

(No Model.)

C. H. LEWIS.
CORE BOX.

No. 254,830.

Patented Mar. 14, 1882.

Fig. 1.

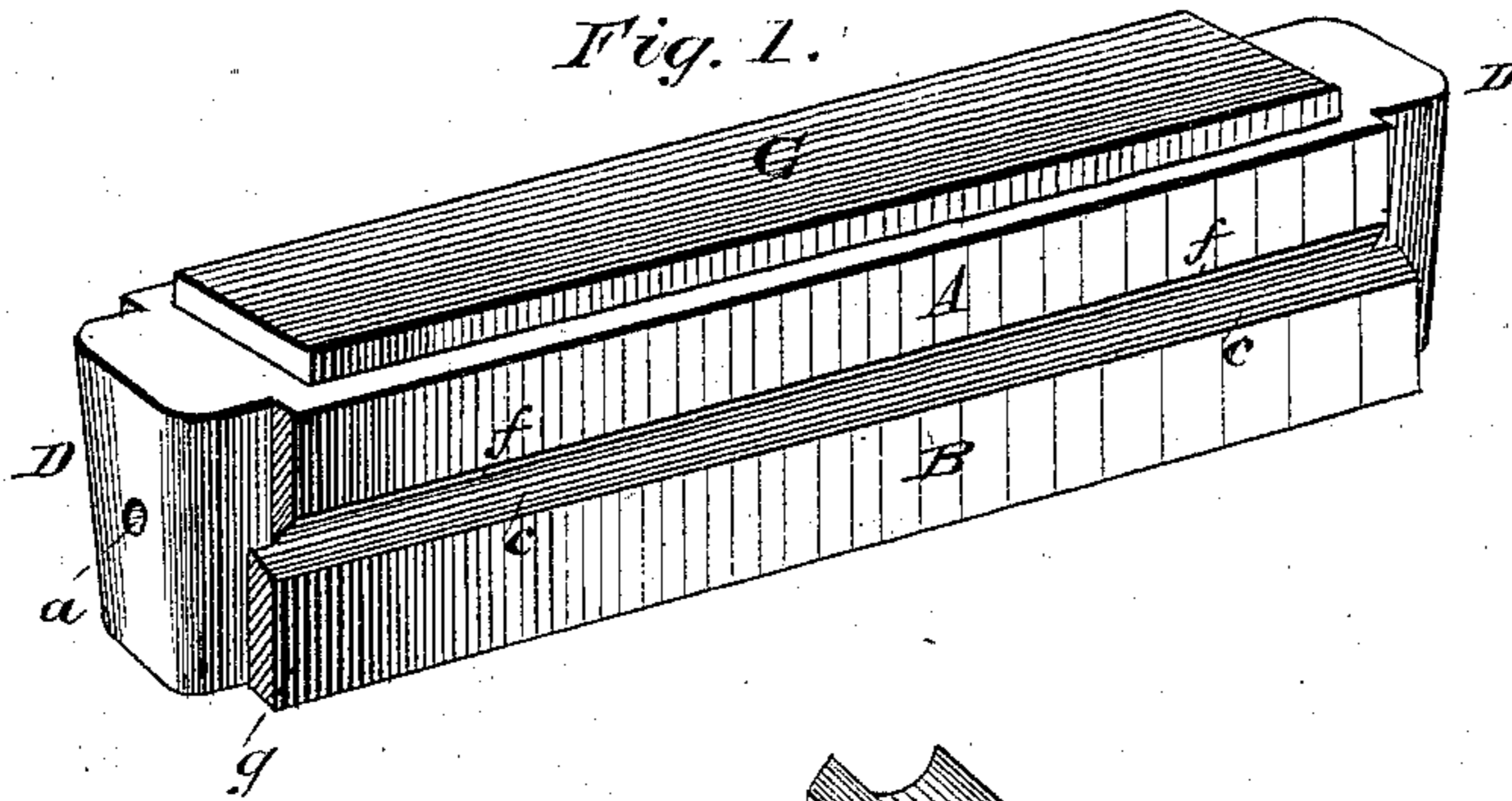


Fig. 2.

