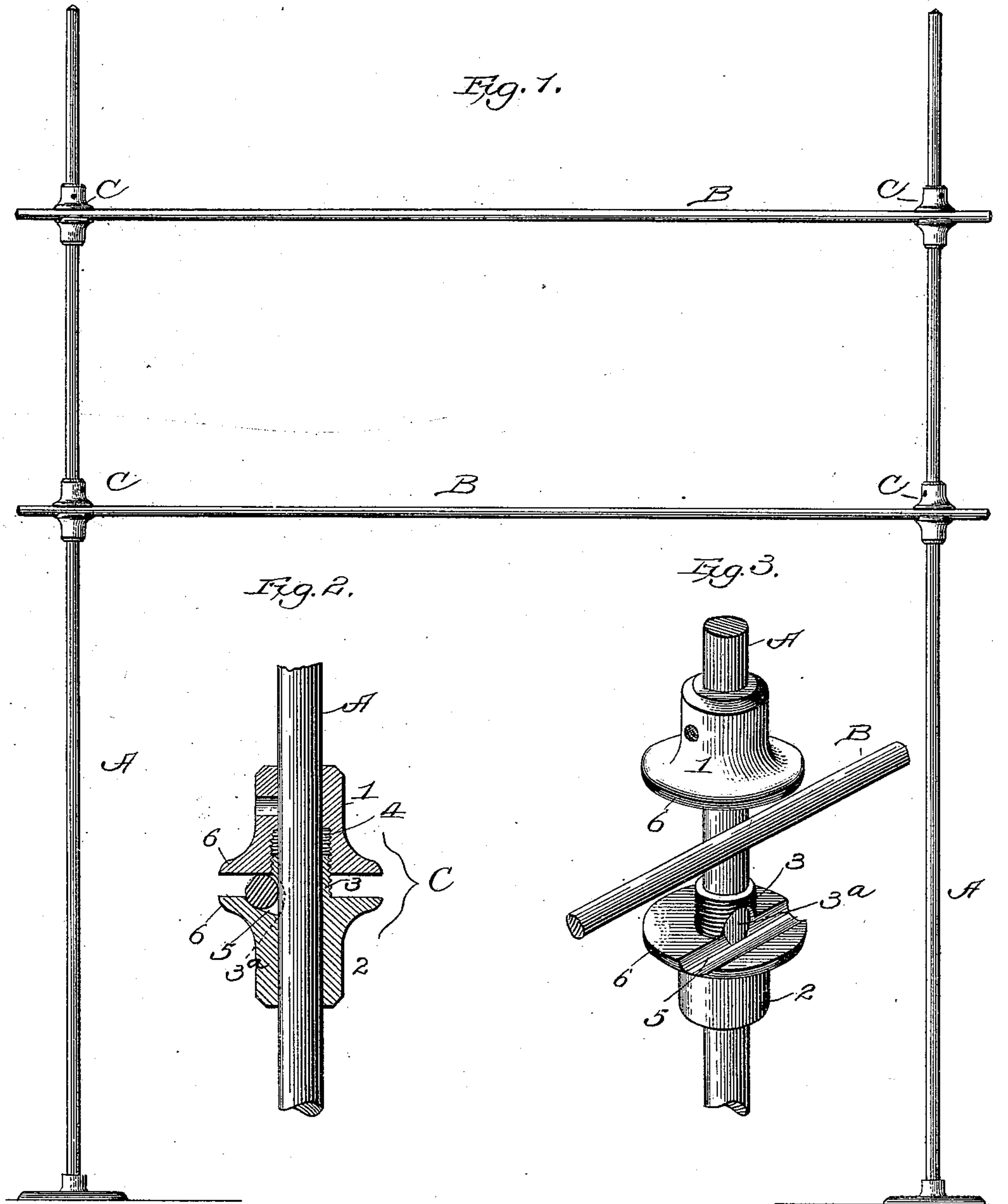


(No Model.)

J. A. MEAHER.  
CLAMP.

No. 556,194.

Patented Mar. 10, 1896.



WITNESSES:

Harry D. Rohrer.  
Mr. Darley

INVENTOR  
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ATTORNEY.



# UNITED STATES PATENT OFFICE.

JOSEPH A. MEAHER, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO  
BENJAMIN G. CASLER, OF SAME PLACE.

## CLAMP.

SPECIFICATION forming part of Letters Patent No. 556,194, dated March 10, 1896.

Application filed December 7, 1895. Serial No. 571,412. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH A. MEAHER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Clamps; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of a portion of a display-rack illustrating one use for my improved device and the manner of applying the same. Fig. 2 is an enlarged central section of one of the clamps shown in Fig. 1 with portion of a vertical or main rod of the rack in elevation, the parts of the clamp being closed to illustrate the method of causing the main and secondary bars or rods (or vertical and transverse bars of a rack) to bind upon each other and thus fixedly secure the parts together; and Fig. 3 is an enlarged perspective view of the clamp and a portion of the main rod or bar, the sections of the clamp separated as in the act of inserting or removing the secondary bar or rod or adjusting the position of the clamp on the main rod or bar.

My invention relates generally to clamps designed for adjustably connecting cross bars or rods, and having been by me devised more especially for use in the construction of changeable or convertible rod-racks or show-racks for store-windows, has been herein illustrated as applied to such use, but without intent or purpose to limit the invention thereto.

