Feb. 5, 1929. 1,701,411

D. S. KELLAM

SHUT-OFF FOR FIRE HOSE

Filed Jan. 16, 1928 2 Sheets-Sheet 1

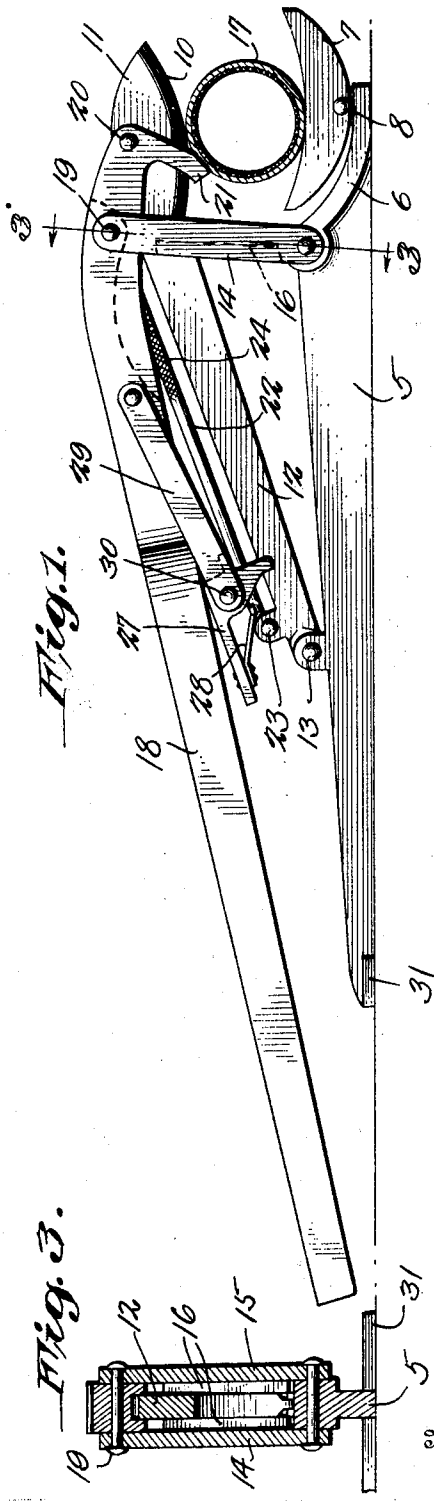

Fig. 1.

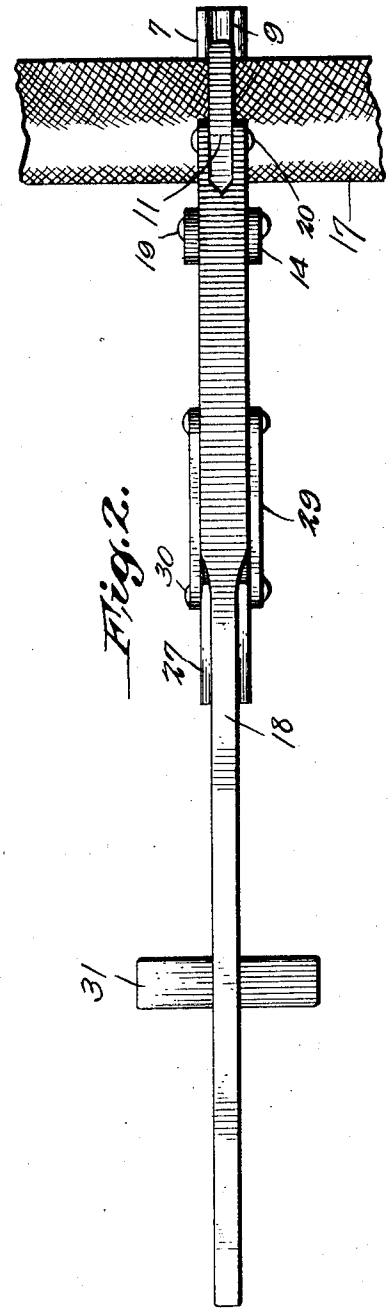

Fig. 2.

Fig. 3.