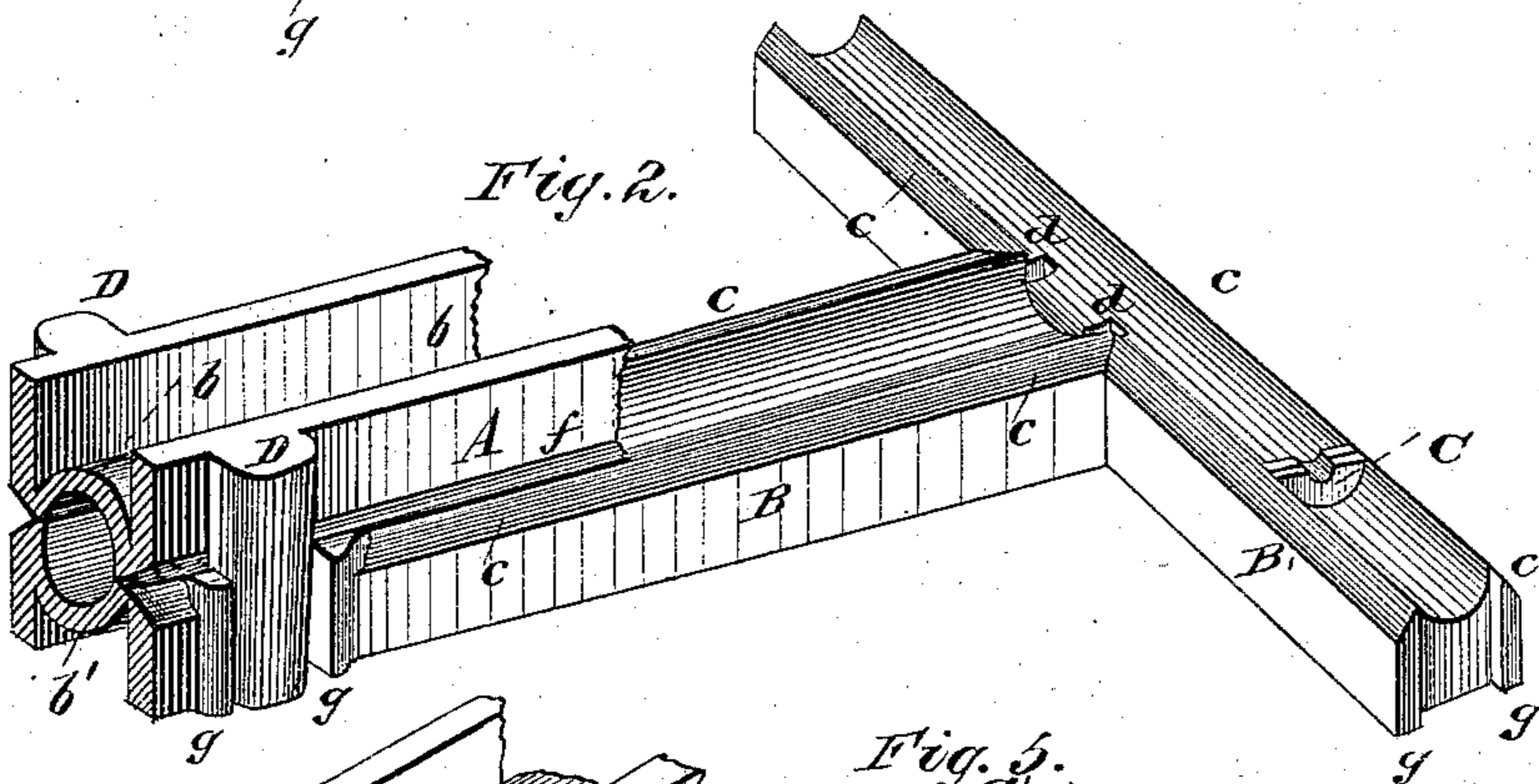


Fig. 3.

