April 29, 1952 A. C. MOTL 2,594,791

TROUGH LIFTER

Filed April 25, 1950

FIG-1

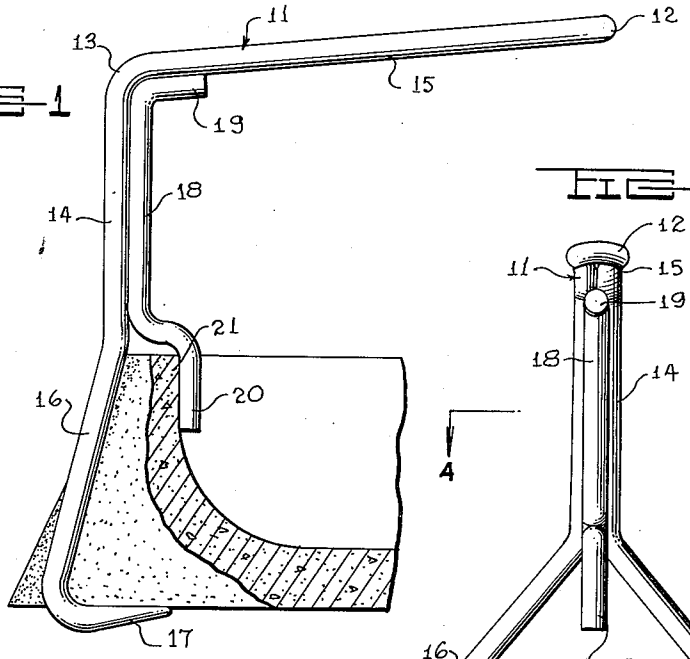


FIG-2

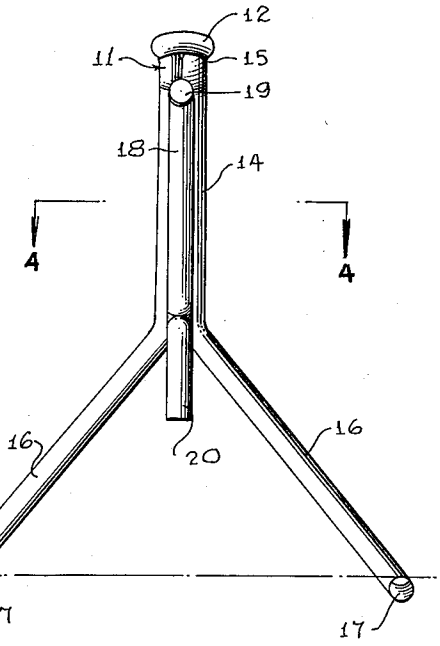
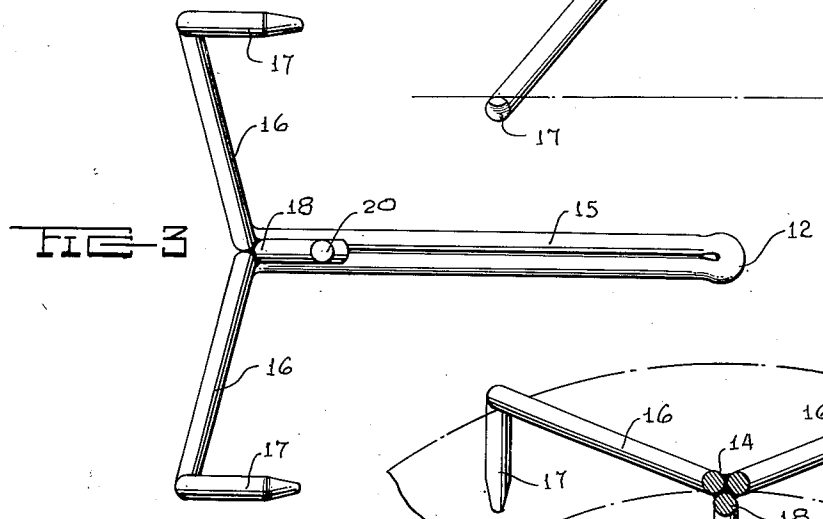


FIG-3



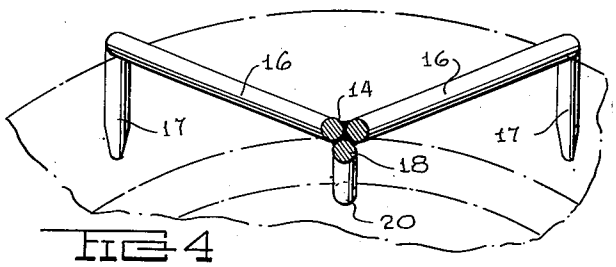


FIG-4

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TROUGH LIFTER

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3 Claims. (Cl. 294—32)

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This invention relates to lifting devices, and more particularly to a lifting device particularly adapted to lift, carry or handle concrete feed troughs employed for feeding livestock.

