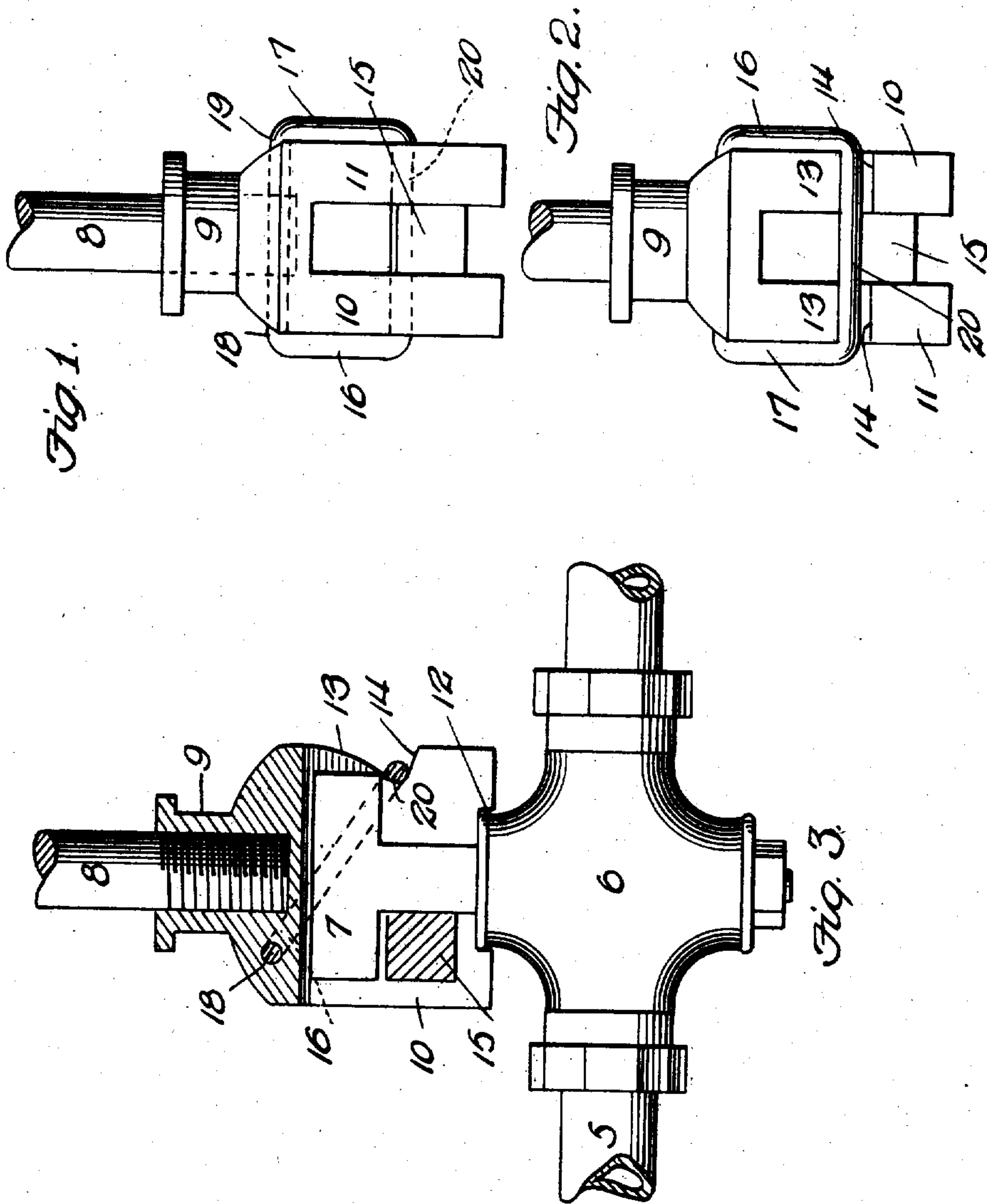


J. SCHRAMM.
SELF LOCKING ROD CLAMP.
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975,292.

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UNITED STATES PATENT OFFICE.

JOHN SCHRAMM, OF CHICAGO, ILLINOIS.

SELF-LOCKING ROD-CLAMP.

975,292.

Specification of Letters Patent.

Patented Nov. 8, 1910.

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To all whom it may concern:

Be it known that I, JOHN SCHRAMM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Self-Locking Rod-Clamps, of which the following is a specification.

This invention relates to improvements in keys employed for turning valves in water and gas mains or the like.

