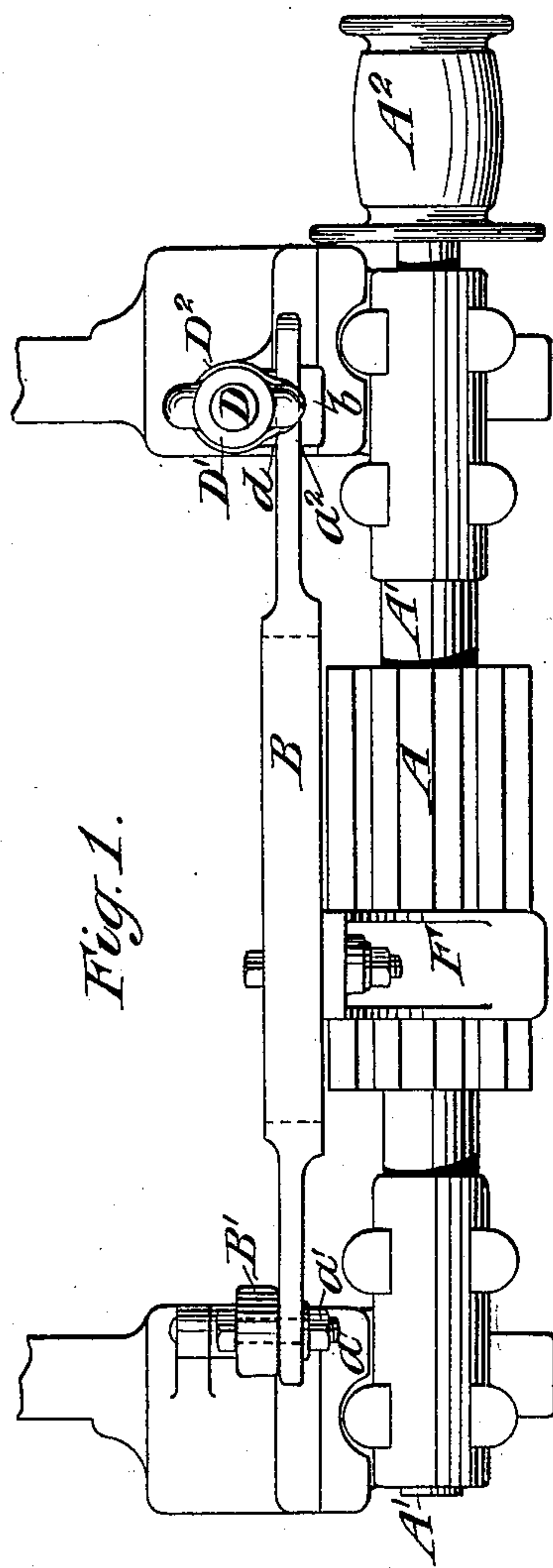
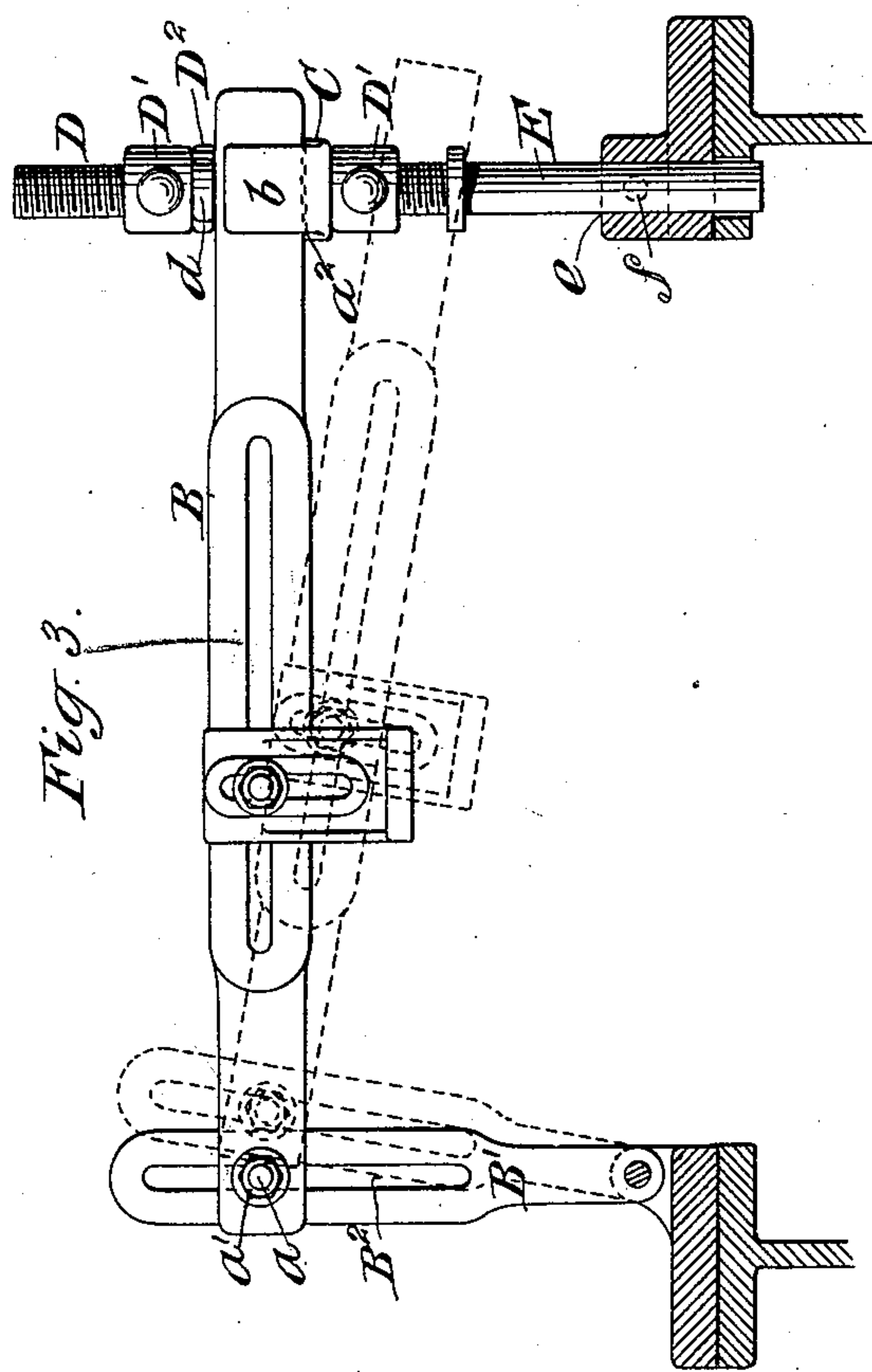
