

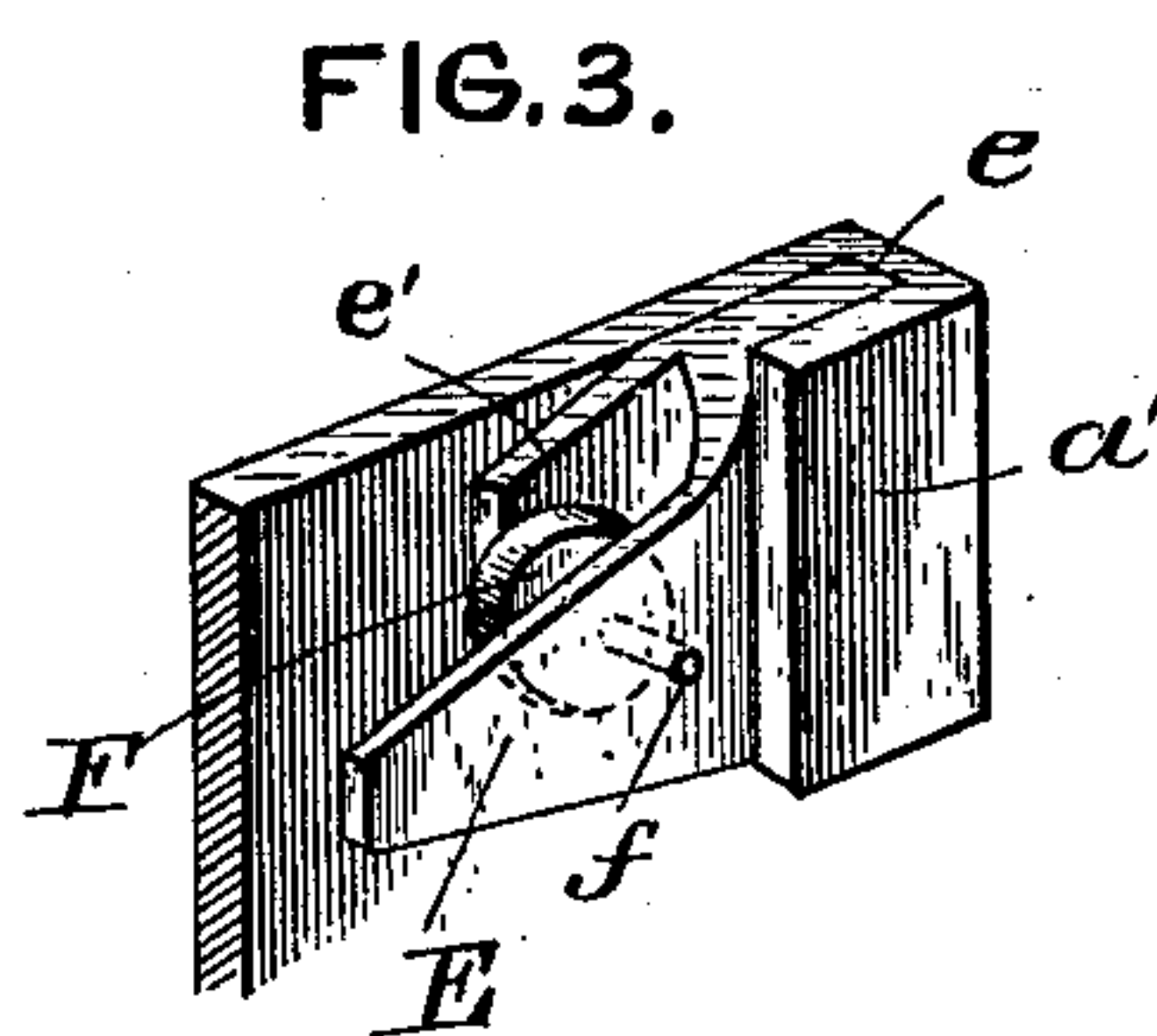
