No. 891,121. PATENTED JUNE 16, 1908.

H. WICHERS.

CLAMP.

APPLICATION FILED NOV. 20, 1907.

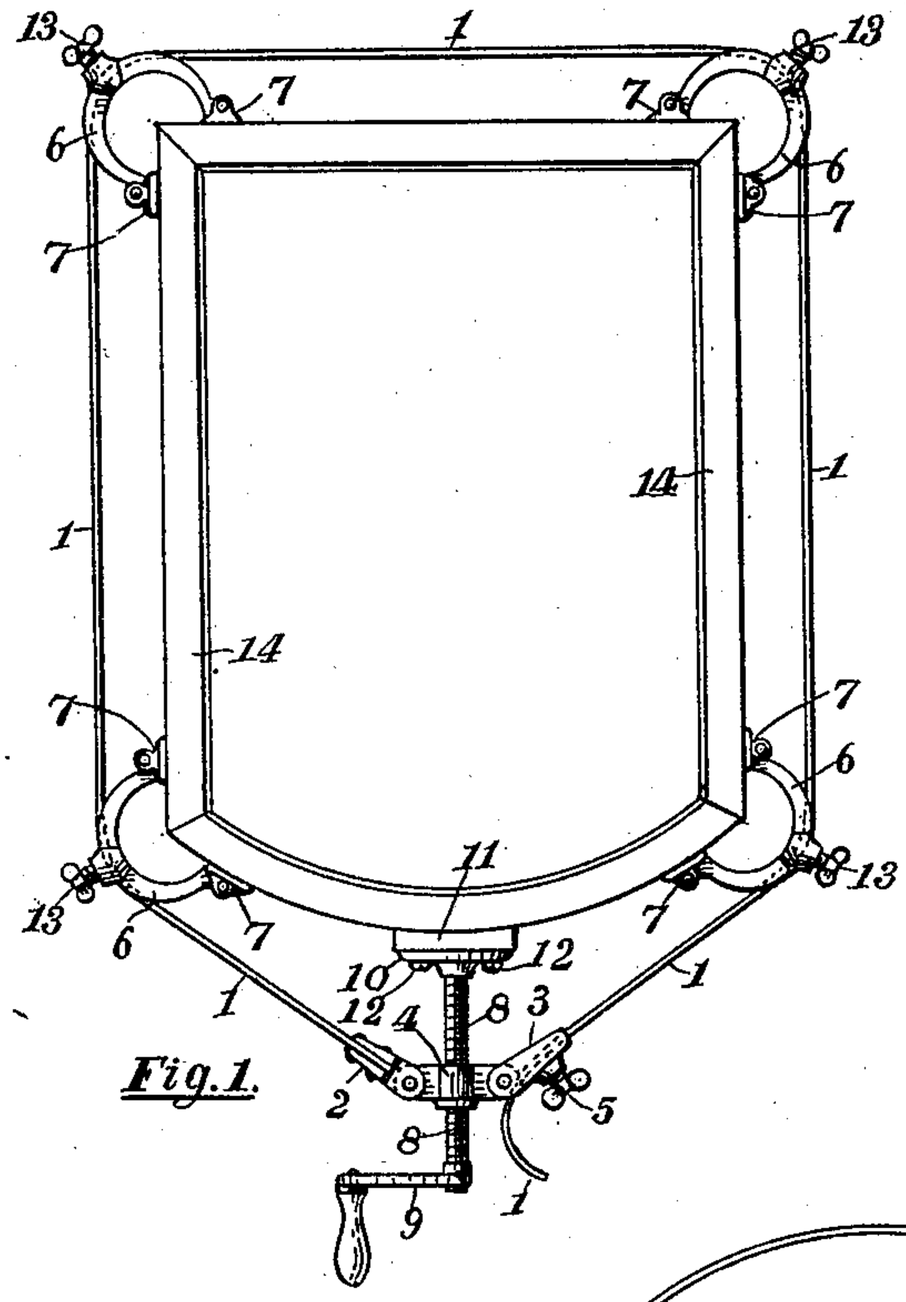


Fig.1.

