

(No Model.)

2 Sheets—Sheet 1.

G. G. POWELL.
GRAVITY FEED BOX.

No. 535,020.

Patented Mar. 5, 1895.

Fig. 1

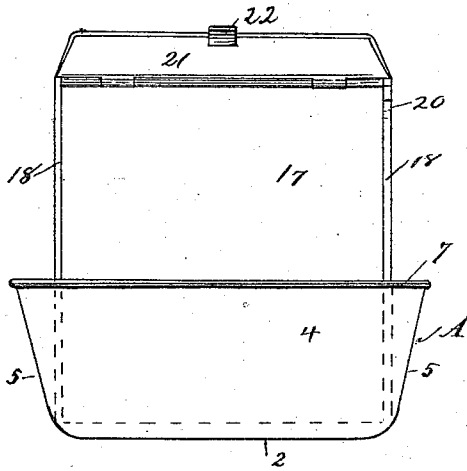


Fig. 2

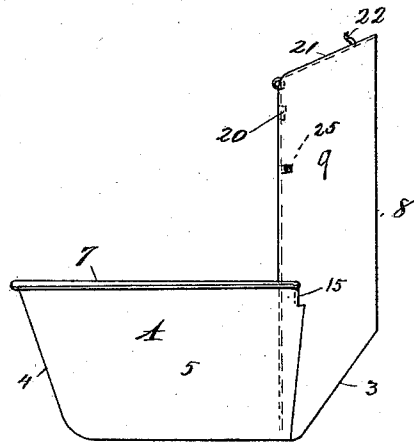


Fig. 3.

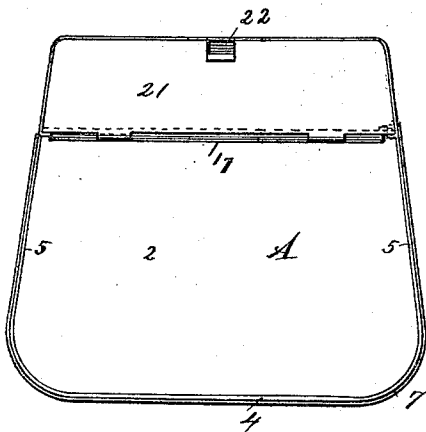
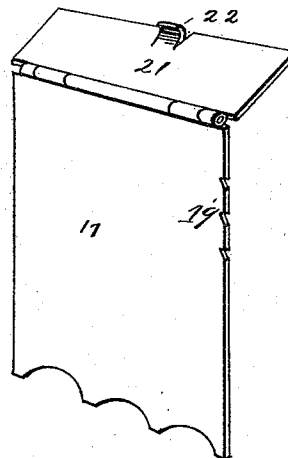


Fig. 5.



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Fig. 4.

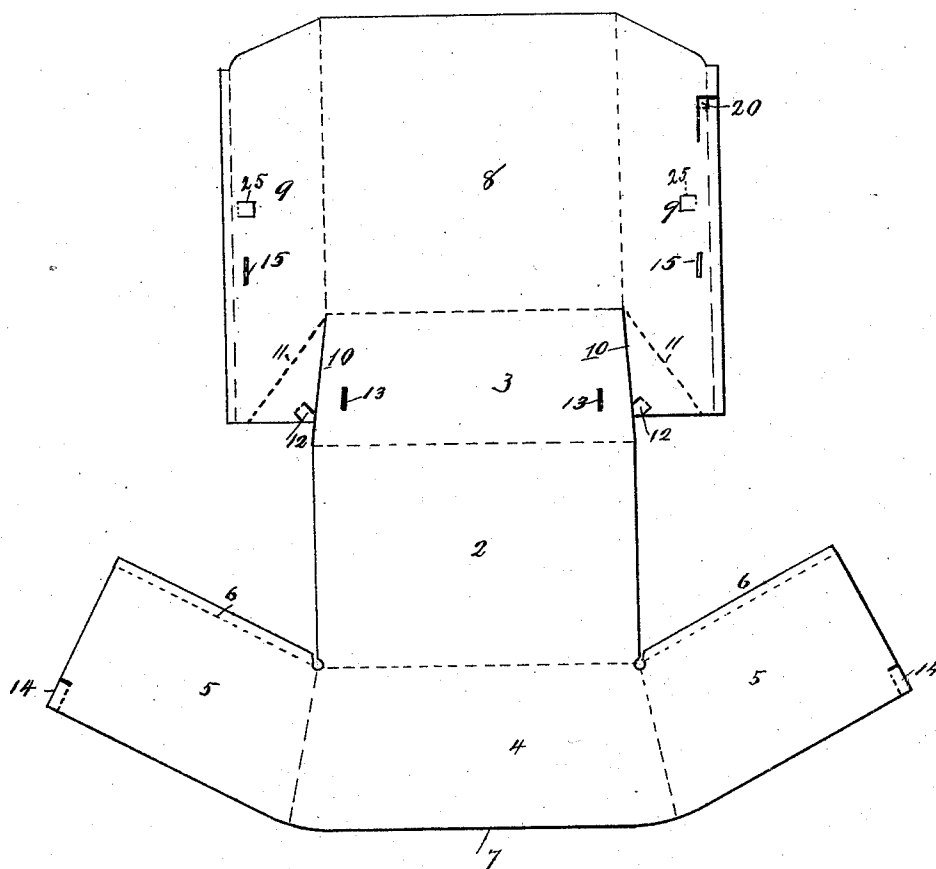


Fig. 6

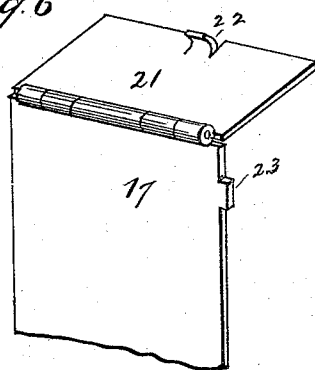
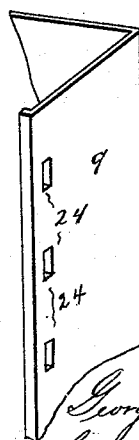


Fig. 7



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UNITED STATES PATENT OFFICE.