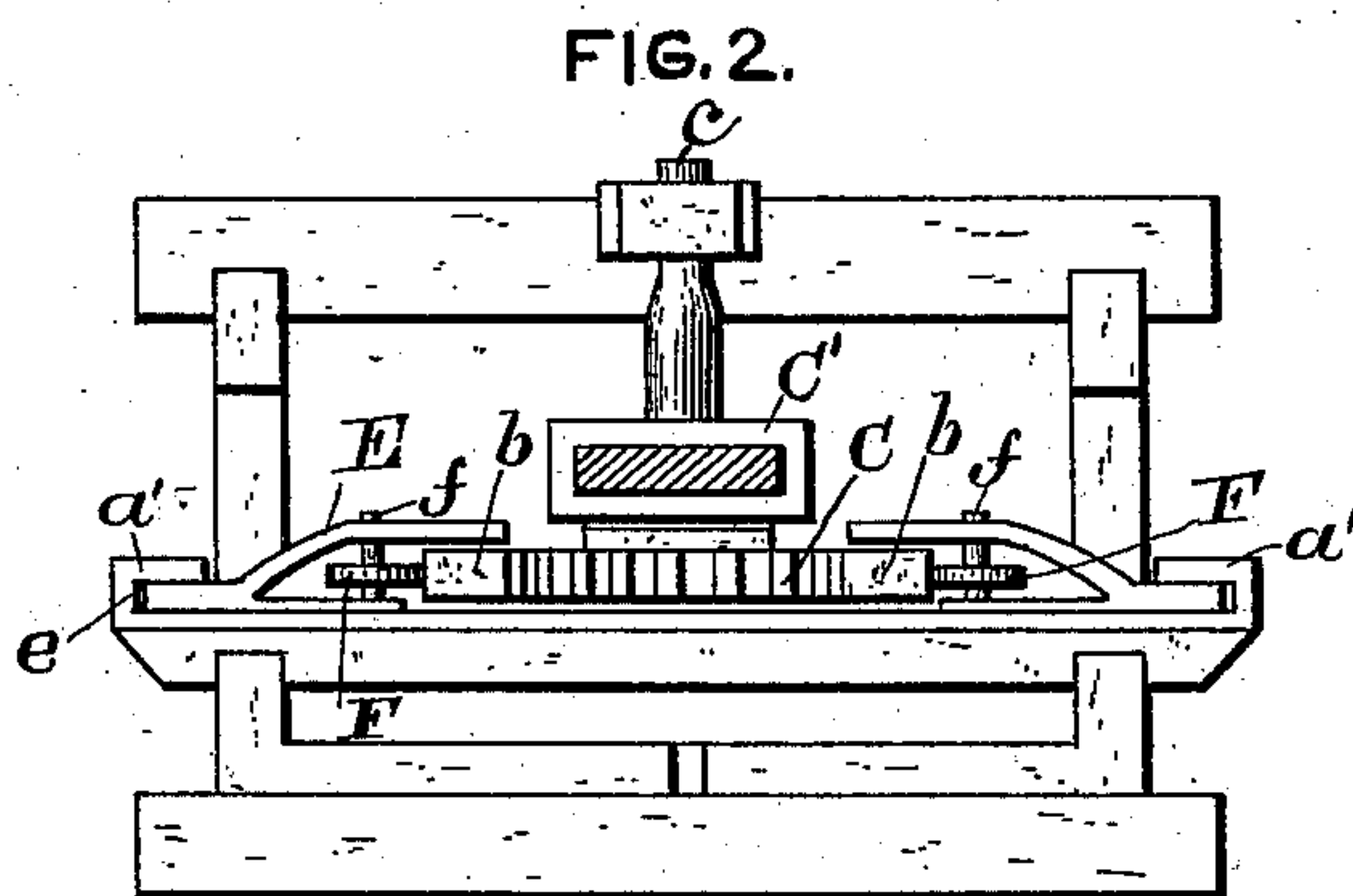
