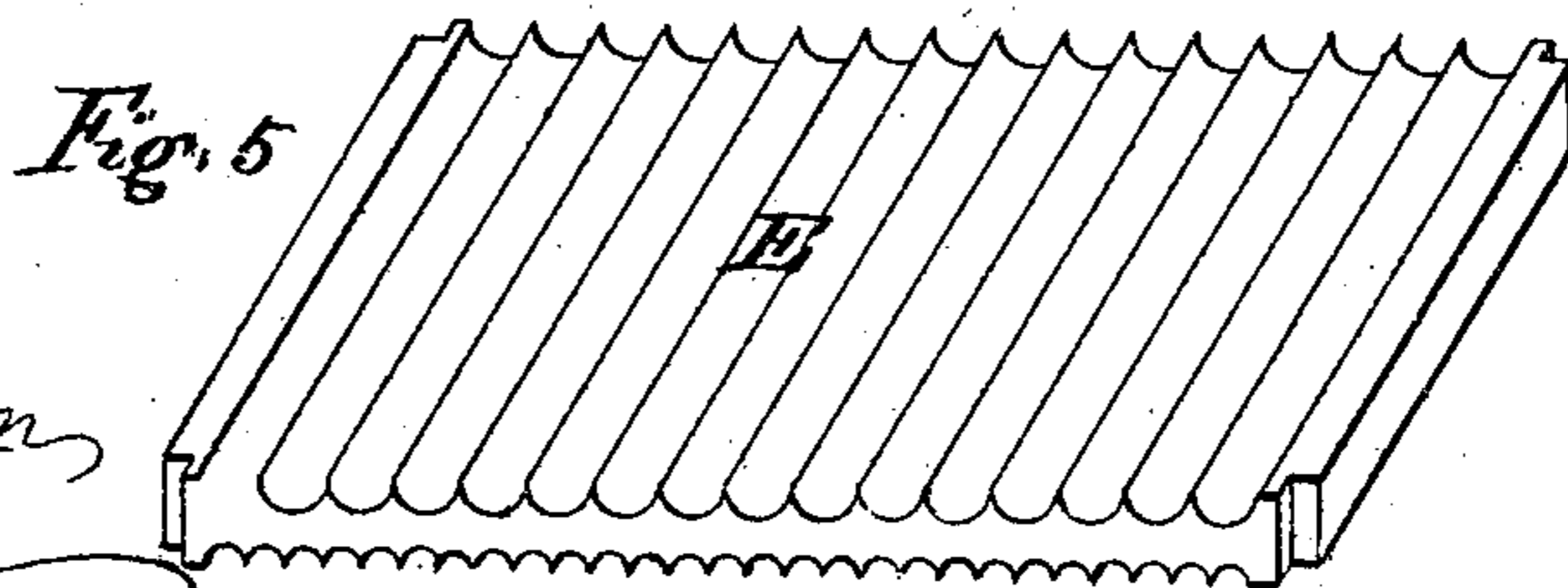
