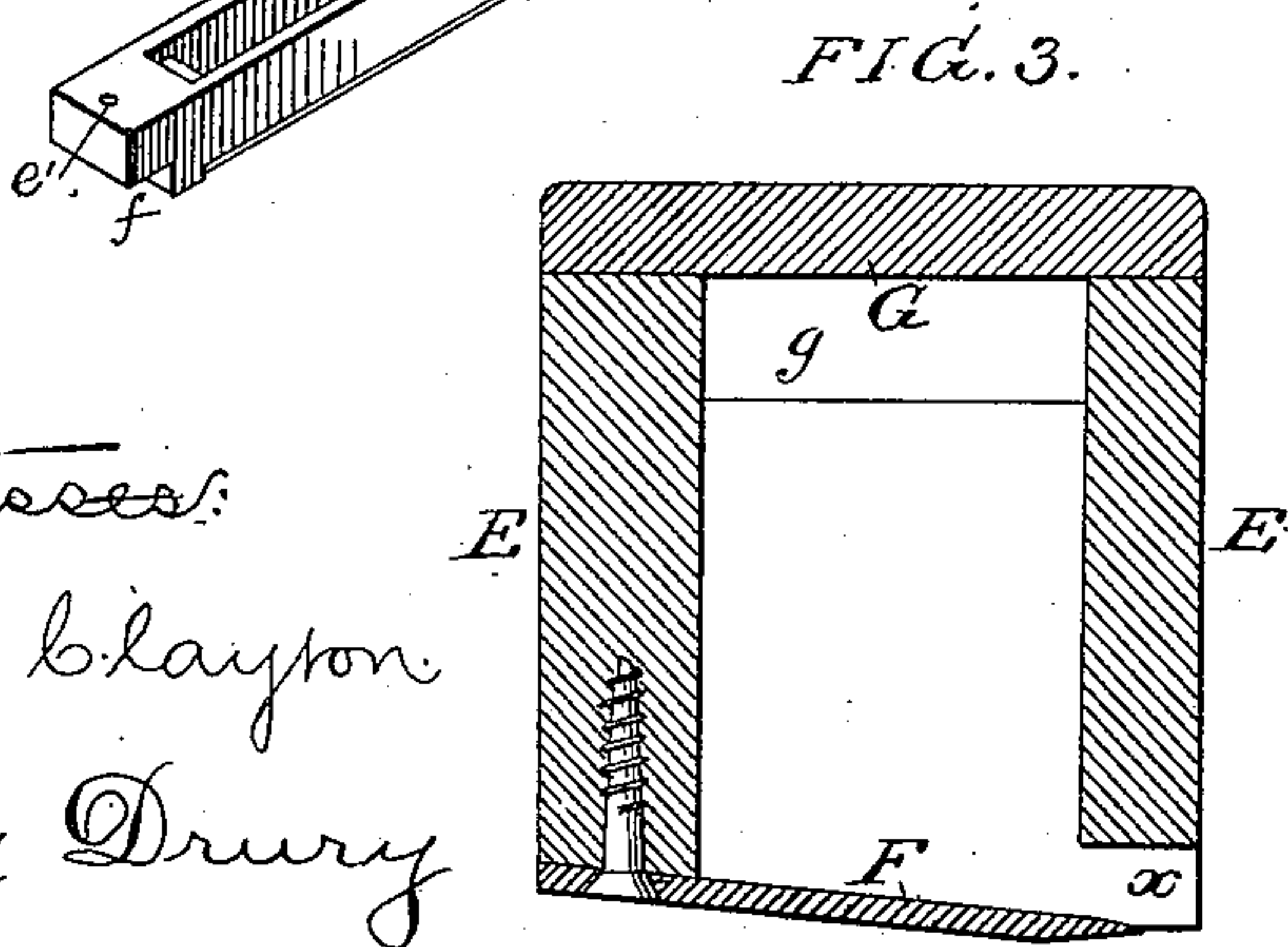
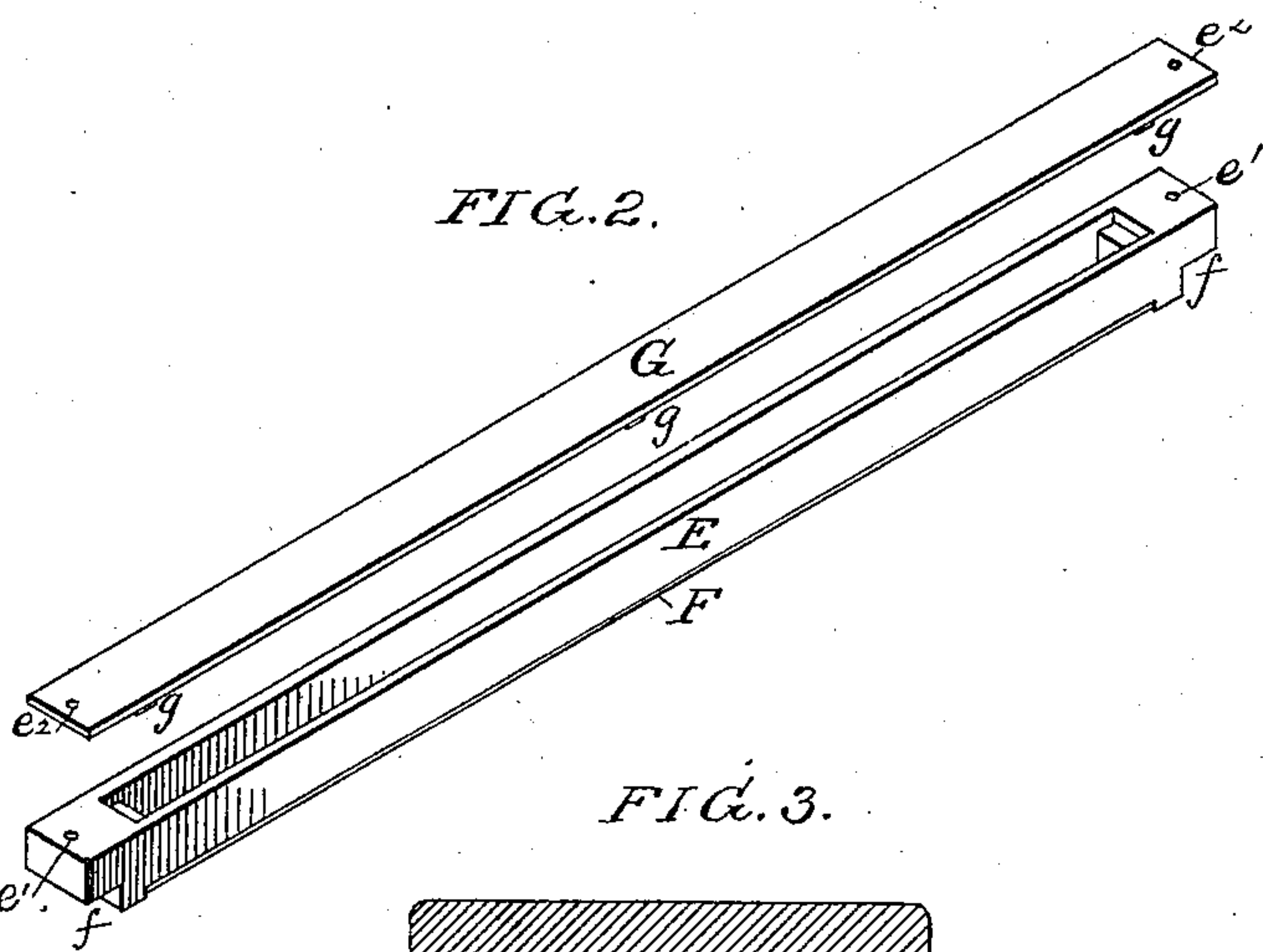
