

No. 697,475

Patented Apr. 15, 1902.

H. GÖLKE.
CLAMPING DEVICE FOR WORK BENCHES.

(Application filed Dec. 18, 1901.)

(No Model.)

Fig. 4

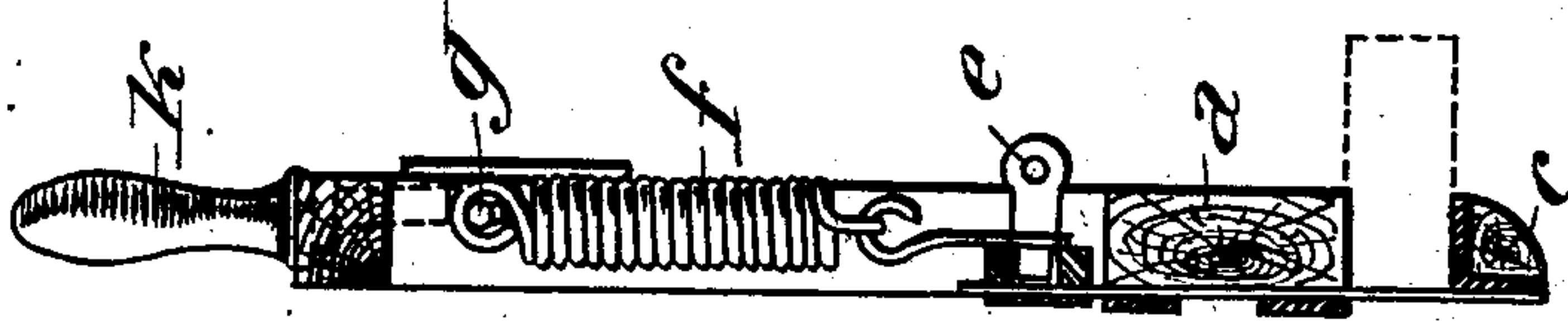


Fig. 3

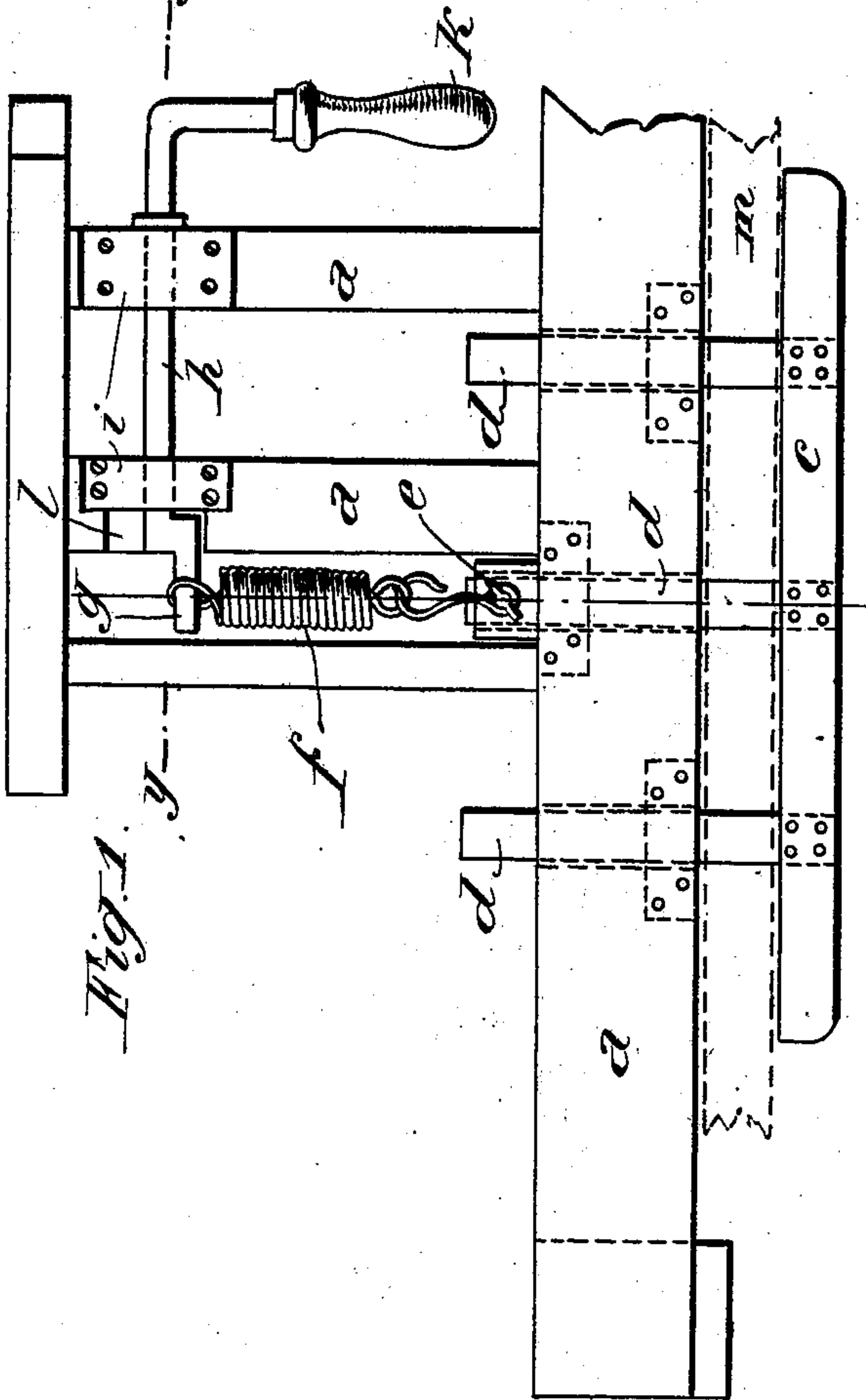
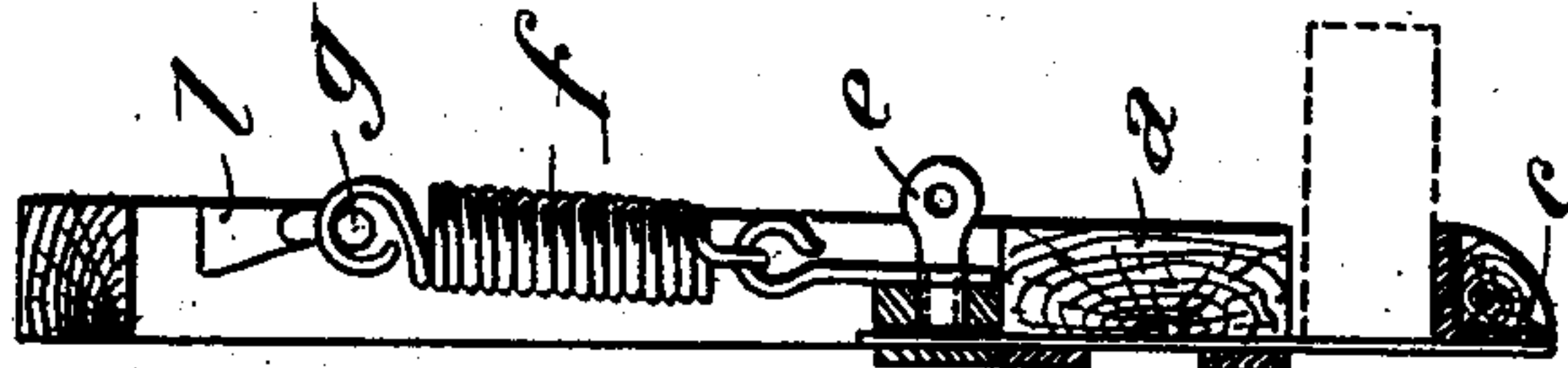
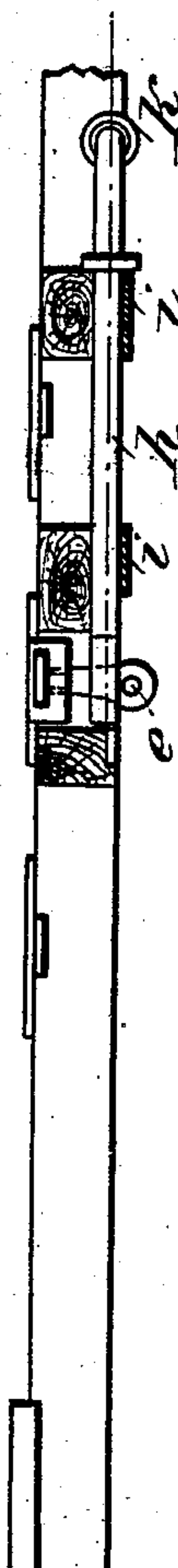


