Sept. 29, 1931. A. T. SCANNELL 1,825,425

CLAMP

Filed Sept. 20, 1930

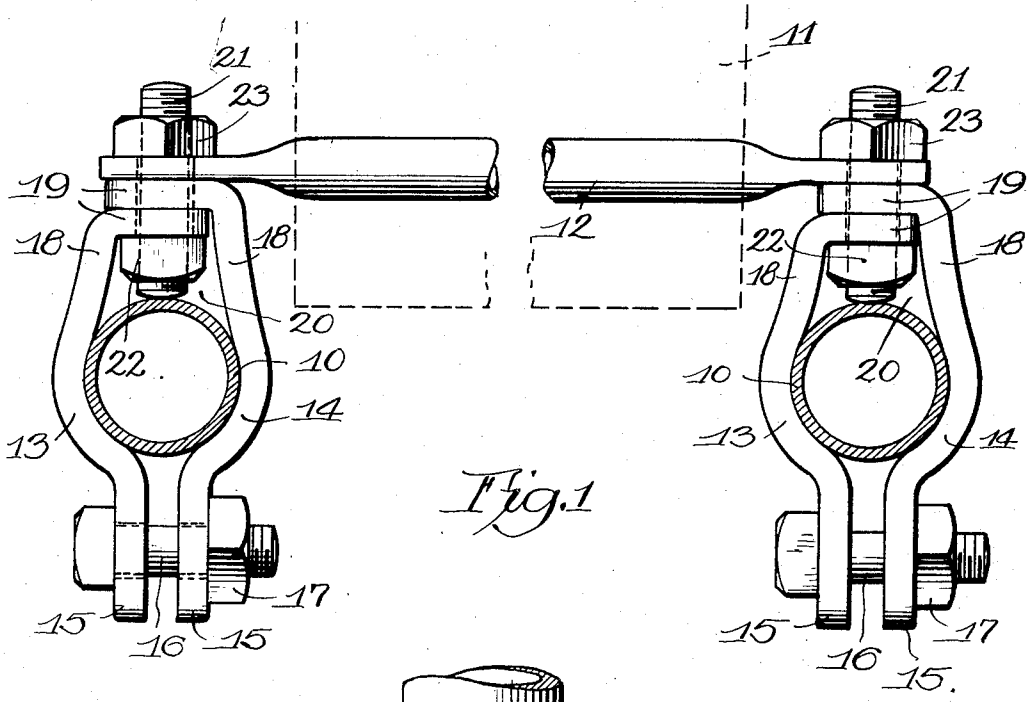


Fig. 1

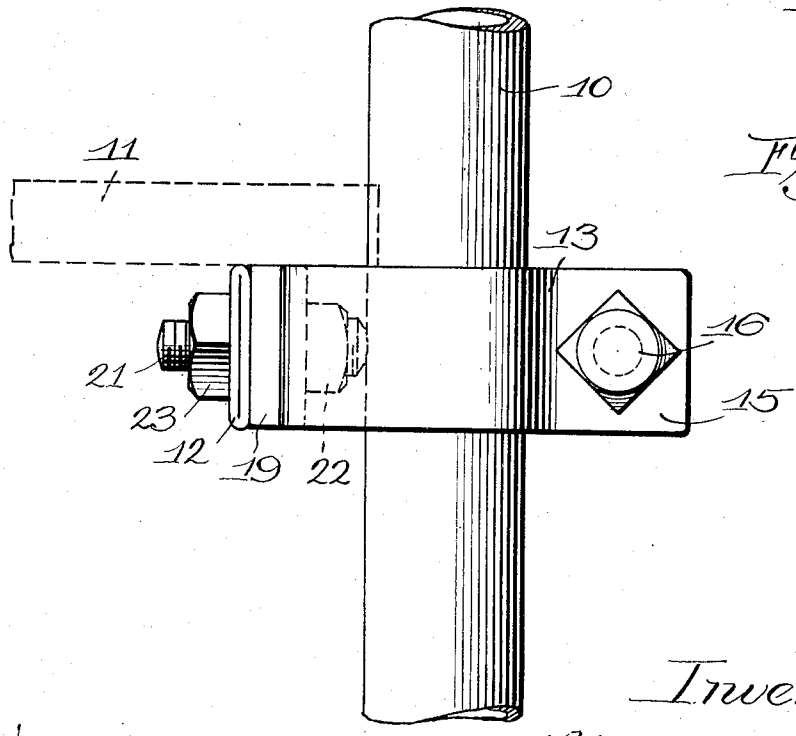


Fig. 2

Witness:
Chas. L. Hursh

Inventor,
Albert T. Scannell
By George Bryan Jones Atty.

Patented Sept. 29, 1931 1,825,425

UNITED STATES PATENT OFFICE

ALBERT T. SCANNELL, OF CHICAGO, ILLINOIS

CLAMP

Application filed September 20, 1930. Serial No. 483,253.

This invention relates to improvements in clamps.