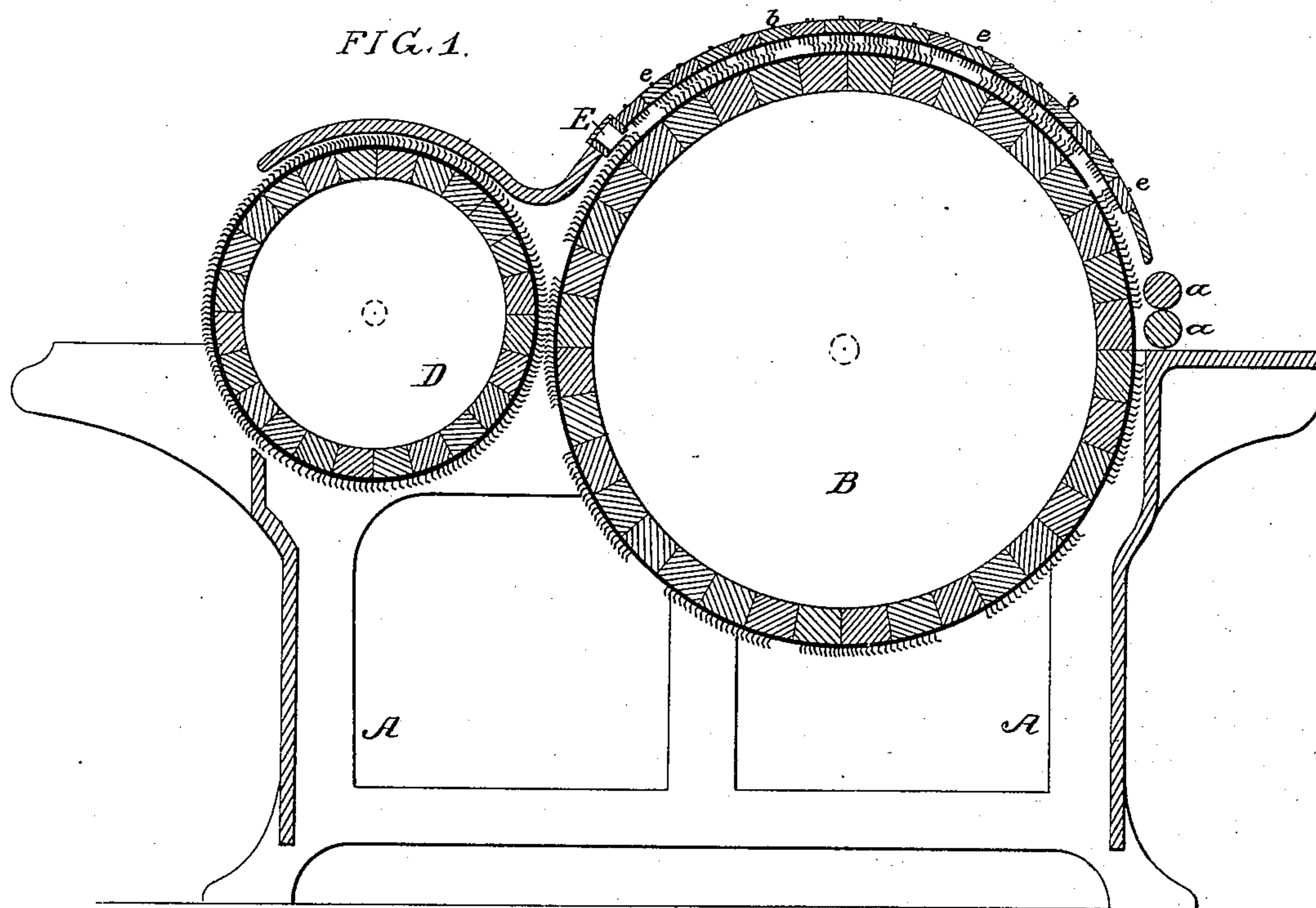