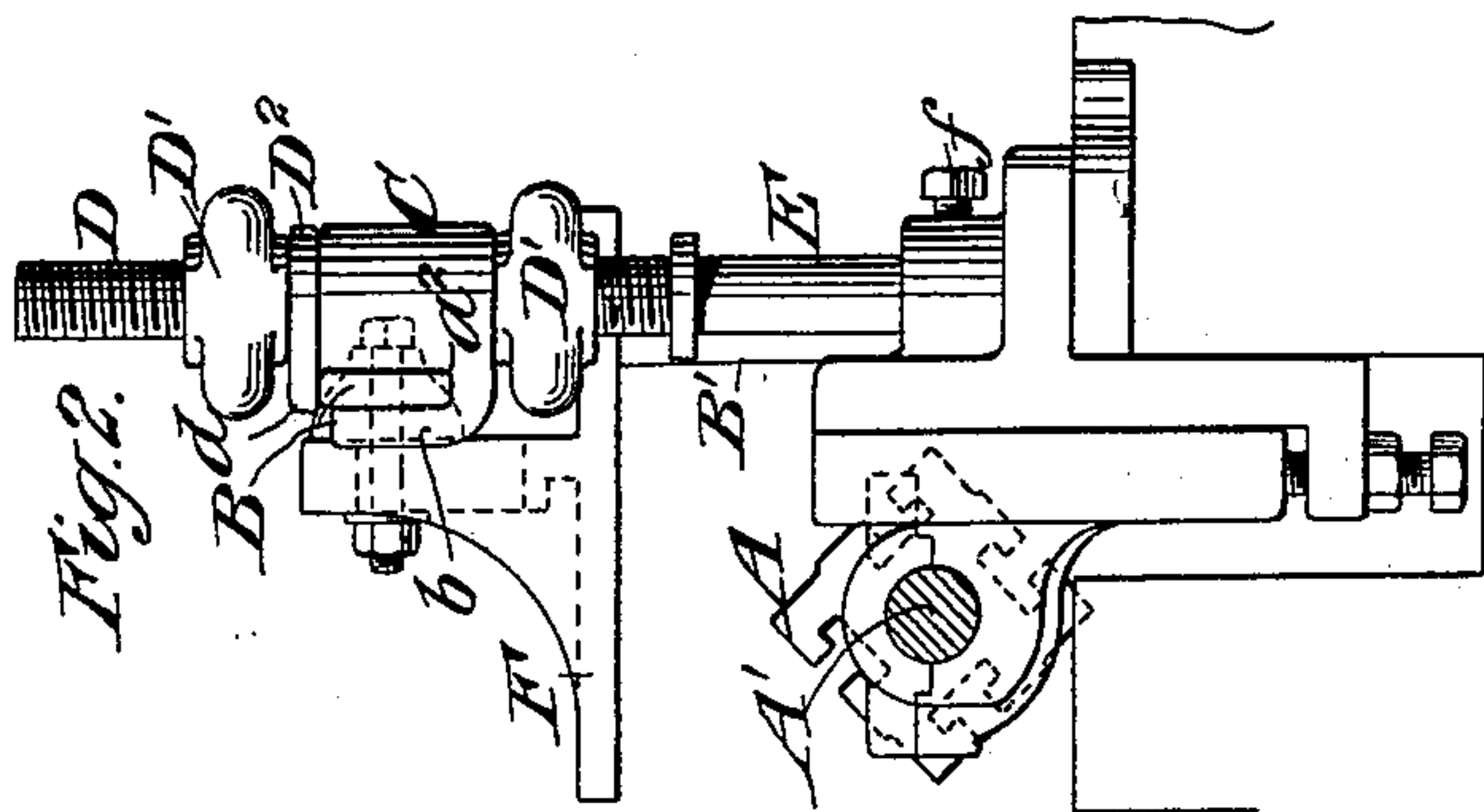


