

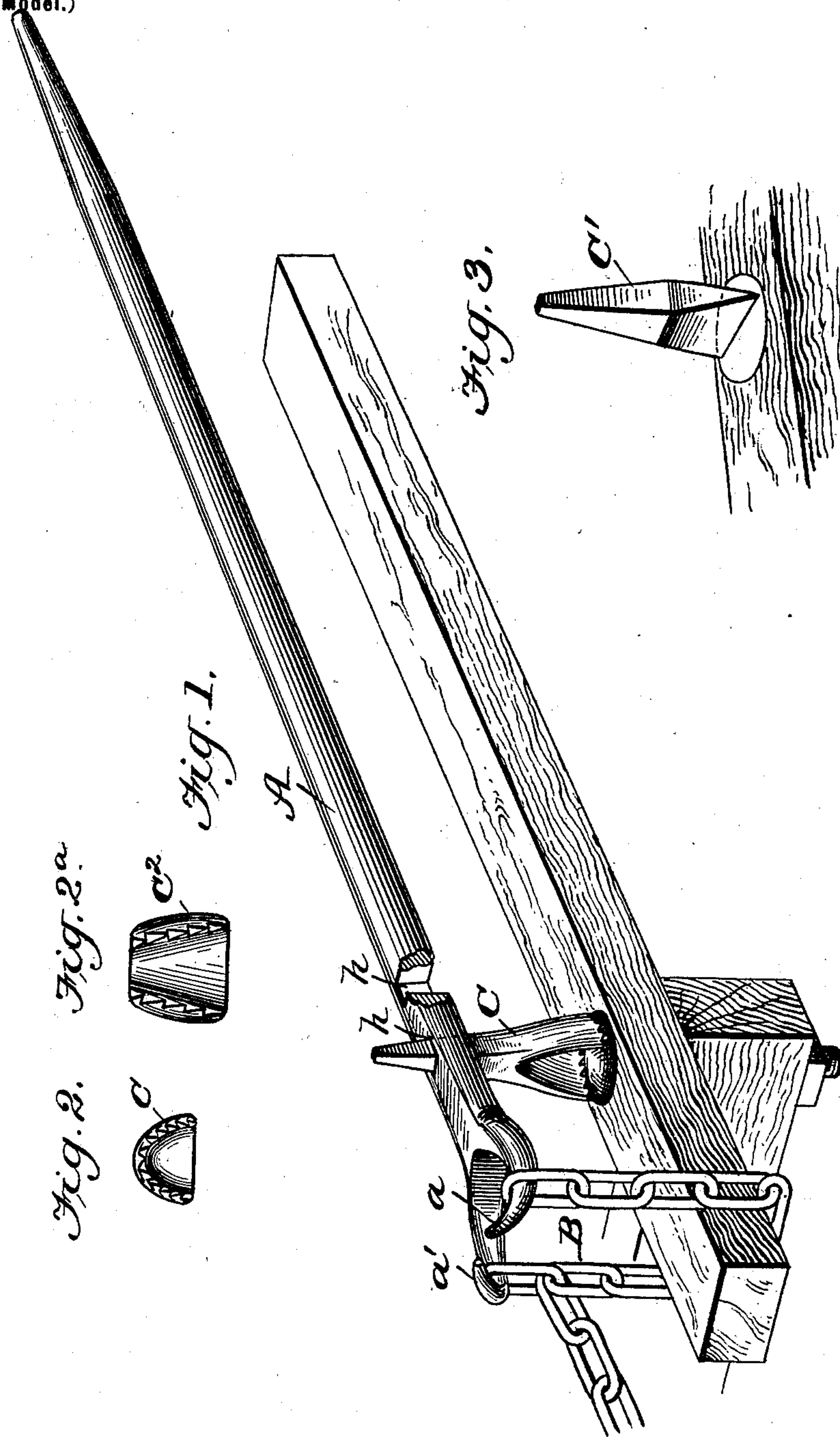
No. 671,872.

Patented Apr. 9, 1901.

H. STADE.  
BOLT HOLDER.

(Application filed Feb. 1, 1901.)

(No Model.)



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

HERMAN STADE, OF FLANDREAU, SOUTH DAKOTA.

## BOLT-HOLDER.

SPECIFICATION forming part of Letters Patent No. 671,872, dated April 9, 1901.

Application filed February 1, 1901. Serial No. 45,599. (No model.)

*To all whom it may concern:*

Be it known that I, HERMAN STADE, of Flandreau, in the county of Moody and State of South Dakota, have invented a new and  
5 useful Improvement in Bolt-Holders, of which the following is a specification.

