

S. O. DUEMLER.
BLACKSMITH'S SUPPORT.
APPLICATION FILED SEPT. 29, 1910.

988,447.

Patented Apr. 4, 1911.

Fig. 1.

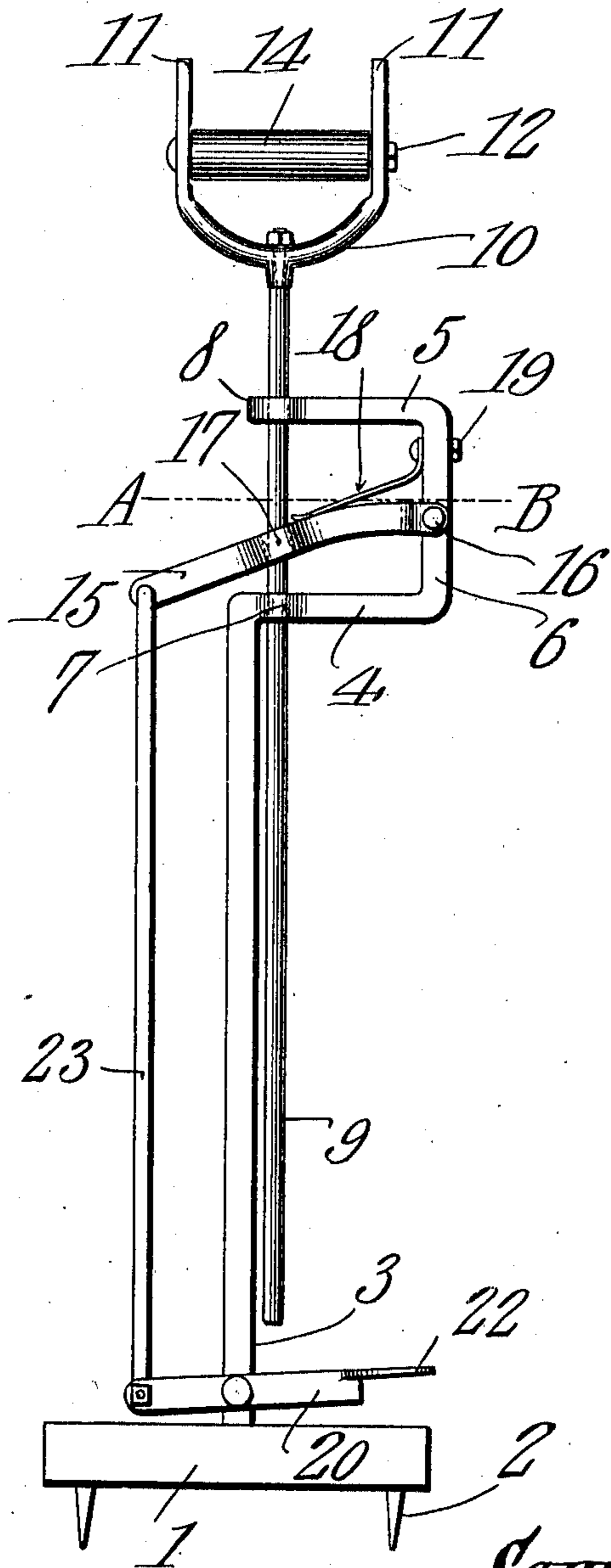


Fig. 2.

