

R. W. E. HAYES.
CLAMP FOR BUCKET SPRAYERS.
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1,179,100.

Patented Apr. 11, 1916.

Fig. 1.

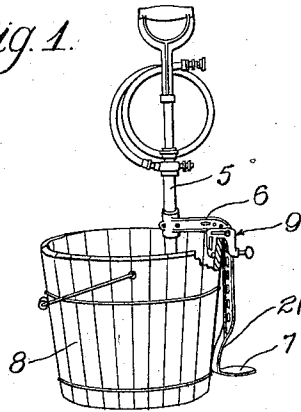


Fig. 2.

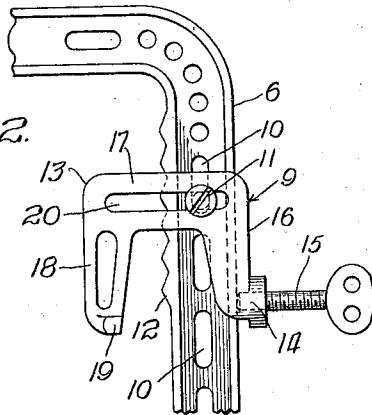


Fig. 3.

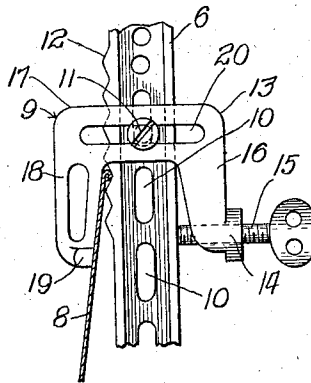
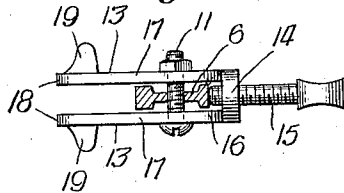


Fig. 4.



Witness:

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UNITED STATES PATENT OFFICE.

RALPH W. E. HAYES, OF GALVA, ILLINOIS, ASSIGNOR OF ONE-HALF TO HAYES PUMP & PLANTER COMPANY, OF GALVA, ILLINOIS, A CORPORATION OF ILLINOIS.

CLAMP FOR BUCKET SPRAYERS.

1,179,100.

Specification of Letters Patent.

Patented Apr. 11, 1916.

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To all whom it may concern:

Be it known that I, RALPH W. E. HAYES, a citizen of the United States, residing at Galva, in Henry county and State of Illinois, have invented certain new and useful Improvements in Clamps for Bucket Sprayers, of which the following is a specification.

This invention relates to an improved form of clamp for bucket sprayers designed particularly to hold the spraying apparatus in a fixed operative position relative to the receptacle for the solution.

My invention has for its objects the construction of a clamp which may be operatively secured to the foot bracket of a sprayer, and be adjustable thereupon to form a rigid connection between the sprayer and the bucket for the solution, regardless of the height or thickness of the bucket; and a clamp which is strong and durable, economical to manufacture, and easily manipulated. These and other objects of my invention will more fully hereinafter appear from the specification and claims, and from the accompanying drawing, in which:—

Figure 1 is a perspective view of a sprayer operatively secured to a bucket by means of the clamp of the present invention; Fig. 2 is a side elevation of a portion of the sprayer bracket with the clamp attached thereto; Fig. 3 is a view somewhat similar to Fig. 2, showing in section the edge of a bucket engaged by the clamp; and Fig. 4 is a cross section through the sprayer bracket exhibiting a plan view of the clamp.

Hand bucket sprayers and buckets for containing the spraying solution have been commonly employed. It is especially desirable that the pump be rigidly attached to the bucket, so as to facilitate the operation of the sprayer, and so that the entire outfit may be conveniently carried by the bucket bail to any place required. It is the construction of a simple, inexpensive, and efficient clamp for the purpose, named, that constitutes the subject matter of the present invention.

