E. BONHAM.

CLAMPING CHOCK.

APPLICATION FILED SEPT. 6, 1918.

1,320,116. Patented Oct. 28, 1919.

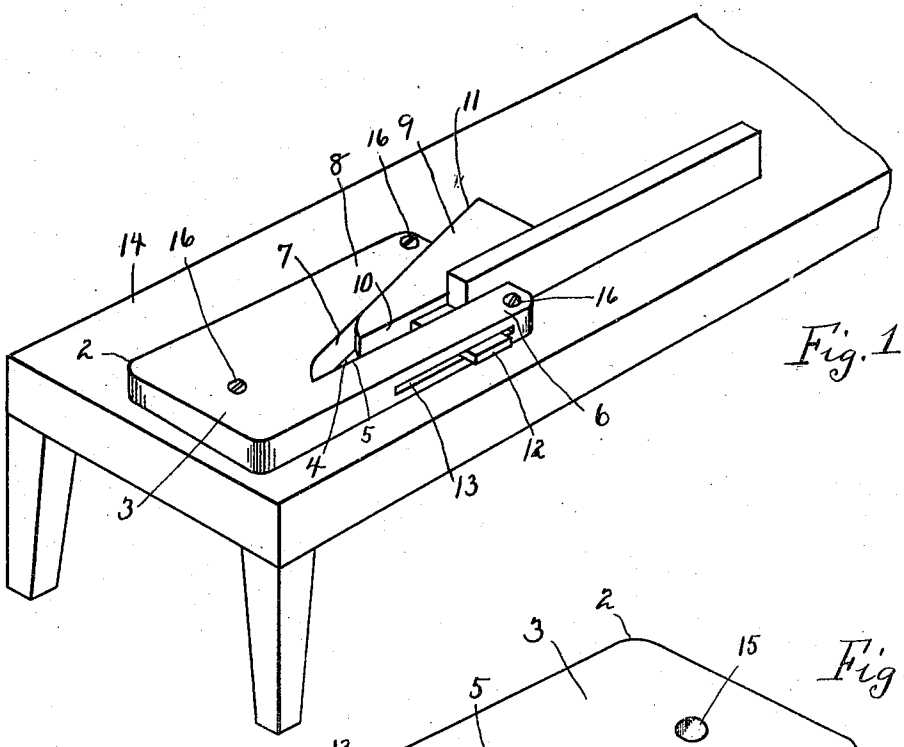


Fig. 1.

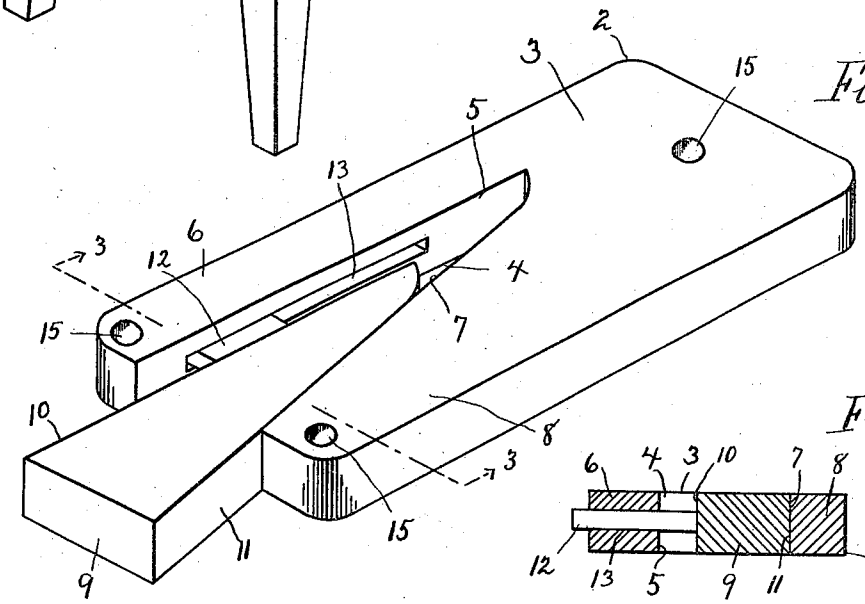


Fig. 2.

Fig. 3.

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CLAMPING-CHOCK.

1,320,116. Specification of Letters Patent. Patented Oct. 28, 1919.

Application filed September 6, 1918. Serial No. 252,875.

To all whom it may concern:

Be it known that I, EDWIN BONHAM, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented new and useful Improvements in Clamping-Chocks, of which the following is a specification.

My invention relates to new and useful improvements in clamping chock, and has for its object to provide an exceedingly, simple, inexpensive and effective device of this character which may be fixed on a work bench or in any convenient locality so as to securely hold the object such as a piece of work through the operations by the workman upon the object.

Another object of the invention is to provide a clamping chock which will close upon the object as the latter is placed in the chock and which will release said object when the same is withdrawn thereby making it unnecessary to independently operate any part of the chock as by screws or levers.