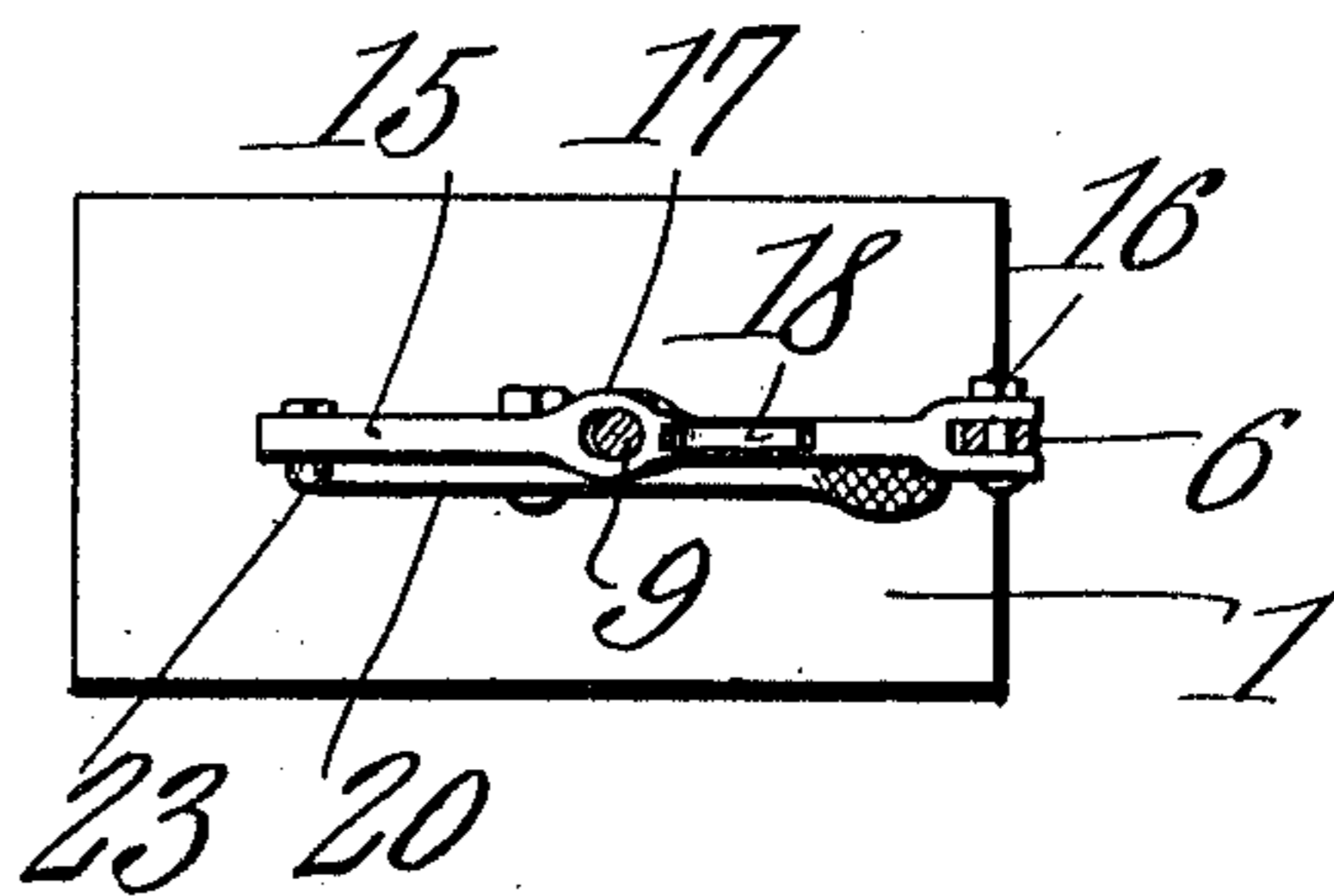
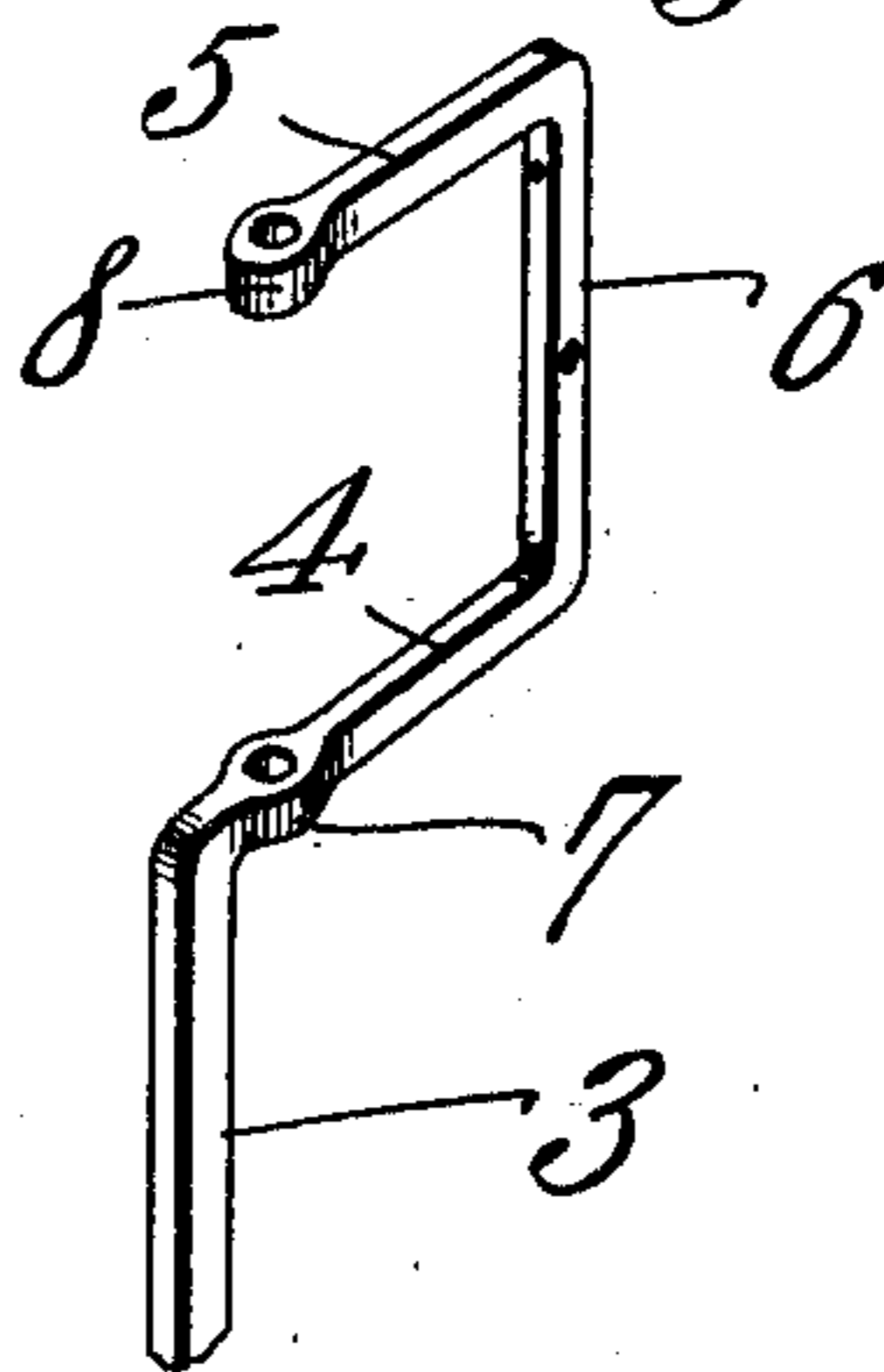


