UNITED STATES PATENT OFFICE.

WILL F. HOYT, OF DOWAGIAC, MICHIGAN.

SEEDBOX FOR GRAIN-DRILLS.


To all whom it may concern:

Be it known that I, WILL F. HOYT, a citizen of the United States, residing at Dowagiac, Cass county, State of Michigan, have invented certain new and useful Improvements in Seedboxes for Grain-Drills, of which the following is a specification.

This invention relates to improvements in grain-drills or seeders. It relates particularly to improvements in seedboxes therefor. Owing to the growing scarcity of timber, it is now quite difficult and expensive to secure proper timber for the manufacture of such seedboxes.

The main object of this invention is to provide an improved seedbox for grain-drills formed of metal which is light in weight, at the same time very strong and rigid and economical to produce.

Further objects and objects relating to structural details will definitely appear from the description to follow.

I accomplish the objects of my invention by the device and means described in the following specification.

The invention is clearly described, and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an outside elevation of my improved seedbox for grain-drills. Fig. 2 is a cross-section taken on a line corresponding to line 2 of Fig. 3, portions of the seed-cup being broken away to show the arrangement of the parts. Fig. 3 is an elevation view, partially in section, on a line corresponding to line 3 of Fig. 1. Fig. 4 is a detail showing one of the hinges for the cover; and Fig. 5 is a detail section showing a modified construction, the cover C being arranged to slide in suitable guideways formed therefor in the end pieces.

In the drawings similar letters of reference refer to similar parts throughout the several views, and sectional views are taken looking in the direction of the little arrows at the ends of the section-lines.

Referring to the drawings, A represents the frame of a grain-drill or seeder-machine. My improved seedbox consists of a body portion B, which is secured upon the inwardly-projecting flanges b' of the end pieces B'. The body portion B is cylindrical in cross-section and is preferably formed of a single piece of sheet metal. The end pieces B are preferably cast.

The lid or cover C is curved to form a segment of the cylindrical body and is hinged thereto by suitable hinges, as C', the hinges being secured upon the inside of the body and cover, as illustrated. The body and cover C are preferably provided with circumferential corrugations b, which add to the rigidity thereof.

In the bottom of the body B are seed-delivery openings d, below which the seed-cups D are arranged.

In the modified construction (shown in Fig. 5) the cover C instead of being hinged is arranged in suitable guides or ways c', provided therefor in the end pieces B', the cover being arranged so it slides down upon the side of the body when open.

I desire to mention that in the drawings accompanying this specification the parts are not made in proportion. I have shown but one seed-cup and seed-opening in the bottom of the cylinder; but it will readily be understood that in practice there are a plurality of seed-delivery openings and seed-cups.

My improved seedbox for grain-drills is very economical to produce, is very strong and rigid, and also has the advantage of being light in weight. A further advantage is that, owing to its cylindrical form, the seed readily flows to the seed-delivery openings, there being no danger of the seed banking up or clogging. The disadvantage of checking or warping incident to grain-boxes formed of wood is overcome. Further advantages will readily appear to those skilled in the art to which this invention relates.

I have illustrated and described my improved seedbox for grain-drills in detail in the form preferred by me. I am aware, however, that it is capable of considerable variation in structural details without departing from my invention.

I desire to remark that my improved seedbox need not be in the form of a perfect cylinder, but that substantially the same results are accomplished so long as it approaches the cylinder form.

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

1. In a seedbox, the combination of metal end pieces having inwardly-projecting annular flanges thereon; a cylindrical body por-
tion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to the said flanges on said end pieces; and a cover formed of a single piece of sheet metal curved to form a segment of the cylindrical body, said lid and body having circumferential corrugations therein, and hinges for said cover secured upon the inside of said body and cover, for the purpose specified.

2. In a seedbox, the combination of metal end pieces having inwardly-projecting, annular flanges thereon; a cylindrical body portion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to the said flanges on said end pieces; and a cover formed of a single piece of sheet metal curved to form a segment of the cylindrical body and hinges for said cover secured upon the inside of said body and cover, for the purpose specified.

3. In a seedbox, the combination of metal end pieces having inwardly-projecting, annular flanges thereon; a cylindrical body portion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to the said flanges on said end pieces; and a cover formed of a single piece of sheet metal curved to form a segment of the cylindrical body, said cover and body having circumferential corrugations therein, for the purpose specified.

4. In a seedbox, the combination of metal end pieces having inwardly-projecting, annular flanges thereon; a cylindrical body portion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to the said flanges on said end pieces; and a cover formed of a single piece of sheet metal curved to form a segment of the cylindrical body, for the purpose specified.

5. In a seedbox, the combination of end pieces; a cylindrical body portion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to said end pieces; and a cover formed of a single piece of sheet metal curved to form a segment of cylindrical body; and hinges secured upon the inside of said body and cover, for the purpose specified.

6. In a seedbox, the combination of end pieces; a cylindrical body portion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to said end pieces; and a cover formed of a single piece of sheet metal curved to form a segment of cylindrical body; and hinges secured upon the inside of said body and cover, for the purpose specified.

7. In a seedbox, the combination of end pieces; a cylindrical body portion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to said end pieces; and a cover formed of a single piece of sheet metal curved to form a segment of the cylindrical body, said cover and body having circumferential corrugations therein, for the purpose specified.

8. In a seedbox, the combination of end pieces; a cylindrical body portion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to said end pieces; and a cover formed of a single piece of sheet metal curved to form a segment of the cylindrical body, for the purpose specified.

9. In a seedbox, the combination of metal end pieces having inwardly-projecting annular flanges thereon; a cylindrical body portion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to the said flanges on said end pieces; and a cover formed of a single piece of sheet metal curved to form a segment of the cylindrical body, said cover and body having circumferential corrugations therein, for the purpose specified.

10. In a seedbox, the combination of end pieces; a cylindrical body portion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to said end pieces; and a cover formed of a single piece of sheet metal, for the purpose specified.

11. In a seedbox, the combination of metal end pieces having inwardly-projecting annular flanges thereon; a cylindrical body portion formed of a single piece of sheet metal, having seed-delivery openings in the bottom thereof, secured to the said flanges on said end pieces, for the purpose specified.

12. In a seedbox, the combination of end pieces; a cylindrical body portion formed of sheet metal having seed-delivery openings in the bottom thereof, secured to said end pieces, substantially as described.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

WILL F. HOYT. [l. s.]

Witnesses:

E. S. McMaster,

N. B. McPherson.