A main object of the invention is to provide a novel and improved lifting tool for lifting, carrying and handling feed troughs and similar objects, said tool being very simple in construction, providing a dependable grip on the trough or other object to be lifted, and being arranged so that a feed trough or similar container may be easily carried or lifted.

A further object of the invention is to provide an improved lifting tool for lifting, carrying and handling concrete feed troughs and similar receptacles, said tool being made of a very small number of parts, being inexpensive to fabricate, being sturdy in construction, providing a reliable grip on a trough or other object to be carried, and involving no moving parts.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

Figure 1 is a side elevational view of an improved trough-lifting tool constructed in accordance with the present invention, said tool being shown in engagement with a concrete feed trough, the trough being shown in vertical, longitudinal cross-section;

Figure 2 is a front elevational view of the tool shown in Figure 1;

Figure 3 is a bottom plan view of the tool of Figures 1 and 2;

Figure 4 is a cross-sectional view taken on line 4—4 of Figure 2.

Referring in detail to the drawings, the illustrated lifting tool, which is generally designated at 11, comprises a continuous straight bar of metal bent midway between its ends at 12 to define a double-bar straight handle portion 15, this handle portion 15 terminating at the end thereof opposite the bend 12 in a right angular bend 13 defining one end of a straight, double-bar shank portion 14. The shank portion 14 is substantially shorter than the handle portion 15. The ends of the double bars of the shank portion 14 remote from the bend 13 merge into legs 16 which diverge from each other in a plane which extends at a slight angle to the plane of the shank portion 14 away from the side of the shank portion remote from the handle portion 15. Feet 17 extend substantially parallel to the handle portion 15 from the ends of the legs 16 remote from the shank portion 14 and project from the legs

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16 on the same side thereof as the handle portion 15. Rigidly secured to adjacent surfaces of the double bars of the shank portion 14 at the same side thereof as the handle portion 15 is another bar 18 having a right angular end portion 19 which is secured to the adjacent side of the handle portion 15, as shown in Figure 1. The opposite end of the bar 18 has thereon a finger 20 which is offset from the shank portion 14 at the same side thereof as the handle portion 15. As shown in Figure 4, the bar 18 reinforces the tool and gives the same desirable rigidity.

In using the tool for lifting a trough such as shown at 21, the offset finger 20 is slipped over the top of the rim of the trough and the feet 17 are slipped under the bottom of the trough. The trough may then be lifted by lifting the handle portion 15, the arrangement being such that the intermediate part of the handle portion 15 overlies the center of gravity of the trough, so that the trough can be conveniently and easily handled without the necessity of the operator coming in direct contact with the trough and avoiding possible injury to the operator's fingers. To disengage the tool from the trough after it has been set down, the handle 15 is merely rotated downwardly to move the feet 17, 17 outwardly from beneath the bottom of the trough and the handle is then lifted to disengage the finger 20 from the inner surface of the trough rim.

While a specific embodiment of a trough-lifting tool has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. In a lifting tool, a straight shank portion, a straight handle portion connected to one end of said shank portion and projecting laterally with respect to the longitudinal axis of said shank portion at right angles thereto, a pair of diverging legs, said legs having their convergent ends connected to the opposite end of said shank portion from said handle portion, said legs having their divergent ends positioned at opposite sides of said shank portion, feet on the divergent ends of said legs, said feet projecting toward the side of said shank portion at which said handle portion is located, and a finger on said shank portion extending longitudinally beyond the said op-

posite end of the shank portion and being offset from said shank portion at the same side thereof as said handle portion.

2. In a lifting tool, a straight shank portion, a straight handle portion connected to one end of said shank portion and projecting laterally with respect to the longitudinal axis of said shank portion at right angles thereto, a pair of diverging legs, said legs having their convergent ends connected to the opposite end of said shank portion from said handle portion, said legs having their divergent ends positioned at opposite sides of said shank portion, feet on the divergent ends of said legs, said feet projecting toward the side of said shank portion at which said handle portion is located, and a finger on said shank portion extending longitudinally beyond the said opposite end of the shank portion and being offset from said shank portion at the same side thereof as said handle portion, and a reinforcing member extending along and secured to the last-mentioned side of said shank portion, said reinforcing member having a part secured along said handle portion and another part constituting said finger.

3. In a lifting tool, a straight shank portion, a straight handle portion connected to one end of said shank portion and projecting laterally with respect to the longitudinal axis of said shank portion at right angles thereto, a pair of diverging legs, said legs having their convergent ends connected to the opposite end of said shank portion from said handle portion, said legs having their divergent ends positioned at opposite sides of said shank portion, feet on the divergent ends of said legs, said feet projecting toward the side of said shank portion at which said handle portion is located, and a finger on said shank portion extending longitudinally beyond the said opposite end of the shank portion and being offset from said shank portion at the same side thereof as said handle portion, said tool being formed of a single bar bent intermediate its ends and providing said handle portion and said shank portion in double-bar form with said legs proceeding from the bars of the shank portion.

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