L. E. SUNDERLAND.

BARRELS.

No. 170,914. Patented Dec. 7, 1875.

Fig. 1.

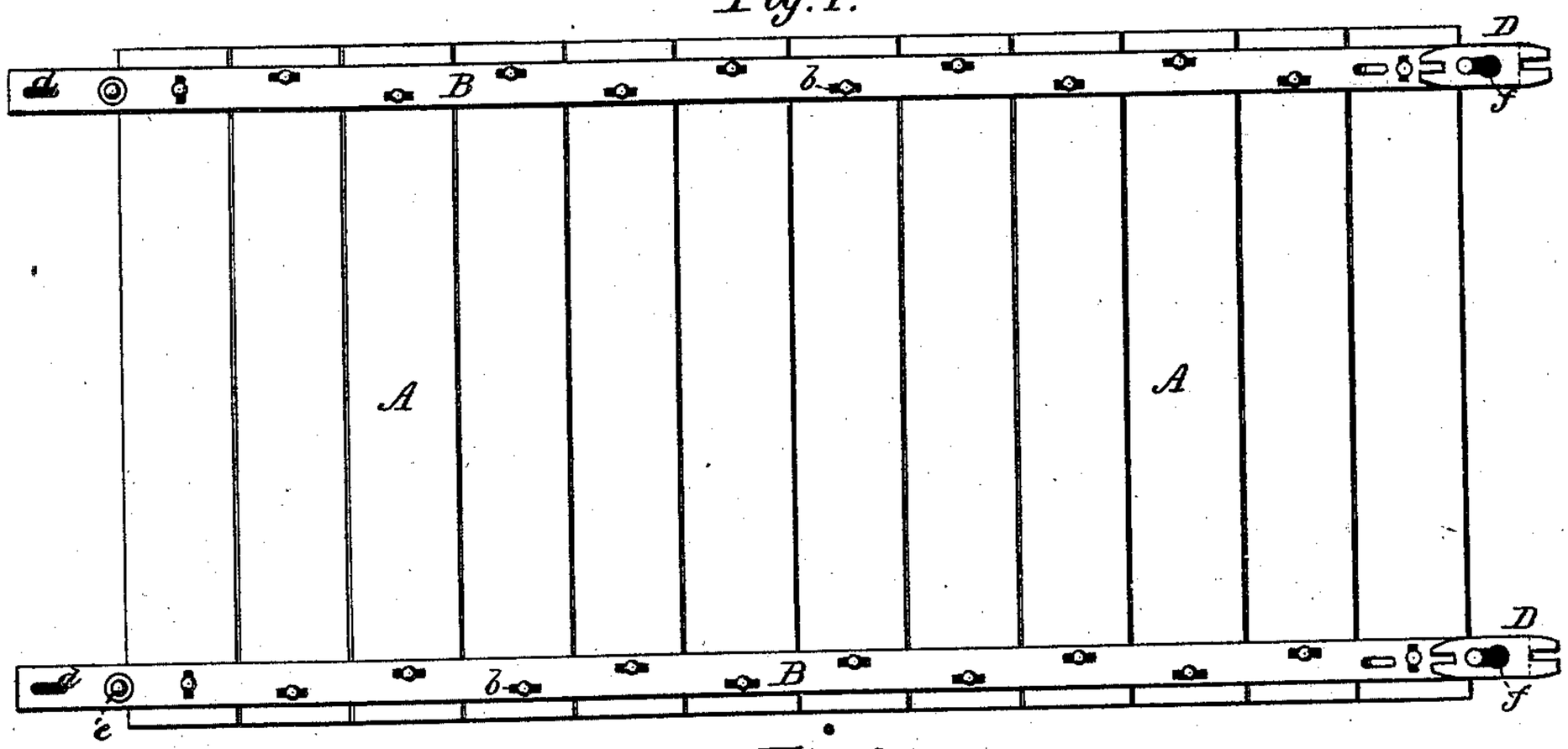


Fig 2.

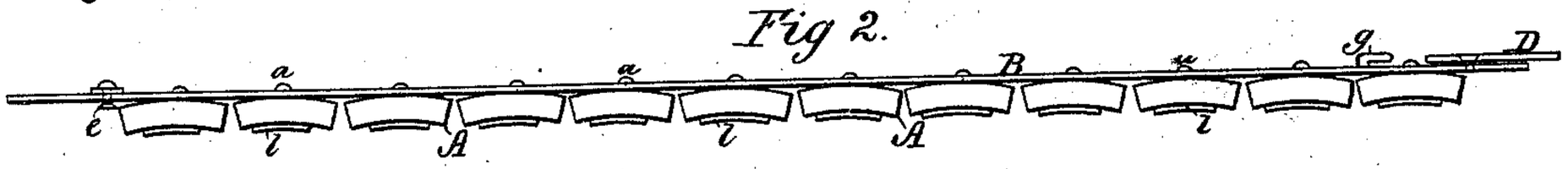


Fig. 3.