Fig. 1

Fig. 2



Witnesses:

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UNITED STATES PATENT OFFICE.

HEINRICH GÖLKEL, OF NEUNKIRCHEN, GERMANY.

CLAMPING DEVICE FOR WORK-BENCHES.

SPECIFICATION forming part of Letters Patent No. 697,475, dated April 15, 1902.

Application filed December 18, 1901. Serial No. 86,389. (No model.)

To all whom it may concern:

Be it known that I, HEINRICH GÖLKEL, a subject of the German Emperor, and a resident of Neunkirchen, Germany, have invented certain new and useful Improvements in Clamping Devices for Work - Benches, of which the following is a specification.

The present invention relates to an improved clamping device for a work-bench for the use of carpenters, joiners, and wheelwrights. This special clamping device allows of clamping and releasing very quickly the articles which are being worked or treated. The accompanying drawings illustrate one practical construction thereof.

Figure 1 is a front elevation of the clamping device. Fig. 2 is a section on the line *yy* of Fig. 1. Figs. 3 and 4 are sections on the line *xx* of Fig. 1. The first of these figures shows the clamping device at rest, and the last figure shows the device in operation.

In the frame *a*, which is arranged in a suitable manner on the work-bench, there is provided a jaw or a clamping-bar *c*, which is capable of movement and has a little "play." In order to guide it, there are employed bars *d*, of which the central one is provided with a regulating-screw *e*, that serves to fix a coiled spring *f*. The other end of this spring, which is in tension, is bent over in the form of an eye and fits on a crank-pin *g*, of which the axle *h* can rotate in the bearing *i* of two wooden cross-pieces. The end of this axle which projects beyond the frame is bent over in a rectangular manner and forms a handle *k*.

In order to prevent the crank in its rotation from one dead-center to the other dead-center, as shown in Figs. 3 and 4, from making a complete revolution, a recess *l* is provided in one of the cross-pieces, and in this recess the crank will enter, while its pin will, notwith-

standing, remain free. On the inner side this recess is or may be just deep enough to allow the crank to reach its dead-center; but on the outer side it is made slightly deeper, so that the crank may just pass the dead-center and then be positively stopped against the bottom of the recess, thus establishing a lock against the tension of the spring.

The manner of operation of this device will be readily understood. When, for instance, it is desired to clamp the piece *m*, the said piece is placed between the parts *a* and *c*, the spring being strained, then the handle *k* is turned through one hundred and eighty degrees or slightly over to pass the outer dead-center, as above explained, whereby the jaw *c* is forced against the parts *m* and *a* by the pull of the spring. The release of the clamped work is produced by moving the handle *k* in the reverse direction, as will be readily understood.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

A clamping device for work-benches, comprising a jaw or clamping-bar *c* guided in a frame fixed to the bench in a suitable manner, a crank-shaft *h* mounted in the frame and by which the jaw may be moved, the crank-pin being connected to the movable jaw by means of the coiled spring *f* which is secured to the guiding-bar by regulating-screw *e*, a handle for throwing the crank from one dead-center to the other and a stop for said crank slightly past the outer dead-center.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

HEINRICH GÖLKEL.

Witnesses:

CARL SCHMITT,
CHARLES LE SIMPLE.