No. 710,544. Patented Oct. 7, 1902.

C. C. WANDELL.

WOODWORKING CLAMP.

(Application filed June 14, 1902.)

(No Model.)

Fig. 1.

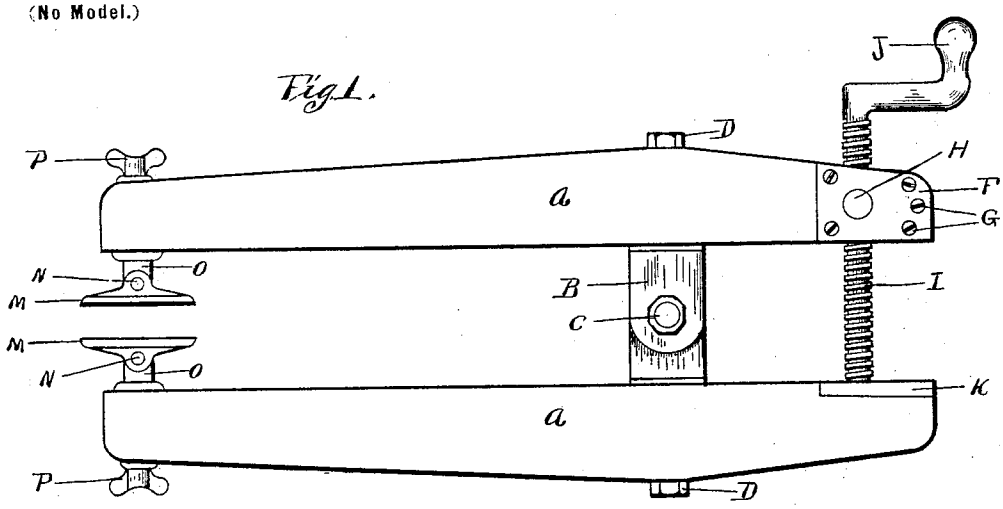


Fig. 2.

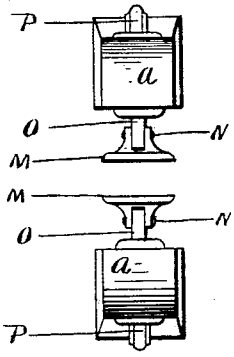


Fig. 3.

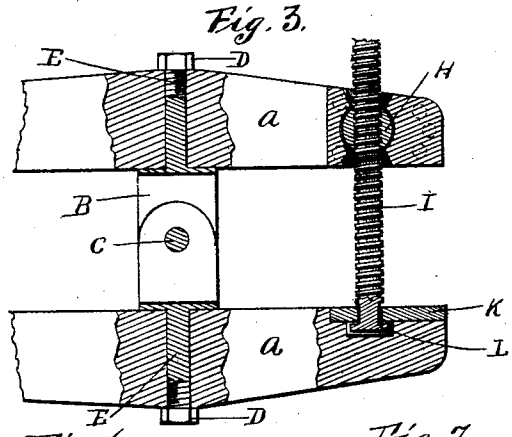


Fig. 4.

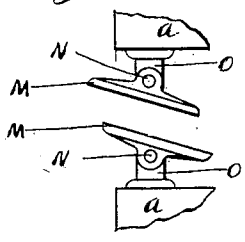


Fig. 5.

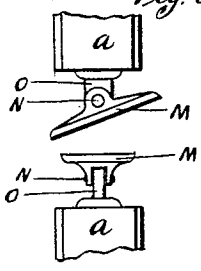


Fig. 6.

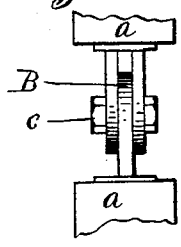
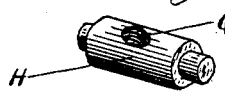


Fig. 7.



Witnesses:-
Edward Voigt
Isabella Magfadden

Inventor.
Charles C. Wandell
By Harry Asa Holgate
Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES C. WANDELL, OF PHILADELPHIA, PENNSYLVANIA.

