

No. 768,500.

PATENTED AUG. 23, 1904.

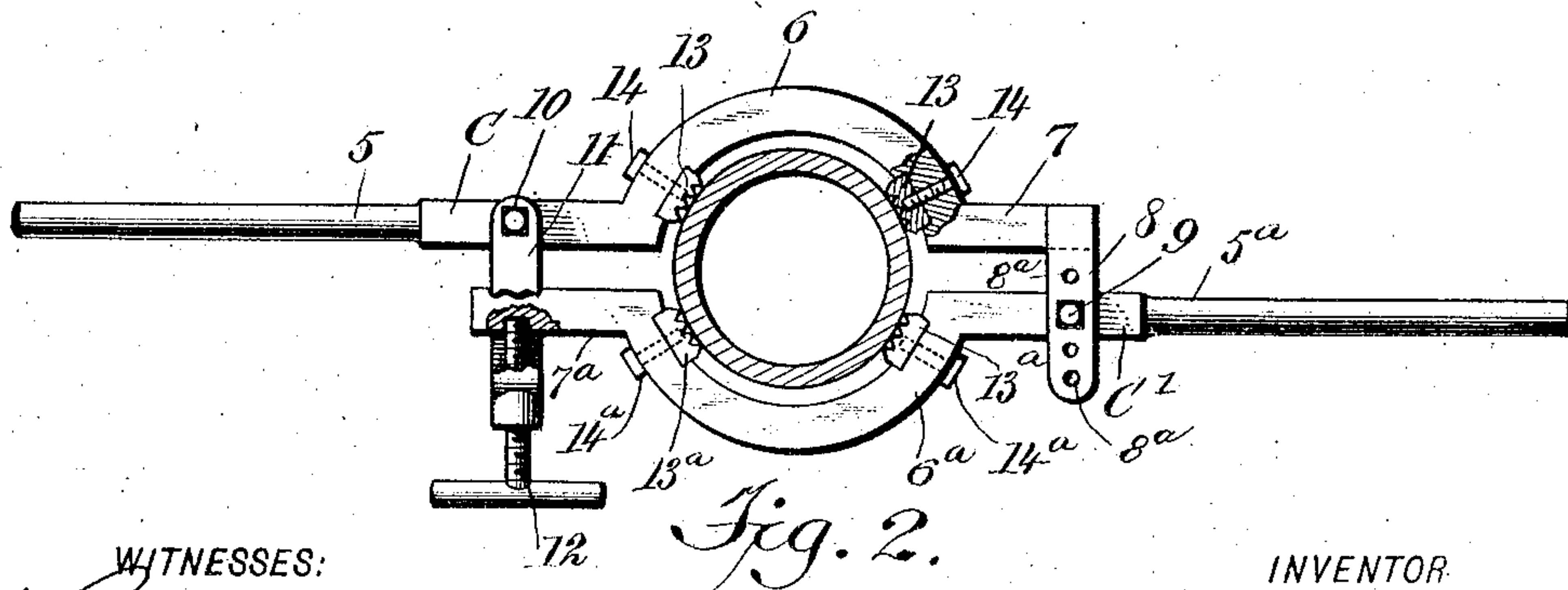
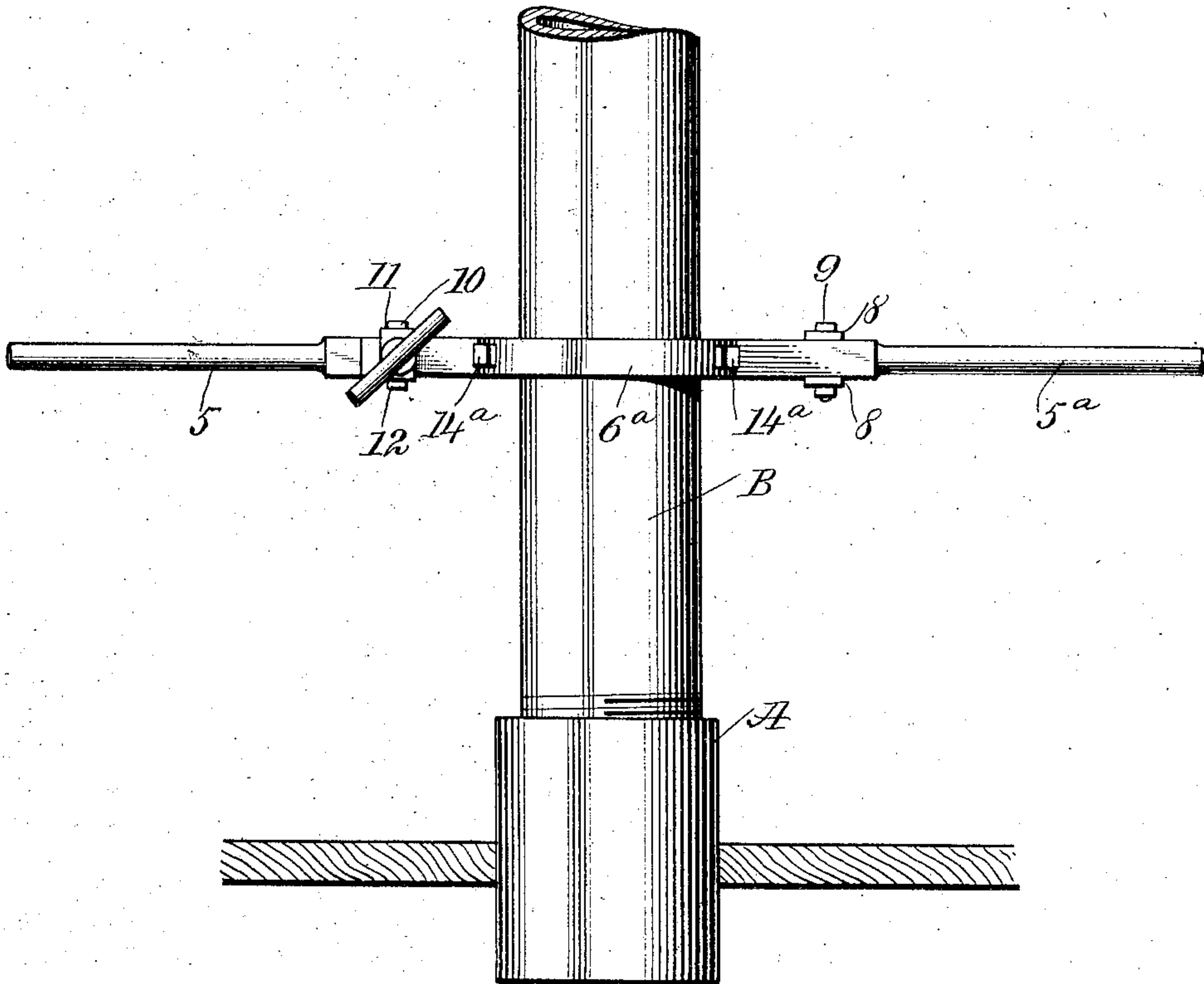
J. G. WINGER.