GEORGE G. POWELL, OF CLEVELAND, OHIO, ASSIGNOR TO ROBERT POWELL,
OF SAME PLACE.

GRAVITY FEED-BOX.

SPECIFICATION forming part of Letters Patent No. 535,020, dated March 5, 1895.

Application filed May 1, 1894. Serial No. 509,732. (No model.)

To all whom it may concern:

Be it known that I, GEORGE G. POWELL, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Gravity Feed-Boxes, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in gravity feed boxes, and the objects are to form a self-feeding, light and serviceable box from sheet metal, and consists in the feed basin rigidly constructed in one piece with the reservoir, and in means for retaining a feed supply and for regulating the flow of the feed to the basin, as hereinafter described, shown in the accompanying drawings, and specifically pointed out in the claims.

In the accompanying drawings Figure 1 is a front elevation. Fig. 2 is a side elevation. Fig. 3 is a plan view. Fig. 4 is a detail of stamped metal shape, showing the lines of bending to form a combined box and reservoir. Fig. 5 is a detail of front slide and cover. Figs. 6 and 7 are details.

In the drawings 1 is the basin consisting in the bottom portion 2, back and front pieces 3 and 4, and side extensions 5 integral with the front. Lips 6, 6, are turned under to cover the openings between the bottom and sides, and the extension 7 about the upper front edge and sides of the basin admits of a wire binding if desired. 8 is the back of the feed receptacle, continuous with the inclined back of the basin, and 9, 9, are the vertical sides of the receptacle integral with the back of the receptacle but separated by slits 10 from the back of the basin. The lower portions of these side pieces are bent diagonally in lines 11, 11, to overlap the back of the basin, and slips 12, 12 cut in these overlapping portions enter slots 13, 13 in the back of the basin, which secure the parts together and give an inclined position to the back as shown in Fig. 2. 14, 14 are similar slips cut in the upper and inner edges of the side pieces for the basin, which fit within slots 15, 15 in the side pieces of the feed receptacle and are turned

over to secure the basin and feed receptacle together.

17 is a front slide to the feed receptacle, moving behind the overlapping edges 18 upon the front of the receptacle sides. The projecting slips 25 engage the rear of the slide and retain it in position against the overlapping edges so as to resist the backward thrust of the animal's mouth when feeding. One edge of this slide is provided with a rack 19 which is engaged by the spring dog 20 cut in the edge of the side 9 and adapted to engage the rack upon the slide so as to retain it wherever desired and regulate the flow of feed into the basin.

A preferable method for securing the vertical front slide is seen in Figs. 6 and 7 where 23 is a tooth projecting from the edge of the slide and 24 are corresponding openings in the sides of the vertical receptacle into which this tooth fits. It will be seen that by springing the sheet metal sides apart by hand the projecting tooth can be placed at any elevation desired in the openings and thus permit any desired flow of grain to the pan. Teeth and openings may be on one or both sides of the receptacle at pleasure, or more than one tooth on a side. A cover 21 is hinged to the slide and follows it up or down the receptacle and a catch 22 is struck out of the plate for lifting the cover.

By means of this construction an exceedingly practical device is obtained, light and durable while of slight initial cost.

In addition to the advantages derived from the strength and lightness of construction obtained by making the box of an integral piece of sheet metal is the fact that the bottom, back and sides of one box will fit closely or "nest" into a similar box in packing, so that great numbers can be packed in very little space, which has not been achieved before. Again less material will be required since the front slide is elastically secured between the side pieces of the receptacle, and no additional front is required for its support.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a feed box, back and bottom pieces

with intervening integral piece, flaring front
and side pieces integral with said bottom
piece and forming therewith the feed pan,
side pieces integral with the back piece and
5 forming therewith the feed receptacle, trian-
gular flaps on the receptacle sides overlap-
ping the piece of the back, slips on the side
pieces adapted to enter corresponding slots on
the adjacent piece, in combination with a
10 slide sprung into position in the side pieces,
substantially as set forth.

2. In a feed box formed of an integral piece
stamped from sheet metal and adapted to
nest with adjacent boxes back and bottom
15 pieces, and intervening piece, flaring front
and side pieces integral with the bottom piece

side pieces integral with the back piece and
provided with overturned edges at right an-
gles thereto, triangular flaps on the receptacle
sides overlapping the piece of the back, slips 20
on the side pieces entering slots on the adja-
cent pieces, in combination with a sliding
piece sprung into position between the side
pieces and between their overturned edges
and the entering slips of the receptacle side 25
pieces, whereby backward thrust is resisted,
substantially as described.

GEO. G. POWELL.

Witnesses:

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