

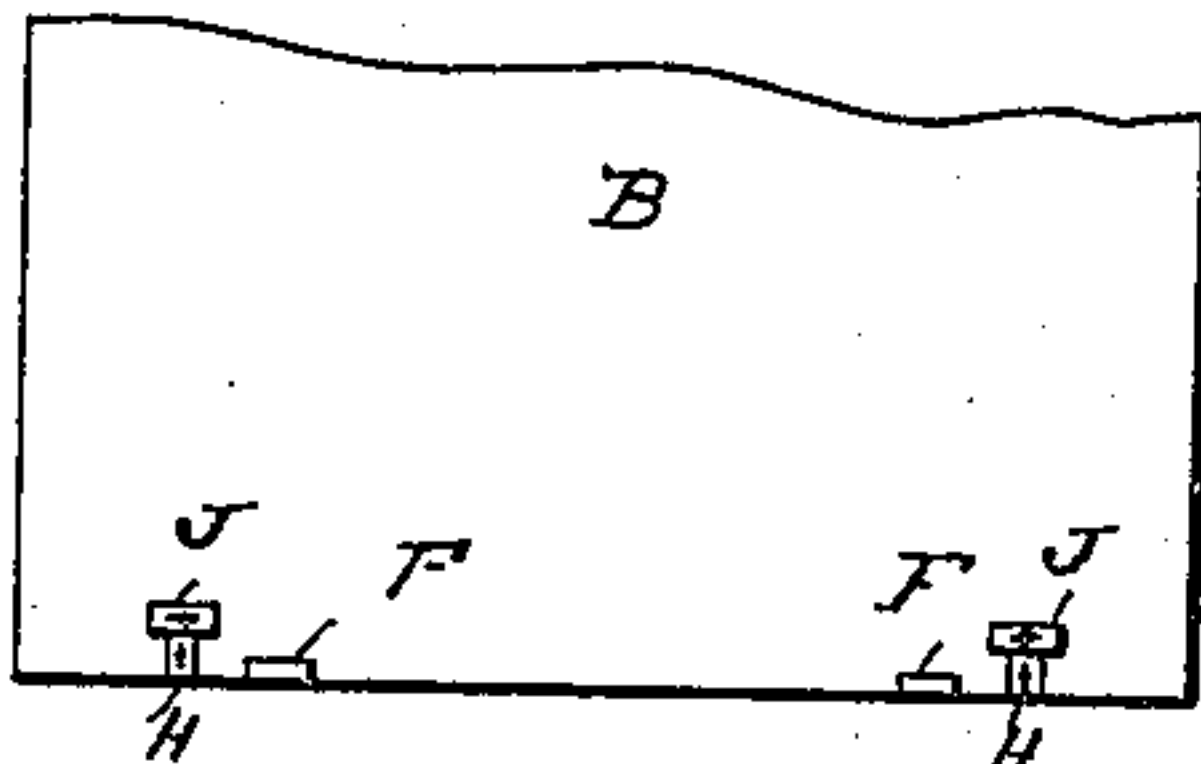