## CASING CLAMPING WRENCH.

APPLICATION FILED JULY 18, 1903.

NO MODEL.

*Fig. 1.*



WITNESSES:

A. K. Appelman  
R. B. Cavanagh

INVENTOR:

*Josiah G. Winger.*

BY

Mum

ATTORNEYS



# UNITED STATES PATENT OFFICE.

JOSIAH G. WINGER, OF GRAND VALLEY, PENNSYLVANIA.

## CASING-CLAMPING WRENCH.

SPECIFICATION forming part of Letters Patent No. 768,500, dated August 23, 1904.

Application filed July 18, 1903. Serial No. 166,077. (No model.)

*To all whom it may concern:*

Be it known that I, JOSIAH G. WINGER, a citizen of the United States, and a resident of Grand Valley, in the county of Warren and State of Pennsylvania, have invented new and useful Improvements in Casing - Clamping Wrenches, of which the following is a full, clear, and exact description.

My invention relates to certain novel and useful improvements in casing wrenches and clamps, and has particular application to a device of the type referred to for use in setting or screwing and unscrewing well-casings.

In carrying out the present invention I have particularly in view as an object the provision of a clamp which will securely engage with the exterior surface of the casing-tube and may be used as a wrench to turn the same, the construction of my device being such that the tube will not be bent or crushed under the influence of pressure exerted thereon.

A further object of my invention is to provide a combined clamp and wrench which may be adjusted to suit varying sizes of tubes or casings, the members of said device being provided with serrated or toothed dies or blocks or their equivalents which will positively engage with the sides of the tubing and prevent the latter from slipping or turning in the tool when the latter is employed for the purpose of screwing or unscrewing the casing.

A further object of my invention is to provide an improved device which shall embody the essential features of durability, simplicity, positiveness of operation, and inexpensiveness.

With the above-recited objects and others of a similar nature in view my invention consists in the construction, combination, and arrangement of parts, as is described in this specification, delineated in the accompanying drawings, and set forth in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a view in side elevation, showing my improved implement applied to a well-casing; and Fig. 2 is a top plan view showing the implement and the manner in which it en-

gages with the casing, said casing being shown in section.