(No Model.)

J. ABBOTT.
CARDING MACHINE.

No. 316,215

Patented Apr. 21, 1885.



Witnesses:
John M. Clayton
Harry Drury

Inventor:
John Abbott
By his Attys
Howan & Sons

UNITED STATES PATENT OFFICE.

JOHN ABBOTT, OF PHILADELPHIA, PENNSYLVANIA.

CARDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 316,215, dated April 21, 1885.

Application filed October 6, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN ABBOTT, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain
5 Improvements in Carding-Machines, of which the following is a specification.

My invention relates to that class of carding-machines known as "top-flat cards;" and it consists of an improved device for removing
10 the particles of foreign matter collected in a carding-machine.

In the accompanying drawings, Figure 1 is a longitudinal section of a top-flat carding-machine to which my improved cleaner has been
15 applied; Fig. 2, a perspective view of the cleaner detached, and Fig. 3 a transverse section of the cleaner drawn to an enlarged scale.

Referring to Fig. 1, A is the frame of the carding-machine; B, the main cylinder; *a a*, the feed-rolls; D, the doffer, and *b* the card-flats, which cover about one-third of the main cylinder, and are held in place on the frame by pins *e*, which pass through openings in
20 each end of the flat. I replace the last flat of the series by my improved cleaner attachment, which is constructed as shown in Figs. 2 and 3.

E is an elongated box, open at the bottom, and to the under side of this box is secured a blade or knife, F, adapted to present its beveled edge to the advancing teeth of the main cylinder B as the latter revolves when the attachment is applied to the machine. Between the front edge of the box and the knife
30 is left a space, *x*, through which the foreign matter detached by the knife passes into the interior of the box.

It will be seen that the box is of about the same size in width and length as the ordinary flat, and is provided with openings *e' e'* at opposite ends to fit over the usual retaining-pins,
40 *e*, for the flats, so that the improved attachment may be readily applied to existing machines by simply removing the last flat now in use and replacing by the attachment without

altering, modifying, or even stopping the carding-machine. The attachment may also be as readily withdrawn again for inspection, sharpening of the knife, or other purpose.

The box is shown as being somewhat deeper than the flats, in order to get the knife down
50 into close proximity to the teeth of the cylinder, the ends of the box being cut away, as at *f*, for this purpose.

To the top of the box E is applied a detachable lid, G, which can be entirely removed
55 without disturbing the box itself when it is desired to remove the foreign matters which have collected in the box. The lid G is provided with blocks *g*, Figs. 2 and 3, on its under side, to fit within the slot of the box and
60 keep the lid in place, and the latter is extended to the full length of the box, as shown. Openings *e'*, Fig. 2, are provided to fit over the tops of the pins *e*.

I claim as my invention—

1. The herein-described attachment for top-flat carding-machines, said attachment consisting of an elongated box of the length and width of an ordinary flat, and having a cleaner-knife at its under side, and at opposite ends
70 openings adapted to fit the usual retaining-pins for the flats on the frame of the machine, substantially as set forth.

2. The herein-described attachment for top-flat carding-machines, said attachment consisting of an elongated box of the width and length of an ordinary flat, and adapted to be
75 applied to the machine in place of the latter, the box having applied to its top a detachable lid, and to its under side a knife, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN ABBOTT.

Witnesses:

HARRY SMITH,
HENRY HOWSON, Jr.