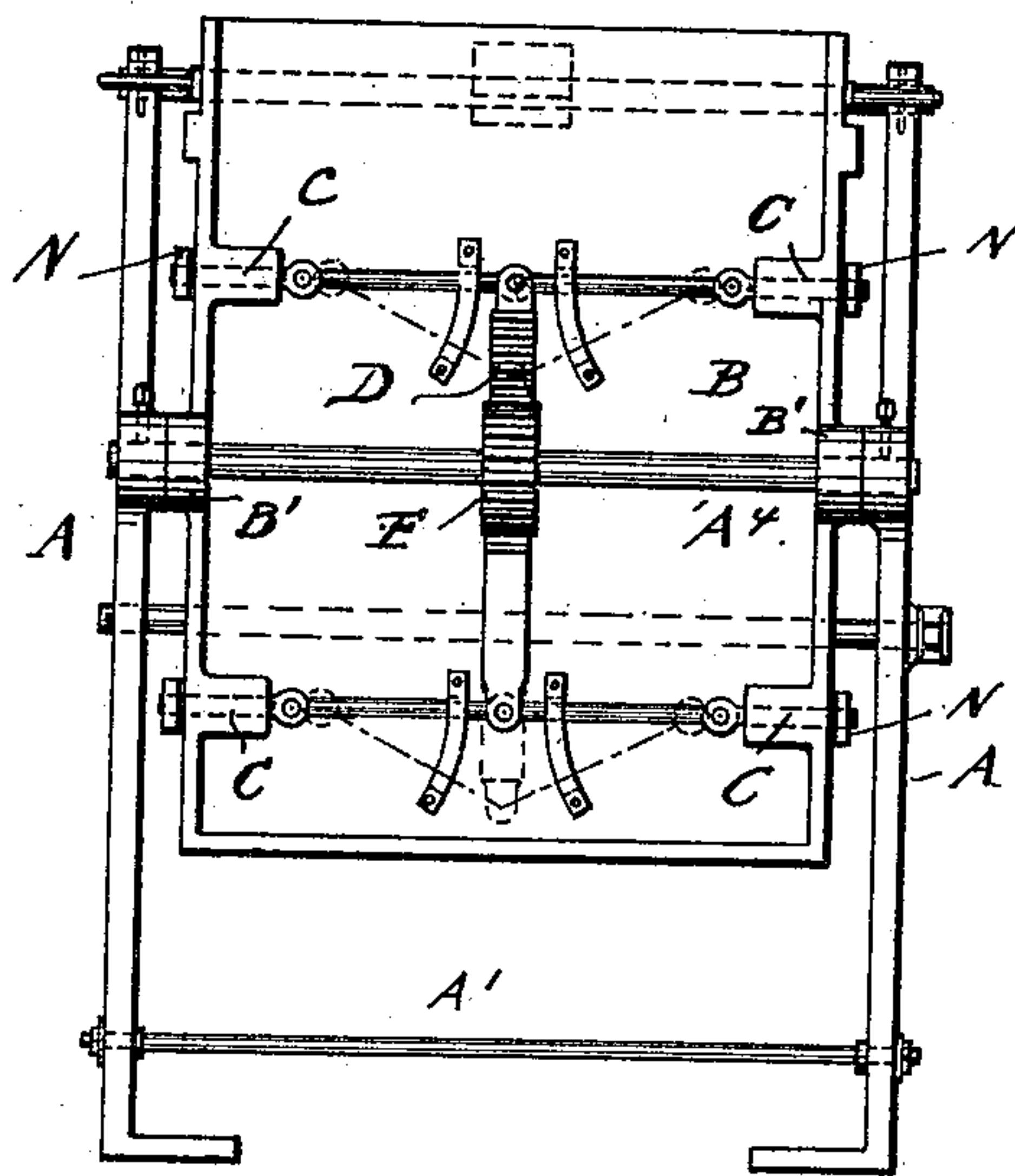
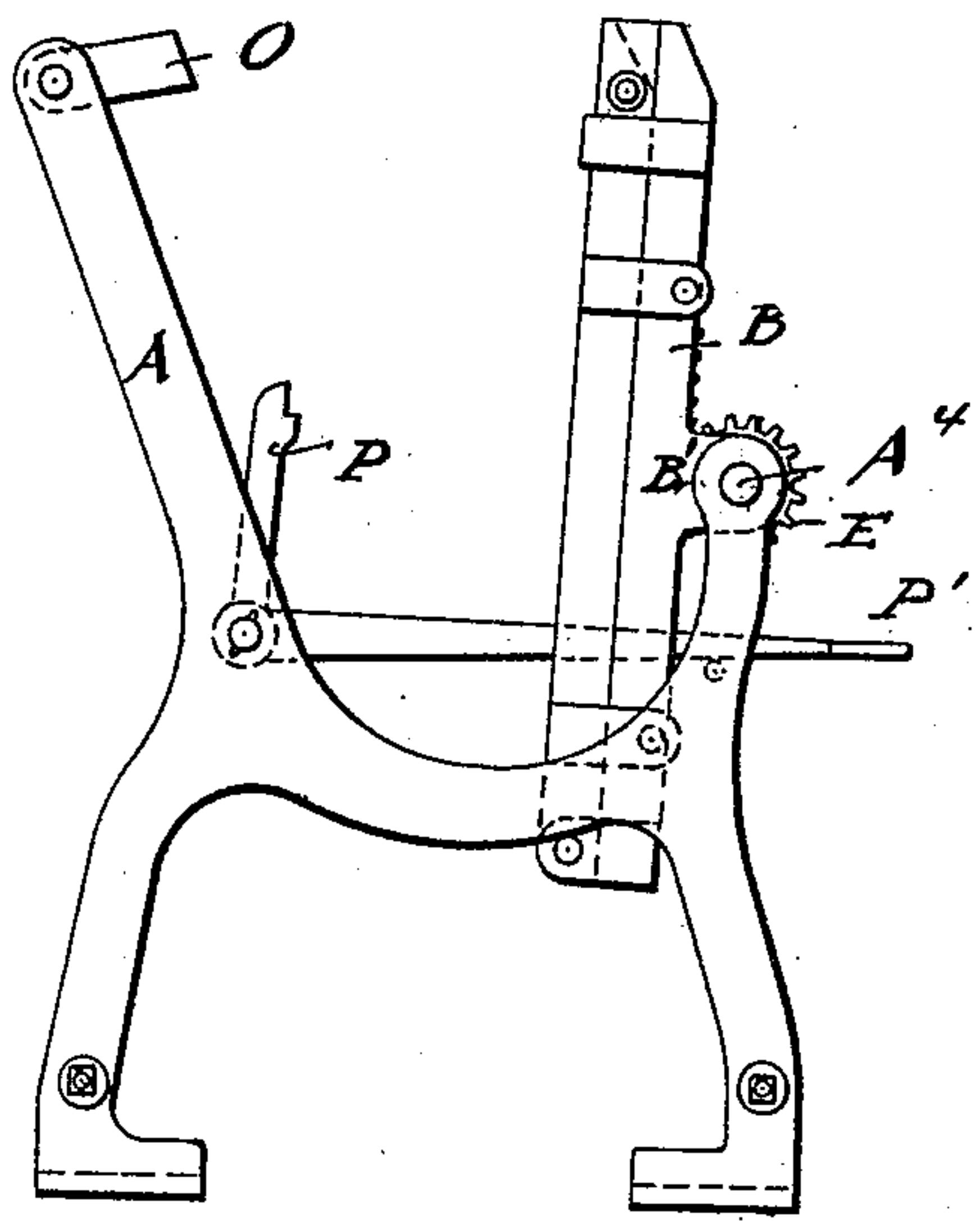
