J. A. WOLFLEY.

Grain-Bin.

No. 202,911. Patented April 23, 1878.

Fig. 1.

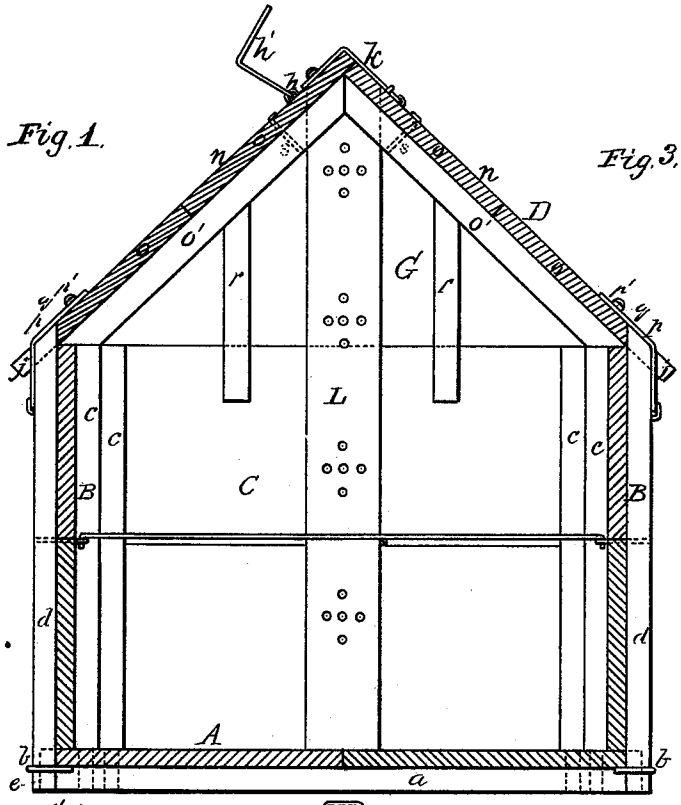
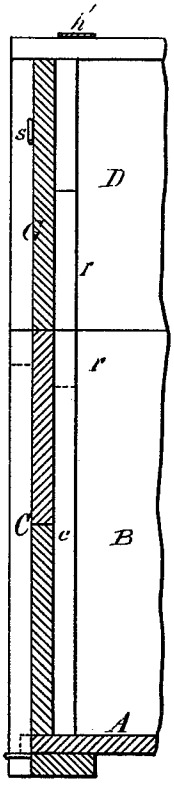


Fig. 3.



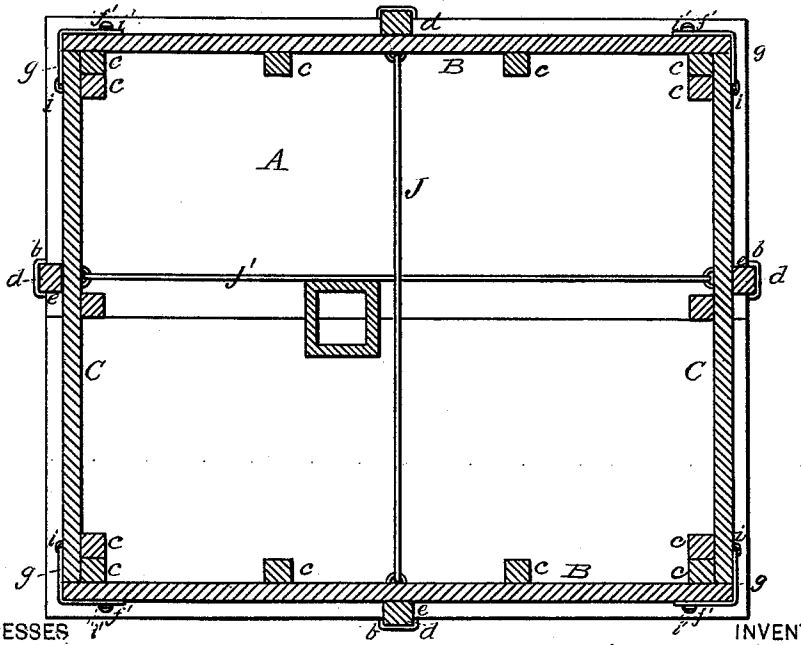


Fig. 2.

