

(No Model.)

F. W. TOBEY.  
DESK.

No. 540,282.

Patented June 4, 1895.

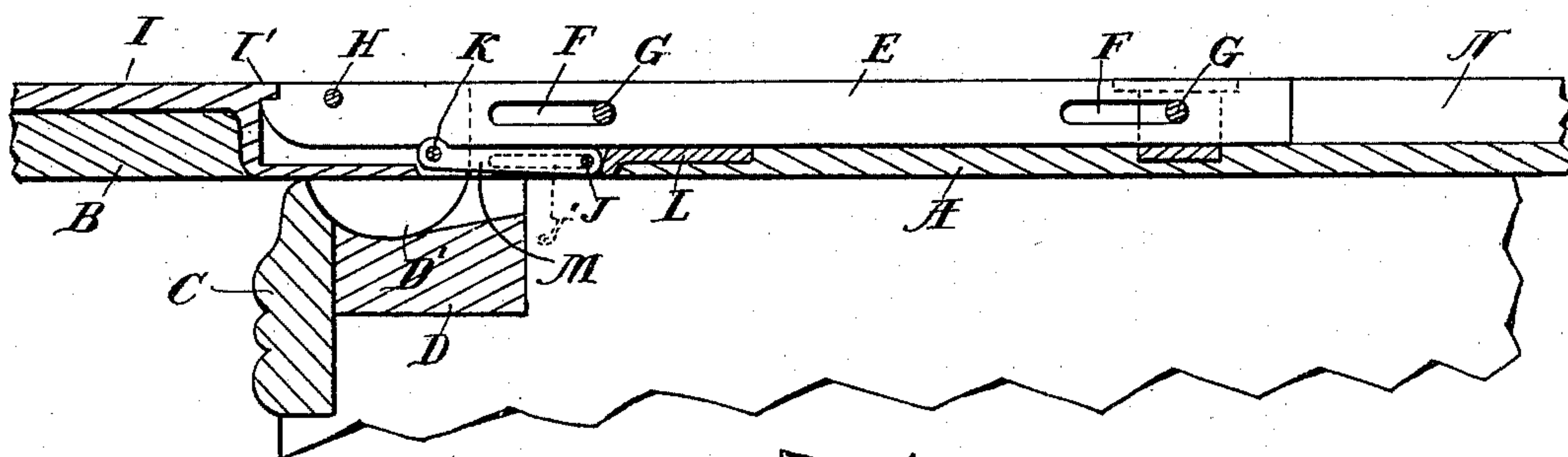


Fig. 1.