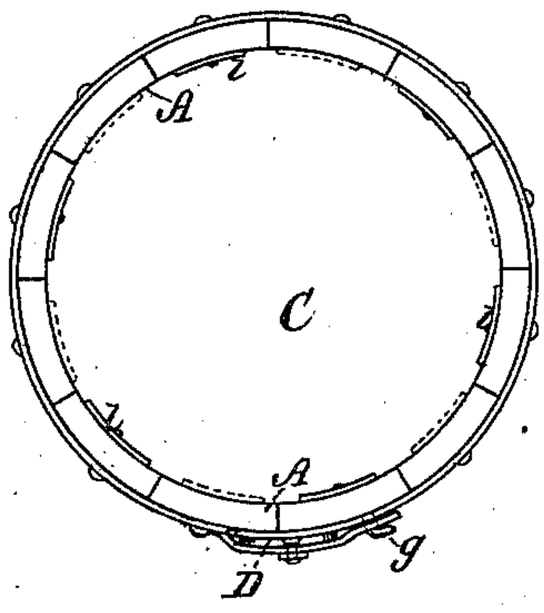


Fig. 5.

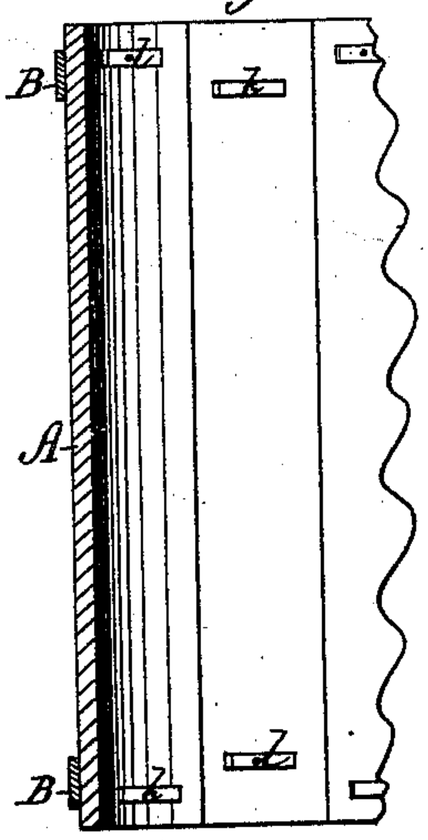


Fig. 4.

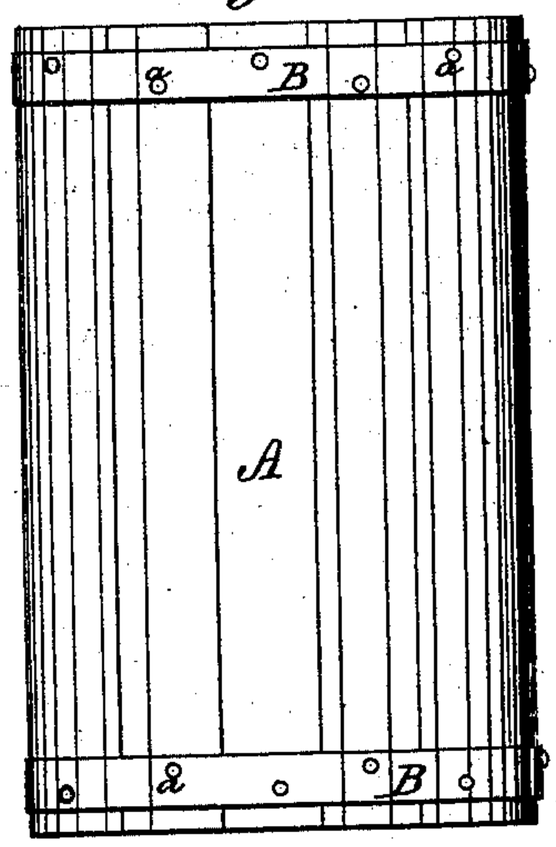


Fig. 6.