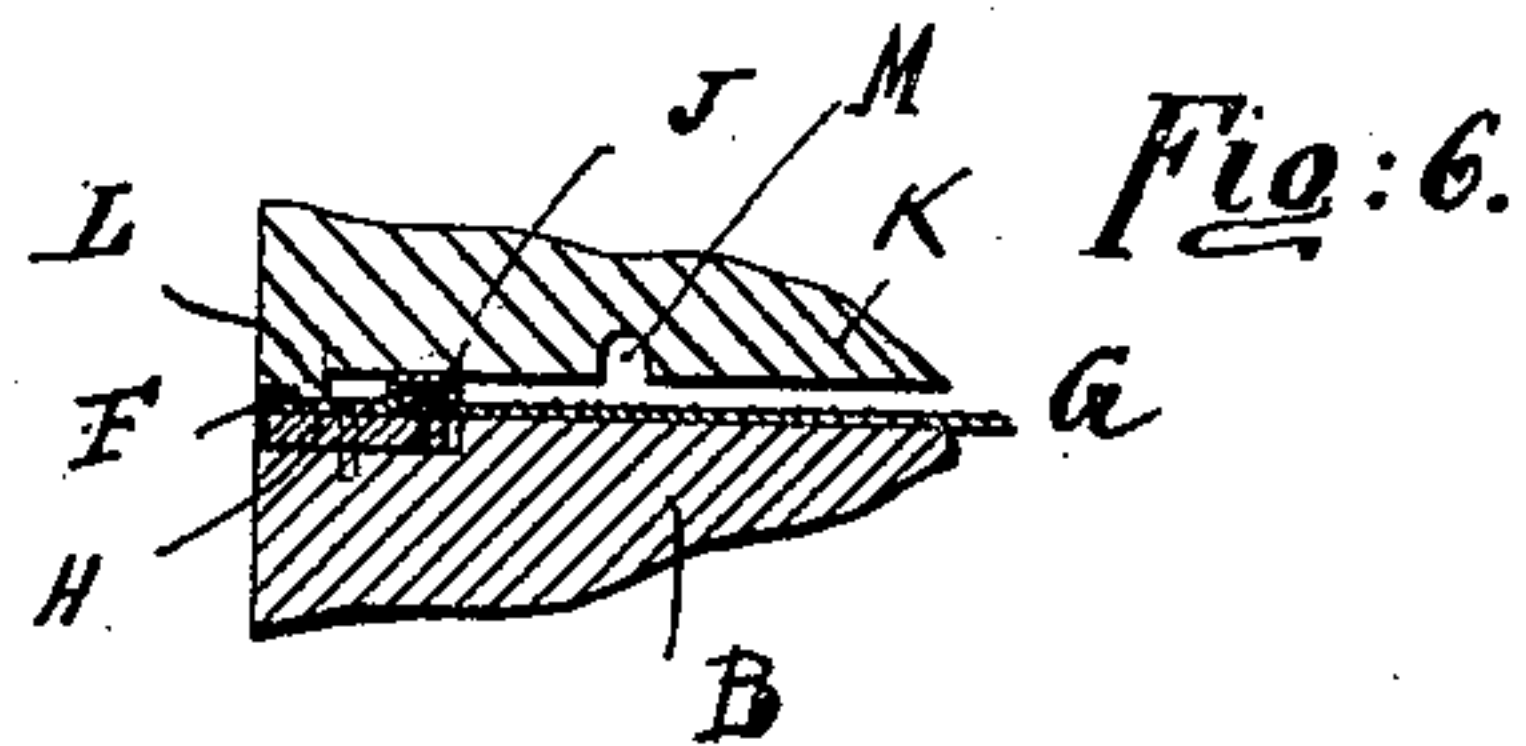
