July 1, 1924. 1,499,543

A. G. MEISTER

METAL FEED TROUGH END

Filed Dec. 4, 1923

Fig. 1.

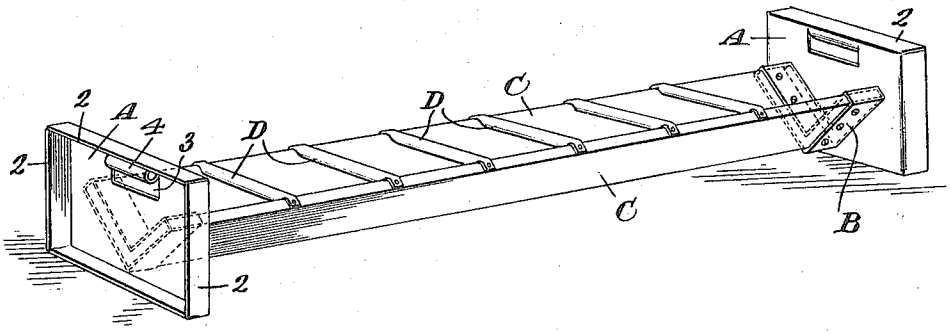


Fig. 2.

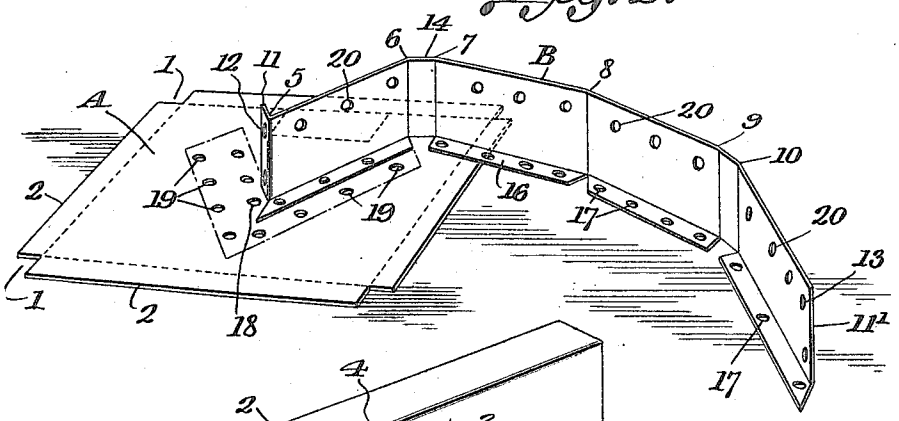
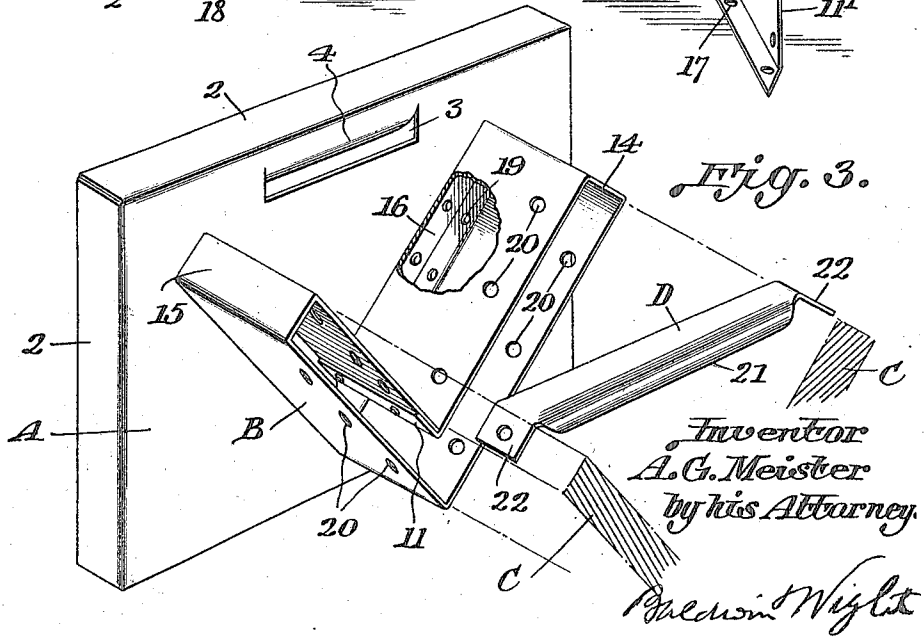


Fig. 3.



Inventor
A. G. Meister
by his Attorney
Bradshaw Wright

Patented July 1, 1924. 1,499,543

UNITED STATES PATENT OFFICE.

ANDREW G. MEISTER, OF COPELAND, KANSAS.

METAL FEED-TROUGH END.

Application filed December 4, 1923. Serial No. 678,469.

To all whom it may concern:

Be it known that I, ANDREW G. MEISTER, a citizen of the United States, and resident of Copeland, in the county of Gray and State of Kansas, have invented certain new and useful Improvements in Metal Feed-Trough Ends, of which the following is a specification.