Referring to the drawing, I have shown in Fig. 1 a spraying pump 5, to which is adjustably secured a bracket 6, the lower end of which terminates in a foot rest 7. The induction end of the pump projects into a bucket 8, the sprayer and bucket being held in this relation by means of a clamp 9.

As appears from the drawing, I prefer

that the bracket 6 should be constructed I-shaped in cross section, so as to secure the greatest strength with the use of least material. A series of openings or slots 10 are formed centrally of the bracket in the manner shown, through any one of which a bolt 11 may be passed. This bolt forms the connecting medium between the clamp 9 and the bracket 6. The inner side of the bracket which faces toward the bucket I prefer to construct with a serrated or corrugated portion 12, for purposes to be hereinafter explained.

The clamp consists of a pair of U-shaped members 13 arranged to straddle the bracket on opposite sides thereof, (see Fig. 4), the members being integrally connected as at 14. Through the connecting portion 14, an opening is provided which is interiorly threaded to receive a thumb-screw 15. The members 13, as best appears in Figs. 2 and 3, are each formed with an arm 16 which lies adjacent the outer side of the bracket, a transverse arm 17 which crosses the bracket and an arm 18, which lies adjacent to the inner side of the bracket. At the lower end of the arms 18, lugs 19 are provided which serve as clamping faces to bear against the inner wall of the bucket at its upper edge. The transverse arms 17 are slotted as at 20 to permit the passage therethrough of the bolt 11.

As appears best in Figs. 1 and 3, the arms 18 of the clamp 9 may engage with the inner side of a bucket, the outer side of the bucket being held against the serrated portion 12 of the bracket. In the case of a metal bucket, there is commonly found an annular bead or ridge at the upper edge thereof, which may conveniently lie within one of the indentations of this serrated portion. The thumb-screw 15 may be manipulated to draw the clamp outwardly with respect to the bracket so as to bring the arms 18 and clamping lugs 19 tightly against the inner side of the bucket. The foot rest 7, as appears from Fig. 1, is joined to the bracket 6 by an inwardly protruding portion 21, which is designed to normally rest against the exterior of the bucket near its lower end. When the thumb-screw 15 has been properly manipulated, it will therefore appear that the sprayer is held securely upon the bucket, both at its upper and lower ends.

A clamping device of the kind described should be enabled to adjust itself to buckets of different sizes or thicknesses. For this purpose, the bolt 11 may be situated at any point within any of the slots 10 necessary to bring the clamp to the proper height with respect to the bucket. Likewise the clamp is laterally movable with respect to the bracket within the limits determined by the slot 20. When the sprayer is attached to the bucket in the manner shown, it may be operated conveniently, the solution being taken from the bucket and sprayed to the points desired. As often as necessary, the bucket may be carried about by means of the bail, the sprayer outfit remaining always in position for immediate use.

I claim:

1. A clamp for a sprayer bracket or the like comprising a bifurcated U-shaped member arranged to straddle the bracket and adjustably mounted thereon, and a threaded device entered into the member and in engagement with the bracket to move the member into clamping position, whereby the edge of an object may be gripped between the bracket and the clamping member, substantially as described.

2. A clamp for a sprayer bracket or the like comprising a bifurcated member arranged to straddle the bracket and adjust-

ably mounted thereon, the bifurcated portions of said member being each substantially U-shaped to present an arm extending transversely of the bracket and two arms, one on either side of the bracket and substantially parallel therewith, and a threaded device entered into the bifurcated member and in engagement with the bracket to move the member into clamping position, whereby an object may be gripped between the bracket and one of the arms parallel therewith, substantially as described.

3. A clamp for a sprayer bracket or the like provided with one or more elongated openings therein, consisting of a bifurcated U-shaped member arranged to straddle the bracket, the connecting arm of each of the U-shaped sections being provided with an elongated opening therein; a locking connection between the clamp and the bracket extended through the respective elongated openings therein, and arranged to permit relatively longitudinal and lateral adjustments therebetween, and means for moving the bifurcated member laterally of the bracket whereby an object may be gripped therebetween, substantially as described.

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Witnesses:

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