Referring now to the accompanying drawings in detail, A designates one portion of the casing, into which is designed to be screwed or threaded the second portion B. The implement or device which I have designed for this purpose comprises, essentially, two members, (designated as a whole by C and C',) each member having a handle portion, as at 5 and 5<sup>a</sup>, at the inner end of which handle portions the members are formed with an approximately semicircular or curved portion 6 and 6<sup>a</sup>, that part of each curved member opposite the point of juncture with the handle being formed with a straight extension, as illustrated at 7 and 7<sup>a</sup>. The members C and C' are arranged substantially as shown in Fig. 2—that is to say, so that approximately a circle is formed by the semicircular portions 6 and 6<sup>a</sup> of the arms or members—and said members are connected together through the medium of cross-bars 8 8, rigidly secured to the member 7, one of said bars lying on either side of the upper portion of the handle 5<sup>a</sup> and being pivotally secured thereto through the medium of a bolt 9, passing through one of the apertures 8<sup>a</sup> in the bars 8 8 and through the handle, said bars being provided with a plurality of apertures 8<sup>a</sup>, so that the members may be adjustably connected—that is to say, the distance between the members may be increased or decreased as necessity occasions. To the member C is pivoted, as at 10, a locking member 11, having a slot formed centrally thereof, whereby the member 11 may slip or fit over the end portion of the extension 7<sup>a</sup>, and in order to lock the members C and C' securely in position a set-screw 12 is threaded in the end of the locking-bar 11 and is designed to bear against the side of the member 7<sup>a</sup>. If desired, an aperture may be formed in the side member of the extension 7<sup>a</sup>, in which aperture the set-screw 12 is designed to seat. The curved portions 6 and 6<sup>a</sup> of the arms or members C C' are formed with grooves designed to seat serrated or toothed bits or blocks, as shown at 13 13 and 13<sup>a</sup> 13<sup>a</sup>, said blocks being held in position through the medium of screw-bolts 14 14 and 14<sup>a</sup> 14<sup>a</sup>.



From the above description, taken in connection with the accompanying drawings, the operation of the device will be readily apparent. The locking-bar being disconnected, the arms are opened upon the bolt 9 as a pivot and then closed or brought together to encircle the casing or tube. The locking-bar 11 is then moved upon its pivot and slipped over the end of the extension 7<sup>a</sup> and securely tightened thereon through the medium of the set-screw 12. By turning the set-screw 12 the arms may be brought as tightly as desirable about the casing or tube, and the latter may then be rotated by the handles 5 and 5<sup>a</sup>.

It is to be noted that a device of this character is exceedingly simple in its construction, as there are no parts to be easily broken or deranged, and such a device entirely obviates the necessity of resorting to the method commonly employed for screwing or unscrewing the casing-tubes—that is to say, it has been the custom to assemble and take apart the casing through the medium of a twister-rope and wooden pole, the rope being wound about the casing and a loop being formed at one end of the rope, through which loop the pole was slipped, and by pulling or turning the pole the casing was screwed or unscrewed, as desired. This manner of connecting and disconnecting the tubes requires a large amount of time and is also very uncertain, as a rope or pole very often breaks under the strain; but with my present device the sections of tubing may be easily connected or disconnected without danger of breaking the implement or crushing the tubing.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A device of the class described, comprising members each having a curved portion, a transverse bar carried by one member and pivotally connected to a second member, said bar holding the members spaced apart, and a locking-bar pivoted to one member and designed to engage with the opposite member.

2. A device of the class described, comprising a plurality of members, each member hav-

ing a handle portion and a curved portion, a transverse bar pivotally connecting the handle portion of one member with an extension formed at the curved portion of the opposite member and holding such members spaced apart, and a device for locking the members against movement.

3. A device of the class described, comprising a plurality of members, each member having a curved portion, and an extension formed at one end of each curved portion, a pivotal connection between said members, a locking device for securing the members against movement, and serrated dies or blocks upon the inner curved portions of the members and screws for securing said blocks, substantially as set forth.

4. A device of the class described, comprising a plurality of members, a pivotal connection holding the members spaced apart, each member having an approximately semicircular portion, said portions being adapted when the members are connected, to form a circular clamping-body, a locking-bar pivoted to one member and designed to engage with the opposite member, a set-screw carried by said bar for holding the members against movement, and dies or gripping-blocks carried by said members, substantially as set forth.

5. A device of the class described, comprising two members, means for adjustably and pivotally connecting the members, a locking-bar pivoted to one member and adapted to engage with the opposite member, a set-screw threaded in the locking-bar and designed to bear against one of the members for holding the parts against movement, dies or gripping-blocks carried by said members and screws for retaining said blocks in position, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSIAH G. WINGER.

Witnesses:

GEO. C. PRIESTLEY,  
C. D. CRANDALL.