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CLAMPING DEVICE AND THE LIKE.
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907,800.

Patented Dec. 29, 1908.

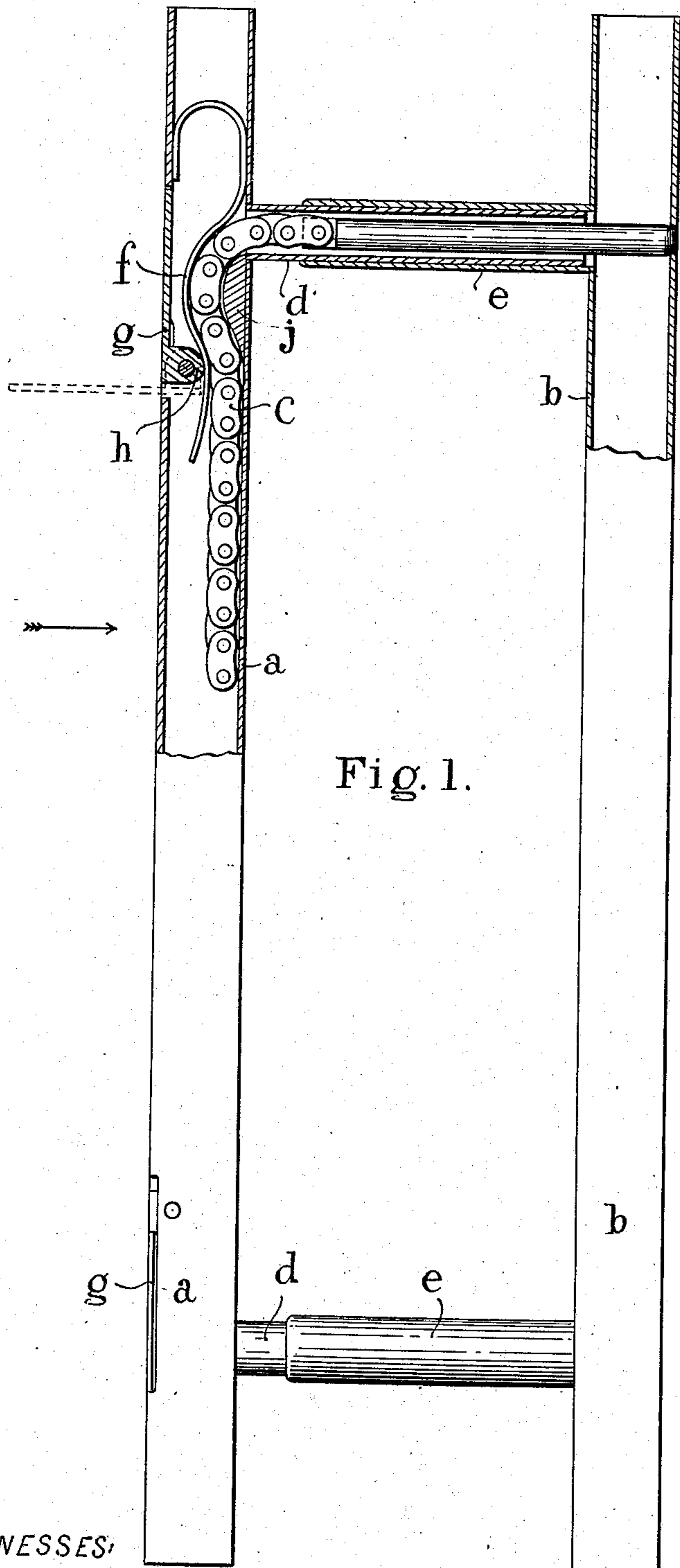


Fig. 1.

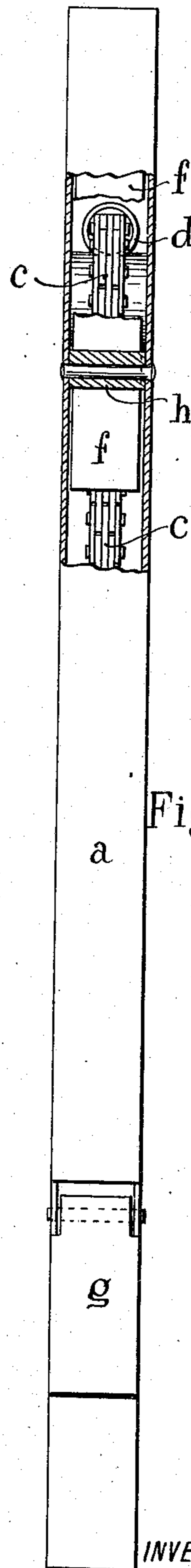


Fig. 2

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UNITED STATES PATENT OFFICE.

JOHN HERBERT HEWITT, OF BIRMINGHAM, AND JOHN WALKER, JR., OF LONDON, ENGLAND.

CLAMPING DEVICE AND THE LIKE.

No. 907,800.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed June 11, 1907. Serial No. 378,360.

To all whom it may concern:

Be it known that we, JOHN HERBERT HEWITT, of 7 Priory road, Edgbaston, Birmingham, Warwickshire, England, engineer, and JOHN WALKER, Jr., of Farringdon House, Warwick Lane, London, England, manufacturer, have invented certain new and useful Improvements in and Relating to Clamping Devices and the Like, of which the following is a specification.

This invention relates to clamping and similar devices where it is required to maintain pressure for some time as in loose leaf books, presses, and the like, and has for its object to provide an improved form of device which can be readily operated and which when locked prevents motion of the clamping members either towards or away from one another.

