

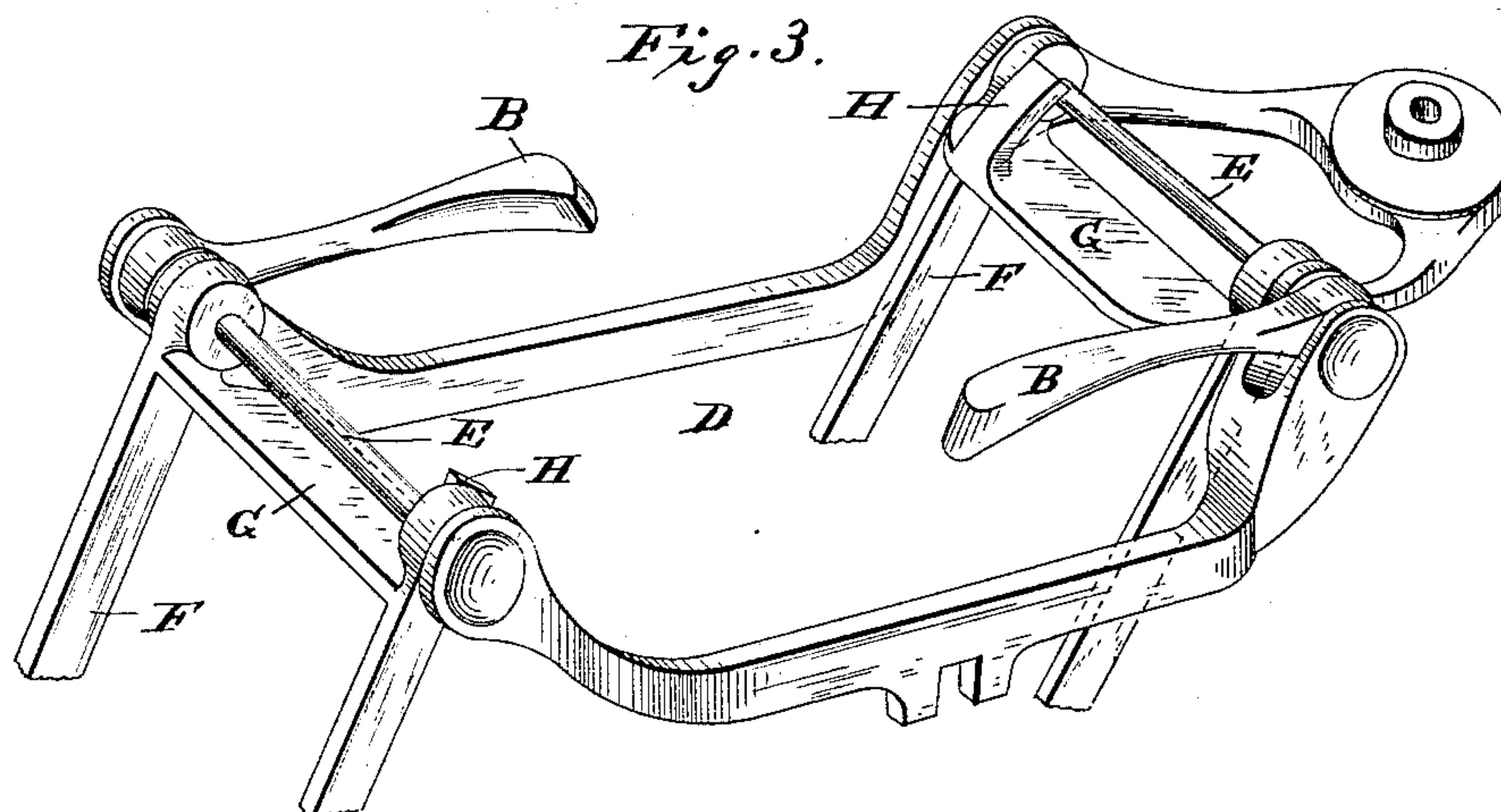
