

No. 685,057.

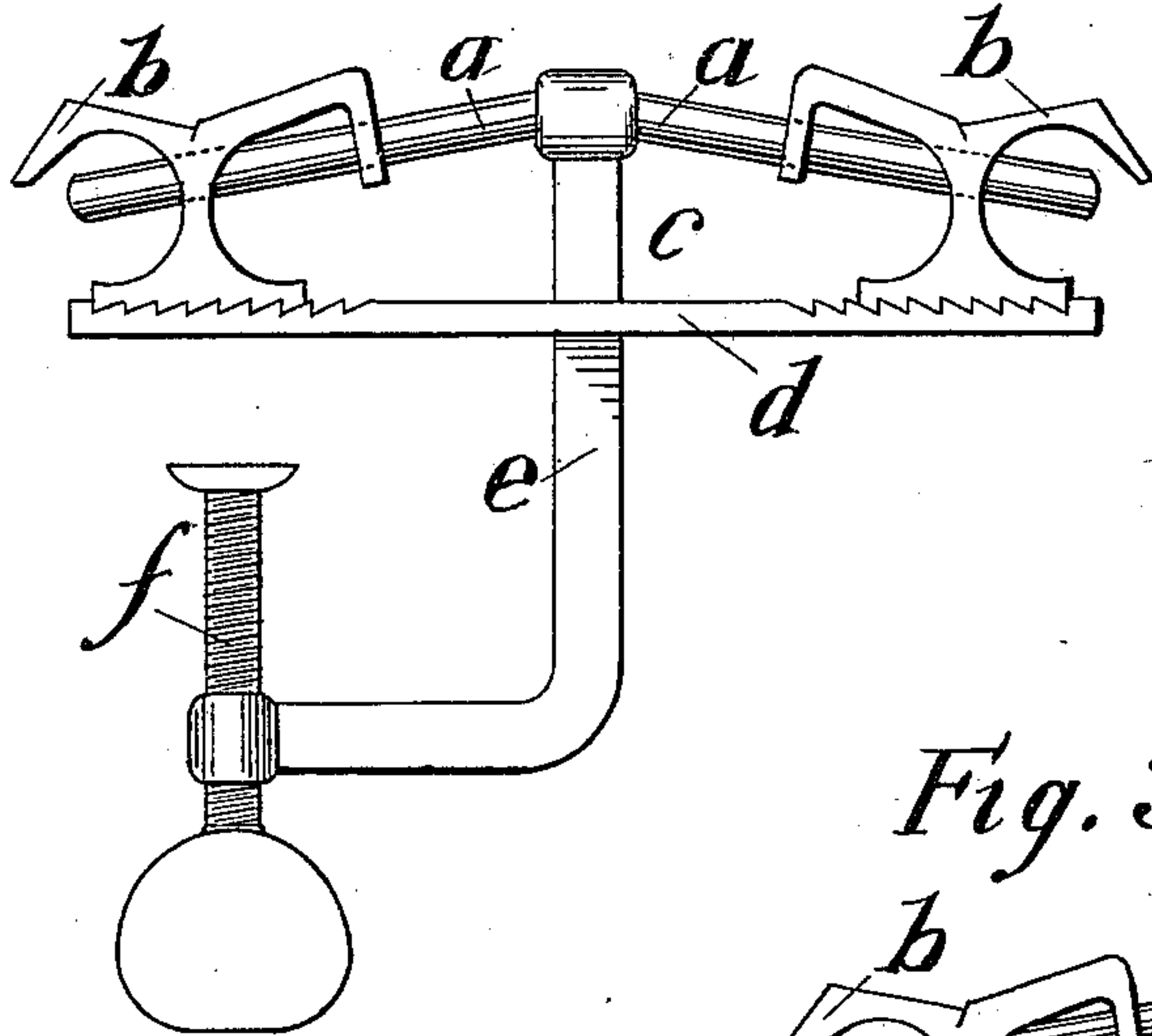
Patented Oct. 22, 1901.

J. S. PEDEN.  
WORK HOLDER.

(Application filed May 29, 1901.)

(No Model.)

