

(No Model.)

J. GRANT.  
WORK REST.

No. 511,201.

Patented Dec. 19, 1893.

Fig. 1

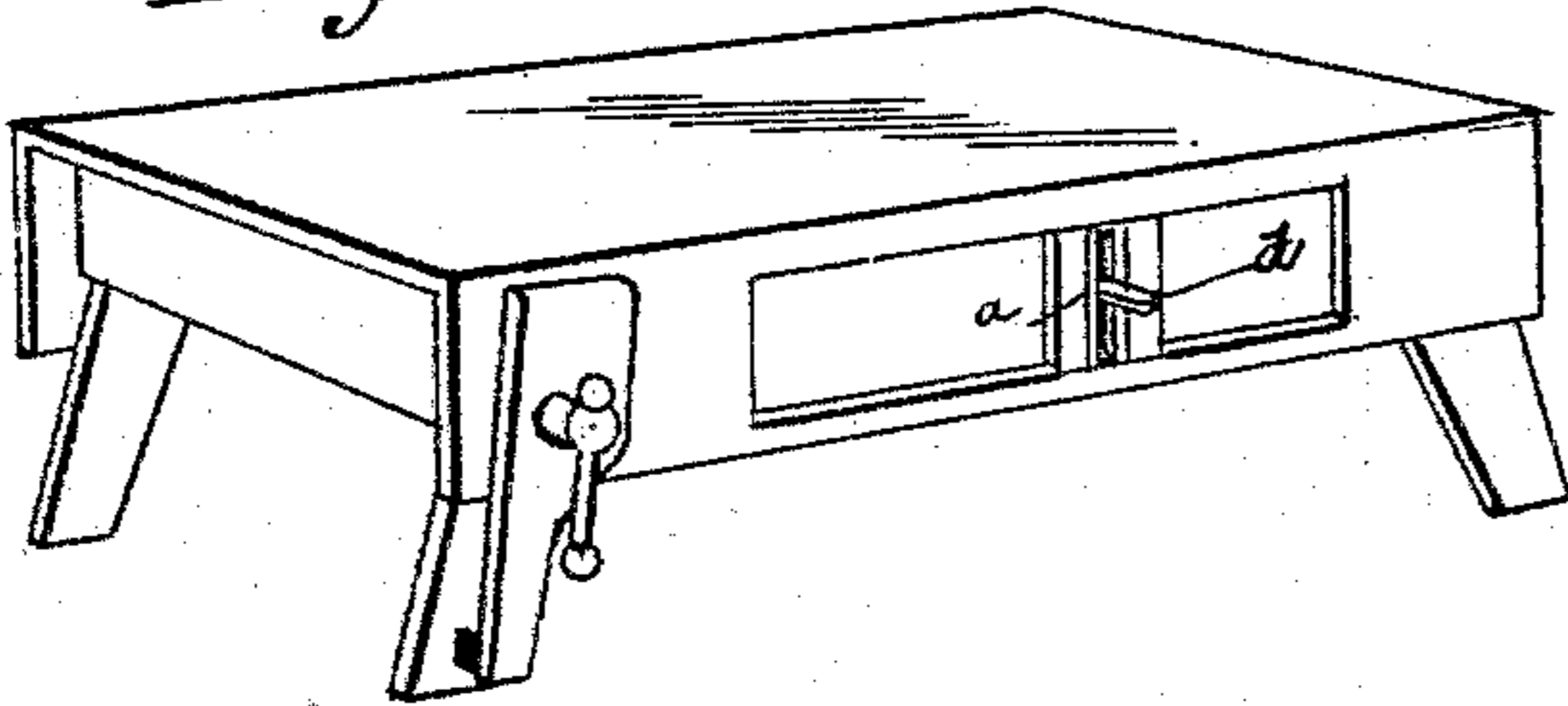


Fig. 2

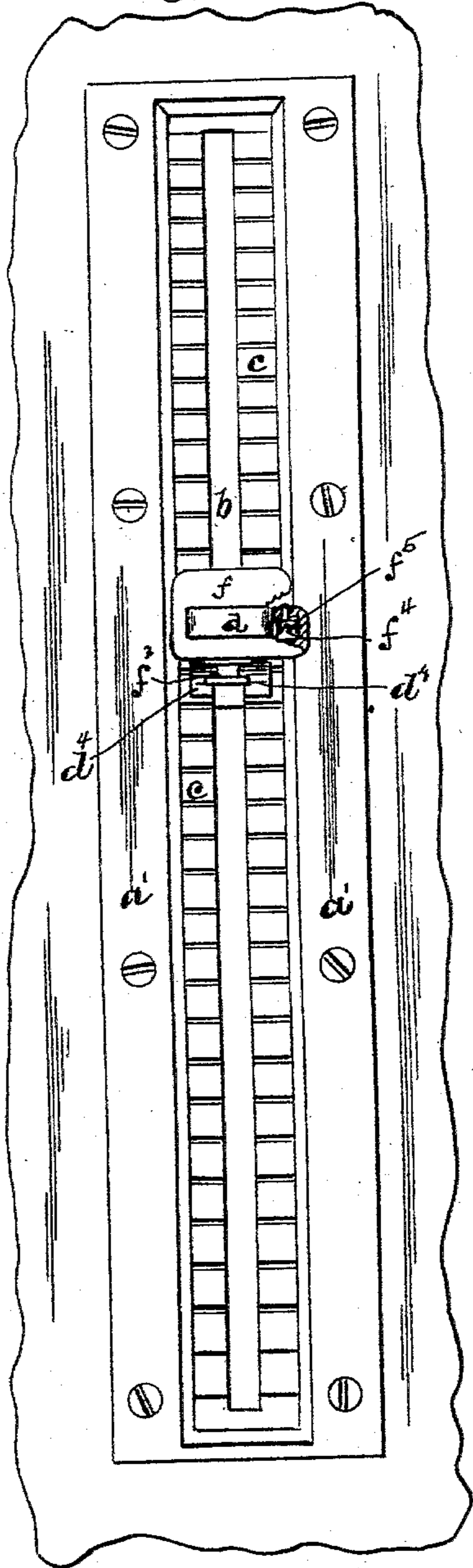