WOODWORKING-CLAMP.

SPECIFICATION forming part of Letters Patent No. 710,544, dated October 7, 1902.

Application filed June 14, 1902. Serial No. 111,801. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. WANDELL, a citizen of the United States, residing at 640 North Forty-fourth street, in the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Woodworking-Clamps, but particularly to those adapted for joiners' use; and I hereby declare the accompanying drawings and description to be an exact specification.

In order that those skilled in the art to which the invention appertains may thoroughly understand and comprehend the same, I will proceed to describe the invention in conjunction with the accompanying drawings, wherein like letters denote like parts.

Figure 1 is a general side elevation of my clamp. Figs. 2, 3, 4, and 5 are detail views of the clamping-disks attached to the arms of the clamp. Fig. 6 is a detail of the fulcrum, and Fig. 7 is a detail view of the means for operating the clamp.

Fig. 1 is a side elevation, of which A A are the jaws of a clamp, made of wood or metal and securely held in relation to each other by the fulcrum B, of which the bolt-shaft C is a pivot therefor, while the nuts D D constitute the means for locking the said fulcrum to the jaws A A by means of the bolts, a part of the fulcrum E E, as in Fig. 3. At a short distance from the pivoted fulcrum upon the upper jaw A, I provide upon each side of the said jaw a plate F, securely held thereto by the screws G G, which contains the pivoted socket H, said socket being diametrically threaded to correspond with and engage the locking screw or bolt I, as in Fig. 3, and one end of the locking screw or bolt is provided with a crank and handle J. Upon the inner face of the lower jaw, coincident to the upper plates and securely held to the jaw by any suitable means, I provide a plate K, through which passes the locking screw or bolt I, which is rendered to engage said plate upon the inner side by swaging or upsetting the metal, as at L.

In order that the clamp will accommodate itself to work of various classes, I provide two disks M M, pivoted by N N to the standards O O, the continuation of the standards being a shaft passing through the jaws and securely held thereto by the thumb-screws P P. By loosening the thumb-screws the disks may be turned in such a manner as to be applicable to material of various angles and thicknesses. Although I illustrate the disks in Figs. 1 and 2 as being parallel with the jaws of the clamp, nevertheless it is possible to render their position angular, as in Figs. 4 and 5.

In Fig. 6 I illustrate an end view of the fulcrum B and pivot-shaft C, which consists in the former of a double-tongued standard engaging a single-tongued standard and each provided with a base of suitable size to engage the face of each jaw sufficiently to prevent any lateral movement in the event that the clamp is applied to any material angular to the jaws.

Fig. 7 is a perspective view of the pivoted socket H, the extended portion of each end being the part that is engaged by the plate F upon each side of the jaw. Q is a diametric passage-way threaded to correspond and engage the locking screw or bolt I.

From the foregoing description it will be seen that an objectionable feature that has heretofore existed in clamps of this class is entirely eliminated in that I mount my lock or clamping screw in such a manner as to permit the easy opening or closing of the jaws without undue strain upon the clamping bolt or screw, and also a fulcrum in conjunction with its projecting bolt-shaft, so constructed as to prevent any lateral movement. The clamping-disks in their movement are universal to such an extent as to allow the application of the entire clamp to material in places inconvenient for the use of other clamps.

I am fully aware that various changes can be made without departing from the spirit of the invention, and I therefore do not wish to limit myself to the exact construction as shown.

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

In a clamp having variable jaws, the combination of a meshing double and single tongued pivoted fulcrum, and means for locking said fulcrum to the jaw, in conjunction

with a diametric threaded pivoted socket, a clamping-screw engaging said socket with the means for retaining the screw to the lower end of the jaw, said jaw being provided with adjustable bolted pivotally-mounted clamping-disks.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses, this 27th day of June, 1901.

CHARLES C. WANDELL.

Witnesses:
H. A. HOLGATE,
EDWARD VOIGT.