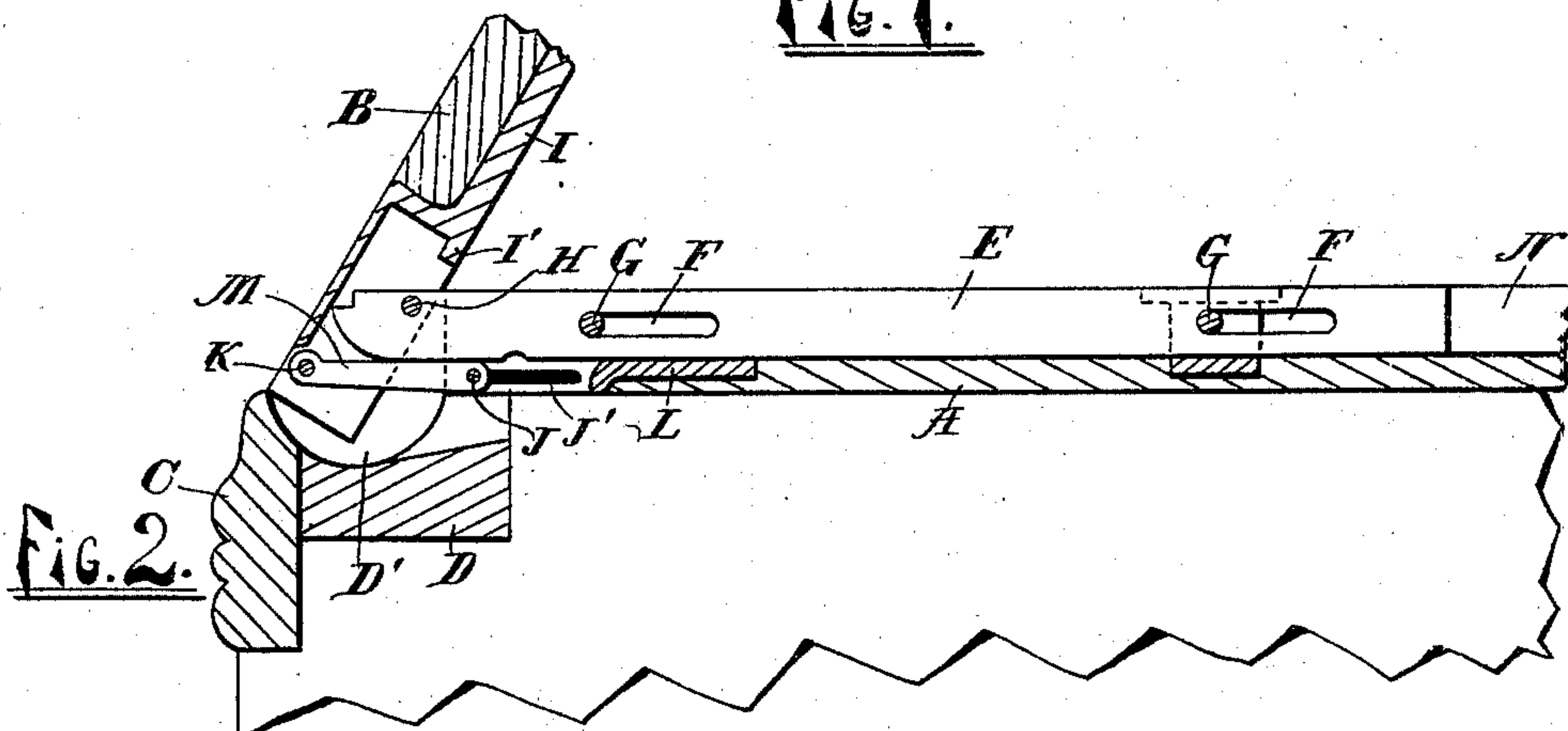


Fig. 2.