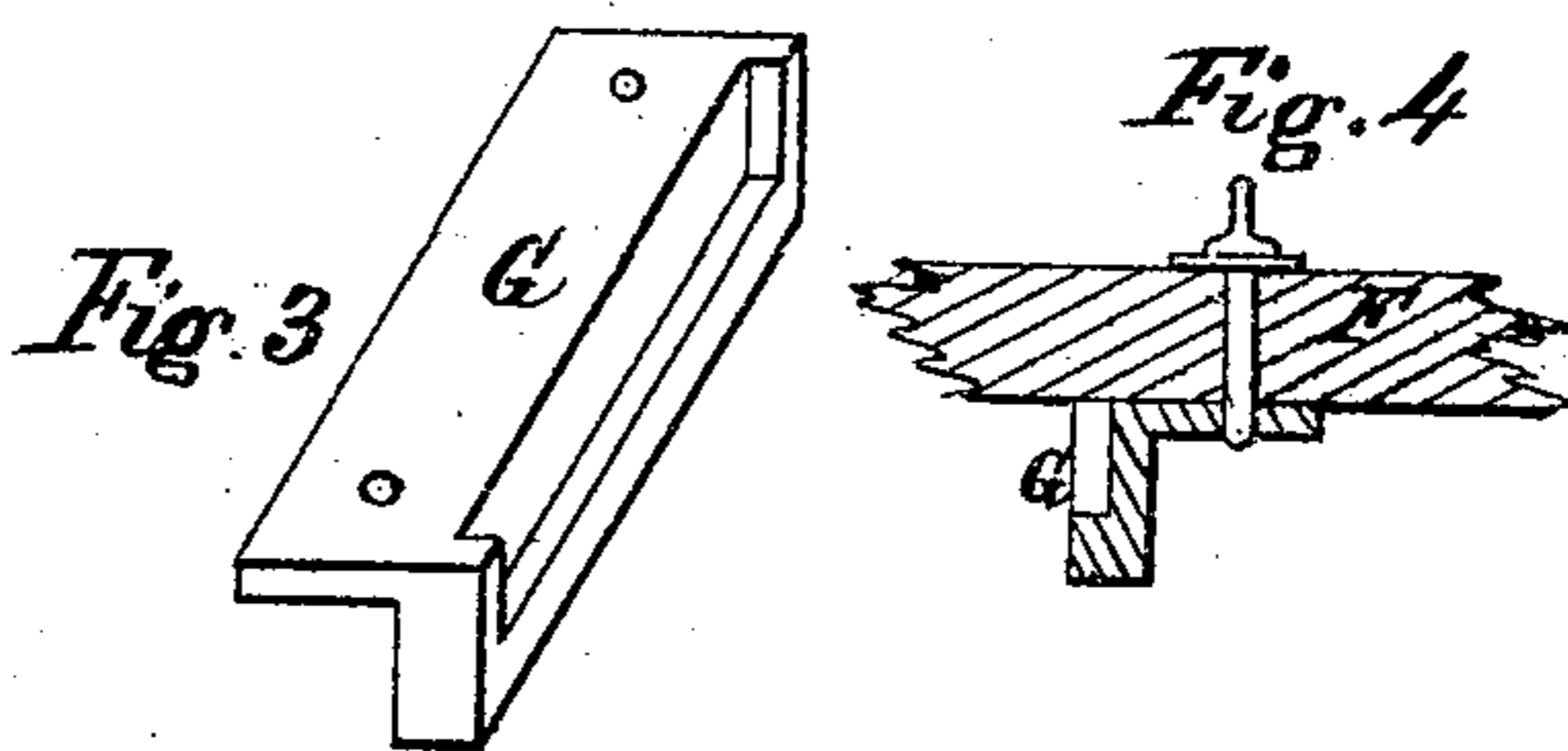
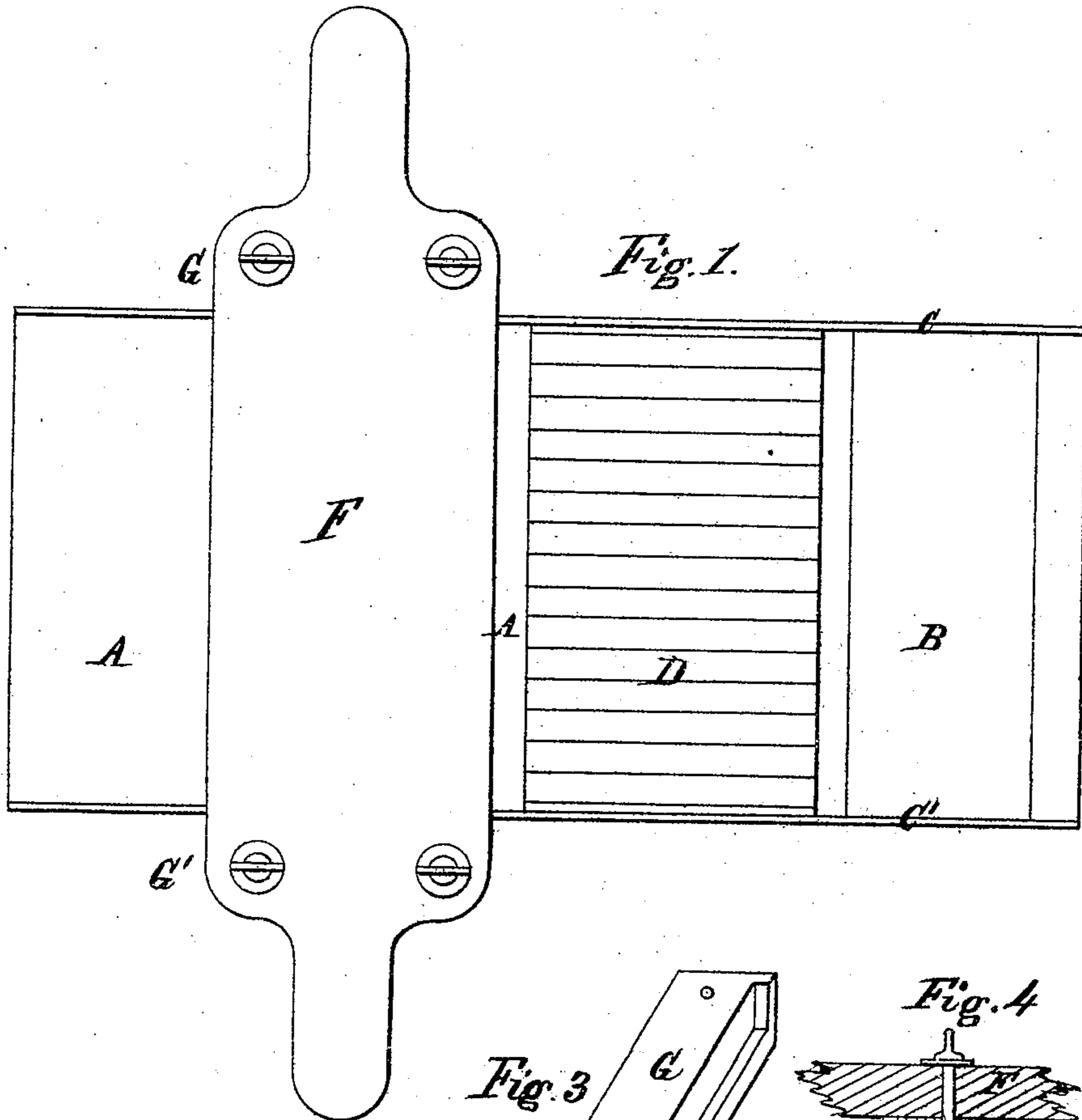