The main object of the invention is to secure a simple and efficient clamp adapted to rigidly connect at least two cross-bars, said bars being adjustable in the clamp, without the use of thumb or set screws or other or equivalent means which will indent or mar the rods or bars so adjustably combined by the clamp, and to this end the main feature of invention, generally stated, consists in the combination of a plurality of separable sections having each a main rod or bar seat or recess, said recesses being arranged in the same plane, and which are adapted to movably embrace one of two rods or bars, and between which sections is a transverse rod or bar seat for a second or cross bar, said seat so arranged that when the clamp is closed the

cross bar or rod shall be forced against or caused to bind on the main or first-named bar, whereby a wedge or cam lock is obtained which will rigidly secure the rods or bars in a given fixed relative position without injury to either rod or bar unless unusual and unnecessary force is resorted to in closing the clamp.

A minor feature of the invention is embraced in the combination of a plurality of annular screw-connected sections, one of which is provided with an inclined transverse rod or bar seat which terminates in or adjacent to the central rod or bar opening of the clamp.

There are other features of invention, all as will hereinafter appear.

I will now proceed to describe my invention more fully in order that others skilled in the art may apply the same.

In the drawings, A indicates the main or vertical rod or bar of a show rack or frame, B B transverse or secondary rods or bars of said rack, and C C C C clamps by which said rods are adjustably connected or combined, which clamps alone embody my invention, so that the bars and rods may be chosen or formed of any desired size or shape, and the clamp-openings which embrace or bind on the rods or bars modified to suit the cross-sections of the rods or bars, without departing from the scope and spirit of my invention.

The clamp C is composed of a plurality of sections, preferably two, indicated by the symbols 1 and 2, each section having a main rod or bar opening or recess, said openings or recesses of the several sections being in line when the clamp is in position on one rod or bar to permit the passage of said rod or bar through the sections. The form to which I give a preference is that of a sleeve having two sections 1 and 2 connected by means of a threaded nipple 3 on one section, which enters a tapped annular recess 4 in the other section, though other well-known means may be employed, if desired, for drawing the two sections together. These sections 1 and 2, which embrace the rod or bar A, should be of sufficient thickness to afford space for the formation in one of said sections of a transverse rod or bar seat 5, and to accomplish this, instead of enlarging the sections, I prefer to



form the sections where they approach or come in contact with flanges or projections 6 6, in one of which flanges I form said transverse seat 5 for the secondary rod or bar B, the other flange being either left plain or provided with a corresponding bar or rod seat, according to the choice of the maker and the nature of the means used for drawing or forcing the sections 1 and 2 together.

10 In case the construction shown in the drawings is adopted the transverse-rod seat 5 is made in that section having the threaded nipple 3, which nipple is cut away, as at 3<sup>a</sup>, to permit the secondary or cross bar or rod B  
15 to impinge on the main or vertical bar or rod A, when the parts 1 and 2 are drawn or forced together by means of said threaded nipple and tapped annular recess (or nut) 4.

The construction of the clamp being of substantially the character hereinbefore set forth, the two sections 1 and 2 will be slipped upon or caused to embrace the vertical or main rod or bar, in juxtaposition, and being loose thereon can be adjusted to any desired  
25 position by simply sliding them along the rod, after which the secondary or cross bar or rod is inserted in the seat 5, between the clamp-sections 1 and 2, and said sections drawn or forced together by nipple 3 and  
30 tapped recess 4, or other suitable means, during which the incline of seat 5 will cause the cross rod or bar B to settle down and bind on main or vertical rod or bar A with a wedge or cam grip, which will rigidly and fix-  
35 edly secure the parts in the position to which they have been adjusted without causing injury or disfigurement to either rod, provided judgment has been exercised in the drawing or forcing together of the clamp sec-  
40 tions.

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

1. A rod or bar clamp composed of a plural-  
45 ity of sections each having a bar or rod opening for the reception of one and the same bar, one of said sections having a transverse-bar seat on its inner face which latter bar-seat intersects the first-named bar or rod opening  
50 of the clamp-section, and means for locking

the sections together, whereby the rods are caused to bind or wedge on each other when the clamp-sections are closed, substantially as and for the purposes specified.

2. A rod or bar clamp composed of a plural- 55 ity of annular sections adapted for the passage of a rod or bar one of said annular sections having a transverse-rod seat in its inner face which seat intersects the opening of the annulus, and means for locking the sections 60 together, substantially as and for the purposes specified.

3. A rod or bar clamp composed of a plural- ity of sections having each a central rod-recess, one of said sections having a threaded 65 nipple and a transverse-rod seat in its inner face, and the other having a tapped recess for the reception of the threaded nipple, substantially as and for the purposes specified.

4. A rod or bar clamp composed of a plural- 70 ity of annular sections one having a slotted nipple and the other a recess to receive said nipple, and one of said sections having an inclined rod-seat and means for locking the clamp-sections together, substantially as and 75 for the purposes specified.

5. A rod or bar clamp composed of a plural- ity of annular flanged sections, one of said sections having an inclined transverse-rod seat which communicates with the central 80 orifice of the section, and means for locking said clamp-sections together, substantially as and for the purposes specified.

6. A rod or bar clamp composed of a plural- ity of annular sections one of which sections 85 has a threaded slotted nipple and a transverse inclined rod-seat which communicates with the central orifice of the annular section, at its lowest point, the other of said annular sections having a tapped recess for the 90 reception of the threaded nipple, substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 4th day of December, 1895.

JOSEPH A. MEAHER.

Witnesses:

JAMES BROWN,  
C. BENKOWSKI.