Fig. 3.



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Witnesses

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UNITED STATES PATENT OFFICE.

SAMUEL O. DUEMLER, OF SPRINGFIELD, MISSOURI.

BLACKSMITH'S SUPPORT.

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To all whom it may concern:

Be it known that I, SAMUEL O. DUEMLER, a citizen of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented a new and useful Blacksmith's Support, of which the following is a specification.

It is the object of this invention to provide a device adapted to be employed in blacksmiths' shops, and other like places where mechanical operations are being carried on, to support a piece of metal while the same is being heated in a forge, or manipulated upon an anvil, the construction being such that the device may readily be adjusted vertically and swung in a horizontal plane, to dispose the material which is being manipulated, in the most accessible position.

Another object of the invention is to provide a device of the class above mentioned in which the vertically movable member may be mounted in a novel and improved manner, and to provide novel means whereby the vertically movable member may be held in a predetermined position.

Another object of the invention is to provide a device of the class above mentioned in which the vertically movable member may be raised to the desired height and there automatically retained.

Another object of the invention is to provide a means whereby, at the will of the operator, the vertically movable portion of device may be lowered without calling into operation, the hands of the operator, or otherwise interfering with the work in hand.

With the above and other objects in view, the invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the drawings and specifically claimed, it being understood that, within the scope of what is claimed, changes may be made, without departing from the spirit of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings,—Figure 1 is a side elevation; Fig. 2 is a section on the line A—B; and Fig. 3 is a perspective of one end of the standard.

In carrying out the invention, there is

provided a base 1, having, upon its lower face, support-engaging prongs 2. Fixed to and rising from the base 1, is a standard 3, which, at its upper end, is bent, or otherwise disposed to form a hook, the hook including a lower portion 4, an upper portion 5, and an intermediate portion 6 connecting the portions 4 and 5, the portions 4 and 5 being disposed in substantially horizontal positions, and the portion 6 being disposed in upright position, substantially parallel to the standard 3.