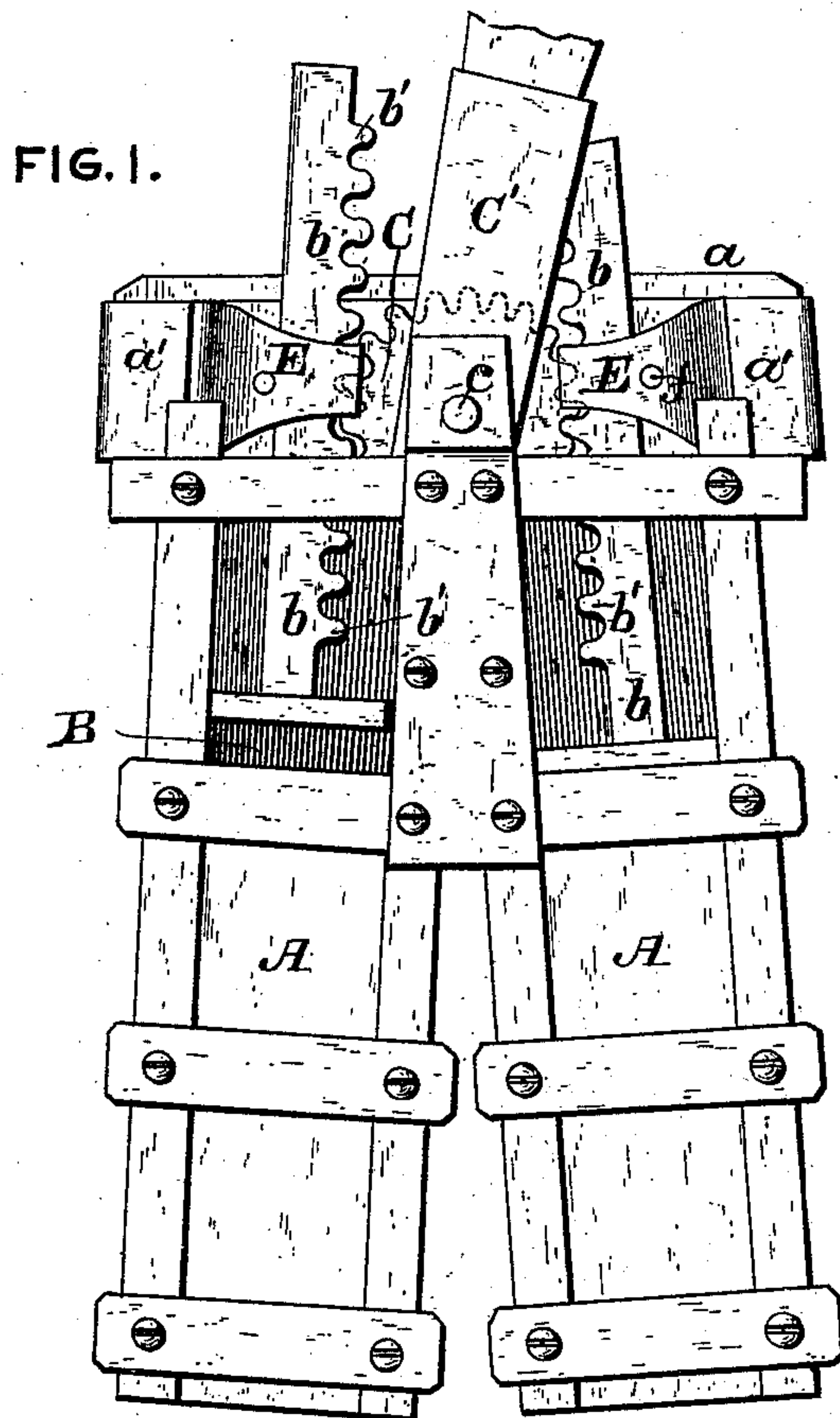
(No Model.)

