J. G. SISSON.

WORK CLAMP.

APPLICATION FILED DEC. 28, 1911.

1,039,831. Patented Oct. 1, 1912.

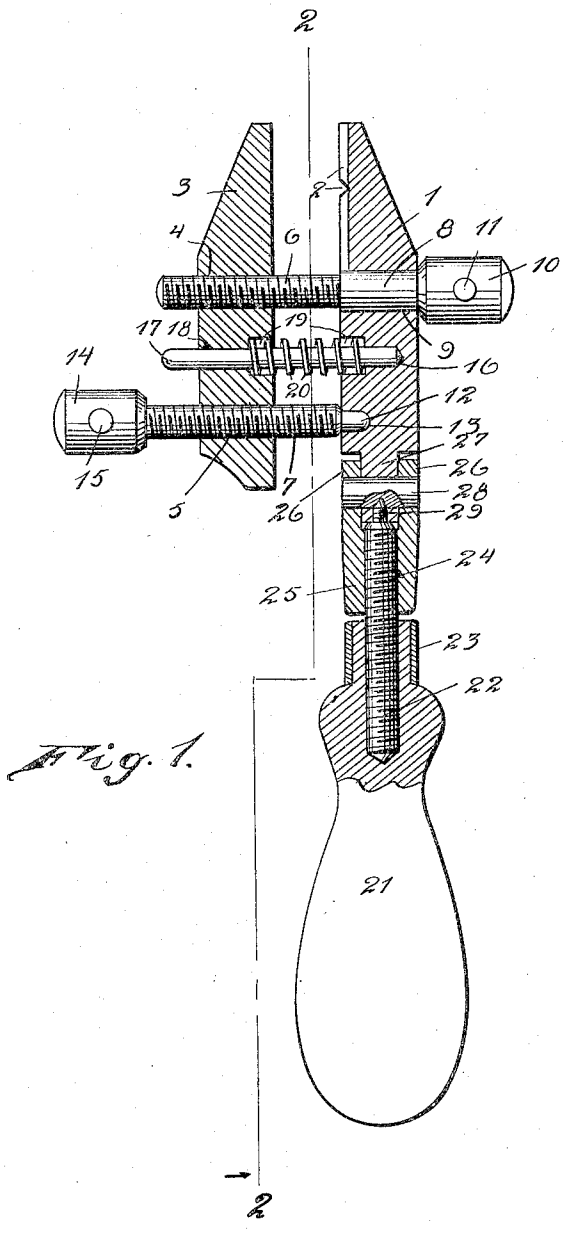

Fig. 1.

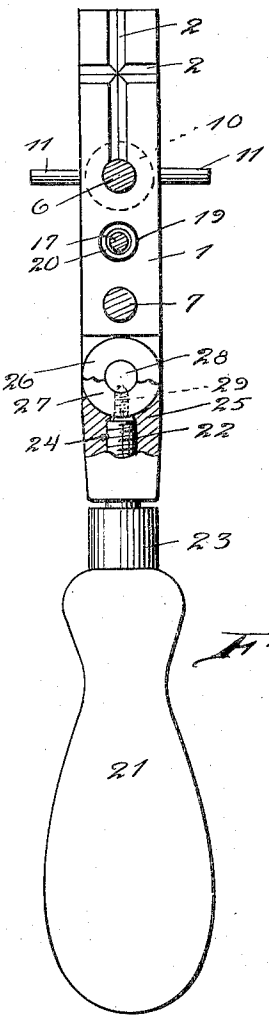

Fig. 2.

Witnesses

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WORK-CLAMP.

1,039,831. Specification of Letters Patent. Patented Oct. 1, 1912.

Application filed December 28, 1911. Serial No. 668,365.

To all whom it may concern:

Be it known that I, JAMES G. SISSON, a citizen of the United States, residing at Athol, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Work-Clamps, of which the following is a specification.

This invention relates to work clamps and has particular reference to a hand work clamp of simple construction.

An important object of this invention is to provide a device of the above mentioned character, having an angularly adjustable handle.

A further object of the invention is to provide simple means to clamp the handle in adjustment at different positions with relation to the clamping jaws of the device.

