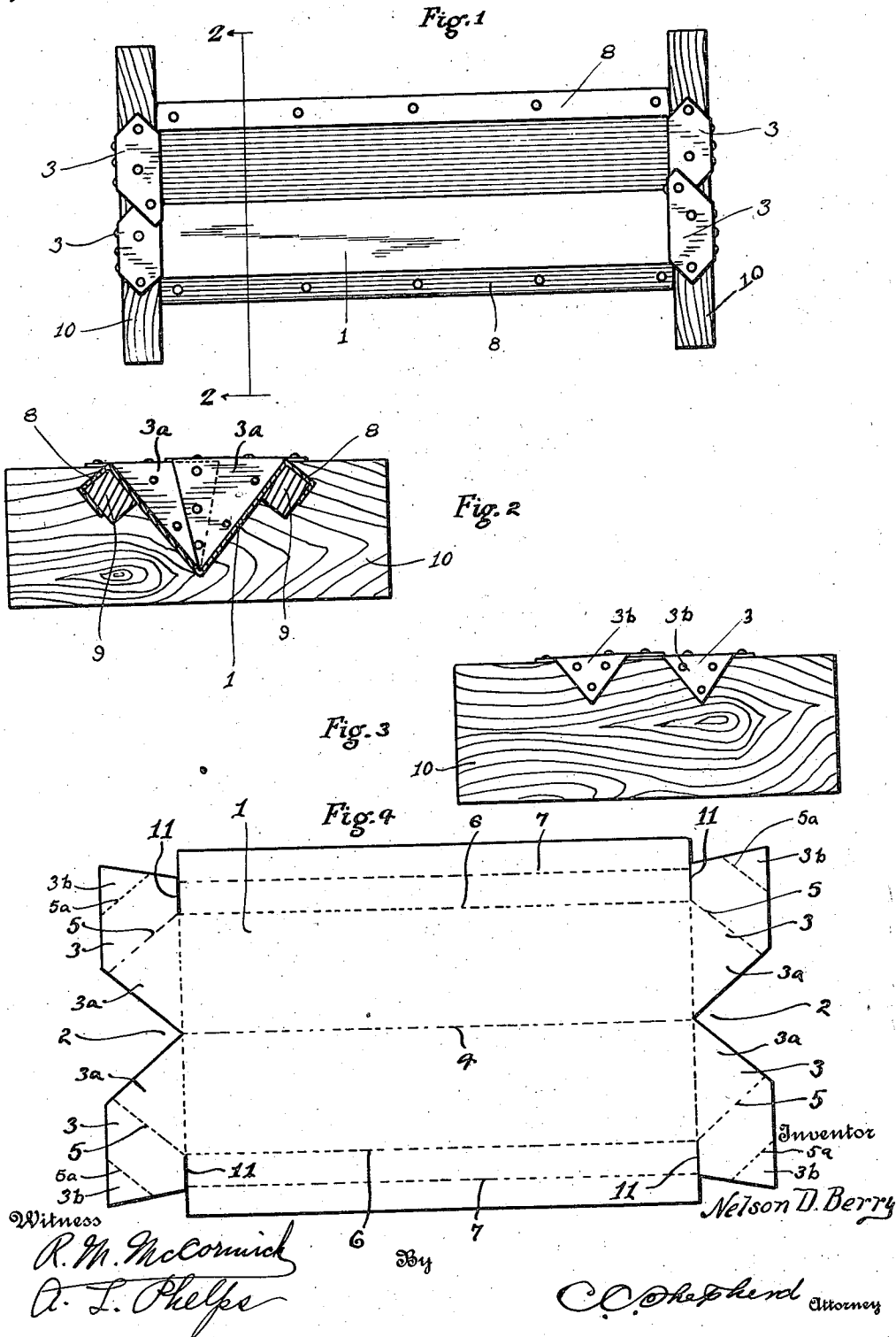


N. D. BERRY.
FEED TROUGH.
APPLICATION FILED NOV. 15, 1916.

Patented Oct. 23, 1917.

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UNITED STATES PATENT OFFICE.

NELSON D. BERRY, OF COLUMBUS, OHIO.

FEED-TROUGH.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, NELSON D. BERRY, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Feed-Troughs, of which the following is a specification.

My invention relates to the improvement of feed troughs of that class which are particularly adapted for use in feeding hogs and other animals.