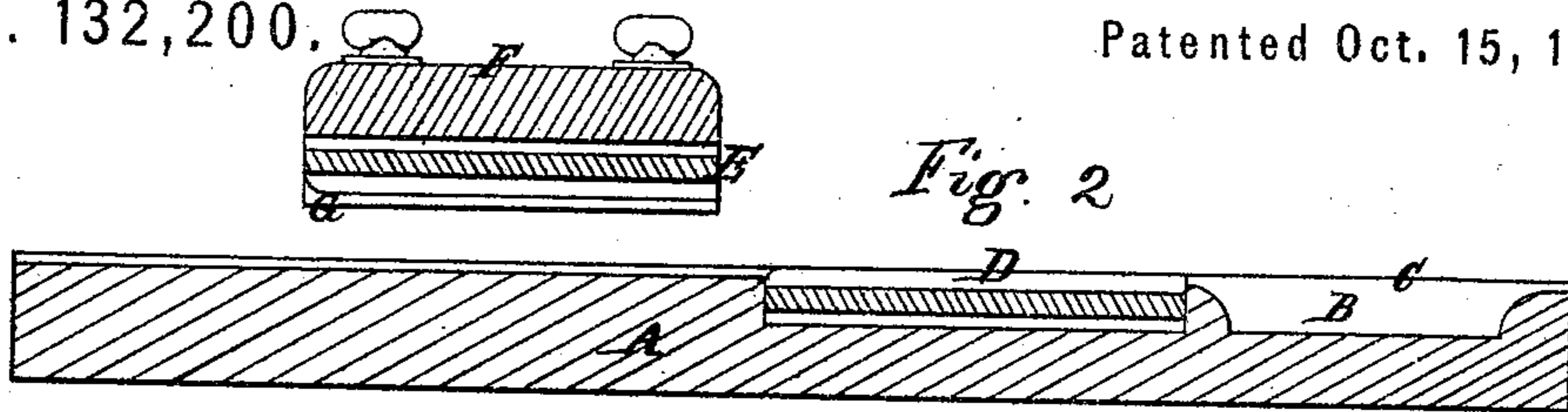