A further object of the device is to provide a device of the above mentioned character, which is easy to operate, simple in construction, and cheap to manufacture.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same, Figure 1 is a central longitudinal sectional view through the device, and, Fig. 2 is an edge view of the same, a portion thereof being broken away.

In the drawings wherein is illustrated a preferred embodiment of my invention, the numeral 1 designates a stationary jaw, preferably provided upon its engaging face with V-shaped grooves 2, as shown. Disposed in opposition to the stationary jaw 1 is a movable or adjustable jaw 3, having screw-threaded openings 4 and 5 formed therethrough, for receiving respectively, operating clamping screws 6 and 7. The screw 6 has an enlarged smooth cylindrical portion 8, operating in a transverse opening 9, formed through the stationary jaw 1, as shown. The screw 6 is provided at the outer end of the cylindrical portion 8 with a head 10, carrying a transverse pin 11. At its inner end the screw 7 is provided with a reduced smooth cylindrical portion 12, operating in a recess 13, formed in the jaw 1. Formed upon the outer end of the screw 7 is a head 14, carrying a transverse pin 15. The jaw 1 is provided between its ends and between the screws 6 and 7, with an opening 16, for rigidly holding a dowel or guide pin 17, which extends through a transverse opening 18 in the movable jaw 3, which opening 18 is disposed between the screws 6 and 7, as shown. The openings 16 and 18 are counter-bored, forming recesses 19, for receiving the end portions of a compressible coil spring 20, which surrounds the pin 17, as shown.

An important feature of the invention is the provision of the handle connected with the clamping jaws 1 and 3 in such a manner that said handle may be swung to assume different angular positions with relation to the same. This handle is designated by the numeral 21 and is preferably connected with the stationary jaw 1 by the means to be next described. The handle 21 is provided near its inner end with a screw-threaded opening for receiving a clamping screw 22 and a metal ring 23, preferably surrounds the reduced inner end of this handle. The clamping screw 22 operates within a screw-threaded opening 24 formed through an intermediate sleeve 25, provided at its inner end with spaced knuckles 26, receiving therebetween a knuckle 27, formed upon the lower end of the stationary jaw 1. These knuckles are apertured, as shown, for receiving a pintle 28, which is held in place by a set screw 29. This set screw 29 is of course separate from the clamping screw 22 and serves to rigidly hold the pintle 28 in place in the knuckle 27. The knuckles 26 are free to turn on the outer ends of stationary pintle. The set screw 29 may be removed by first swinging the handle 21 to a horizontal position, whereby access may be readily had to the set screw so that it can be turned with a screw driver or the like. As clearly shown in Fig. 2, the lower end of the intermediate knuckle 27 is formed curved or round.

In the use of the device, the work is placed between the jaws 1 and 3 and is securely clamped therebetween by proper manipulation of the operating screws 6 and 7. When these operating screws are turned to permit of the movement of the jaw 3 away from the jaw 1, it is obvious that the spring 20 will so move the jaw 3. By turning the handle 21 to the left, the clamping screw 24 will disengage the lower rounded end of the intermediate knuckle 27, whereby the handle 21 may be swung in the plane of the stationary jaw 1, to assume different angular

positions with relation thereto. By a reverse turning of the handle 21 the screw 24 will clamp against the lower end of the knuckle 27 and thus lock the handle 21 in adjustment at its new angular position.

I wish it understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that certain changes in the shape, size, and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claim.

Having thus described my invention, I claim:—

A work clamp comprising movable and stationary jaws, adjustable connecting means between the same, a sleeve having a screw-threaded axial opening, hinged connecting means including a transverse pin between the sleeve and stationary jaw, whereby said sleeve may be swung to assume different angular positions with relation to said stationary jaw and still remain permanently connected therewith, a handle, and a clamping screw permanently connected with the handle to extend therebeyond to operate in the screw-threaded axial opening for clamping against the pin, whereby the handle may be securely locked in adjustment at different angular positions with relation to the stationary jaw.

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

JAMES G. SISSON.

Witnesses:
ROBERT A. RAY,
WILLIAM G. LORD.