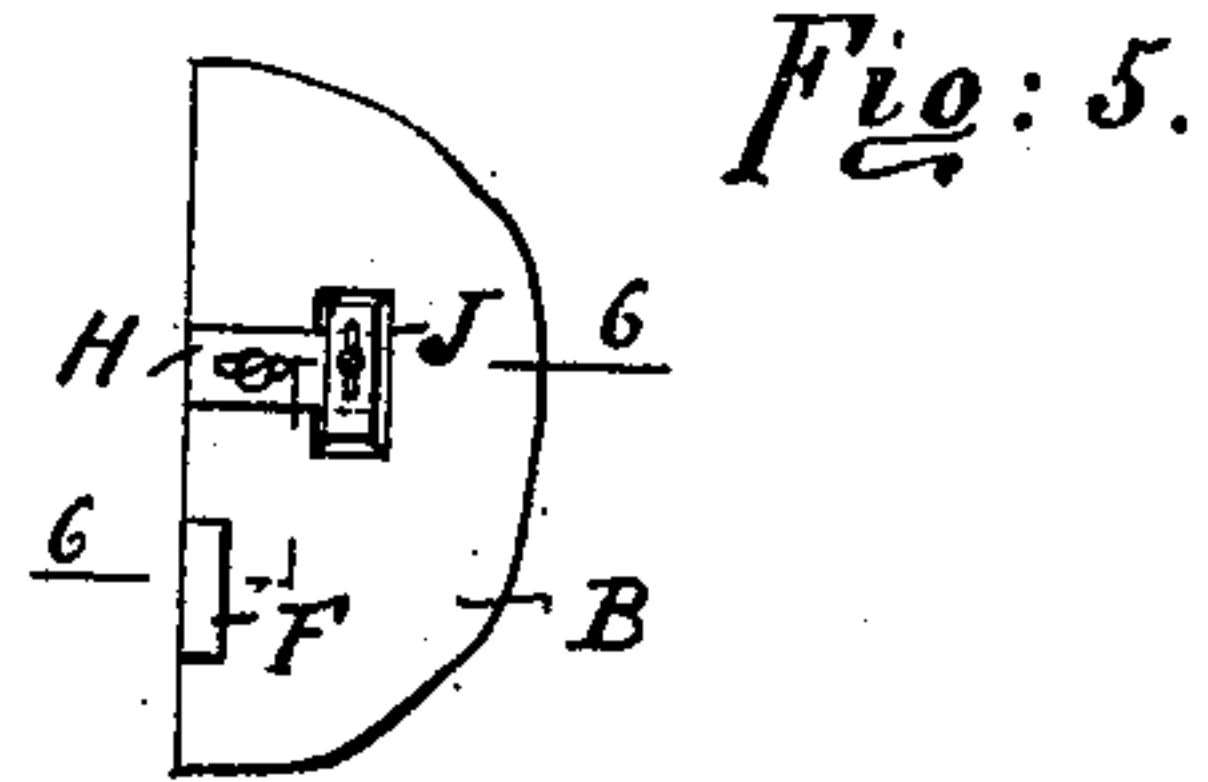
