W. TANKERSLEY.

HOSE COUPLING APPLYING IMPLEMENT.

APPLICATION FILED OCT. 8, 1910.

994,664.

Patented June 6, 1911.

2 SHEETS—SHEET 1.

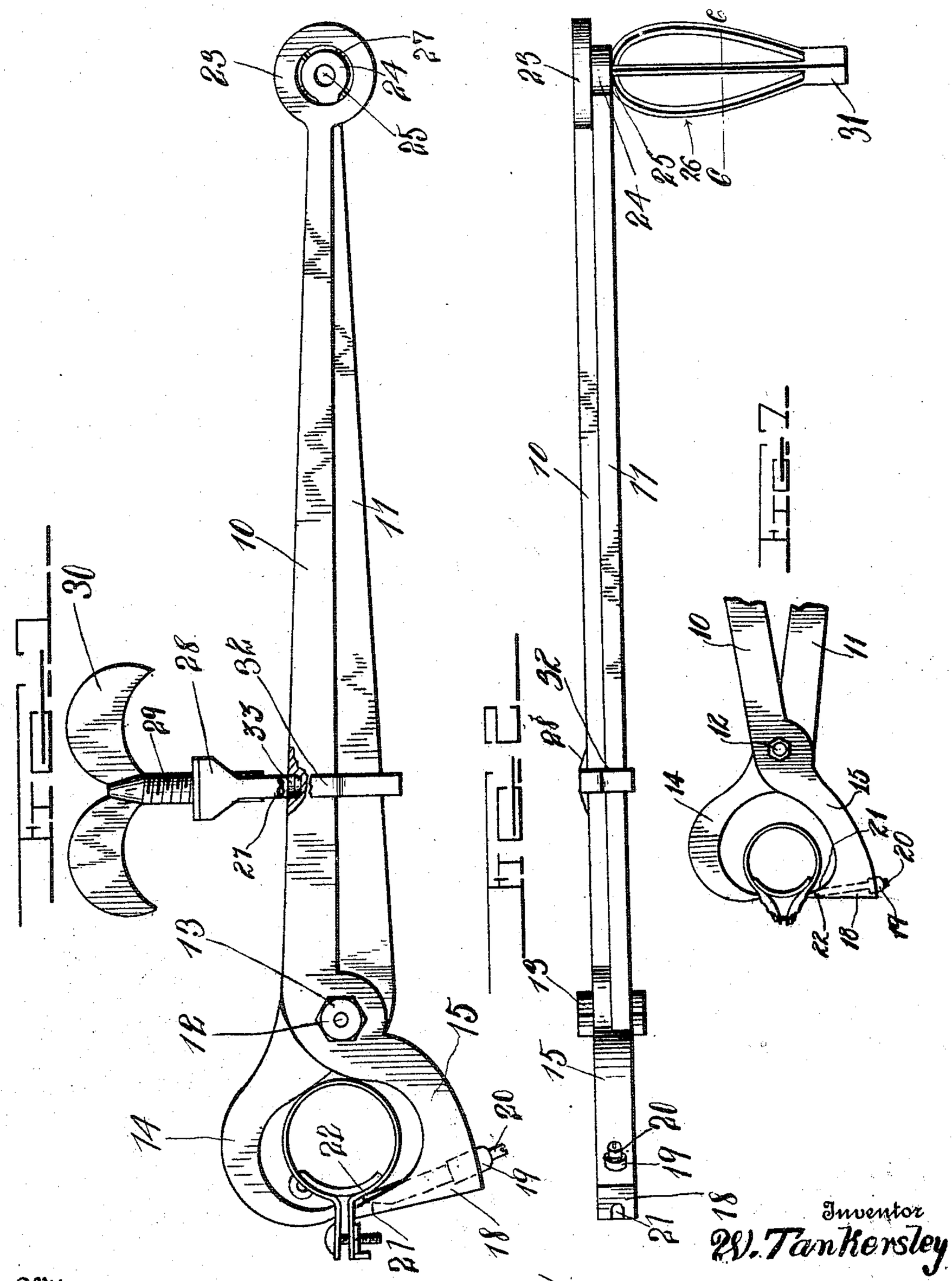

FIG. 1.