My invention is an improvement in bolt-holders of that form in which a lever is provided with a chisel-shaped fulcrum that is  
10 made to clutch the bolt-head, while the outer end of the lever is anchored to some solid or immovable part to permit pressure to be brought on the chisel-shaped fulcrum to clutch and hold the bolt-head, and thereby  
15 hold the bolt against the turning strain both in turning up nuts and in twisting them off when they are to be removed.

My invention comprises a very simple, practical, and cheap form of such general construction which holds the bolts of all sizes  
20 very firmly in almost any position, and thereby prevents the same from turning under the strain of the wrench when the latter is applied to the nut.

25 It consists in the improved construction and arrangement of the device, which I will now proceed to describe with reference to the drawings, in which—

Figure 1 is a perspective view of my improved bolt-holder shown applied to a bolt.  
30 Fig. 2 is a face view of the form of fulcrum-chisel adapted to a round and convex headed bolt. Fig. 2<sup>a</sup> is a modification of the same, and Fig. 3 is a perspective view of the form  
35 of fulcrum-chisel applied to a flat-headed bolt.

In the drawings, A represents a hand-lever, which may be of any length or size, but preferably is between two and three feet long. It is made of metal and at one end is formed  
40 into a fork whose two prongs  $\alpha$  and  $\alpha'$  are tapered to a point and are bent first outwardly, then upwardly, and then inwardly. These prongs are adapted to be hooked into the links of a chain B, one prong  $\alpha$  being  
45 hooked into the link of one end of the chain and the prong  $\alpha'$  into a link of the other end of the chain after it has been passed around some stationary object to form an anchorage, and thus give a purchase or hold for exerting  
50 the required pressure on the fulcrum-chisel. The chain-links are of uniform size, about one and one-half inches long, and stout enough

to stand the strain. Near the forked end of the lever, at a suitable distance to give the proper leverage, there are formed through the  
55 shank of the lever two or more square or angular holes  $h$ , extending transversely through the lever and tapered so as to be larger at the bottom than they are at the top. In either of these holes is seated the square and tapered  
60 upper ends of the fulcrum-chisels C. These are made of various lengths, from three to seven inches or more, to suit various kinds of work for reaching the bolt when in inaccessible places, and their gripping or clutch-  
65 ing ends are made in different forms to adapt them to either convex or flat headed bolts. For convex-headed bolts, as seen at C, the chisel end is formed in a semicircular curve with serrations at its edge to grip the round  
70 edge of the bolt, while for flat-headed bolts a straight-edge chisel C' is used, which grips the flat face of the head of a bolt and prevents it from turning. To adapt the chisel to bolt-heads of various sizes, the clutch-faces  
75 may be tapered, as at C<sup>2</sup> in Fig. 2<sup>a</sup>, the wide end being for large bolts and the narrow one for small bolts. Any kind of clutch-faces may be formed on the edges of these chisels that may be desired in adapting them to va-  
80 rious kinds of work.

In applying this tool the chain is hitched around the stationary part of the object containing the bolt, and the ends of the chains  
85 are then hooked onto the prongs of the lever to form an anchorage hitch or sling, which may be as long or as short as may be required. A chisel of the required shape and length is then inserted in one of the sockets of the lever and the chisel edge is brought to bear  
90 against the head of the bolt. Pressure being then applied to the long end of the lever the bolt is clutched and securely held, so that the nut may be turned off even when so securely held as to require a piece of the bolt end to  
95 be twisted off with it.

As the chisel has a square shank seated in a square hole in the lever, it will be seen that the chisel is held against turning with the  
100 bolt. For changing the leverage the chisel is placed in the socket farthest from the fork. A peculiar advantage of this fork is that it not only allows a loop of any size to be quickly made of the chain and hooked over the same,



but as the prongs of the fork are separated some distance from each other the two sections of the chain running from the two prongs form with the fulcrum-chisel a three-point bearing or sort of tripod effect that holds the lever firmly in its proper position and prevents it from rocking or tilting sidewise in applying the strain.

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

1. A bolt-holder consisting of a lever having a clutching-chisel for a fulcrum, and forked ends turned upwardly, and a length of chain having links adapted to be independently caught over the prongs of the fork substantially as and for the purpose described.

2. A bolt-holder consisting of a lever having a detachable anchorage at its outer end, and angular tapered holes through its shank, and a clutching-chisel having an angular and tapered shank adapted to be received in said holes substantially as described.

3. A bolt-holder consisting of a lever having forked and upturned ends and chisel-sockets in its shank, a chain having links adapted to be caught upon the prongs of the forks, and a detachable clutch-chisel having a shank fitting in the sockets of the lever substantially as and for the purpose described.

HERMAN STADE.

Witnesses:

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