Feb. 14, 1928.

1,659,302

L. REINHARDT

CLAMP

Filed March 28. 1927

Fig. 1.

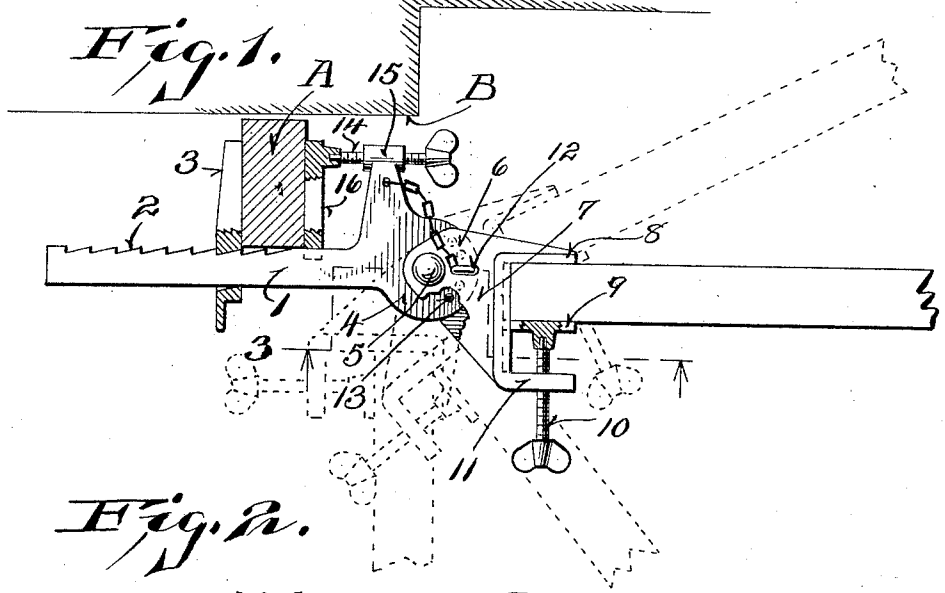


Fig. 2.

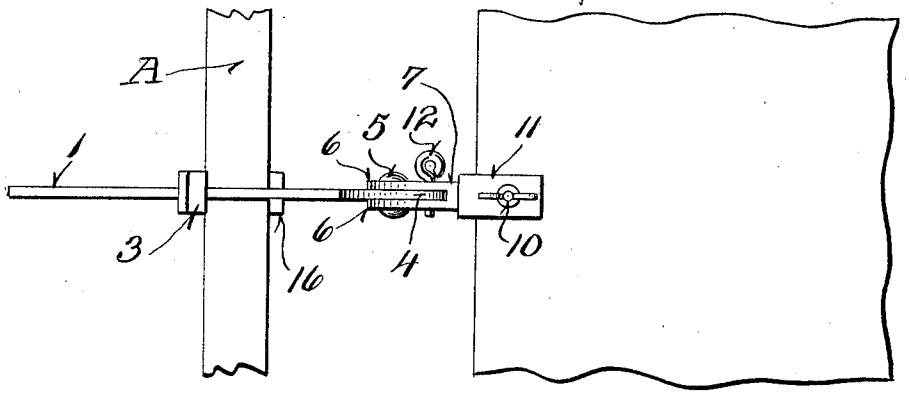
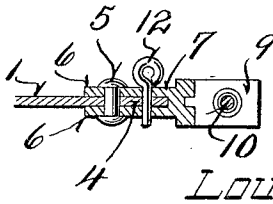


Fig. 3.



Inventor
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By
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Patented Feb. 14, 1928.

1,659,302

UNITED STATES PATENT OFFICE.

LOUIS REINHARDT, OF MANITOWOC, WISCONSIN.

CLAMP.

Application filed March 28, 1927. Serial No. 179,006.

My invention refers to clamps, and is especially adapted for use in connection with woodwork wherein the clamp is utilized as a work bench for receiving boards, doors, window sashes, or the like.

A specific object of the invention is to provide a pivotal clamp head for the work, the same being connected to an anchor clamp whereby said anchor clamp can be adjusted to a wall joist, or other suitable member, and the pivotal clamp can be adjusted to bring the work clamped therein at any desired angle for more readily operating upon said work.

Heretofore in the use of clamps of this general type, which are arranged to be fastened near the wall of a shop, the work is gripped by a ratchet clamping member and frequently such ratchet clamping member was so positioned that the work was in alinement with the adjacent wall, whereby it was quite inconvenient for the manipulation of tools. In other words, the adjustable feature of my clamp is to swing the work clear of any wall obstruction to a position where it can be conveniently operated upon.

With the above and other minor objects in view, the invention consists in certain pecularities of construction and combination of parts, as will be hereinafter set forth with reference to the drawings and subsequently claimed.

In the drawings:—

Figure 1 represents a plan view of a clamp embodying the features of my invention, with parts broken away and other parts in section to illustrate the structural features more clearly.

Figure 2 is a side elevation of the same, and

Figure 3 is a detail cross section, the section being indicated by line 3—3 of Figure 1.

Referring by characters to the drawing, A represents the exposed joist of a wall, for example, and B the wall line. Secured to the joist is a standard clamping bar 1 provided with ratchet teeth 2 for adjustable locking engagement with a foot 3, which foot is shown engaged with the joist A. The clamping bar at its outer end terminates in a centrally apertured circular head 4 having a rivet or pivot pin 5 passing through the apertured head and confines the upper and lower jaws 6 of an oscillatory clamping shoe 7. The shoe is provided with a fixed jaw 8 and an adjustable gripping pad 9 which is carried by a threaded clamping screw 10 that engages an offset ear 11 of the shoe. The work, such for example as a door or window, is rigidly gripped between the pad 9 and the jaw 8 of the shoe, as best shown in Figure 1.

When it is desired to adjust the angle of the work, as indicated in dotted lines, the shoe is swung upon its pivot to the desired angle, and thereafter a locking pin 12 is fitted through alined apertures of the jaws 6, said pin being also passed through any one of a series of apertures 13 that are radially positioned about the circular head 4. Hence, it will be seen that the work is thus locked in any predetermined position.

The clamping bar, which forms the vise for the device whereby it is anchored, is provided with a threaded clamping screw 14 which is in union with a boss 15 that extends from an arm of the head. The clamping screw carries a pad 16, the heel of which pad is slotted for engagement with the bar 1 whereby it is held against rotation. This pad functions in conjunction with the foot 3, whereby the vise member is anchored to the joist A.

From the foregoing description it is obvious that the vise portion of the tool can quickly be locked to any stationary point of anchorage, and thereafter when the work is locked within the jaw members of the shoe 7, it can be swung radially about the pivot bolt 5 and locked in any predetermined position by insertion of the pin 12. Hence, an artisan can readily arrange his work at a convenient angle, whereby it can be planed, or otherwise worked upon, without interference from any wall obstruction.

I claim:—

As a new article of manufacture, a woodworking clamp comprising a bar terminating with a circular head having a projecting arm, the circular head being provided with a series of apertures, clamping means car-

ried by the arm and bar, whereby the device is rigidly locked, a shoe having jaws overlapping the circular head, the jaws being in pivotal union therewith and having alined apertures therethrough, a pin for selectively locking the shoe at any predetermined angle with relation to the head, and clamping means carried by the head for rigidly securing work thereto.

In testimony that I claim the foregoing I have hereunto set my hand at Manitowoc, in the county of Manitowoc, and State of Wisconsin.

LOUIS REINHARDT.