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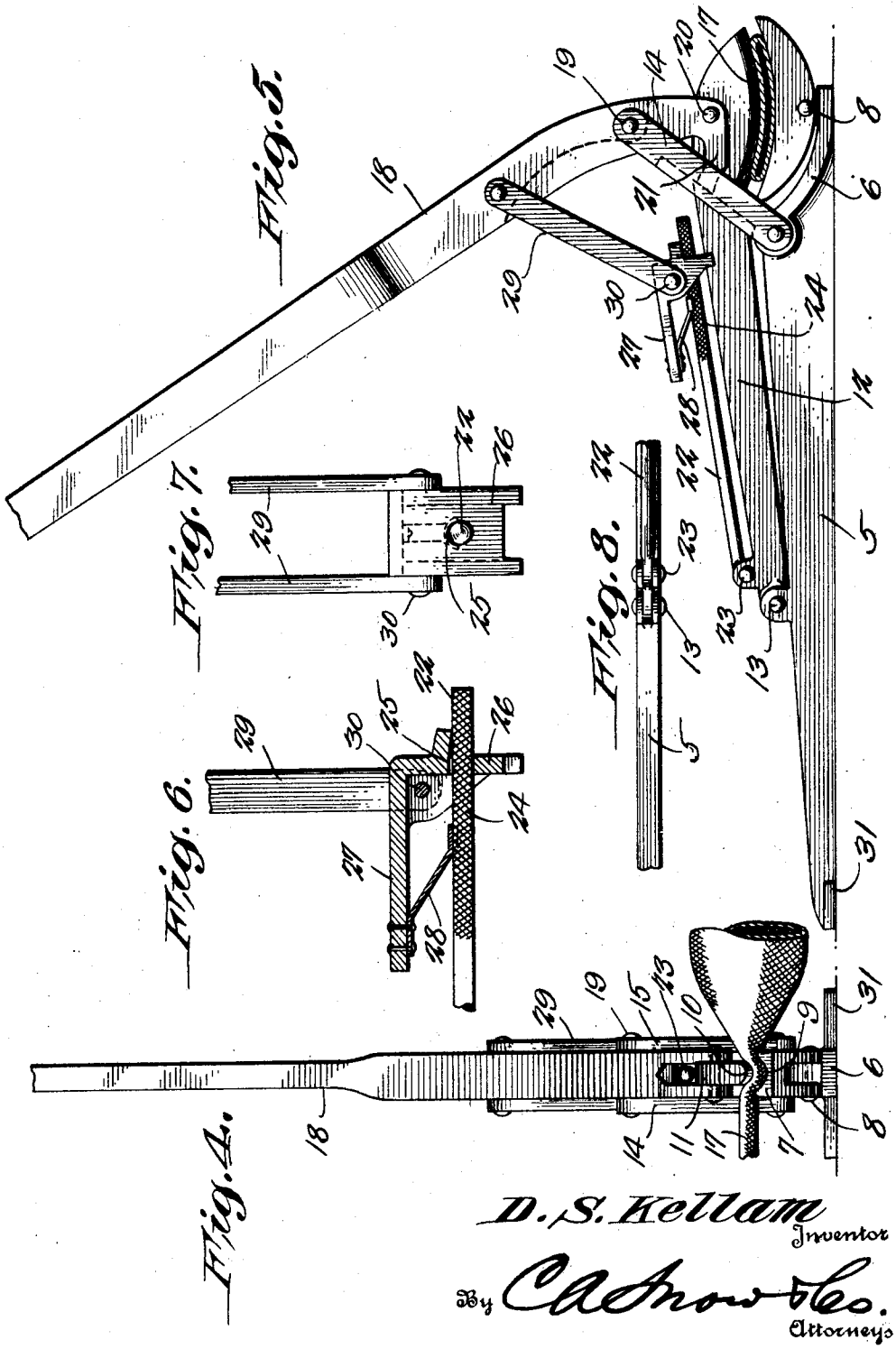

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UNITED STATES PATENT OFFICE.

DAVID S. KELLAM, OF ATLANTA, GEORGIA.

SHUT-OFF FOR FIRE HOSE.

Application filed January 16, 1928. Serial No. 247,208.

This invention has reference to hose clamps and more particularly to hose clamps especially designed for use in clamping fire hose under pressure.

The primary object of the invention is to provide means for stopping the flow of water through a hose, should the hose become ruptured or burst under the water pressure, thereby eliminating the necessity of cutting off the water supply at the plug.

An important object of the invention is to provide a clamp of this character which may be readily and easily locked in its clamping position, to insure against the clamp releasing its hold on the fire hose.

A still further object of the invention is to provide a structure which will insure against lateral movement of the movable jaw of the clamp, thereby preventing twisting of the clamp under the water pressure.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 is a side elevational view of a clamp constructed in accordance with the invention and showing the same as positioned on a hose.

Figure 2 is a plan view thereof.

Figure 3 is a sectional view taken on line 3—3 of Figure 1.

Figure 4 is a front elevational view of the clamp in its clamping position.