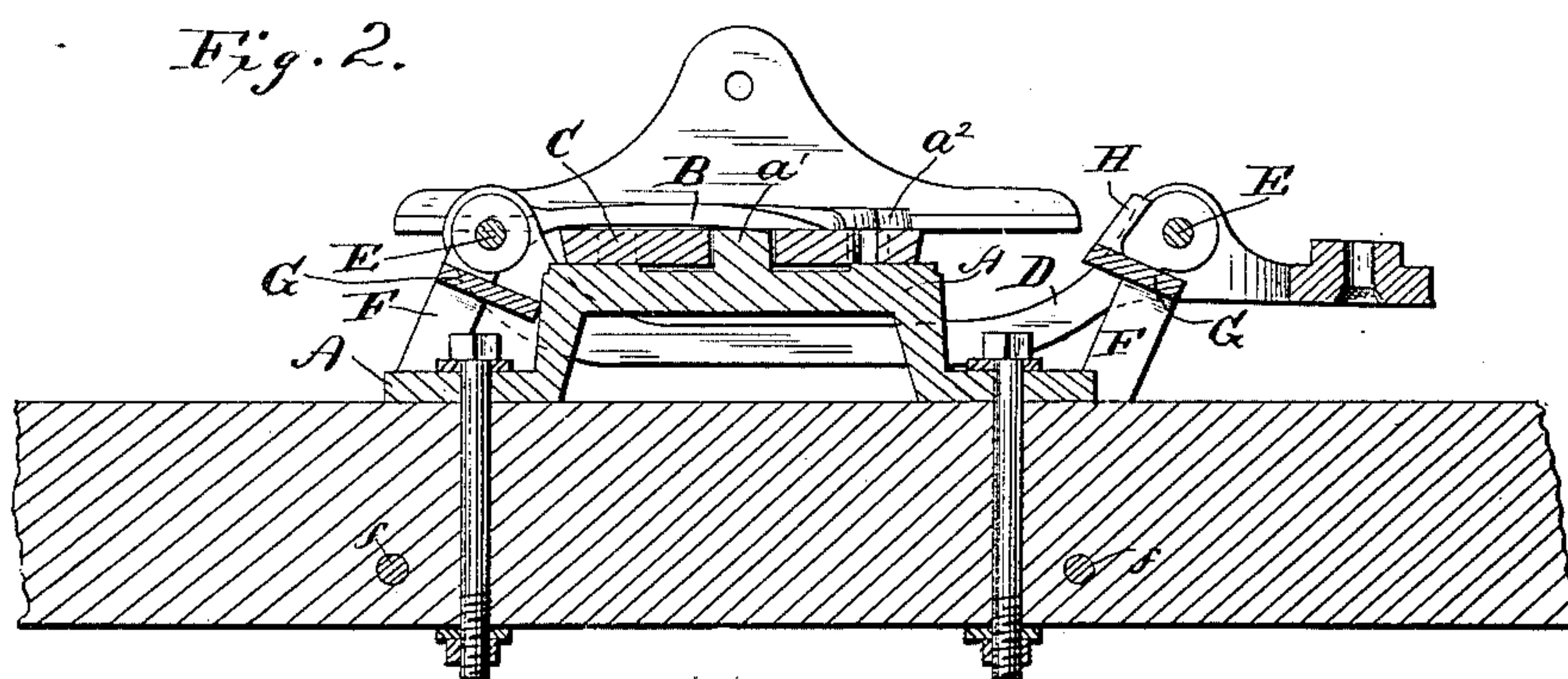