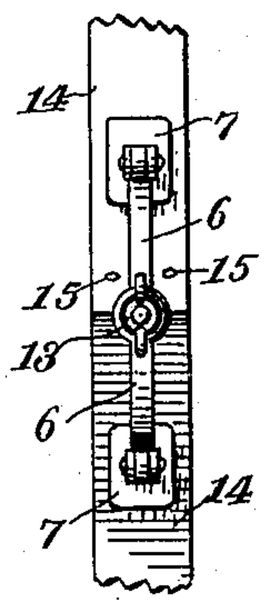


Fig.3

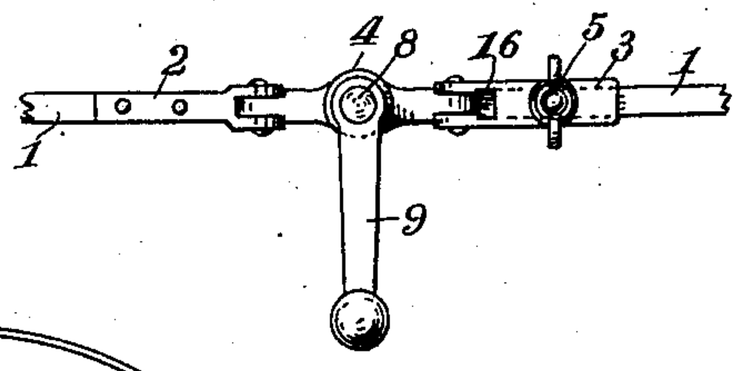
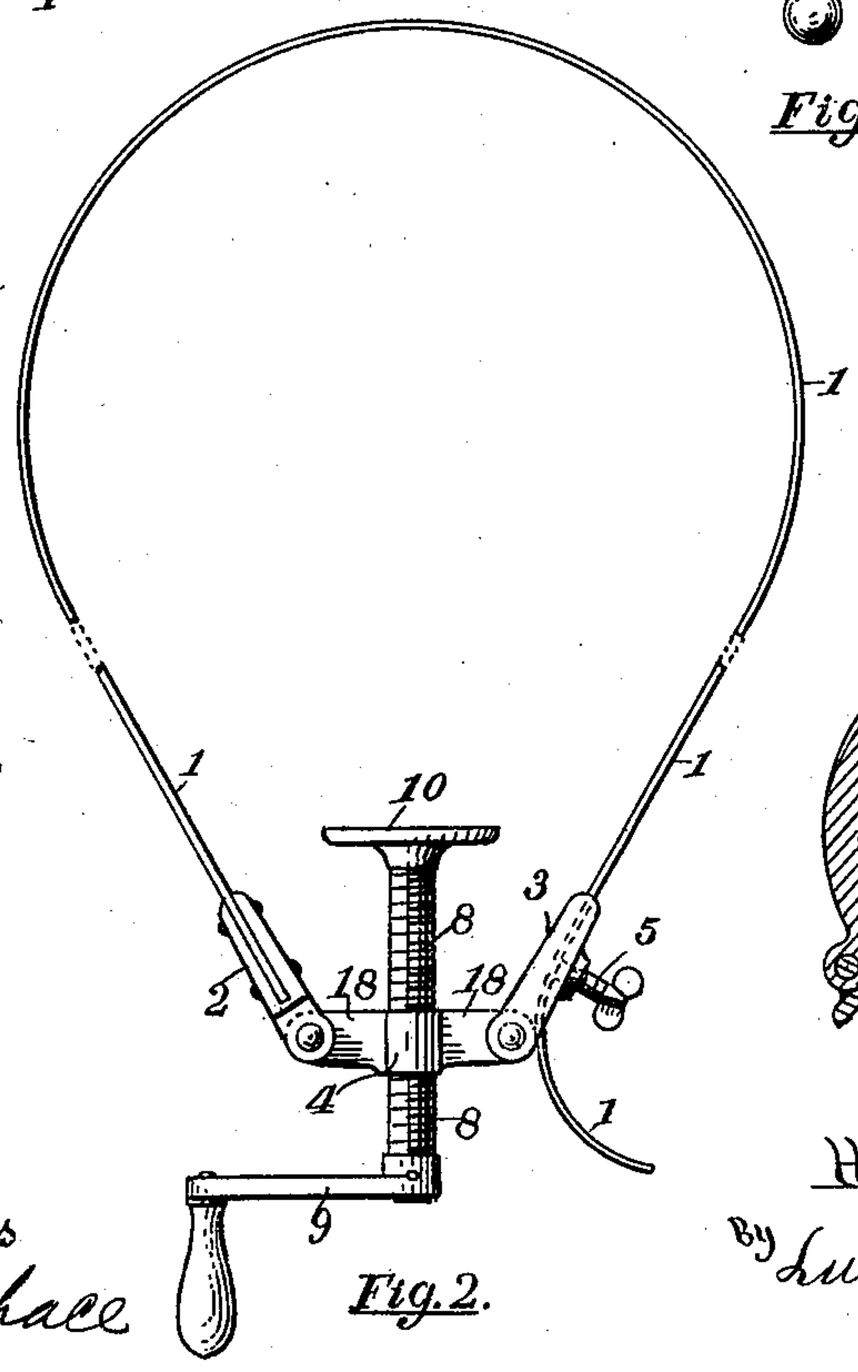


Fig.4.



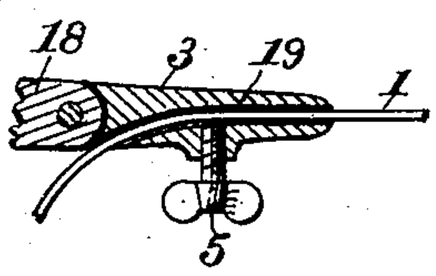


Fig.5.

