

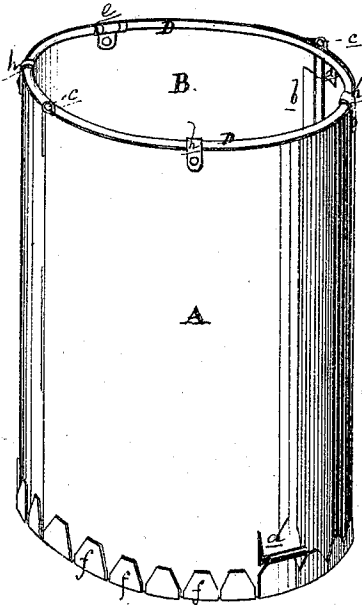
*F. K. Winsor,*

*Lime Barrel.*

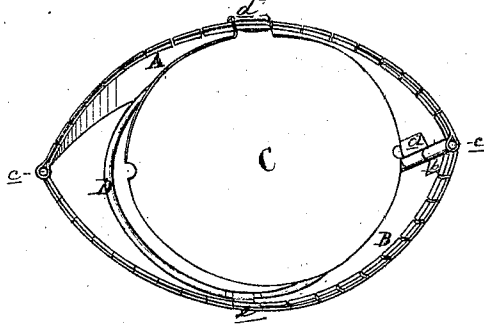
*No. 103953.*

*Patented June 7, 1870.*

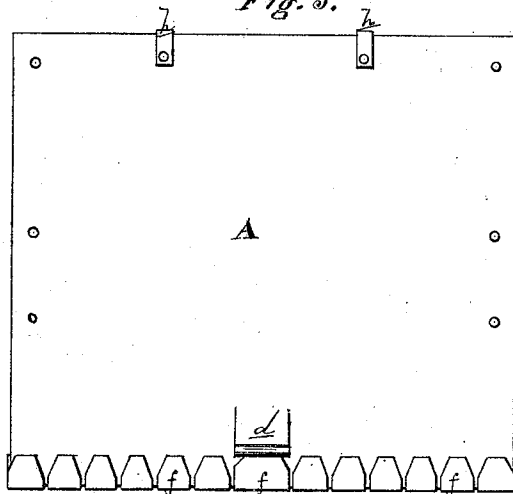
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Attest

*Frederick Ebert*  
*Samuel J. Sprague*

Inventor.

*Frank K. Winsor*  
*per attorney*  
*Thos J. Sprague*

# United States Patent Office.

FRANK KNOLTON WINSOR, OF HILLSDALE, MICHIGAN.

Letters Patent No. 103,953, dated June 7, 1870.

## IMPROVEMENT IN LIME-BARRELS OR KIBBLES.

The Schedule referred to in these Letters Patent and making part of the same.

### To whom it may concern:

Be it known that I, FRANK KNOLTON WINSOR, of Hillsdale, in the county of Hillsdale and State of Michigan, have invented a new and useful Improvement in Lime-Barrels or Kibbles; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective view of my improved barrel, as when ready for use.

Figure 2 is a perspective view, looking through the barrel from the bottom, as when partially closed, and

Figure 3 is an elevation of the barrel closed.

Like letters indicate like parts in each figure.

The nature of this invention relates to the construction of sheet-metal barrels or kibbles, in such a manner that they may, when not in use, be folded compactly, for convenience in stowing and shipment.

The invention consists in hinging together two rectangular plates of sheet metal, and hinging to one of the plates, near the bottom, a disk of sheet metal, of such diameter that it will just fill the space between the plates when the latter are bent into two semi-circles, and in hinging to the top of the other plate a hoop of the same diameter, which serves to keep the plates or sections distended in a true circle; also, in the arrangement of suitable clips for sustaining the bottom of the barrel, as more fully hereinafter set forth.

In the drawing—

A B represent two rectangular plates of sheet metal hinged together at each side or end by hinges *a b*, one of which is formed in either plate, in a series extending from top to bottom, and secured together by a pin *c*, passing through them.

C is a disk of sheet metal, hinged at *d* to the section A, and

D is a hoop of equal diameter with the disk, and is hinged at *e* to the opposite of the other section.

*f* are clips, riveted around the bottom of both sections, and are provided with inward-projecting lips, which sustain the disk when the barrel is set up.

*h* are hook lugs, in like manner riveted about the top of the sections, and prevent the hoop D from being withdrawn from the barrel.

These barrels, it will be seen, when set up as shown in fig. 1, are adapted for holding lime and other like substances which are shipped in open barrels. As a charge is made for ordinary barrels, and as the cost of reshipment, from their bulk, would not warrant their return, I obviate this difficulty by the construction of the above-described barrels, which, when emptied, may be made to occupy but little room. This I accomplish by pushing inward the free end of the hoop, and upward the disk or bottom head, when the sections, being hinged, may be brought close together, the hoop and disk lying flat between them, making a light and compact parcel, to be shipped back at a small cost, ready for use again, while its durability, as compared with a wooden barrel, need not be discussed.

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

The construction of a barrel for the purposes specified, wherein the two sections A B, bottom C, and ring D are arranged relatively to each other, substantially as herein specified.

FRANK KNOLTON WINSOR.

Witnesses:

SAM. J. SPRAY,  
FREDERICK EBERTS.