(No Model.)

E. F. AUTENRIETH.  
PLANING MACHINE.

No. 404,948.

Patented June 11, 1889.



Witnesses:  
O. Sundgren  
J. Bergengren

Inventor:  
Ernest F. Autenrieth  
By attorneys  
Brown & Griswold



# UNITED STATES PATENT OFFICE.

ERNST F. AUTENRIETH, OF NEW YORK, ASSIGNOR TO THE GLEN COVE MACHINE COMPANY, (LIMITED,) OF BROOKLYN, NEW YORK.

## PLANING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 404,948, dated June 11, 1889.

Application filed December 13, 1888. Serial No. 293,457. (No model.)

*To all whom it may concern:*

Be it known that I, ERNST F. AUTENRIETH, of New York, in the county and State of New York, have invented a certain new and useful Improvement in Planing-Machines, of which the following is a specification.

My improvement relates particularly to the presser-bar employed in planing-machines for pressing the lumber downwardly as it passes over a surfacer.

I have only illustrated such portions of a planing-machine as are essential to an understanding of my invention.

In the accompanying drawings, Figure 1 is a plan or top view of a surfacer for a planing-machine, together with a presser-bar embodying my improvement. Fig. 2 is an end view of the same. Fig. 3 is a side elevation of the presser-bar and its attachments.