One object of the invention is to provide a clamp adapted for securing a landing panel to a construction tower which clamp is of simple, sturdy construction and which can readily be attached to or removed from its support.

Another object of the invention is to provide a clamp adapted to be secured to a post of a construction tower or the like by the use of only two bolts, one of which tightens the clamp to the post to hold it against slipping while the other bolt secures the landing panel, or other member being supported, to the clamp, which bolt can be forced into engagement with the post to supplement the action of the bolt in preventing slippage of the clamp.

Other objects relate to various features of construction and arrangement of parts which will be apparent from a consideration of the following specification and accompanying drawings, wherein:

Fig. 1 is a horizontal section showing a pair of cooperating clamps embodying the present improvements secured to a pair of vertical posts; and

Fig. 2 is a side elevation of the left hand clamp shown in Fig. 1.

In the drawings 10 are tubular steel or iron posts such as frequently are used in the erection of construction towers used for elevating building materials. During the progress of the building it is necessary to construct temporary landing platforms whereby building material can be removed from the tower elevator at different floors of the building being constructed. These platforms may consist of planks such as are illustrated at 11 which extend from a transverse support generally termed a landing panel 12 which is secured at the proper elevation to the two posts facing the building. The landing panels are secured to the posts by means of clamps which in the present embodiment of the invention comprise two parts, 13 and 14. Each clamp member has its intermediate portion shaped to contact with a portion of the circumference of a post 10 and has one end directed outwardly to form an ear 15. These ears have openings therein for receiving a headed bolt 16 having a nut 17 at the other end for tightening the clamp members against the post to prevent slipping. The opposite ends of the clamp members 13 and 14 each has an outwardly extending portion 18 which portions terminate in parallel overlapping ends 19.

The ends 19 are disposed in planes parallel to the landing panel or support 12. The overlapping ends 19, as will be seen are spaced somewhat from the post 10 forming a clearance or socket 20.

A stud bolt 21 passes through an opening in the end of the panel 12 and through registering openings in the ends 19 into the socket 20. The bolt 21 is screwed into a nut 22 which is placed in the socket 20 and is held by the walls of the socket against rotation. An outer nut 23 firmly clamps the panel 12 to the bracket and at the same time holds the bracket members together. The bolt 21 can be turned so that its inner end bears firmly against the post 10 which will assist in preventing any slipping of the clamp upon the post.

The landing panel 12 as shown in the drawing may comprise a steel tube flattened at the ends, although any suitable bar may be employed. The panel 12 being spaced somewhat from the post 10 by the construction described, the weight placed upon the bar tends to affect a binding action of the clamp upon the post which, in conjunction with the clamping action of the bolt 16 and the engagement of the post by the inner end of the bolt 21, provides a very secure clamp but one which can readily be released from

position when desired for changing the panel to a different elevation on the tower or for removing it. When the nut 17 is tightened, the clamp tends to creep horizontally on the post, thus forcing the inner end of the stud bolt 21 into firm contact with the post or if the nut 17 is tightened sufficiently the end of said bolt will dig into the post, whereby the clamp is held against any possible slippage.

Although I have shown and described a particular embodiment of the invention for the purpose of illustration, I do not wish to be restricted specifically thereto except as so limited by the appended claims.

What I claim is:

1. A clamp for construction towers comprising a pair of clamp members each having a central curved portion adapted to contact with a portion of the circumference of a tower post and having ends disposed in overlapping relation and spaced from said post, a stud bolt passing through openings in said overlapping ends, a nut on the inner end of said bolt disposed within said space and confined by said clamp members against turning, a nut on the outer end of said bolt for securing an additional member to said clamp, and a bolt for securing the opposite ends of said clamp members together and tightening the same on said post.

2. A clamp adapted to be secured to a tower post comprising a pair of members having curved central portions adapted to contact with a portion of the circumference of said post and having ends extended outwardly of the post and bent to overlap each other with a socket between the same and said post, a bolt passing through said overlapping ends, a nut for the inner end of said bolt held by walls of said socket against rotation, a nut on the outer end of said bolt, and a bolt at an angle to said first bolt for securing the opposite ends of said members together and clamping said curved portions thereof against said post.

3. A clamp adapted to be secured to a vertical post comprising a pair of members having intermediate curved portions adapted to contact with portions of the post circumference, said members terminating at one end in oppositely directed over-lapping portions disposed in vertical planes, a bolt passing through said over-lapping portions and radial with respect to said post, and a bolt for the opposite ends of said clamp members for tightening said curved portions against said post.

4. A clamp adapted to be secured to a post comprising a pair of members having intermediate portions shaped for contact with opposite portions of said post, said members having outward extensions terminating in parallel overlapping ends defining a socket between the same and said post, a stud bolt arranged radially of said post and passing through said overlapping ends, a nut for the outer end of said bolt, a nut for the inner end of said bolt held against rotation by the walls of said socket whereby said bolt can be screwed through said nut into engagement with said post, and a bolt for the opposite ends of said members for effecting the clamping of the same to said post.

In testimony whereof, I have subscribed my name.

ALBERT T. SCANNELL.