The object of the invention is the provision of a key which may be lowered to the head of the valve stem and when in engagement with the latter will automatically lock, whereby accidental disengagement of the key from the head of the stem will be positively prevented.

Another object is the provision of a construction which may be operated by an inexperienced person and brought into engagement with the valve stem located on the gas or water main considerably below the surface of the ground.

With these and other objects in view, which will hereinafter fully appear, the present invention consists in certain novel details of construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claim, it being understood that various changes in the form, proportion, size and minor details of the device may be made, within the scope of the appended claim, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming a part of the specification:—Figure 1 is a detailed end view of the device. Fig. 2 is a similar view of the opposite end. Fig. 3 is a vertical section of the parts shown in Fig. 1.

Similar numerals of reference are employed to designate corresponding parts throughout.

The pipe main is designated by the numeral 5, and the valve therein by the numeral 6. By reference to Fig. 3 it will be seen that the stem of this valve terminates in a T-shaped head 7 of well known construction.

The device forming the subject matter of the present invention includes in its construction a rod 8, the upper end of which

extends to a point adjacent to the surface of the earth, and the lower end of which was formed integral therewith, or otherwise secured thereto a head. The head includes a tubular socket 9 which receives the lower end of the rod 8, the said socket 9 terminating in a pair of spaced jaws 10 and 11. The jaws 10 and 11 are considerably greater in width than the diameter of the socket 9, their widths corresponding approximately to the length of the cross arm of the T-shaped head 7, and the distance therebetween corresponding approximately to the thickness of the said T-shaped head. The distance between the upper and lower ends of the jaws is somewhat greater than the length of the head, and formed at the medial portions of said lower ends are recesses 12, which receive the upper end of the valve casing when the parts are in the position shown in Figs. 1 and 3.

By reference to the drawings, it will be seen that the jaws 10 and 11 are at one end rounded for a portion of their length, as at 13, the said rounded surfaces extend from the lower end of the socket 9 to a point adjacent the lower end of each jaw, and terminate in a detent, whereby a shoulder 14 is provided. The middle of the detent is so positioned that when the jaws engage the head 7 the said medial portion will be below the plane of the horizontal limb of the T-shaped head, as shown in the drawings. Connecting the jaws 10 and 11 and arranged adjacent to the sides remote from the curved surface 13, and located in a plane with the lug 14, or approximately so, is a cross piece 15 which is located on the lower side of the horizontal limb of the T-shaped head when the jaws engage with the head, as shown in Figs. 1 and 3.

A lock is provided for the jaws, and in the present instance comprises an oblong rectangular shaped link preferably formed of a single piece of wire or the like. The sides of the link are designated by the numerals 16 and 17, and the distance between the said sides corresponds approximately to the space between the opposite outer faces of the jaws 10 and 11. The sides 16 and 17 terminate at one end in intumed extensions 18 and 19 which are loosely received by the opening formed in the jaws 10 and 11 and located adjacent to the upper ends of the said jaws and in a plane with the cross piece

15. The link is of such length that the portion 20 connecting the sides 16 and 17 will normally bear on the shoulder 14 and in the detent, and when so positioned will engage
5 with the lower side of the horizontal limb of the T-shaped head and at the end thereof opposite to the end in engagement with the cross piece 15.

10 Having now described the construction of the device the manner of locking it to the head 7 will be stated.

As shown the rod 8 is lowered to the head 7 and when so lowered the cross piece 15 will invariably engage with the upper side of the
15 said head. By now moving the head laterally until the cross piece 15 clears one end of the head, the device may be tilted until the cross piece engages the lower side of the head. When the parts are in this position,
20 it will be evident that the portion 20 of the limb will bear upon the upper side of the head. By now moving the device in the opposite direction until the portion 20 clears the opposite end of the head the cross piece
25 is permitted to fall into the detent and onto the shoulder, and bear on the lower side of

the head, thus effectively locking the parts, as shown in Figs. 1 and 3.

From the foregoing it will be seen that I have provided a device which is compara- 30
tively simple in structure, inexpensive to manufacture, embodying few parts and these so arranged that the danger of derangement will be reduced to a minimum.

Having thus described the invention what 35
I claim as new is:—

A key of the class described comprising a pair of jaw members provided on one side with alining detents, a cross piece connecting said jaw members and located adjacent to 40
the free ends of the jaws and at the sides remote from the detents, a substantially U-shaped loop pivotally secured to and embracing said jaw members, and having its medial portion normally arranged in said 45
detents, for the purpose described.

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

JOHN SCHRAMM.

Witnesses:

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EDMUND BENDER.