Similar letters of reference designate corresponding parts in all the figures.

A designates a surfacer by which the under side of a board is planed. The surfacer is mounted upon a shaft A', deriving motion from a pulley A<sup>2</sup>, driven in the usual or any suitable manner.

B designates the presser-bar. This presser-bar extends horizontally of the machine. It is supported near one of its ends upon an upright arm B', which arm is pivoted near its lower end upon a portion of the main frame of the machine, so that it may swing freely.

B<sup>2</sup> designates a longitudinal slot formed in the arm B'. Through this slot, and also through the adjacent end of the bar B, extends a clamping-bolt *a*. By loosening this clamping-bolt the adjacent end of the bar B may be adjusted into different vertical positions, and by tightening the nut *a'* upon said bolt the bar may be clamped in any position into which it may have been adjusted. The other end portion of the bar is received within a pocket *a*<sup>2</sup>, formed between a collar C and an upwardly-extending projection *b* on said collar. The collar C is provided vertically with a suitable aperture, through which extends a screw-threaded support D. Nuts D', engaging the screw-threaded portion of the support D—one above and the other below the collar C—prevent vertical movement of the collar.

Between the upper of the nuts D' and the collar C is a ring or washer D<sup>2</sup>, surrounding the support D. This ring or washer is provided with a projecting portion *d*.

When the upper of the nuts D' is loosened, the ring or washer D<sup>2</sup> may be rotated to bring the projecting portion *d'* over or away from over the bar B. When over the bar B and the nut D' is again tightened, the bar cannot be lifted out of the pocket *a*<sup>2</sup>. When moved away from over the bar B, the latter may be freely lifted out of the pocket. The lower portion of the support D (indicated by the letter E) is unscrew-threaded and is adapted to be passed freely through a suitably-formed aperture *e*, extending vertically through a portion of the frame of the machine. I have shown a set-screw *f* for retaining the support D in any position into which it may be adjusted within the aperture *e*. It will be seen that this arrangement not only admits of a vertical adjustment of the support D within the aperture *e*, but it also furnishes a detachable connection between the support D and the frame of the machine. This is advantageous, because it is often desirable to remove the surface-cutter A and replace it with a molding or other cutter. All that is necessary to do in such case is to loosen the set-screw *f* and lift the support D bodily from the aperture *e*, when it, together with the bar B, may then be swung freely over upon the pivot of the arm B'. This is advantageous, because in order to thus swing the presser-bar away from over the surfacer it is not necessary to adjust the nuts D'. The adjustment of the support D, made possible by this connection with the frame, admits also of slight variations in adjustment, where great accuracy is not required, without manipulating the nuts D'. Upon the bar B is a vertically and horizontally adjustable presser F, of ordinary construction.

By the above arrangement the bar B may be swung at any angle by leaving the bolt *a* fixed and operating the nuts D', or, in case quick adjustment is required, by loosening the set-screw *f*.

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

1. In a planing-machine, the combination,  
with a presser-bar, of a swinging support  
therefor, to which the bar is connected near  
one of its ends and upon which it is adjusta-  
5 ble, a support for the bar near its other end  
having a screw-threaded portion and an un-  
screw-threaded portion formed with the screw-  
threaded portion, the screw-threaded portion  
being provided with nuts, whereby the bar  
10 may be vertically adjusted, and the unscrew-  
threaded portion having a detachable connec-  
tion with the frame of the machine, substan-  
tially as specified.

2. In a planing-machine, the combination,  
15 with a presser-bar, of a swinging support

therefor near one end, a support for the same  
near the other end thereof, comprising a screw-  
threaded portion and an unscrew-threaded  
portion, said screw-threaded portion being  
provided with nuts, whereby the bar may be 20  
adjusted vertically, and the unscrew-threaded  
portion extending loosely through an aperture  
in the frame of the machine, and a set-screw  
for securing said unscrew-threaded portion in  
said aperture, substantially as specified.

ERNST F. AUTENRIETH.

Witnesses:

FREDK. HAYNES,  
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