Figure 5 is a side elevational view of the clamp in its clamping position.

Figure 6 is a sectional view through the locking mechanism.

Figure 7 is an end elevational view of the locking device.

Figure 8 is a fragmental plan view of the pivoted end of the rod forming a part of the locking device.

Referring to the drawings in detail, the device includes a body portion 5 having a curved forward end 6 to which the jaw 7 is pivotally connected, as at 8.

The upper surface of the pivoted jaw 7 is grooved as at 9 to conform to the shape of the curved surface 10 of the jaw 11 formed at the outer or free end of the arm 12 which has pivotal connection with the body portion 5, at 13.

Pivotally connected with the body portion 5 at a point adjacent to the curved end 6 are the links 14 and 15, each of which being provided with inwardly extended flanges 16 that engage the opposite side edges of the arm 12 to insure against twisting of the arm 12 as the same is being moved into clamping relation with the hose to be clamped, and which in the present showing is indicated by the numeral 17.

The links 14 have pivotal connection at their upper ends with the lever 18, as at 19, the forward end of the lever 18 being pivotally connected at 20 to the arm 12, the forward extremity of the lever being extended at right angles as at 21 providing an extension to contact with the hose to be clamped, when the clamp is being moved into position, to insure the proper position of the clamp on the hose.

The locking mechanism includes the rod 22 pivotally connected to the arm 12 at 23 the rod being constructed so that it normally lies in parallel relation with the arm 12 and as shown, this arm is formed with a roughened or knurled portion 24 to be engaged by the walls of the opening 25 formed in the depending portion 26 of the latch 27 forming the important part of the lock.

This opening 25 is slightly larger than the diameter of the rod 22, so that when the latch member 27 is tilted against the action of the spring 28, the edges of the walls of the opening will bite into the knurled portion 24 to restrict movement of the latch member and hold the same in its positions of adjustment along the rod 22.

The reference character 29 designates links which are pivotally connected to the latch member 27 at 30, the links being also pivotally connected to the lever 18, so that movement of the lever 18 from a position as shown by Figure 1 to its clamping position as shown by Figure 5, will cause the latch member to be slid along the rod 22 where it grips the rod to hold the lever 18 in its clamping position.

At one end of the body portion, are the foot pieces 31 on which the operator may stand to hold the clamp against vertical movement as the lever 18 is being swung vertically.

In the use of the device it is obvious that

when the clamp is positioned as shown by Figure 1 and the lever is moved vertically, the hose to be clamped is compressed between the jaws of the clamp and held in such compressed position to insure against water passing therethrough.

I claim:—

1. A hose clamp including a body portion adapted to rest on the ground surface and having a jaw at one end thereof, a pivoted arm having a jaw cooperating with the first mentioned jaw to clamp an article, an operating lever pivotally connected with the last mentioned jaw, links connecting the body portion and lever, said lever adapted to move the arm towards the body portion, and means for locking the lever in its active position.

2. A hose clamp including a body portion having a pivoted jaw at its outer end, an arm pivotally connected with the body portion and resting thereagainst, a jaw at the outer end of the arm and adapted to cooperate with the first mentioned jaw to clamp a hose therebetween, links connected with the body portion, a lever pivotally connected with the arm, said links having pivotal connection with the lever, said links adapted to contact with the arm to restrict lateral movement of the arm, and a pivoted locking member connected with the lever for locking the lever in its active position.

3. A hose clamp including a body portion having a jaw at its outer end, said jaw being pivotally connected with the body portion and having a grooved surface, an arm pivotally connected with the body portion and having a jaw cooperating with the first mentioned jaw, the last mentioned jaw having a curved surface to cooperate with the groove in clamping an article therebetween, an operating lever pivotally connected with the arm, links for pivotally connecting the body portion and lever, and a locking member controlled by the movement of the lever for locking the lever in its positions of adjustment.

4. A hose clamp including a body portion having a jaw at one end thereof, an arm pivotally connected with the body portion and having a jaw cooperating with the first mentioned jaw to grip an article therebetween, a lever pivotally connected with the arm, links for pivotally connecting the lever with the body portion, said lever adapted to operate to move the jaws into clamping relation with respect to each other, a lock including a rod pivotally connected with the arm and having a knurled extremity, a sliding member operating over the rod and adapted to contact with the knurled extremity to restrict movement of the sliding member, links connecting the sliding member and lever, and said sliding member adapted to lock the lever in its active position.

In testimony that I claim the foregoing as my own, I have hereunto affixed my signature.

DAVID S. KELLAM.