June 24, 1930. J. SEA 1,766,230

CABINET MAKER'S CLAMP

Filed Dec. 10, 1926

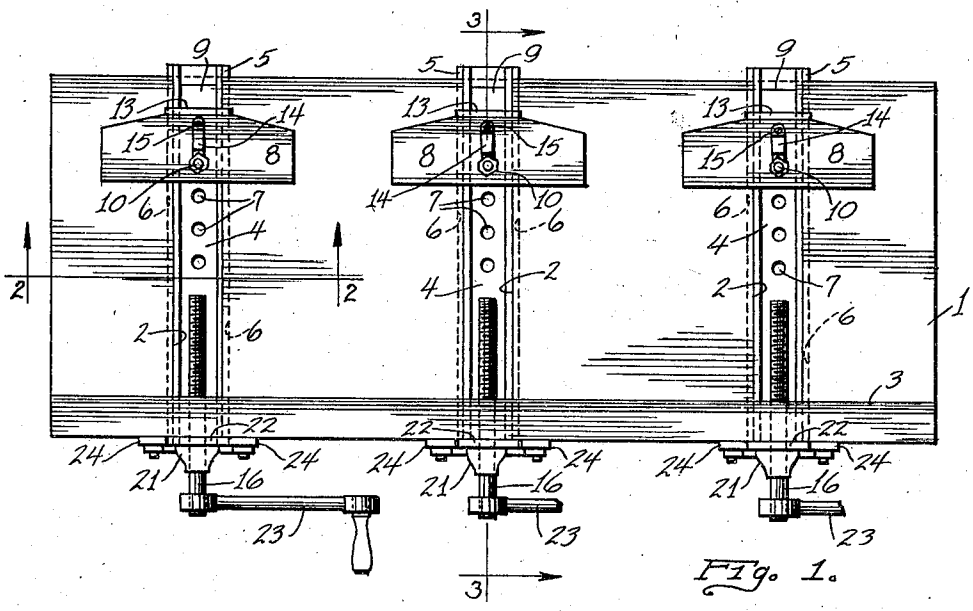


Fig. 1.

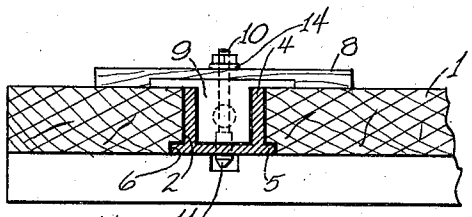


Fig. 2.

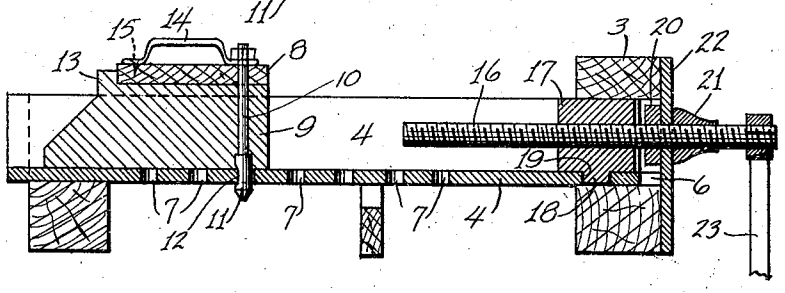


Fig. 3.

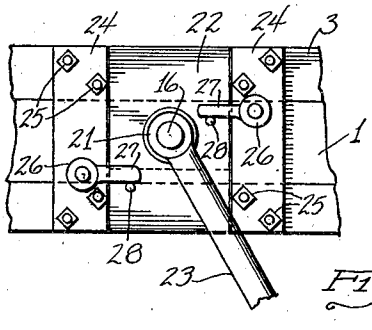


Fig. 4.

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CABINETMAKER'S CLAMP

Application filed December 10, 1926. Serial No. 153,874.

My invention relates to improvements in cabinetmakers' clamps, and it consists in the combinations, constructions, and arrangements, hereinafter described and claimed.

An object of my invention is to provide a cabinetmaker's clamp which may be used as a work bench, and in which novel means is provided for disposing the clamp in various positions in the table for permitting the device to handle various kinds of work.

A further object of my invention is to provide a device of the type described, in which the clamping members are constructed for preventing the vertical movement of the clamping members with respect to the table top when the clamping members are brought into contact with the work.