Witnesses

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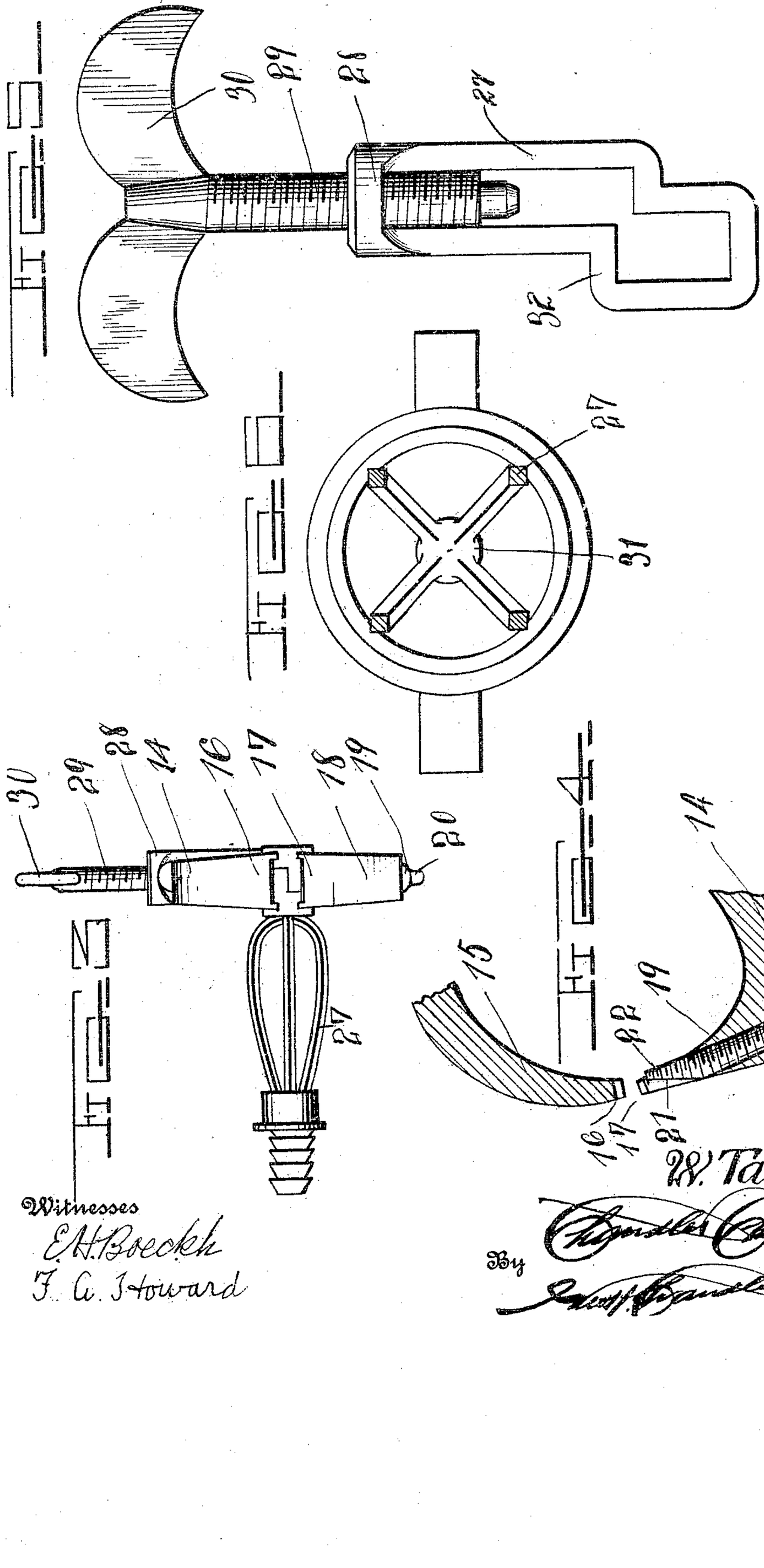

Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM TANKERSLEY, OF LA JUNTA, COLORADO.

HOSE-COUPLING-APPLYING IMPLEMENT.

Specification of Letters Patent. Patented June 6, 1911.

Application filed October 8, 1910. Serial No. 586,055.

To all whom it may concern:

Be it known that I, WILLIAM TANKERSLEY, a citizen of the United States, residing at La Junta, in the county of Otero, State of Colorado, have invented certain new and useful Improvements in Hose-Coupling-Applying Implements; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in devices employed for attaching hose couplings and for like purposes, and has for one of its objects to provide a simply constructed device whereby the couplings may be readily applied to hose of various sizes and without the necessity for employing a vise or other like implement.

With this and other objects in view, the invention consists in certain novel features of construction as hereinafter shown and described and then specifically pointed out in the claims; and, in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a side elevation, of the improved device, Fig. 2 is a plan view of the same, Fig. 3 is a front elevation of the improved implement, Fig. 4 is an enlarged sectional detail illustrating the construction of the reversible pin, Fig. 5 is an enlarged detail of the clamping frame detached, Fig. 6 is a transverse section, enlarged, on the line 6—6 of Fig. 2, Fig. 7 is a side elevation of the jaws of the device showing the pin in reverse position.