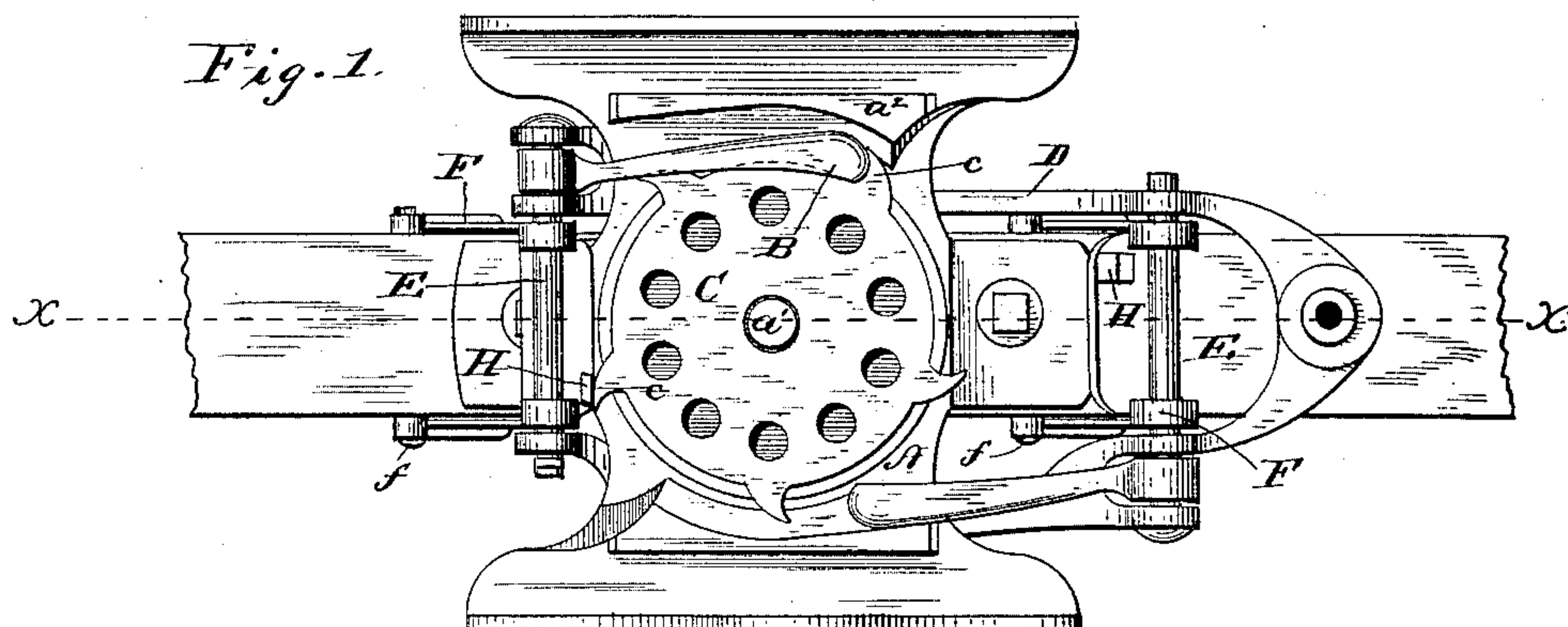
(Model.)