My invention relates to improvements in the construction of feed troughs, preferably of the common V-shaped type used in feeding poultry and stock, and has for an object the production of metal end pieces which can be used with boards to form a trough of any desired length.

Another object of the invention is the production of each end out of two pieces of sheet metal which may be stamped and bent to the proper form and readily assembled.

Another object of the invention is the production of light and yet durable ends which can be sold as a unit and in which the ends of the boards can be readily placed and fastened without any necessity for the boards being of exact length or having precisely square ends.

Other objects will be apparent from the following detailed description and appended claims.

In the drawings:

Figure 1 is a perspective view of a trough formed with the ends constituting the subject of my invention.

Figure 2 is a view showing the two blanks from which the end is formed and indicating the manner of production.

Figure 3 is a perspective view of an end completed and showing its construction as well as the manner in which the wooden sides are received in the ends.

Each end is constructed of two sheet metal parts A and B, of which Figure 2 shows the end blank A before it is bent to form and the trough engaging blank B partially bent to form. The blank A is rectangular in form and has notches 1 cut out of each corner so as that the edges may be folded outwardly on the dotted lines of Figure 2 forming flanges 2. Also as indicated on this figure, two V-shaped rows of holes are punched for purposes hereinafter set forth. A slit 3 of considerable width is cut near the top of the blank and the metal rolled outwardly and upwardly under the top flange 2 as indicated at 4 to form a hand opening and broad smooth hand grip.

The blank B is formed from a long rectangular sheet of metal which is bent on six lines 5, 6, 7, 8, 9, and 10 into hollow V-shaped form as shown in Figure 3. The bend at 5 produces a narrow flange 11 which overlaps the opposite end 11′ of the blank to make a close fit, and this flange has rivet holes 12 which match rivet holes 13 in the opposite end, and rivets or equivalent fastenings passing through the holes 12 and 13 hold the folded bracket end in its V-shaped form.

The bends 6 and 7 are separated by a narrow space of approximately the thickness of the boards which are usually employed, and the bends 9 and 10 are similarly separated. The portion of the blank between the bends 6 and 7 forms a flat surface 14 and the similar portion between the bends 9 and 10 forms a surface 15. These form the outer ends of the hollow V-shaped bracket members and engage the upper edges of the boards inserted into said bracket members.

The bend 8 forms the extreme bottom of the V-shaped member. Along one end of the blank B a flange 16 is bent at right angles. This flange has cut outs corresponding to the portions 14 and 15, and also a V-shaped cut out at the bend 8, these cut outs being necessary to permit the blank to be folded into the desired shape as is evident. The flange 16 is provided with a row of holes 17 which match the inner row of holes 18 in the blank A. Rivets or equivalent fastening members pass through the holes 17 and 18 and fasten the two blanks A and B together. Through the outer row of holes 19 in the blank A, screws or nails may be passed into the ends of the wooden sides C of the trough. The blank B also has a row of holes 20 through which screws or nails may be passed into the wooden sides of the trough.

There is also provided a series of reinforcing and bracing elements D each stamped out of a piece of sheet metal generally rectangular in shape but having ends narrower than the body thereof. The edges 21 of the metal body of each bracing element D are rolled under and toward each

other to form a substantially tubular body and the ends 22 are bent at such angle as is necessary to permit them to fit the upper edges of the wooden sides C to which they may be fastened by screws or nails. These braces D may be located as desired to form intermediate spaces of desired size.

It will be noted that the metal ends and braces can be readily constructed at small cost and used to form a trough of any desired length. The ends of course can be manufactured in various sizes to use with wooden sides of different dimensions. The metal parts will last indefinitely and the wooden sides can be renewed as necessary. All of the parts are relatively light and the trough can be handled easily and moved from place to place. The construction affords a tight fit of all joints and it is not necessary that the ends of the boards C fit snugly against the end blank A nor that the two boards be cut to exactly the same length and angle. The width of the member B is sufficient to allow for considerable variation in this respect without any decrease in the utility of the trough.

It is obvious that various detail changes may be made without departing from the spirit of the invention which is to be regarded as limited only by the scope of the appended claims.

I claim as my invention:

1. A metal feed trough end comprising two sheet metal parts, one of which is a flanged rectangular member, and the other of which is a hollow V-shaped member provided with an edge flange for attachment to the first member.

2. A metal feed trough end comprising two parts, each formed from a single sheet metal blank, one of said parts having a flange around its edge, and the other of which is bent to hollow V-shaped form and has a flange along one edge for attachment to the first member.

3. A metal feed trough end comprising two sheet metal parts, one of which is formed with a flange around its edges and a hand opening, and the other of which is bent to hollow V-shaped form and has a flange along one edge for attachment to the first member and a flange along one end bent to overlap the opposite end when the blank is folded.

In testimony whereof, I have hereunto subscribed my name.

ANDREW G. MEISTER.