A further object of my invention is to provide a device of the type described which is extremely simple in construction and which is a great time saver to the operator in aiding him to quickly assemble his work.

Other objects and advantages will appear in the following specification, and the novel features of the invention will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawing, forming a part of this application, in which—

Figure 1 is a top plan view of the device,

Figure 2 is a section along the line 2—2 of Figure 1,

Figure 3 is a section along the line 3—3 of Figure 1, and

Figure 4 is a front view of a portion of the device.

In carrying out my invention, I provide a work table consisting of a top 1 having grooves 2 therein and a head piece clamping member 3. In actual practice, the table will be about four feet long, and the three grooves 2 will be disposed in the table top, one in the center thereof and the other two at the ends thereof.

I have shown in Figure 1 that the table is provided with three clamping devices. These devices are so constructed as to be changeable from one groove to another groove, and although I have shown three of the devices, two of said devices would answer the purpose for most of the work concerned, one of the devices being placed in the center groove while the other device is placed in either of the end grooves. If only two of the devices were used, and it was necessary to clamp work together that extended the entire length of the table, the center device could be removed by a means hereinafter described and be disposed in the empty end groove. In this way, the cost of the table could be reduced since two clamping devices would answer the purpose.

Since all three of the clamping devices are identical in construction with respect to each other, a description of one of them will be sufficient for all three. U-shaped members 4 (see Figure 2) are slidably disposed in the grooves 2, and these members have flanges 5 which extend into cutaway recesses 6. The members 4 have openings 7 in the bottom thereof for permitting a clamping member 8 to be adjustably secured to the member 4 by a means now to be described.

A casting 9 of the shape shown in Figure 3 is seated in the U-shaped member 4 and is adjustably secured thereto by means of a bolt 10 which has an enlarged portion 11 adapted to extend into the opening 7. The portion 11 has notches 12 cut therein (see Figure 3) to prevent the member 9 from being forced upwardly with respect to the member 4 when pressure is brought to bear upon the member 8.

The bolts 10 also secure the clamping member 8 to the member 9, and it will be further noted from Figures 1 and 3 that the member 8 bears against a flange 13 carried by the member 9. For ease in moving the members 8 and 9 from place to place, I secure a handle 14 to the member 8 by means of the bolt 10 and a screw 15.

The means for moving the clamping members 8 and the member 4 comprises screws 16 which are threaded into nuts 17, the nuts in turn being secured to the member 4 by means of a projection 18 which projects into an opening 19 in the member 4. Collars 20 and 21 are mounted upon the screw 16 and receive a plate 22 therebetween. A crank 23 is mounted upon the outer end of each of the

screws 16, and it will be seen that when the crank is rotated, it will move the members 4 together with the clamping members 8 toward or a way from the head piece 3.

The means for permitting the removal of one of the members 4 from one of the grooves and disposing it in another of the grooves is clearly shown in Figure 4. It will here be seen that the plate 22 is disposed between plates 24, the latter, in turn, being secured to the table by means of bolts 25. Retaining members 26 are carried by the plates 24 and are adapted to be swung over the face of the plate 22, thus locking the plate in position. The bolts 25 are countersunk for permitting the projections 27 to be swung from the locked position shown in Figure 4 into unlocked position, whereby the plate 22 may be removed. If necessary, stop pins 28 may be disposed upon the plate 22 for holding the projection 27 in the position shown.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. As heretofore stated, the table 1 may be used as a work bench, and when the parts have been assembled, they may be clamped together and then a corrugated binding member is driven into the parts to hold the same together. If only two of the clamping devices are used on the table, and the operator wishes to dispose one of the devices at the end of the table so as to have both of the devices at the extreme ends of the table, the center plate 22 is removed by means of throwing the projections 27 into inoperative position, the block 9 is removed from the member 4 and then the member 4 is moved to the right when looking at Figure 3. The member is then inserted in the empty groove, the block is placed back into position, the fastening member 26 is swung into position, and the device is ready for use.

I claim:

A clamping device comprising a table having guideways in the top thereof, a U-shaped member capable of reciprocal movement within the guideways, a plurality of screw-threaded blocks secured within the U-shaped member, a removable closure plate for the front end of the guideways, latches for securing the closure plate in position for closing the end of the slot, a traveling screw for screw-threaded engagement with the closure plate and with the internally screw-threaded blocks.

In testimony whereof I affix my signature.

JOHN SEA.