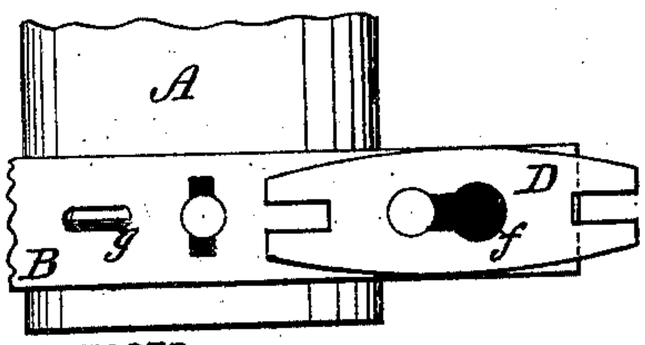
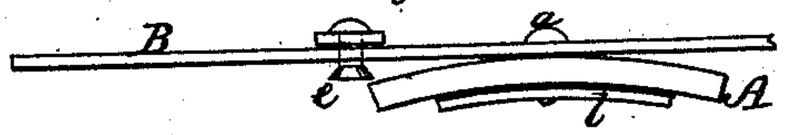


Fig. 7.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LESLIE E. SUNDERLAND, OF WILLIAMSBURG, VIRGINIA.

IMPROVEMENT IN BARRELS.

Specification forming part of Letters Patent No. **170,914**, dated December 7, 1875; application filed April 16, 1875.

To all whom it may concern:

Be it known that I, LESLIE E. SUNDERLAND, of Williamsburg, in the county of James City and State of Virginia, have invented an Improvement in Barrels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a plan view of the barrel laid out flat; Fig. 2, an edge view of the same; Fig. 3, an end view of the barrel as constructed; Fig. 4, a side elevation of same; Fig. 5, a sectional view, showing inside of the barrel; Fig. 6, a detail plan of a part of the locking devices for the hoop; Fig. 7, a detail side elevation of the locking devices upon the other end of the hoop.

The object of this invention is to provide a barrel for the shipment of produce, which shall be capable of transformation after the said produce is delivered, so as to occupy a comparatively small space and be returned to the sender at the rates of solid freight and at a comparatively trifling cost. It consists in the peculiar construction and arrangement of the devices for fastening the hoops around the barrel and in the means for holding the heads without the use of a croze.

In the drawing, A represents the staves of a knock-down barrel, each of which is riveted at *a* to the hoops B, the said hoops having slots *b* through which the rivets pass, so as to accommodate the relative position of the staves and hoops when laid out flat or rolled up to form a barrel. C are the heads of the barrel, which are of the usual construction, and are fitted in between lugs *l*, alternating upon opposite sides of the heads. These lugs are attached to the ends of the rivets, and, while they serve to secure the same, also strengthen the staves and prevent the same from splitting. An important advantage is that it admits of a barrel being packed full of heads when it is to be returned.

When the barrel, as thus constructed, is ready to be locked into its shape as a receptacle for produce, the latter is accomplished by the following devices: In one end of the hoops I make a slot, *d*, and at a little distance from the same end, and projecting inwardly, a headed stud, *e*. Upon the other end of the same hoop is pivoted a locking-button, D, having an eccentric slot, *f*, in which the headed stud, *e*, is inserted, the said button having also at its ends open slots to facilitate the turning of the same. Now, when the button is turned the headed stud is brought upon the opposite side of the pivot of the button and the two ends of the hoop strongly constricted around the barrel, whereby the staves are brought together and united with a tight joint. The projecting end of the hoop carrying the slat *d* is now bent down and a pivoted key, *g*, attached to the other end of the hoop, passed through and turned to secure the same. In the ends of the hoops the slots, through which the rivets pass that secure the staves, are made longitudinal with the staves instead of transverse, as the others are, the object of which is to accommodate the slight longitudinal motion of the outer staves when turning the locking-button, and thereby avoiding any strain on the hoops.

Having thus described my invention, what I claim as new is—

1. The button D, pivoted to one end of the hoop, and having an eccentric slot, *f*, in combination with the headed stud, *e*, attached to the other end of the hoop, substantially as and for the purpose described.

2. The hoop B, having at one end the slot *d* and headed stud *e*, in combination with the pivoted key *g* at the other end, and the pivoted button D, having an eccentric slot, *f*, substantially as and for the purpose described.

3. The device for holding the head of the barrel, consisting of the lugs *l*, attached to the inner sides of the staves, and when the barrel is set up alternating upon opposite sides of the inserted head, substantially as and for the purpose described.

The above specification of my invention signed by me this 15th day of April, 1875.

L. E. SUNDERLAND.

Witnesses:

SOLON C. KEMON,

CHAS. A. PETTIT.