The upper portion 5 of the hook is somewhat shorter than the lower portion 4 thereof, so that the extremity of the upper portion 5 is disposed above, and between the standard 3 and the intermediate portion 6 of the hook. In the lower portion 4 of the hook, and adjacent the standard 3, there is an enlargement, constituting an eye 7, there being in the extremity of the upper portion 5 of the hook, a similarly formed eye 8, aligned vertically with the eye 7 in the portion 4. In these eyes 7 and 8, a rod 9 is adapted to move vertically, an upright fork 10 being rotatably mounted on the upper end of the rod 9. A pivot bolt 12 connects the tines 11 of the fork, and upon this pivot bolt there is journaled for rotation a roller 14.

A lever 15 is provided, one end of which is disposed within the contour of the hook at the upper end of the standard 3, and pivoted at 16 to the intermediate portion 6 of the hook. Intermediate its ends, the lever 15 is provided with an eye 17, in which the rod 9 is adapted to move, the construction being such that when the lever 15 is disposed in a horizontal position, or nearly so, the rod 9 will move freely in the eye; while, upon the other hand, when the free end of the lever 15 is depressed, the rod 9 will be firmly bound in the eye 17, against downward movement.

In order normally to hold the lever 15 in such a position that it will restrain the rod 9 against downward movement, a spring 18 is provided, one end of which is secured by means of a bolt 19, or the like, to the intermediate portion 6 of the hook, above the point where the lever 15 is pivoted. The other end of the spring 18 bears against the lever 15 intermediate the portion 6 of the hook and the rod 9. Pivoted intermediate its ends to the lower portion of the standard

3, is a pedal 20, flattened at one end as denoted by the numeral 22, for the reception of the foot of the operator, and, at the other end, pivotally connected with the lower end of a connecting rod 23, the upper extremity of which is pivotally connected with the free end of the lever 15.

The construction is such that, when the operator desires to raise the roller 14, the rod 9 may be grasped and pulled upwardly, the rod 9 sliding readily in the eye 17 of the lever 15, the lever tilting upwardly, sufficiently to permit the operation. When, however, a downward pressure is exerted upon the roller 14, the lever 15, under the actuation of the spring 18 and, indeed, under its own weight, will firmly engage the rod 9 against downward movement. When it is desired to lower the roller 14, the foot of the operator may be placed upon the portion 22 of the pedal 20, lifting the connecting rod 23 and tilting upwardly the free end of the lever 15. This tilting of the lever 15 will break the engagement between the lever and the rod 9, whereupon the arm may be lowered to the desired level. When the foot of the operator is removed from the pedal 20, the lever 15 will automatically engage the rod 9 and bind the said rod at the desired level.

Owing to the hook which is formed by the portions 4, 5 and 6 at the upper end of the standard 3, the standard, the connecting rod 23 and the lever 15 may be disposed in substantially a common plane, thus causing the device to occupy but very little space. Moreover, by housing the spring 18 within the contour of the hook at the upper end of the standard 3, the said spring is so positioned that it will be protected against accidental injury. The hook at the upper end of the standard likewise serves to support the rod 9 at two points, without necessitating the telescoping of the rod 9 within the

standard 3, or resorting to another expensive and cumbersome expedient.

In operating the structure, the same may be disposed in a convenient position between the anvil and the forge, and a long bar of metal may be advanced along the roller 14 into the forge and heated. Subsequently, the bar may be retracted or advanced along the roller 14 to position the heated end of the metal above the anvil, the rotatable mounting of the fork 10 readily permitting the heated end of the metal to be swung horizontally from one point to another.

Having thus described the invention, what is claimed is:—

1. A device of the class described comprising an upright standard; a rod mounted for vertical movement in the standard and arranged at its upper end to serve as a support; a lever pivoted at one end to the standard and arranged in its intermediate portion to engage the rod against downward movement; and resilient means for holding the lever in engagement with the rod.

2. A device of the class described comprising an upright standard; a rod mounted for vertical movement in the standard and arranged at its upper end to serve as a support; a lever pivoted at one end to the standard and arranged in its intermediate portion to engage the rod against downward movement; resilient means for holding the lever in engagement with the rod; and a pedal pivoted to the standard adjacent its lower end and operatively connected with the lever to break the engagement between the lever and the rod.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

SAMUEL O. DUEMLER.

Witnesses:

E. P. NEWMAN,
ETHYL LATHAM.