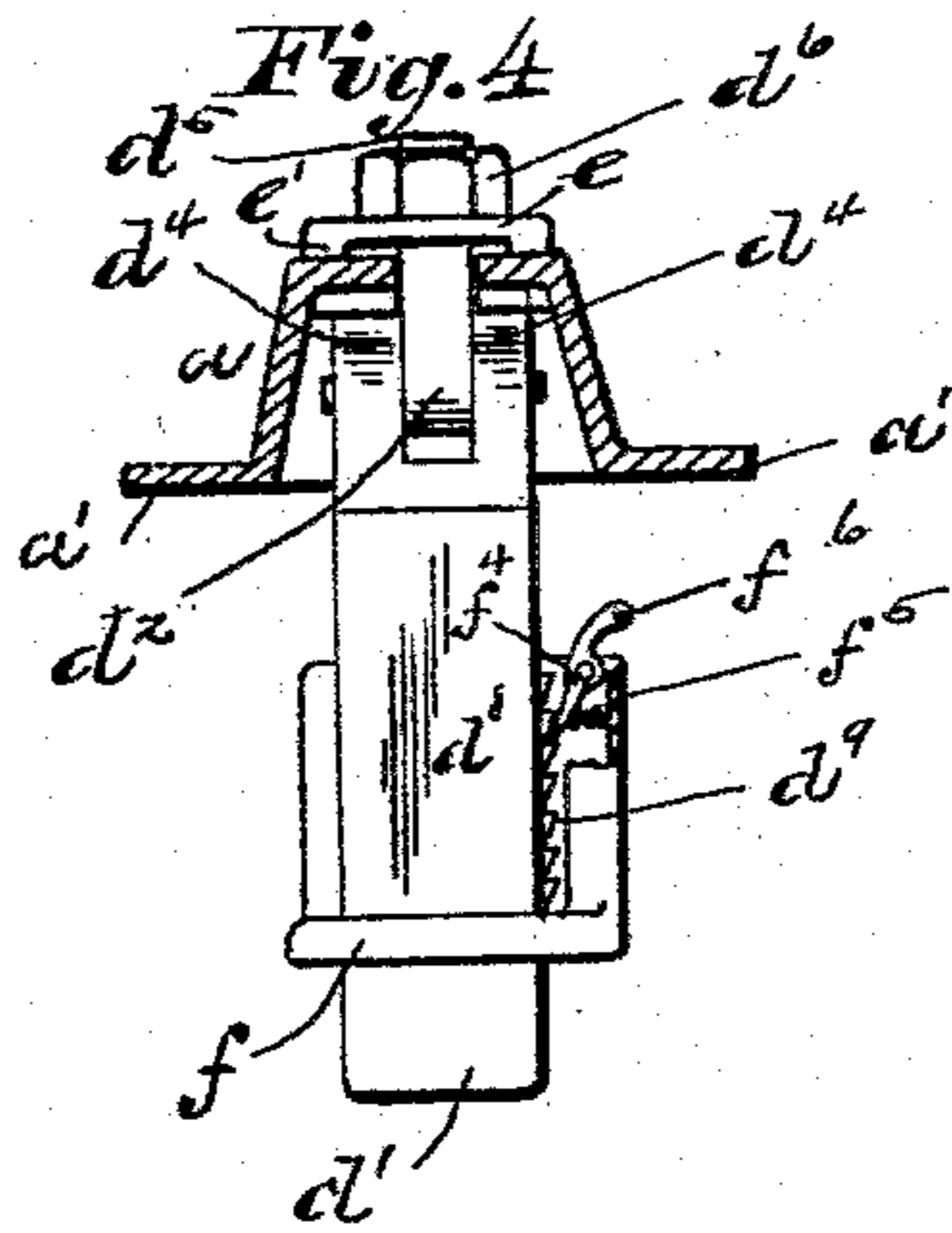
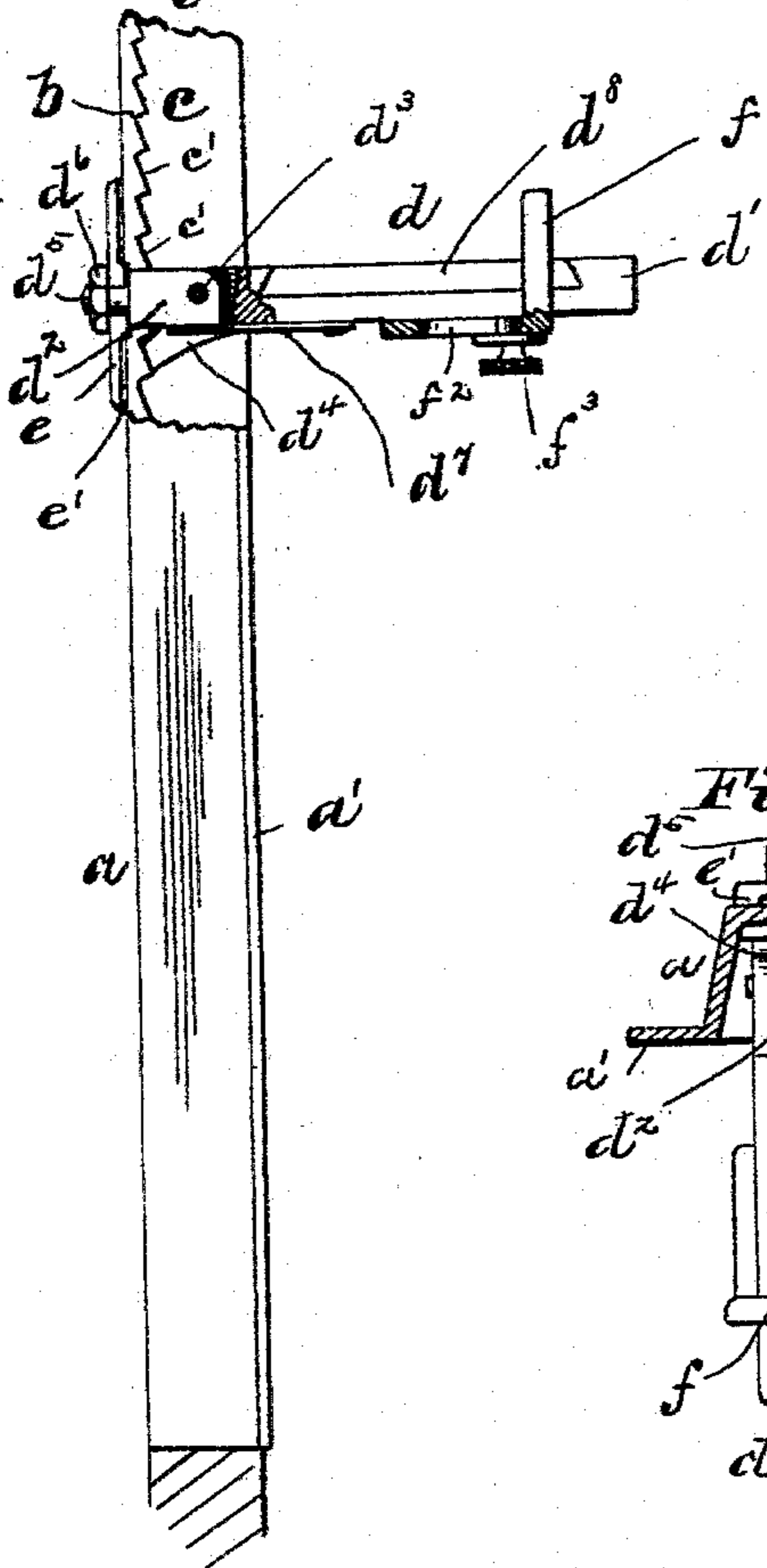