WITNESSES

Mary F. Utley.

Villers Anderson.

INVENTOR

Joseph A. Wolfley,

by E. W. Anderson.

ATTORNEY

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH A. WOLFLEY, OF WHITE CLOUD, KANSAS.

IMPROVEMENT IN GRAIN-BINS.

Specification forming part of Letters Patent No. **202,911**, dated April 23, 1878; application filed September 10, 1877.

To all whom it may concern:

Be it known that I, JOSEPH A. WOLFLEY, of White Cloud, in the county of Doniphan and State of Kansas, have invented a new and valuable Improvement in Grain-Bins; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical transverse section of this invention. Fig. 2 is a horizontal section of the same. Fig. 3 is a partial vertical section of one end.

This invention has relation to improvements in portable bins for storing grain and other analogous substances.

The object of my invention is to devise a bin that may be readily taken to pieces and packed in compact form for transportation, and as readily set up for use.

The nature of the invention will be clearly understood from the following description and the claims appended thereto.

In the annexed drawing, the letter A designates the base, B the sides, C the ends, D the gable roof, and G the gable-ends, of my improved bin. These, when put together, form a species of rectangularly-shaped hut. The bottom is composed of two or more sections, supported and united by the sills *a*, and is provided with two or more projecting staples, *b*, upon its edges, for a purpose hereinafter explained. The bottom is of somewhat greater dimensions than the bin of which it forms a part, and the sides and ends B C rest upon it when placed in position. These latter are composed of two or more sections, having each a number of inside vertical cleats, *c c*, and one or more outside cleats, *d*. The latter extend the whole height of the bin, and are stepped at their lower ends in the staples *b* aforesaid, the bottom A of the bin being notched at *e* for the purpose. The cleats *c c* hold the upper portions of the sides and ends in contact with each other when they are placed in position.

g represents angular hasps, of any suitable metal, secured by means of staples *i*, at the ends of the bin, to the end pieces C, and at their other ends to the sides B. These hasps are passed around the angle of the box over corresponding staples *f'* upon the edges of the adjacent parts of the bin, and are locked thereto by means of pins *i'* or other similar devices. The angles of the bin are thus properly braced together.

The middle portions of the sides and ends are, respectively, braced against outward displacement by metallic rods J J', crossing each other at right angles, and having their hooked ends engaged in eyebolts or staples in the said sides and ends.

The roof D is composed of two sections, *n*, connected together by staples *h* and hasps *h'*, and having at the ridge an opening, closed by a valve, *k*, of angular form, through which the ventilating-flue L extends. The sections *n* are composed of one or more sections, *o*, united together by cleat-rafters *o'*. These rest upon the edge of the sides.

The outside cleats *d* extend through notches *j* at the lower end of roof-sections *n*, and are each provided with angular hasps *p*, which engage staples *p'* on the said section, being confined thereto by means of pins or bolts *q*. The gable-ends G may also be sectional, and are provided with cleats *r*, which extend down inside of the ends C, when they are in place, and hold the said gables against outward displacement. They are further sustained by means of pins *s*, that extend down through the roof into or outside of said gable-pieces.

By removing the locking-pins, disengaging the hasps and staples, and then separating the bin-roof, sides, and ends into their constituent parts, the latter may be packed in small compass for convenient transportation.

I am aware that a portable corn-crib to be taken apart is not new; also, that a portable house for similar purposes has been constructed; hence I do not claim such a device broadly.

What I claim as my invention, and desire to secure by Letters Patent, is—

The grain-bin herein described, consisting

of the bottom A, sides B, ends C, suitably connected and braced by cleats *c d*, staples *b*, hasps *g*, and ties J, the gable-ends G having extended inside cleats *r*, the sectional roof D, roof-hasps *h'* and *p*, and ventilator L, all constructed and arranged to be readily taken apart and put together, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH A. WOLFLEY.

Witnesses:
E. D. BENNER,
HENRY ISDY.