M. L. COPE.

HAY PRESS.

No. 364,905.

Patented June 14, 1887.



ATTEST  
*J. Henry Kaiser*  
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INVENTOR.  
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*his atty.*



# UNITED STATES PATENT OFFICE.

MASON L. COPE, OF DENTON, TEXAS, ASSIGNOR OF THREE-FOURTHS TO  
HENRY H. DAWSON, OF SAME PLACE.

## HAY-PRESS.

SPECIFICATION forming part of Letters Patent No. 364,905, dated June 14, 1887.

Application filed March 24, 1887. Serial No. 232,299. (No model.)

*To all whom it may concern:*

Be it known that I, MASON L. COPE, a citizen of the United States, residing at Denton, in the county of Denton and State of Texas, have  
5 invented certain new and useful Improvements in Hay or Cotton Presses; and I do hereby 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 ap-  
10 pertains to make and use the same.

Figure 1 is a plan view of this device. Fig. 2 is an end view; Fig. 3, a detail in perspective, showing the anti-friction roll and its attachment to the machine.

15 This device belongs to that class of inventions known as "hay" or "cotton" presses; and it consists in certain novel features, as will be hereinafter more fully set forth and explained, reference being had to the accompanying  
20 drawings.

In the drawings, A A denote those portions of the press into which the hay, cotton, or other material to be pressed is fed and in which the compression is effected. These  
25 portions of the machine may be of any usual or ordinary construction.

B B are the plungers, and *b* their stems, having the usual rack thereon at *b'*. These are actuated in the usual manner by the cog  
30 C, which is placed between them, working on the pivot or axis *c*, which has any suitable bearings in the body of the machine. By this construction the plungers will have the usual reciprocating movement when the machine is  
35 in use.

The cog-wheel C is operated by means of the socket C', which is secured upon its axis or shaft *c*. The rack-bars of the plungers each pass between the rear wall, *a*, of  
40 the press and the bracket E. This bracket has a flange, *e*, by means of which it is fixed in the guideways *a'* on the press, and its forward or inner end is curved outwardly, so that it comes upon the outside of the rack-bar  
45 and extends slightly over the edges of the cog-wheel C, though this latter feature is not especially important. By this construction the racks are kept in place, so that they will always be in positive engagement with the  
50 cogs of the wheel C. In order to insure ease and freedom of movement on the part of the rack-stems *b*, there is provided an anti-friction roll, F, between the curved part of the bracket and its flange *e'*, or the rear plate of

the machine, each pivoted on a pin, *f*. These  
55 rolls, of which there is one adapted to operate upon the back of each rack-stem, essentially contribute to the ease with which the plunger is worked.

In above designating the rear part of the  
60 press it is not meant that the rear wall of the machine is directly used in every instance, because there may be, as is now shown, a metallic plate fixed there, the bent ends of which will constitute the guideways, by means of  
65 which the brackets are placed in position. The mere mechanical details of this structure can, of course, be changed at will, so long as their essential construction, which has been above pointed out, is adhered to. The ad-  
70 vantages of these detachable brackets are that the machine can be very readily put together so far as the brackets and anti-friction rolls are concerned, or taken apart when  
75 necessary; also, in that the brackets provide strong and durable guideways for the rack-stems.

Having now described the invention, what is considered new and patentable is—

1. In a hay or other press, in combination  
80 with the plungers and their rack-stems, the cog C, the brackets E, and the anti-friction rolls F, operating each on the rear of one of the rack-stems, substantially in the manner and  
85 for the purposes set forth.

2. In a hay or other press substantially as described, the rack-stems *b*, combined with the brackets E, detachably secured to the  
90 press, their forward ends constituting in connection with the rear plate of the press guideways for said stems, substantially as shown and described.

3. In a hay or other press having the guideways *a'*, the brackets E, having flange *e*, and combined with the plungers and rack-stems,  
95 substantially in the manner and for the purposes set forth.

4. In a hay or other press, the brackets E, curved as described, and having the flange *e*, combined with the ways *a'*, the anti-friction  
100 rolls F, and with the rack-stems *b* and plungers B, substantially in the manner and for the purpose set forth.

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

Witnesses: MASON L. COPE.  
A. W. ROBERTSON,  
H. H. DAWSON.