Fig. 3



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN GRANT, OF SPRINGFIELD, OHIO.

## WORK-REST.

SPECIFICATION forming part of Letters Patent No. 511,201, dated December 19, 1893.

Application filed January 11, 1893. Serial No. 457,987. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN GRANT, a subject of the Queen of Great Britain, who have declared my intention of becoming a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Work-Rests, of which the following is a specification.

My invention relates to a work rest, especially adapted for use on a carpenter's or cabinet-maker's bench, and the object of my invention is to provide a simple and effective device which may be readily adjusted to any desired position to hold work or boards of different widths, and which may be readily folded out of the way when not in use.

My invention consists in the various constructions and combinations of parts herein after described and pointed out in the claims.

In the accompanying drawings Figure 1 is a perspective view of a bench to which my device is shown applied. Fig. 2 is a front elevation of my improved device. Fig. 3 is a side elevation, partly in section, and Fig. 4 is a transverse section of the same.

Like parts are represented by similar letters of reference in the several views.

My improved work rest consists essentially of an outer frame or casing having a main body *a*, substantially of a U-shape, and projecting side wings *a'*, *a'*. The main body *a*, is provided on the inside at the back with a longitudinal groove *b*, on each side of which are arranged ratchet teeth *c*. Arranged within the outer casing and adapted to slide vertically therein is the rest proper, *d*, the main portion of which is formed in two parts *d'*, *d''*, hinged together at *d'''*; the outer projecting part *d'*, being provided with downwardly and backwardly projecting lugs *d<sup>4</sup>*, adapted to engage in the ratchets *c*, and hold the rest in any position of adjustment. The part *d''*, of the rest, which projects through the slotted opening *b*, is rectangular in cross section, but is shouldered down where it passes through the slotted opening to form a stud *d<sup>5</sup>*; which passes through the said opening and is screw-threaded to receive a nut *d<sup>6</sup>*; said stud being also adapted to pass through a sliding block *e*, preferably formed at the four corners with wearing surfaces *e'*, which bear against the