The objects of my invention are, first, to provide an improved feed trough of simple and durable construction at a reasonable cost of manufacture; second, to form from a single metallic plate the trough body and means for connecting the latter with the supporting frame of the trough, and third, to so construct my improved trough as to admit of the ready removal of ice which may form therein and to accomplish this without injury to the trough.

The preferred embodiment of my invention is shown in the accompanying sheet of drawings, in which similar characters of reference designate corresponding parts, and in which:

Figure 1 is a plan view of my improved trough,

Fig. 2 is a sectional view thereof on line 2-2 of Fig. 1,

Fig. 3 is an end view and,

Fig. 4 is a face view of the metal blank from which the trough body is formed, the dotted lines thereon indicating the lines of bending to which the blank is subjected.

In carrying out my invention I employ an oblong blank or plate of suitable sheet metal 1, which at each end is provided with an extension of less width than the width of the body of the blank, said extended portion having a central V-shaped cut 2 therein which results in the formation, on each side of each of said V-shaped cuts, of a tongue 3. The outer side of each of these tongues is inclined slightly as shown toward the end of the blank body.

In producing a trough body and means for connecting said trough body with the supporting frame of the trough, the blank body is bent to the V or trough form on the central dotted line 4. Each pair of end extension members 3 are bent to vertical positions to form the upright end pieces 3^a of the trough body. Owing to the formation of the central bend of the blank body on the

line 4 to the required trough angle, one of the end members 3^a is caused to overlap the other after the manner indicated more clearly in Fig. 2 of the drawing. This being accomplished, each of the tongues 3 is bent outwardly on its dotted line 5, which bending line is at the height of the sides of the trough. The longitudinal marginal portions of the trough body blank extend outward beyond the inner portions of the tongues 3 and are further separated from said tongues by cuts or slits 11 which extend inward to the ends of the dotted lines 6. These longitudinal marginal portions of the metal trough body blank are bent outward and downward on the lines 6 throughout their lengths and such outwardly and downwardly bent portions are formed with downward terminal bends on the lines 7, thus resulting in the formation of the channel or hook-like trough sides 8, which are shown more clearly in Fig. 2.

As indicated in the drawing, the inverted channel members 8 are designed to engage the upper end portions of the outer sides of parallel frame bars 9 which extend between transverse and parallel end frame members 10, said hook or channel members 8 being nailed or otherwise secured to said frame side rails 9. That portion of each of the tongues 3 which is immediately on the outer side of the dotted line 5 is made to bear directly upon the upper side of the corresponding end supporting frame member 10 and the tip portion 3^b of each of the tongues is bent downward on the line 5^a and is secured to the outer side of the corresponding end piece 10. The vertical portions 3^a of the trough ends are nailed or otherwise secured to the inner face of the adjoining frame member 10, while the outwardly bent portions of the tongues 3 are likewise secured to the upper sides of said frame members.

By the construction described, it will be observed that the frame portion of the trough formed as above described, consists simply in the two opposing end supports and the connecting side rails and that the body of the trough, which is designed to contain the feed for the hogs or other animals is formed of one sheet of unsoldered or unwelded metal.

Ordinarily, where a feed trough is formed entirely of wood as is commonly done, the water or other liquids therein becomes

solidly frozen during the winter months and it is not only a difficult matter to chop or otherwise remove the ice therefrom, owing to the tendency of the ice to cling to the wood, but injury to the trough is often caused by the chopping operation. It is well known that where a sheet metal container is provided, the entire block of ice which may be formed in the trough, may be readily jarred loose from the metal surface and easily removed in one or more lumps without in any way injuring the container. It will also be observed that by forming the blank in the manner described, I have obviated the necessity of welding or soldering the trough and its various members one to the other.

What I claim, is:

In a feed trough, the combination with a frame formed of end pieces and connect-

ing side rails, of a metallic trough body formed from a single sheet of metal, said trough body being bent centrally and longitudinally to trough form, the ends of said body being notched out to form end extension members, said notches being of such size that each pair of end extension members overlap, said trough body also being bent along its longitudinal edges to channel shape to fit over the top of said side rails, said end extension members being also of a size and shape to be bent over the top of and down a portion of the outside of said end pieces.

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

NELSON D. BERRY.

Witnesses:

C. C. SHEPHERD,
WALTER E. L. BOCK.