L. SCOFIELD.

CORN PLANTER.

No. 318,512.

Patented May 26, 1885.



Witnesses
Chas. R. Burr
A. J. Stewart

Inventor
Lori Scofield
7 Church & Church
Attorneys

UNITED STATES PATENT OFFICE

LEVI SCOFIELD, OF GRAND HAVEN, MICHIGAN, ASSIGNOR TO CHALLENGE
CORN PLANTER COMPANY, OF SAME PLACE.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 318,512, dated May 26, 1885.

Application filed March 10, 1885. (Model.)

To all whom it may concern:

Be it known that I, LEVI SCOFIELD, of Grand Haven, in the county of Ottawa and State of Michigan, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

My invention relates to improvements in the seed-plate-actuating mechanism of corn-planters, and particularly to improvements upon the mechanism shown, described, and claimed in Letters Patent of the United States granted to me on the 17th day of March, 1885.

It has for its object to provide more simple and efficient means for effecting the arrest of the horizontally-vibrating frame to which the actuating-pawls are connected, and more simple and efficient means for preventing the racing of the seed-plate under the impulses given it by the actuating-pawls.

In the accompanying drawings, Figure 1 represents a top plan view of one of the seed-boxes of a corn-planter constructed in accordance with my invention, with the hopper and bottom plate removed to show clearly the construction and arrangement of the improved seed-plate-actuating mechanism. Fig. 2 is a sectional view taken on the line $x x$, Fig. 1. Fig. 3 is a perspective view of the horizontally-vibrating frame and the swinging supports upon which it is mounted.

Similar letters of reference in the several figures indicate like parts.

A represents the plate or casting which forms the base of the seed-box, and serves to connect the latter rigidly to the beam of the planter. This casting has flanges $a^2 a^2$, which serve to guide the actuating-pawls B in their movements, and is provided with a horizontal bearing for the seed-plate C to rest upon, and with a central stud, a' , which forms a pivot for the seed-plate.

The seed-plate is provided with the usual seed-apertures and with the peripheral ratchet-teeth $c c$, with which the actuating-pawls $b b$ co-operate. These pawls are preferably arranged at opposite corners of a reciprocating frame, D, and are pivoted to the bolts E,

which serve to connect said swinging frame to the upper ends of bifurcated arms or links F F, that bestride the beam, and are pivoted in turn thereto by bolts f , as shown.

The parts thus far described very much resemble corresponding parts of the mechanism illustrated in my former patent, above referred to, though there are some differences in construction, which render the present device more simple and easier to fit up, which I will now point out. In the former device the throw of the horizontally-swinging frame in both directions was limited by the striking of the parts of said frame (lettered $h^5 h^5$ in said patent) against the cross-plate of the main casting A, and the racing of the seed-plate was prevented by the co-operation of stops formed upon the pawls with the ratchet-teeth of said seed-plate, whereas in the present device I connect the arms constituting the swinging supports of the horizontally-moving frame by a broad bar or cross-piece, G, as shown clearly in Fig. 3, and cause said bars or cross-pieces to serve as stops for arresting and limiting the movements of the swinging frame by alternately engaging with opposite portions of the casting A, as will be understood by reference to Figs. 1 and 2; and instead of forming stops upon the pawls, I arrange upon said bars or cross-pieces G studs or projections H, which operate alternately to arrest the further rotation of the seed-plate by engaging with the projecting teeth thereof simultaneously with the engagement of the bars with the casting in limiting the throw of the swinging frame. These changes in construction render the new device equally as efficient as the former device, if not more so, and require less fitting up of the castings.

I of course am aware that it is not broadly new to combine in a seed-plate-actuating mechanism of a planter stops for limiting the motion of a frame carrying the seed-plate-actuating pawls with other stops for preventing the racing of the seed-plate, and I therefore do not desire to be understood as endeavoring to claim herein such broad idea.

My improvements are in the nature of additions to or modifications of the device covered by my former patent; and

What I claim to be new is—

1. The combination, with the seed-plate and the casting upon which the seed-plate is mounted and rotates, of the horizontally-swinging frame and its pawls, and the vertically-swinging supports for the said frame, having the wide bars or cross-pieces adapted to co-operate with the casting to limit the throw of the frame and its pawls, substantially as described. 5
2. The combination, with the seed-plate and the casting upon which the seed-plate is mounted and rotates, of the horizontally-swinging frame and its pawls, and the vertically-swinging supports for the said frame, having the wide bars or cross-pieces adapted to co-operate with the casting to limit the throw of the frame and its pawls, and having also the studs or projections for engaging with the teeth of the seed-plate and preventing the racing of the latter, substantially as described. 15

LEVI SCOFIELD.

Witnesses:

GEO. STICKNEY,
W. M. SAUNDERS.