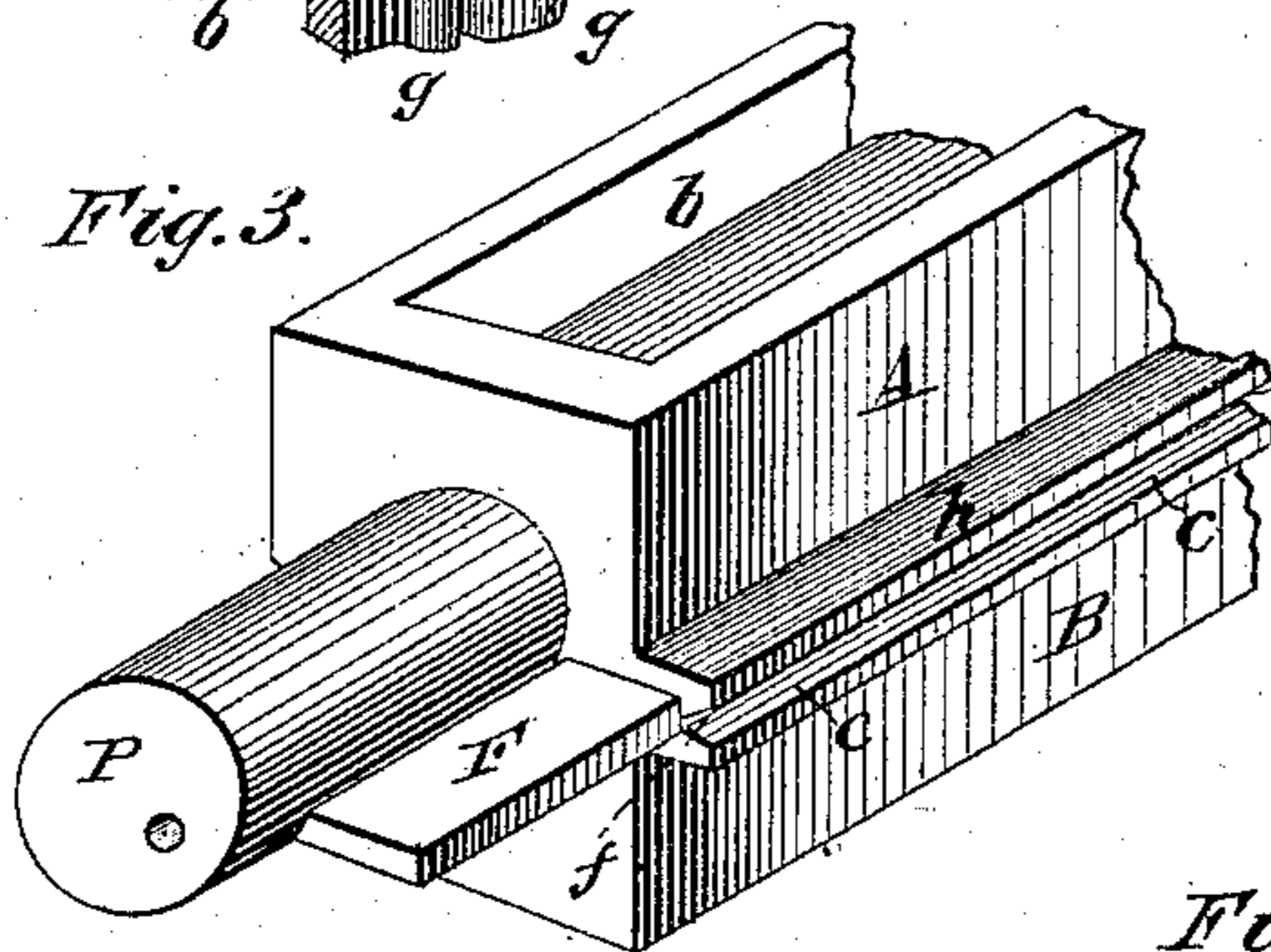


Fig. 4.