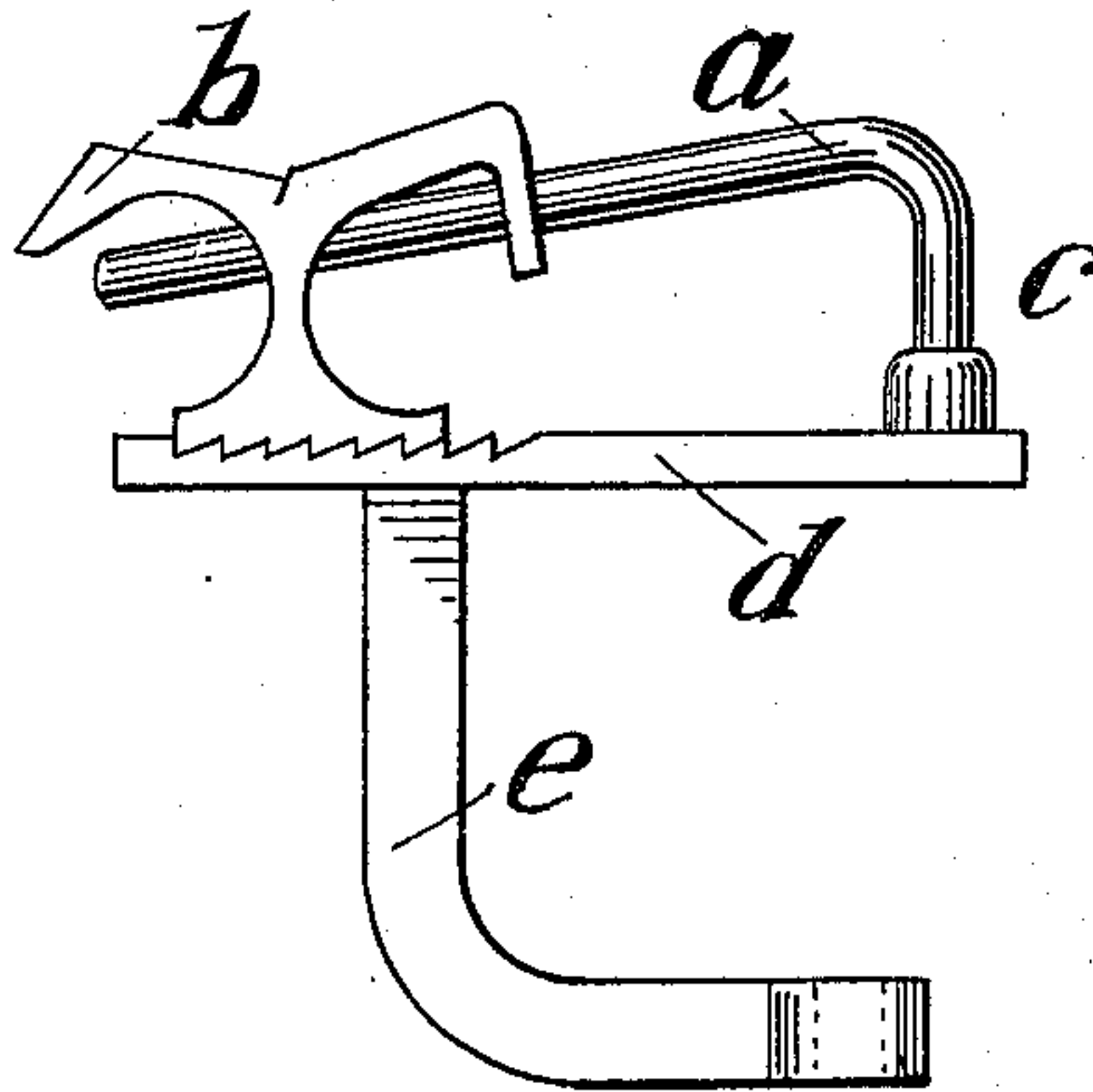
*Fig. 1*



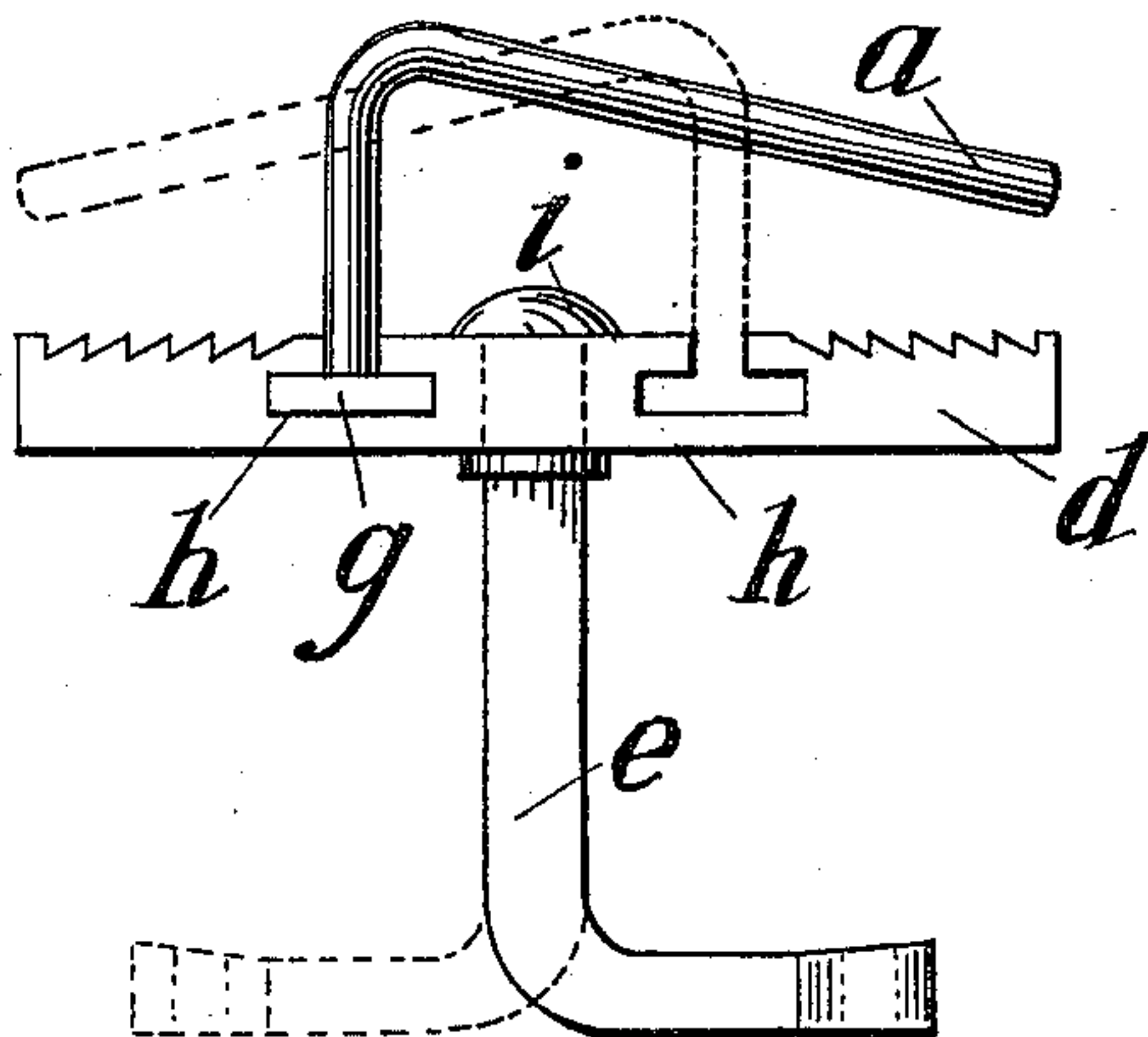
*Fig. 2*



*Fig. 3*



*Fig. 4*



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## WORK-HOLDER.

SPECIFICATION forming part of Letters Patent No. 685,057, dated October 22, 1901.

Application filed May 29, 1901. Serial No. 62,336. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH S. PEDEN, a citizen of the United States, and a resident of the borough of Manhattan and county of New York, in the city of New York and State of New York, have invented new and useful Improvements in Work-Holders, reference being had to the accompanying drawings, forming part thereof.

10 My invention relates to work-holders adapted for use in sewing and for other uses.

My invention has for its objects simplicity of construction and operation and small number of working parts, strength and durability, 15 readiness of adjustment, and the attainment of an elastic gripping action associated with a powerful and self-adjusting grip. Devices of this nature have usually been constructed with a spring-actuated upper jaw operating 20 upon a fixed element to form the lower jaw of the clamp or have been clamping devices without springs. The first necessitated a comparatively large number of parts, thereby detracting largely from their utility, and the second were liable to grip the fabric too firmly, 25 and thereby tear or mar it. I have found that it is possible to combine the advantages of both sets of devices and produce a resilient clamping-jaw of large bearing-surface that is 30 capable of holding firmly, but not rigidly enough to tear or otherwise mar fine work. For this purpose I propose to employ a spring-pressed wedge action wherein the pull tends to force the wedge down more tightly and produce a stronger bite into the material. This 35 action is not, however, a rigid clamping owing to the elasticity of the spring, producing thereby what may be termed an "elastic wedge clamp." By this construction I am enabled to 40 eliminate a large number of the small parts used in the former devices.

