWELL, a citizen of the United States, residing at Methuen, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Drop-Box Pickers for Looms, of which the following is a specification.

This invention relates to improvements in drop-box pickers for looms; and it is carried out as follows, reference being had to the accompanying drawings, wherein—

Figure 1 represents a top plan view of the picker-frame, showing the picker-head in section. Fig. 2 represents a cross-section on the line 2 2 in Fig. 1, showing the picker-head removed and showing the picker guides and staff in section; and Fig. 3 represents vertical section on the line 3 3 shown in Fig. 1.

Similar letters refer to similar parts wherever they occur in the drawings.

The invention is preferably applicable to what are termed "drop-box pickers for looms," in which a plurality of shuttles are used; and it consists of a metal frame A, which is guided on a horizontal spindle B, forming a part of a loom of the kind mentioned above. The said metal frame A is preferably provided with a perforation A', through which is inserted the usual picker-staff C, which is actuated in the usual manner for reciprocating the picker during the weaving operation.

D D in Fig. 2 represents the ways between which the picker-frame A is guided during its reciprocating motion, as usual. At the ends of the perforation A', that receives the picker-staff C, I make on the metal frame A vertical projections A'' and A<sup>3</sup>, preferably slightly curved on their interior portions for the purpose of preventing the picker-staff C from being cut or abraded during its oscillating motion. In one piece with the metal frame A is made a side projection A<sup>4</sup>, to which the picker-head is attached. The picker-head may be made in any suitable or desirable manner without departing from the essence of my invention. In the drawing Fig. 1 I have shown such picker-head as consisting of layers E E, of leather or other desirable material, inclosed within a molded cover of rawhide F or other equivalent material, attached

in a suitable manner to the side projection A<sup>4</sup> of the frame A, as shown in Fig. 1.

In devices of this kind the frame and picker-head have been made integral, usually of sheets of laminated leather or rawhide, and such devices are very costly on account of the breaking down of the picker-head, rendering the entire picker useless and necessitating the replacement of a new frame and picker-head.

By making the device as shown in my application—namely, a metal frame separate from the picker-head—I am enabled at a very slight expense to replace the picker-head when worn out without the necessity of replacing the frame that carries the picker-head, and by this construction a great saving in expense is made, as the frame may be used indefinitely, needing only to attach to it from time to time a picker-head as the latter is worn out or becomes useless.

What I wish to secure by Letters Patent and claim is—

1. A drop-box picker for looms consisting of a frame or carrier having a perforation for receiving the picker-staff and having at the ends of such perforation vertical projections A'', A<sup>3</sup> and having a side projection A<sup>4</sup> and a detachable picker-head secured to the latter, substantially as and for the purpose set forth.

2. In combination, a frame provided with a perforation to receive a picker-staff, a projection formed integral with said frame, a picker-head, a covering of flexible material therefor, and means for attaching said flexible covering to said projection thereby connecting the picker-head thereto.

3. In combination, a frame, a projection formed integral with said frame, a picker-head, a covering of flexible material therefor, and means for attaching said flexible covering to said projection thereby connecting the picker-head thereto.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK A. WARDWELL.

Witnesses:

ALBAN ANDRÉN,

RICHARD C. ULBRECH.