A further object of the invention is to provide in a device of the character stated a stationary jaw, a slidable clamping jaw and means for causing the gripping face of the movable jaw toward the gripping face of the stationary jaw during the sliding movement of the movable jaw.

A still further object of the invention is to provide a body member including a stationary jaw, a guide wall or face and a coacting movable jaw guided by said guiding wall or face so that said movable jaw will be forced to move transversely toward the stationary jaw during its longitudinal movement, said movable jaw carrying means acting both as a stop for the object to be held and as the operating means for the movable jaw.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail referring by numerals to the accompanying drawings forming a part of this application in which:—

Figure 1, is a fragmentary perspective view of a work bench showing my improved clamping chock thereon with an object held in position for work thereon.

Fig. 2, is an enlarged perspective view of the clamping chock looking toward the end opposite that shown in Fig. 1 and illustrating the movable jaw in a partially open position, and

Fig. 3, is a section at the line 3—3 of Fig. 2, looking in the direction of the arrows.

In carrying out my invention as here embodied, 2 represents my improved clamping chock preferably including a body 3 having a notch 4 formed therein, open at one end and running from said open end to a point short of the opposite end of the body and this notch 4 has one straight wall or face and forms the gripping face 5 of the stationary jaw 6 which latter is produced by the formation of the notch and is between the straight wall or face and the side edge of the body, and also an oblique guide wall or face 7 and between this oblique wall or face and the other side edge of the body is produced the guide block 8. The oblique wall diverges from the straight wall from the inner to the outer end of the notch.

Within the notch 4 is located the movable jaw 9 having a straight gripping face 10 adapted to coact with the straight gripping face 5 and angular face 11 adapted to coact with the oblique face or wall 7, so that as the movable jaw is forced into the notch or moved longitudinally, the oblique guide face or wall 7 of the guide block 8 will cause the movable jaw to move laterally.

In order to provide means for actuating the movable jaw and to also act as a stop for the work or object to be held in the chock, I provide a lug or projection 12 which is carried by the movable jaw and projects from the straight gripping face thereof and this projection or lug extends into or through a longitudinal slot 13 formed in the stationary jaw and said projection or lug 12 also acts as a holding means to prevent accidental displacement or withdrawal of the movable jaw.

In order that the clamping chock may be fastened to some suitable object such as work bench 14, I provide the same with a number of holes 15 through which pass suitable attaching means such as screws 16, the latter being threaded into or through the work bench.

In practice, the operation of the device is as follows:

The movable jaw 9 is first opened the desired amount by withdrawing it from the notch 4 after which the work is inserted in the space or channel between the straight gripping face 5 of the stationary jaw 6 and the straight gripping face 10 of the movable jaw and as soon as the end of the work or object to be held in position contacts with the lug or projection 12 any further movement of the object in the chock will force the lug or projection inward and with it the movable jaw by which it is carried and this inward or longitudinal movement of the movable jaw will cause the angular wall or face 11 thereof to ride along the oblique wall or face 7 of the guide block 8, thereby causing the movable jaw to move laterally and gradually decrease the distance between the two straight gripping faces 5 and 10 of the stationary and movable jaws respectively, thus firmly gripping the object or work between the two jaws and when said object or work has been firmly gripped, the same cannot move farther into the notch because of the stop lug or projection 12 and thereby preventing movement of the object with relation to the jaws of the chock, so that the surfaces of the object will not be marred.

Although the chock will firmly grip and securely hold the work in place, yet when it is desired to remove said object, it is only necessary to withdraw the same and the movement to cause said withdrawal will immediately release the movable jaw and permit the withdrawal of the object as will be obvious.

Of course I do not wish to be limited to the exact details of construction as herein shown, as these may be varied within the limits of the appended claims without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and patentable is: —

1. A chock comprising a stationary jaw having a lateral slot running longitudinally thereof intermediate its ends and provided with a straight gripping face, a guide block adjacent the stationary jaw having a guide face arranged obliquely to the stationary jaw, a movable jaw having a straight gripping face and an angular face, the latter coacting with the guide face of the guide block to impart a lateral movement to the movable jaw as the latter is moved longitudinally in one direction along the guide block thereby decreasing the distance between the gripping faces of the jaws and stop means carried by the movable jaw, projecting from the gripping face thereof and registering with the slot in the stationary jaw, said means also acting as an actuating means for longitudinally moving the movable jaw.

2. A device of the character stated comprising a body having a notch in one end to produce a stationary jaw and a guide block, said notch producing a straight gripping face on the stationary jaw and an oblique guide face on the guide block diverging from the inner end of the straight gripping face, said stationary jaw having a slot therein intermediate its length, a movable jaw having a straight gripping face to coact with the stationary jaw and an angular face to coact with the guide face, said guide face imparting a lateral movement to the movable jaw as the latter is moved into the notch and a stop carried by the movable jaw and registering with the slot in the stationary jaw for the purpose specified.

In testimony whereof, I have hereunto affixed my signature.

EDWIN BONHAM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."