The improved device comprises two main arms 10—11 pivotally united near one end by a detachable bolt 12 and nut 13. The arm 11 is provided with an outwardly directed jaw 14, while the arm 10 is provided with an opposing reversely curved jaw 15. The terminal of the jaw 14 is provided with a transverse recess 16, while the jaw 15 is provided with a similar terminal recess 17, the two recesses being located directly opposite each other when the jaws are in closed position. The jaw 15 is enlarged at its outer end with a threaded aperture through the enlargement to receive a threaded pin 19, the pin being provided at its outer end with a screw-driver receiving recess 20, and cut away at the other end upon opposite sides, as shown at 21—22, the cut-away portion 21 being at a greater angle than the cut-away portion 22, as shown. The inner end of the aperture for the pin 19 communicates with the recess 17, and is so located that when the pin 19 is disposed with the larger cut-away portion 21 toward the inner face of the jaw 15, no portion of the pin will project beyond the face of the jaw, and when the pin is reversed in position, or arranged with the smaller cut-away portion 22 presented inwardly or toward the inner face of the jaw, a relatively large portion of the pin will project beyond the inner face of the jaw, as shown in Fig. 4, and likewise with its end spaced away from the free end of the jaw, so that a shoulder is produced to assist in the operation of applying the coupling, as hereinafter explained. At its opposite end the arm 10 is provided with a relatively large ring 23, while the arm 11 is provided with a smaller ring 24 which registers with the larger ring 23 when the arms are disposed in one position, as shown in Fig. 1. The ring 24 is internally threaded to receive a threaded stud 25 upon a hose fitting holding device formed with four outwardly curving arms 26, the arms being united at their outer ends to a square portion 31. The outer faces of the arms are square, as represented in Fig. 6, to form gripping edges, as hereinafter explained.

Slidable upon the arms 10—11 is an endless frame 27 having an enlargement 28 at one end and formed with a threaded aperture therethrough to receive a threaded clamp pin 29, the latter having thumb plates 30 to enable the pin to be forcibly rotated. The frame 27 is provided with an internal shoulder 32 whereby a laterally offset socket is formed to bear over the arm 11, and thus slidably maintain the frame upon the arm 11 while the arm 10 is free to move within the remaining portion of the frame, as indicated in Fig. 5. The frame 27 and its pin 29 thus constitutes a clamp device whereby the arms 10—11 may be forcibly compressed when required. The frame 27 being slidable upon the arms 10—11, may be adjusted thereon to any required extent, and the arm 10 is provided with countersink recesses at intervals to receive the point of the clamp screw, to prevent it from slipping when strain is applied, one of these recesses being shown at 33. The member 26 together with its square point 31 is designed to hold the coupling members while the hose is being

applied thereto, and is adapted to hold hose coupling members of various sizes. The relatively small terminal 31 is small enough to enter the smaller coupling members, while the arms 26 at their widest points are adapted to engage within the larger coupling members. Any size of coupling member within the range of the curved arms 26 may thus be held firmly while the hose is being forced thereon. The member 26—31 is thus a convenient and useful adjunct to the implement and materially increases its efficiency and utility.

In operating the device the frame is released and either detached entirely from the arms 10—11 or moved as near as possible to the pin 12 to permit the arms 10—11 to be separated to provide for the engagement of the jaws with the hose clamp. The implement is thus adapted to a large number of bands of various sizes. The terminals of the jaws are then engaged with the band near its clamping bolt and pressure applied by compressing the members 10—11. The frame 27 is then moved toward the rings 23—24 and the screw 29 rotated to apply the requisite pressure to compress the sides of the clamp until the clamp bolts can be inserted. By this means any required pressure may be readily applied, and the resilient clamping ring closed to a sufficient extent to permit the insertion of the clamping bolt. Thus the bands may be applied to any size of hose without the necessity for employing a vise or other like implement.

By actuating the threaded pin 19 as before described, it may be made to serve as a cam for forcing the tongue 22 into position and will further serve to engage the slotted way of the clamping member and insure the alinement of the bolt holes. The relatively large ring 23 provides an effectual means for suspending the implement from a nail or other support when not in use.

What is claimed is:—

1. An implement of the class described comprising two arms pivotally united near one end and with the shorter ends formed into oppositely curving gripping jaws with recesses in their terminals, one of said jaws being further provided with an aperture communicating with the terminal recess thereof, and a pin rotatively and adjustably supported in said aperture with its inner end reduced on one side, and means for reversing and adjusting said pin.

2. An implement of the class described comprising two arms pivotally united near one end and with the shorter ends formed into oppositely curving gripping jaws, one of said jaws being provided with an aperture communicating with the terminal thereof, a pin rotatively and adjustably supported in said aperture with its inner end reduced on one side, and means for reversing and adjusting said pin.

3. An implement of the class described comprising two arms pivotally united near one end and with the shorter ends formed into oppositely curving gripping jaws, one of said jaws being provided with an aperture communicating with the terminal thereof, a pin rotatively and adjustably supported in said aperture with its inner end reduced on one side, means for reversing and adjusting said pin, and a clamp device slidable upon said arms.

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

WILLIAM TANKERSLEY.

Witnesses:
D. R. CLUGE,
E. S. WILDIN.