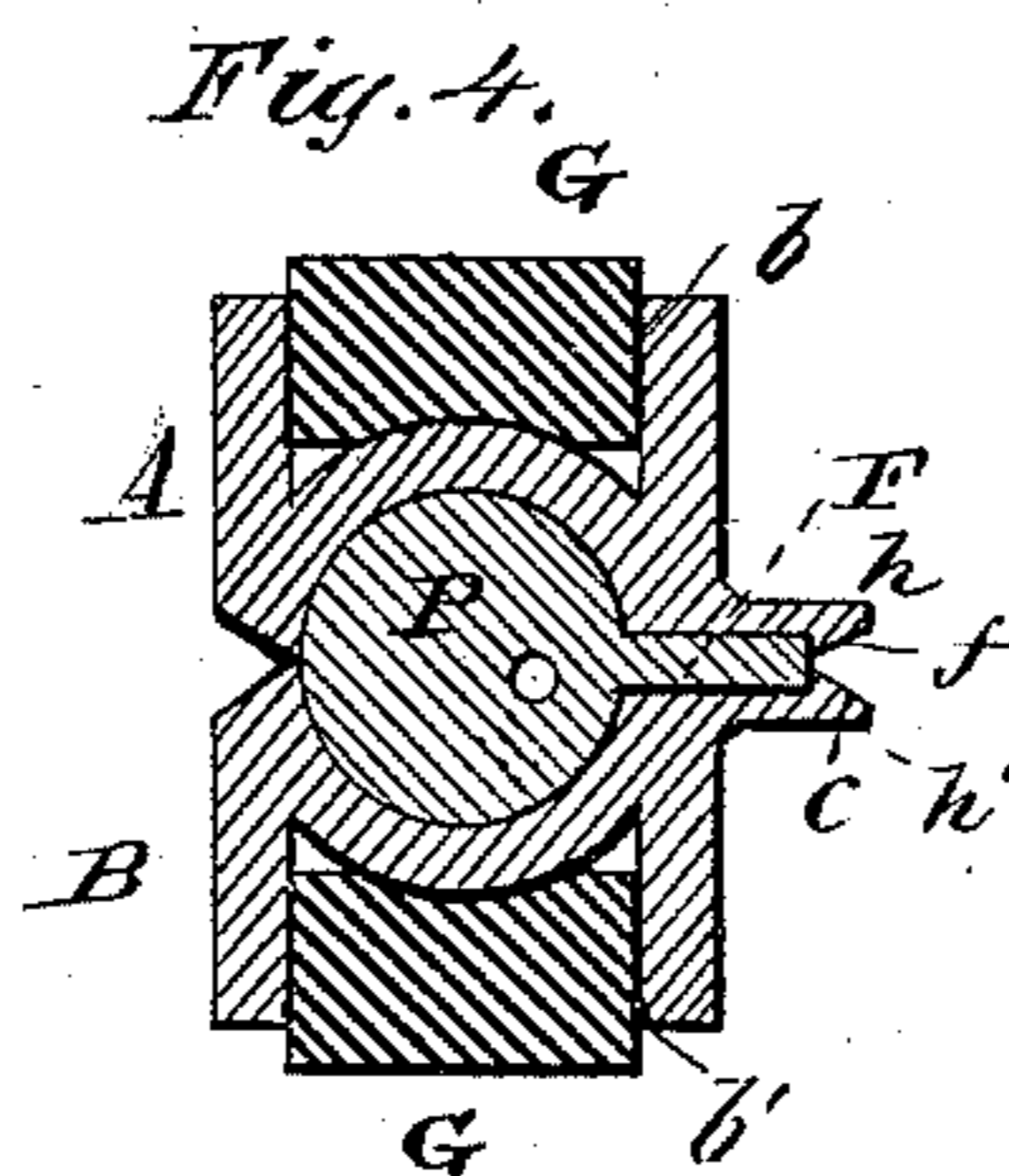
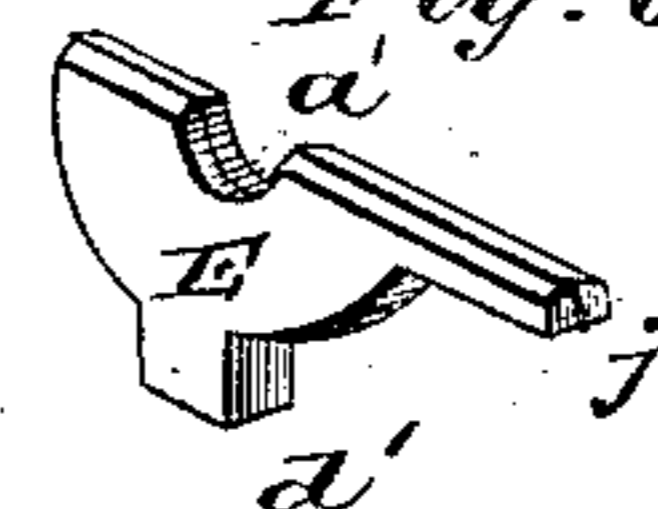


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

CURTIS H. LEWIS, OF INDIANAPOLIS, INDIANA.