J. COOPER.

Improvement in Machine for Cutting and Shaping Pills.

No. 132,200.

Patented Oct. 15, 1872.



Witnesses.

Chas P Thompson
Hainor Seale

Inventor.

John Cooper

UNITED STATES PATENT OFFICE.

JOHN COOPER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR CUTTING AND SHAPING PILLS.

Specification forming part of Letters Patent No. 132,200, dated October 15, 1872.

To all whom it may concern:

Be it known that I, JOHN COOPER, of the city and county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Cutting and Shaping Pills, and which improvements are set forth and described in the following specification:

The nature of my invention consists in providing a machine with a set or series of movable plates in pairs, the grooves of which will match to make the required size of pill, and so that one machine supplied with these movable plates will take the place of the several machines heretofore required for the several sizes. The first part of my invention consists in combining with the bed and sliding beam of a pill-cutting machine, and shaping a series of movable plates so fitted that one pair may be removed and another pair be substituted therefor, in order that a different-size pill may be made on the same machine. The second part of my invention consists in grooving both sides of these movable plates, so that fewer plates are required in the set, thus reducing the cost, rendering the apparatus more compact, and enabling one to operate the changes with greater facility. The other part of my invention relates to the ready adjustment and securing of the plates in their respective positions.

Figure 1 is a plan of a machine embodying my invention. Fig. 2 is a longitudinal vertical section, showing the parts which are on the upper side of the line O O, drawn across Fig. 1. Fig. 3 is a detached view of part G on Figs. 1 and 2. Fig. 4 is part of a vertical section through parts F and G on Figs. 1 and 2. Fig. 5 is a view of the part E on Figs. 1 and 2.

A is the bed of the machine, recessed at B, the ends of which are closed by the side plates C C', which also secure the grooved cutting and shaping plate D in its place, which is also a recess across the bed A. The upper or sliding grooved cutting and shaping plate E, shown separate and detached in Fig. 5, is secured to the sliding bearer or handle F by means of the clamps G G', shown detached in Fig. 3, and which are provided with a flange

or bead on the under side to guide the cutting-plate correctly in its passage over its mate, which is recessed in the bed.

The operation of this improvement is as follows: The material being in readiness from which to manufacture pills of the required size, the lower plate D is placed in the recess in the bed A, with side uppermost in which the grooves are of the proper size to make the pills required. The plate in which are corresponding grooves is then selected, and is laid lengthwise on the lower side of the sliding bearer F and pushed up against the clamp G, which has previously been rigidly attached in its place at one end of the sliding handle, which will clamp and hold it. The plate is then secured by means of the clamp G' at the other end. The machine is now in readiness for operation. After the material has been exhausted for this size of pills, and it is required to readjust the machine, the plates are loosened and removed, and others are substituted in which the grooves correspond with each other, and are of the size required, being attached in the same manner as before related.

I do not wish to be understood as confining myself to this particular method of constructing the clamping device, as it is obvious there are many styles in which the same object—viz., the ready securing of the movable plates to the sliding bearer or handle may be secured; for instance, the clamps might be provided with pins, which would fit in the holes in the ends of the plates, or vice versa; or the plates might be secured with thumb-screws running through the bearer or handle; but

What I claim as my invention, and desire to secure as such Letters Patent, is—

1. The movable plates with grooves on both sides, as set forth and described.

2. The sliding bearer or handle, combined with a clamping device for securing the movable plate, as hereinbefore set forth, or in any manner equivalent thereto.

JOHN COOPER.

Witnesses:

WM. P. THOMPSON,
DAVID BEITLER.