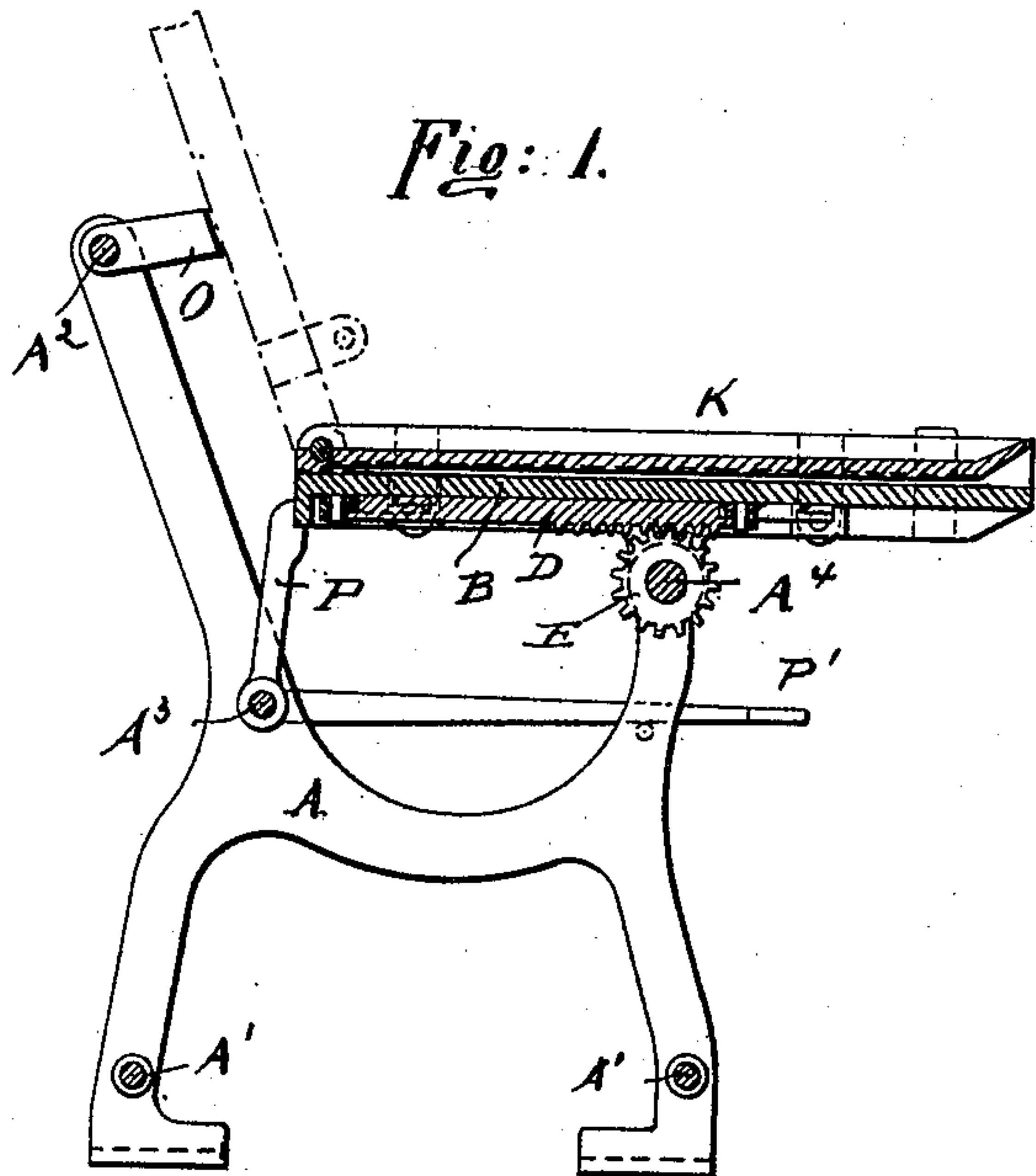
No. 620,230.