A device constructed in accordance with this invention comprises two clamping members, flexible members secured to one of said clamping members and adapted to pass through the other clamping member, against which they are pressed and secured by cams or similar devices, and means for preventing the deformation of that part of the flexible members between the two clamping members.

Referring now to the drawings:—Figure 1 is an elevation partly in section of one form of device constructed in accordance with this invention; and Fig. 2 is a view thereof partly in section taken in the direction of the arrow A, Fig. 1.

The form of device shown is particularly adapted for use as mechanism for loose leaf books or the like and comprises two hollow clamping members *a b*, square in cross section, two chains *c c* of a form hereinafter more fully set forth secured to the clamping member *b* and adapted to pass through and along the inside of the other clamping member *a*, tubes *d d* on the clamping member *a* adapted to telescope into tubes *e e* on the clamping member *b*, said tubes being adapted to surround said chains, springs *f f* secured within the clamping member *a* and adapted to guide said chains therealong, and pivoted levers *g g* having cams *h h* mounted thereon and adapted to depress the springs *f f* against the chains *c c* to secure same against the clamping member *a*. The chains *c c* are formed of links, preferably flat, secured together by pins so that when the chains are secured and held against deforma-

tion they are adapted to resist compressive strains. To prevent the deformation of the chains the telescoping tubes *d d* and *e e* are made to fit around the chains as closely as possible. It is very desirable that curved guides such as *j* be employed so that the chain may be closely adjusted, and it is also desirable that the links be curved on their inner surfaces to conform to the guides.

In use the device is opened by raising the levers *g g* so as to release the pressure on the chains and the clamping members can then be pulled apart. In closing the device, the clamping members are forced together and the chains slide along in the tubes into the clamping member *a*, the levers are then depressed so as to operate the cams *h h* to press and secure the chains against the clamping member *a*.

What we claim and desire to secure by Letters Patent is:

1. A clamping device comprising the combination of two clamping members, relatively inelastic flexible members secured to one of said clamping members and adapted to pass through the other clamping member, means for frictionally pressing and securing said flexible members against said other clamping member and means for preventing the deformation of that part of the flexible members between the two clamping members.

2. A clamping device comprising the combination of two clamping members, chains composed of links connected together by pins and secured to one of said clamping members and adapted to pass through the other clamping member, means for frictionally pressing and securing said chains against said other clamping member and means for preventing the deformation of that part of the chains between the two clamping members.

3. A clamping device comprising the combination of two clamping members, telescopic tubes mounted on said clamping members, chains composed of links connected together by pins and secured to one of said clamping members and adapted to pass through the telescopic tubes and through the other clamping member, said telescopic members being of such size that said chains fit tightly therein, and means for pressing and securing said chains against said other clamping member.

4. A clamping device comprising the combination of two clamping members, tele-

scopic tubes mounted on said clamping members, chains composed of links connected together by pins and secured to one of said clamping members and adapted to pass
 5 through the telescopic tubes and through the other clamping member, said telescopic members being of such size that said chains fit tightly therein, springs fitted in said other clamping member and adapted to guide said
 10 chains therealong and cams mounted on levers pivoted to said other clamping member, substantially as set forth.

5. A clamping device comprising the combination of two clamping members, a relatively inelastic flexible member secured to one of said clamping members and adapted to pass to the other clamping member, means for frictionally pressing and securing said flexible member against said other clamping
 20 member, and means for preventing the deformation of that part of the flexible member between the two clamping members.

6. A clamping device comprising the combination of two clamping members, a relatively inelastic flexible member secured to one of said clamping members and adapted to pass to the other clamping member, means for frictionally pressing and securing said flexible member against said other clamping
 30 member, and means for preventing the deformation of that part of the flexible member between the two clamping members, said last named means comprising telescopic tubes through which said flexible member
 35 passes.

7. A clamping device comprising the combination of two clamping members, a flexible member secured at one end to one of said clamping members, and having its other end
 40 lying free within said clamping member, means for guiding the free end of said flexible member in said second clamping member, and means for fastening said flexible member to said second clamping member, said guiding means being adapted to prevent any material slackness in said flexible member between the fastening means and the first

clamping member, whereby when the second clamping member is pressed downwardly toward the first said flexible member is
 50 guided within said second clamping member, and when said fastening means is operated said clamping members are locked in their compressed positions.

8. A clamping device comprising the combination of two clamping members, and means for holding said members together comprising chains secured to one of said clamping members, and having their opposite ends in effect disengaged from but extending along the other of said clamping members, means for guiding said chains to move lengthwise automatically as the clamping members are moved toward or from each other, and means for fastening said chains to
 65 the second clamping member.

9. A clamping device comprising the combination of two clamping members, and means for holding said members together comprising chains secured to one of said clamping members and having their opposite ends in effect disengaged from but extending along the second clamping member, said second clamping member having means for guiding the free ends of the chains so that
 75 they move automatically in a lengthwise direction as the clamping members are moved toward and from each other, and clamps for engaging said chains to hold them relatively to the second clamping member.
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In witness whereof, we have hereunto signed our names in the presence of two subscribing witnesses.

JOHN HERBERT HEWITT.
 JOHN WALKER, JUN.

Witnesses to the signature of John Herbert Hewitt:

WALTER STANLEY RESTALL,
 ARTHUR ROUND.

Witnesses to the signature of John Walker, Jr.:

CHAS. CRONIN,
 ROBERT MILTON SPEARPOINT.