outside of the casing at the rear. The part *d''*, is rounded at the upper front corner, as shown in Fig. 1, but is formed square at the lower corner and is adapted to contact with a flat spring *d<sup>7</sup>*, secured at its outer end to the hinged portion *d'*; said spring being adapted to hold the parts either in an extended or folded position as said spring bears against the bottom or end of the sliding portion *d''*. The rest *d*, is further preferably provided with a soft bearing block *d<sup>8</sup>*, in the upper surface thereof, preferably of leather or rubber, and is further preferably provided with a sliding head *f*, which is formed with an opening to fit and slide over the projecting portion of the rest *d*, and at the bottom with a slotted opening *f<sup>3</sup>*, through which is projected a supporting screw *f<sup>3</sup>*, which permits a limited movement of said sliding head on the rest *d*. The rest *d*, is further provided on one side with a series of ratchet teeth *d<sup>9</sup>*, with which a pivoted pawl *f<sup>4</sup>*, on the sliding head *f*, is adapted to engage; said pawl being pressed inwardly by a spring *f<sup>5</sup>*, and preferably extended to form a thumb-piece *f<sup>6</sup>*, by means of which it may be readily detached from the ratchets to permit the head to be moved back or forth, as desired.

The lugs *d<sup>4</sup>*, on the rest *d*, are preferably formed at an angle to the plane of the rest and are adapted to bear against the beveled face *c'*, of the ratchets *c*; the outer or bearing end of the lugs *d<sup>4</sup>*, being formed tangent to a circle struck from the pivotal center *d'''*, of said rest, and the beveled faces *c'* of the ratchets being formed to correspond thereto, when the rest is in its working position. The result of this construction is that the rest may be thrown out of engagement with the ratchets at any time, and when released drops back into engagement therewith without any previous upward or downward movement of the rest. The beveled face contacting, as described, serves the double purpose of supporting the rest and also of taking up any lost motion in the respective parts, when the weight comes on said rest, as a downward movement tends to draw the sliding plate *e*, firmly against the back of the frame and thus take up the lost motion therein.

A device as thus described is intended to be used with a carpenter's or cabinet-maker's bench. The outer casing is let into the sliding

block or into the sides of the work bench so as to stand flush therewith. The channeled or U-shaped portion of the frame is of sufficient depth to receive the rest *d*, when folded 5 therein. The sliding head *f*, serves the purpose, when desired, of holding the end of the work on the rest against lateral movement and prevents the same from slipping off of the main body of the rest. This head may be 10 readily detached, if desired, and used or not, as the preferences of the operator may dictate.

Having thus described my invention, I claim—

1. The combination with the casing having 15 the slotted opening and ratchets therein, of a two part rest connected to a sliding head through said slotted opening, and a sliding guard on said rest, and means for holding said guard in different positions of lateral ad- 20 justment thereon, substantially as specified.

2. The combination with the outer casing having the ratchet projections and the slotted opening therein, of a two part rest adapted to slide in said casing and engage in said 25 ratchets, a spring for holding said rest in different positions of adjustment, a sliding guard on said rest having a spring actuated pawl, adapted to engage in ratchets on the side of said rest, substantially as specified.

30 3. In a work rest, the combination with the

frame or casing having a series of beveled or ratchet faces extending downwardly and outwardly from said frame, a slotted opening adjacent to said ratchet faces, a bearing block projecting through said slotted opening, and 35 a sliding rest pivoted to said bearing block and provided with engaging projections extending inwardly and downwardly and having beveled ends adapted to rest on said beveled or ratchet faces below said rest, whereby 40 said rest is supported on the inclined faces of said ratchet, substantially as specified.

4. The combination with the U-shaped casing having a slotted opening therein, and a series of inclined or beveled faces arranged at 45 each side of said opening, a movable rest connected to a bearing block through said opening, said rest being provided with projections having beveled ends adapted to engage with the beveled faces on said casing, said projec- 50 tions and beveled faces being adapted to form a wedge-shaped support for said rest, which causes the parts to draw tightly together in operation, substantially as specified.

In testimony whereof I have hereunto set 55 my hand this 6th day of January, A. D. 1893.

JOHN GRANT.

Witnesses:

ROBERT C. RODGERS,

FRANK WATT.