I will now describe the constructions illustrating embodiments of my invention shown in the accompanying drawings and will thereafter point out my invention in claims. 45

Figure 1 is a side elevation of a work-clamp embodying my invention, showing a double clamping arrangement. Fig. 2 is a part end elevation of the same. Fig. 3 is a side elevation of a single clamp. Fig. 4 is a side elevation of a reversible clamp. 50

To more particularly describe my device with reference to the drawings, *d* represents my fixed element—a suitable bed-plate—that acts as the lower jaw of the upper or work-receiving clamp and as the upper jaw of a lower 55 or support-gripping clamp, this support-gripping clamp having an L-shaped bar *e* arranged to project beneath the table-ledge and to carry a thumb-screw *f* to secure the device thereto. 60 To the bed-plate is secured an upright *c*, that carries the resilient arm *a*, arranged to incline toward the bed-plate, and a wedge clamping-jaw *b*, representing my movable element, is fitted to slide longitudinally on the inclined 65 resilient arm *a*. The inclined resilient arm *a* is rounded, and the wedge clamping-jaw *b* may therefore turn freely thereon when clear of the bed-plate or lower jaw, and, as shown, the wedge clamping-jaw is sufficiently narrow 70 to clear the lower clamping-jaw when turned on the inclined resilient arm at a right angle to the position shown. This construction permits the wedge jaw to be readily inserted upon 75 and removed from the inclined resilient arm, its removal being accomplished by moving it toward the upright until it is free from the base or lower jaw and then turning it through a right angle and its insertion being accomplished by a reversal of these movements. 80

At the holding or gripping points of the device I prefer to corrugate the bed-plate or lower jaw and to correspondingly corrugate the surface of the clamping-wedge.

The construction shown in Fig. 1 provides 85 a double clamp having two inclined resilient arms *a* and two wedge clamping-jaws *b*, permitting the device to be used for holding work over or on a table and for holding work away from a table, or both. As the clamping-jaw 90 *b* is removable from its spring-arm, it is obvious that in the form illustrated in Fig. 1 a single clamping-jaw *b* may be used by the operator with either or both of the resilient arms *a*. Fig. 3 illustrates a single clamp for hold- 95 ing work away from a table. In the construction shown in Fig. 4 I have removably secured the arm *a* to a bed-plate *g* and have provided therefor two sockets *h* in the bed-plate and two sets of corrugations at either end of the 100 bed-plate. In this device I have also placed the L-bar *e* of the work-gripping clamp on a



swivel *i*, so that the bed-plate may be turned end for end by slightly releasing the thumb-screw *f*.

The operation of my device is as follows:

5 The clamping-wedge *b* is moved up the inclined resilient arm *a* and the material inserted between the said arm and the bed-plate. The clamping-wedge is then moved downward upon the material until the same is firmly  
10 held. As the tension on the material is increased the tendency is to pull the wedge jaw forward and to force the spring-arm upward and more tightly wedge the material against the bed-plate.

15 It is evident that various modifications other than those above described may be made within the spirit and scope of my invention.

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

20 1. A work-holder consisting of a fixed element, a movable element and means for providing a yielding and wedging action between said fixed and movable elements.

25 2. A work-holder consisting of a fixed element, a movable element, a yielding support therefor, and means intermediate of said movable element and support producing a wedging action between the two elements.

30 3. In a work-holder the combination of a spring-arm suitably secured to a bed-plate and inclined toward the same, a clamping-jaw movable longitudinally thereof and a bed-plate with which said clamping-jaw coacts.

35 4. In a work-holder, in combination, a bed-plate, a spring-arm suitably secured to the bed-plate and inclined toward the same, a

clamping-jaw movable thereon and acting in conjunction with said bed-plate, and means for clamping the holder to a support.

5. In a work-holder, in combination, a bed-plate, a spring-arm suitably secured to a bed-plate and inclined toward the same, a clamping-jaw sliding longitudinally thereon, and capable of being removed therefrom, and acting in conjunction with said bed-plate, and  
45 means for clamping the holder to a support, substantially as set forth.

6. In a work-holder, in combination, a bed-plate, a spring-arm supported at one of its ends by the bed-plate, a clamping-jaw carried  
50 by the spring-arm and constructed to coact with the bed-plate to grip material placed between it and the bed-plate when a pull is exerted on the material, substantially as set forth.

7. A work-holder consisting of a bed-plate, two oppositely - extending inclined spring-arms, a wedge clamp acting in conjunction therewith, and means for clamping the holder  
55 to a support, substantially as set forth.

8. A work-holder consisting of the bed-plate *d*, the two inclined spring-arms *a*, *a*, the wedge clamp *b* fitted to slide on either of said arms, and means for clamping the holder to  
60 a support, substantially as set forth.

Signed at New York this 28th day of May, 1901.

JOSEPH S. PEDEN.

In presence of—

HENRY D. WILLIAMS,  
C. C. BAILEY.