CORE-BOX.

SPECIFICATION forming part of Letters Patent No. 254,830, dated March 14, 1882.

Application filed November 8, 1881. (No model.)

To all whom it may concern :

Be it known that I, CURTIS HANSON LEWIS, of Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Core-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in core-boxes; and it consists in details of construction and arrangements of parts that will be hereinafter more fully set forth in the specification and claims and pointed out in the accompanying drawings, in which—

Figure 1 is a side elevation of a closed core-box with end guides; Fig. 2, a side elevation, partly in section, of a T-shaped core-box with movable partition; Fig. 3, an elevation of core-box for flanged cores; Fig. 4, a vertical section of same, showing the rubber striking piece or cushion; Fig. 5, a perspective view of a movable partition for unflanged core-boxes; and Fig. 6, a perspective view of a partition for flanged, chambered, and other irregular cores.

The core-box is made in two parts, A B, the upper part, A, having an extension, D, at either end, as shown in Fig. 1, or at the sides, as shown in Fig. 2, the lower part, B, having flanges *g*, to receive and guide the extensions D, and thus form a perfect guide for the two parts of the box and hold it firmly when in position or filled. For forming flanged or irregular-shaped cores the upper and lower parts are provided with the flanges *h h'*, (see Figs. 3 and 4,) with their inside edges beveled off so as to form sharp cutting-edges. When circular or elliptical cores are formed these flanges are left off, and the sides of the parts A B are beveled off and present sharp cutting-edges when pressed together.

To form T-shaped cores I place one or more boxes, B', at the end or ends of the parts A B, and in this box I insert the partition C in the holes or recesses *d*, the partition E being used

for flanged cores, and each having the central depression, *a'*, to insert a vent-rod passing through the vent-hole *a* in the ends D. Thus I can vary the lengths of these cross or end pieces of the cores, or may make several of them at the same time by means of these partitions.

In Fig. 3 I show a flanged core-box and core and the opening for the insertion of the rubber cushion or other elastic substance, G, which is formed to fit in the opening and conform to the surface of the core. This elastic cushion is intended for striking upon to force the upper upon the lower half of the box and give a uniform pressure upon the core. In the ordinary core-boxes, where the sides or top is pressed upon or struck, the pressure being almost wholly at the particular point struck or pressed on, there is danger of breaking or cracking the core. When the lower part of the core-box is filled with sand, raised sufficiently above the surface for the upper half to be placed thereon, the beveled edges of the flare or flanges act to cut off the sand, thereby smoothing the core and dispensing with the trowel and finishing-tools ordinarily used in such operations, and of course saving the necessity of striking off the half-surface of the core in each half of the box, so that the two halves of the box can be placed together without the work of cutting down and fitting the two parts of the core. By compacting the sand in this way a saving of at least one-third of the flour is obtained over the ordinary method of forming cores.

Having thus described my invention, what I claim as new is—

1. A core-box made in two parts, provided with openings for the insertion of a rubber or other elastic cushion, the upper half having end extensions, D, for closing the box and fitting guides in the lower part, the abutting edges of the two parts being beveled off so as to cut the sand when the parts are closed, substantially as and for the purpose set forth.

2. A core-box made in two parts, each part having a rubber or other elastic cushion, G, and provided with flanges *h h'*, having bev-

eled cutting-edges, whereby irregular or flanged cores may be formed, substantially as and for the purpose set forth.

5 3. A core-box provided with rubber or other elastic cushions, as described, and one or more extension-boxes, B', having openings *d* to receive the shank of a partition, C, whereby T-shaped cores can be formed, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CURTIS HANSON LEWIS.

Witnesses:

ALONZO J. SIMMONS,
S. A. BUELL.