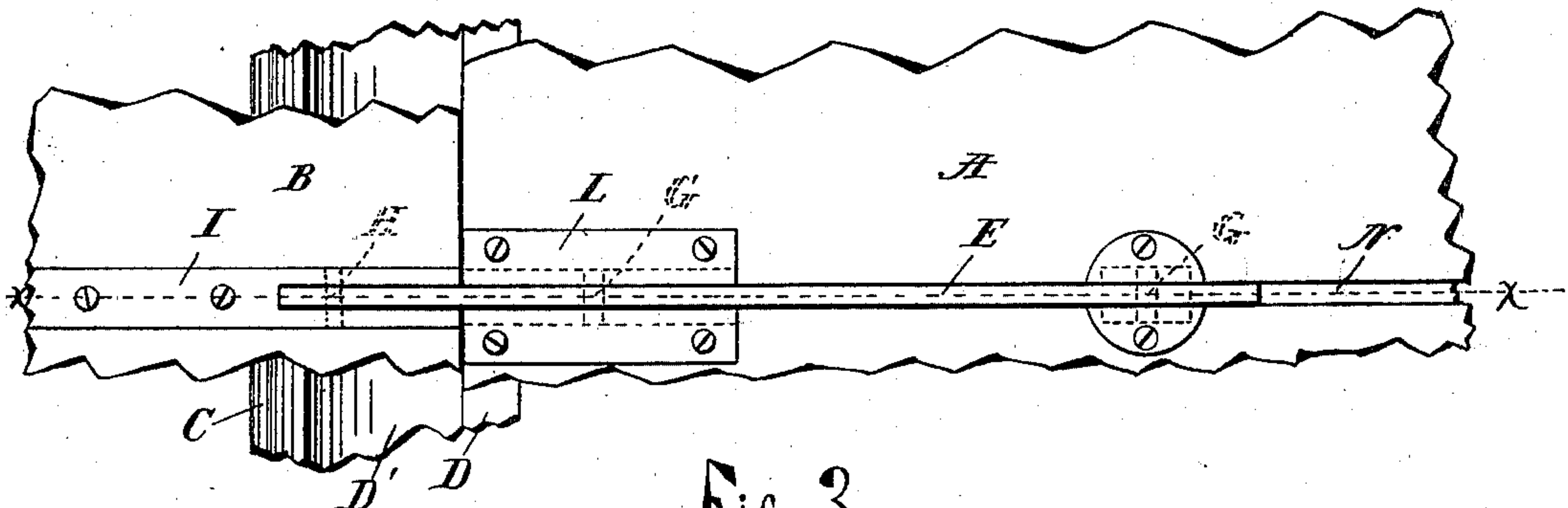


Fig. 3.

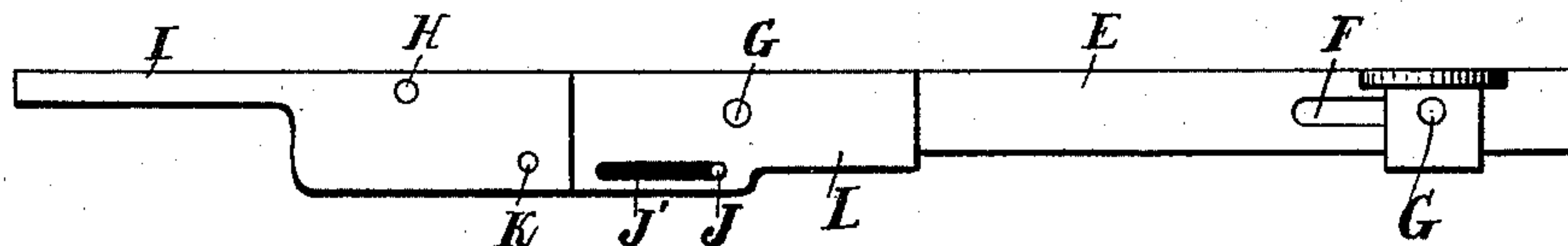


Fig. 4.

WITNESSES:

Lewis E. Sanders.  
Gors Moulton

INVENTOR

Fred W. Tobey

BY

Guthrie V. Moulton  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

FRED W. TOBEY, OF GRAND RAPIDS, MICHIGAN.

## DESK.

SPECIFICATION forming part of Letters Patent No. 540,282, dated June 4, 1895.

Application filed March 20, 1894. Serial No. 504,417. (No model.)

*To all whom it may concern:*

Be it known that I, FRED W. TOBEY, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Desks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in desks and its object is to provide the same with certain new and useful features, hereinafter more fully described and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section on the line  $xx$  of Fig. 3, showing portions of the desk with my device in place and the front of the desk open. Fig. 2 is the same, showing the desk front closed; Fig. 3, a plan view of the same; and Fig. 4, a detail of the support in side elevation, detached from the desk.

Like letters refer to like parts in all of the figures.

A is the desk top; B, the desk front; C, the front finish or molding of the desk.

D is an angle strip connecting the molding C with desk top A, and having a concavity D' in its upper side.

E is a horizontal bar having slots F, said bar lying within a groove N and extending through a grooved casing L (the former being preferably formed in the desk top and the latter secured to said top) and is secured by means of the pins G in said slots, whereby said bar is longitudinally movable.

H is a movable pivot pin on the bar E upon which the desk front turns while it is being raised or lowered, said pivot pin being moved in and out by the lowering and raising of the front, in the manner hereinafter described. This pivot pin H passes through the bar E and secures said bar in the casing I, of the desk front B which casing has the ledge I', with which the bar E comes in contact when the desk front is open, said casing being embedded in said front.