Patented Feb. 28, 1899.

B. F. CURTIS,
STEREOTYPE CASTING BOX.

(Application filed Sept. 25, 1897.)

(No Model.)



Witnesses
Peter Albertine Jr.
Frederick Bugasch.

B. F. Curtis Inventor
By his Attorney
Oscar A. Turner

UNITED STATES PATENT OFFICE.

BENJAMIN F. CURTIS, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
FERDINAND WESEL, OF SAME PLACE.

STEREOTYPE-CASTING BOX.

SPECIFICATION forming part of Letters Patent No. 620,230, dated February 28, 1899.

Application filed September 25, 1897. Serial No. 652,979. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. CURTIS, a citizen of the United States, and a resident of New York, (Brooklyn,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Stereotype-Casting Boxes, of which the following is a specification.

This invention relates to certain new and useful improvements in casting-boxes for casting stereotype-plates; and the object of my invention is to provide a new and improved casting-box which is simple in construction, is locked automatically when placed in position for casting, and is unlocked automatically when placed in position for removing the plate, and which also provides the plates cast with a register-slot.

In the accompanying drawings, forming a part of this specification, and in which like letters of reference indicate like parts in all the views, Figure 1 is a side view of my improved casting-box, parts being in section and the box lowered. Fig. 2 is a side elevation of the same, showing it raised. Fig. 3 is a front view of the same raised. Fig. 4 is a plan view of part of the casting bed-plate. Figs. 5, 6, and 7 are details.

The frame of the machine is formed of two substantially H-shaped standards A, united by rods A', A², A³, and A⁴, and on the latter the bed-plate B is mounted to swing by means of lugs B', made integral with the sides of the bed and through which said rod passes, the lugs being located at or near the center of the length of the bed, so as to balance the same as much as possible. Two sliding bolts C are mounted on the under side of the bed at each side and are suitably guided and have their inner ends pivotally connected with a rack-bar D, guided to slide longitudinally on the under side of the bed B and engaging a cog-wheel E, fixed on the shaft A⁴, so that when the bed B is swung up and down the rack-bar D is moved longitudinally and the bolts C are moved in or outward.

On one side edge of the bed two angle-clips F are secured to extend a slight distance over the top of the bed, and under the same the edge of the stereotype-matrix G is placed, as shown in Fig. 6. Adjacent to said clips two

slides H are mounted in dovetail grooves of the bed to slide toward and from the longitudinal central line of the bed, which slides are flush with the top of the bed, and on the inner end of each slide a gage J is mounted to slide parallel with the longitudinal axis of the bed, which gages project above the face of the bed and can be locked in place after adjustment.

The cover-plate K is hinged to the rear end of the bed in such a manner that it can be swung toward and from the bed and is recessed on its under side to a depth equal to the desired thickness of the plate to be cast, whereby a rim L is formed on the under side of the cover-plate along the rear and side edges. The cover-plate is provided in its underside with longitudinal grooves M for forming ribs on the back of the cast plate. Apertured lugs N are secured to the sides of the cover-plate and project below the same, so that when the cover-plate rests on the bed the bolts C can pass through the apertures in said lugs N.

O is a rest for the cover in raised position, and P is a rest for the bed and plate in lowered position.

The casting-box is used in the following manner: The stereotype-matrix G is placed on the bed and the gages J pass into recesses previously formed in said matrix, so that the matrix assumes the correct position on the bed. The cover-plate K is then swung down, the rear support P for the bed B is disengaged by raising the handle-lever P, which swings back said support, and the bed and cover are swung into the raised position shown in Fig. 2. Thereby the bolts C are forced outward and automatically lock the bed and cover-plate together. The molten metal is poured into the open upper end of the box thus formed and fills the entire space between the cover-plate and the matrix. As no metal can pass into the space occupied by the gages J, the completed plate has a slot or hole for each gage J, and these slots serve as registers for future manipulations with the plate. The bed and cover are then swung down until the bed rests on the supports P, and then the cover-plate is raised and the cast plate removed, and so by swinging the bed into hori-

zontal position the bolts C are automatically withdrawn and the cover-plate disengaged from the bed.

Having thus described my invention, what
5 I claim as new, and desire to secure by Letters Patent, is—

1. In a casting-box, the combination with a frame and a fixed shaft on the same, of a bed mounted to swing on said shaft, a cover for
10 said bed laterally-movable bolts on the under side of the bed for locking the cover on the bed, a central longitudinally-movable bar on the under side of the bed, to which bar said bolts are pivoted and means for shifting
15 said bar from the fixed shaft on the frame when the bed is swung up or down substantially as set forth.

2. In a casting-box, the combination with a frame and a fixed shaft on the same, of a bed
20 mounted to swing on said shaft, a cover hinged to said bed bolts on the bed, for lock-

ing the cover on the bed, a rack-bar connected with said bolts and a cog-wheel fixed on the said shaft, substantially as herein shown and described.

3. In a casting-box, the combination with a bed of a slide mounted in the face of the bed to slide transversely to the length of the bed and a gage, projecting above the upper surface of the bed and mounted on the inner
30 end of the slide and adjustable on the same in the direction of the length of the bed, substantially as herein shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 10th day of September, 1897.

BENJAMIN F. CURTIS.

Witnesses:

OSCAR F. GUNZ,
A. SCHROEDER.