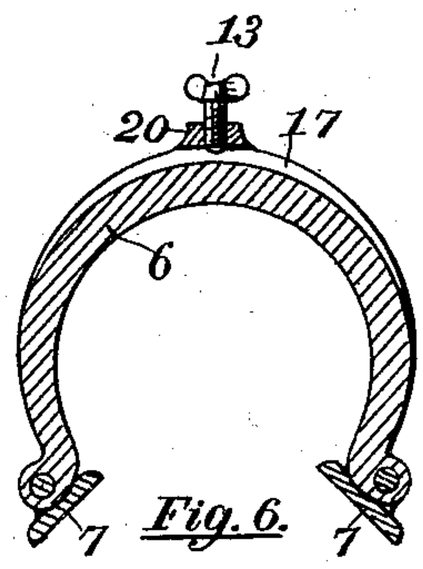


Fig.6.

Witnesses

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CLAMP.

No. 891,121. Specification of Letters Patent. Patented June 16, 1908.

Application filed November 20, 1907. Serial No. 403,005.

To all whom it may concern:

Be it known that I, HENRY WICHERS, a citizen of the United States of America, residing at Zeeland, in the county of Ottawa and State of Michigan, have invented certain new and useful Improvements in Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in clamps for wood work and its object is to provide a clamp adapted to be applied to various shapes of wood work; to provide the same with means for simultaneously clamping all of the joints of the work by means of a single screw movement; and to provide the device with various new and useful features, hereinafter more fully described and particularly pointed out in the claims.

My invention consists essentially of a flexible strap preferably a strip of steel, yokes engaged by the strap and having pivoted members to engage the work, a nut adjustably attached to the strap and a screw extending through the nut and provided with a contact member adapted to engage the work as will more fully appear by reference to the accompanying drawings, in which:

Figure 1. is a plan view of a device embodying my invention applied to an arch top frame; Fig. 2. an enlarged detail of the strap and tightening screw; Fig. 3. a detail of one of the yokes applied to the corner of a structure; Fig. 4. an enlarged detail of the tightening screw and members connected therewith; Fig. 5. a sectional detail of means for adjusting the operative length of the strap for different sizes of work and; Fig. 6. a sectional detail of one of the yokes and parts attached.

Like numbers apply to like parts in all of the figures.

1 represents a flexible strap of any suitable material, preferably a strip of steel and having one end secured to a clip 2 pivoted to one of two oppositely projecting arms 18 on a nut 4. The other end of the strap is inserted in a longitudinal opening in a clamp 3 pivoted to the other arm 18, and is adjustably secured therein by means of a set screw 5. Extending through the nut 4 is a screw 8, manually rotated by a crank 9 on one end, and at the other end provided with a rotative plate 10 to which may be detachably secured a block 11 by means of screws 12, said block being adapted to engage the work and conform to the shape thereof, as occasion requires. At each angle of the work or at intervals where the joints occur, I provide yokes 6 spanning the joint and narrow enough to permit of inserting nails 15 in the work at the joint and at each side of the yoke. On the respective ends of this yoke are pivoted plates 7 which engage the work and press the same firmly together at the joints. To simultaneously force these yokes against the work, the outer side of the arched portion thereof is provided with a groove 17 and presents a curved surface to the strap 1, which strap slidably engages the same and will bend to conform thereto without making a kink or break in the strap. To adjust these yokes on the strap, each one at the middle is provided with a bridge-bar 20 spanning the groove in which bar is inserted a thumb-screw 13 to engage the strap and hold the yoke adjusted thereon, as occasion may require.

In operation the yokes are placed in position spanning the joints of the work and will conform to any degree of angle therein and the strap is tightened by turning the screw 8 and simultaneously forcing the block 11 and the yoke plates against the work.

What I claim is:

1. In a clamp a series of yokes having convex outer surfaces, plates pivoted to the ends of the yokes, a strap engaging the convex surfaces of the yokes, a nut having oppositely projecting arms, a clip pivoted to one of said arms, and attached to one end of the strap, a clamp pivoted to the other of said arms and adjustably holding the other end of the strap, a screw rotative in the nut and having a plate rotative on one end and a crank attached to the other end.

2. In a clamp, the combination of a series of yokes having convex outer surfaces, bridge bars on the yokes, thumb screws in the bars, a strap engaging the yokes and engaged by

the thumb screws, plates pivoted to the ends of the yokes, a nut having oppositely projecting arms, a clip pivoted to one arm and attached to one end of the strap, a clamp pivoted to the other arm and engaging the strap to adjust and hold the same, a screw rotative in the nut, a crank to manually operate the screw, a plate rotative on the end of the screw, and a block detachably secured to the plate.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY WICHERS.

Witnesses:
B. NEERKEN,
THOS. KEPPEL.