J is a pin carried by the horizontal connecting rod M and adapted to slide in the slots J' in the casing L. Said rod M is pivoted to the casing I at a point (K) which is so located

with respect to the pivot, H, of the bar E, that said rod will move in a plane substantially parallel with the movement of said bar and in advance of the movement of the latter.

As the desk is being closed, the desk front first turns upon the pin H, and as said pin, or pivot, is a certain distance from the lower end of the casing I, said end or that portion of the desk front, must move downward and outward, carrying the rod M with it, until the pin J reaches the outer end of the slot J'. Said pin thus forms a stop to the further outward movement of the rod and as said front is not yet closed, the longitudinally movable bar E moves inward, thus shifting the position of the pivot of the desk front, and bringing the lower portion of said front outside the line of pivot H, whereby I am enabled, by concaving the angle strip D and molding C, to make a continuous finish at the front of the desk when said front is closed, and at the same time bring the front against the edge of the top. I am also by this construction, able to extend the molding C outward beyond the plane of the front B, and cover the edge of the same. As the desk is being opened the front will again turn on the pivot H, and the rod M will be thrust inward until the pin J reaches the end of the slot J', when the inward motion of the lower portion of the desk front will be stopped and the bar E will be pulled outward. When the desk front reaches the horizontal position the end of the bar E engages the ledge I, and the parts act to support the front rigidly in said position in the plane of the top. It will be observed that the front is supported in both horizontal and upright position by said bar and rod and that it is not hinged to the desk-top, and also that both the rod and bar move in substantially parallel horizontal planes and the one in advance of and in a direction opposite to the movement of the other. This construction is of prime importance and constitutes the essence of the present invention.

What I claim is—

1. The combination with the desk, and a longitudinally-movable bar pivoted at its outer end to the desk front, of a connecting rod located substantially parallel with and moving oppositely to said bar, said rod being pivoted at its outer end to said front below said bar



and having its inner end connected to the stationary part of the desk by a movable pivot, substantially as shown.

2. The combination with the front of a desk having a ledge, and the desk top provided with a casing, of a bar pivoted to said front and movable longitudinally through said casing, a stop for limiting the movements of said bar, a connecting rod located substantially parallel with and moving oppositely to said bar, said rod being pivoted at its outer end to said front below said bar and having its inner end pivotally connected with said casing by a movable pivot, and a stop for limiting the movements of said rod, substantially as described.

3. The combination with a desk, of a slotted casing secured to the top thereof, the movable slotted-bar pivoted to the movable front of the desk and supporting said desk front, the movable rod also pivoted to said front, and the pins in the slots of said casing and bar, said parts being arranged and operating substantially as described.

4. In a desk the combination of a desk front, a longitudinally movable bar pivoted in the casing I, said casing being embedded in the desk front and having a ledge adapted to engage the end of said bar and support said desk front, a casing L embedded in the desk top, slots in said bar, pins passing through said slots and into said casing L, a connect-

ing rod pivoted in the casing at one end and carrying the pin J at the other, said pin being adapted to move in the slot J' in the casing L, a molding, and an angle strip having a concave upper face, substantially as described.

5. A means for pivotally supporting the front of a desk, embodying a casing, I, a bar pivoted to said casing, a connecting rod pivoted at its outer end to said casing at a point below the pivot of the bar, and the casing L through which said rod and bar are adapted to move longitudinally, said rod being pivoted to said casing L by a movable pivot, substantially as described.

6. In a desk, the front and a support therefor, said support having in combination, a longitudinally movable bar pivoted at one end in a casing I, said casing having a ledge adapted to engage the end of said bar, a casing L embracing said bar, slots in said bar, pins secured in said casing L and engaging said slots and a connecting rod pivoted in said casing I, at one end and having at the other end, a pin adapted to move in a slot in the casing L, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRED W. TOBEY.

Witnesses:

LUTHER V. MOULTON,  
LOIS MOULTON.