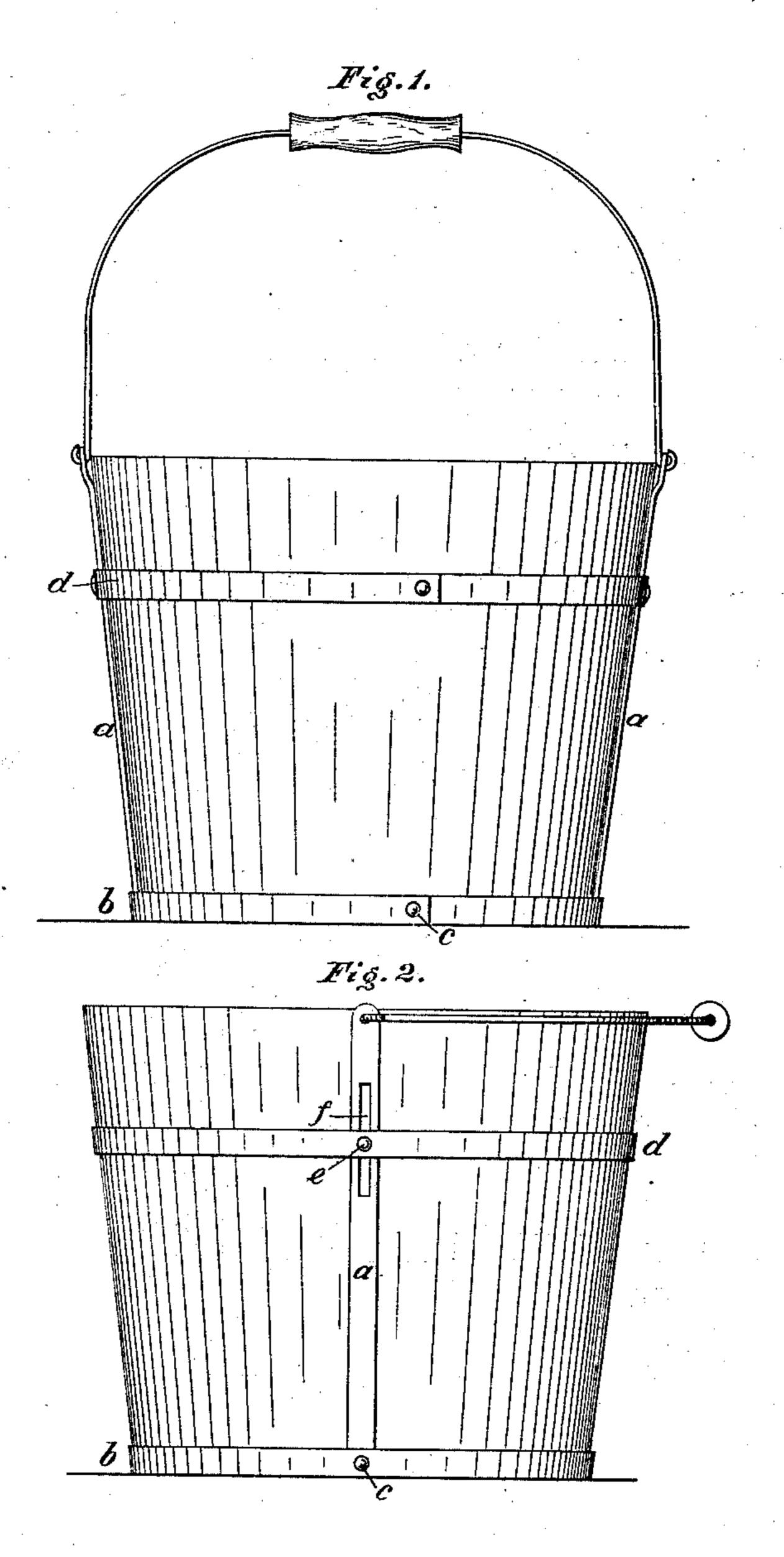
T. RICHARDS, Jr. Wooden Bucket, Tub, &c.

No. 223,541.

Patented Jan. 13, 1880.



Mitnesses: John A. Brustt

Inventor:

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

United States Patent Office.

THOMAS RICHARDS, JR., OF ATCO, NEW JERSEY.

WOODEN BUCKET, TUB, &c.

SPECIFICATION forming part of Letters Patent No. 223,541, dated January 13, 1880.

Application filed December 8, 1879.

To all whom it may concern:

Be it known that I, Thomas Richards, Jr., of Atco, Camden county, New Jersey, have invented an Improvement in Wooden Bucksets, Tubs, and Measures, of which invention the following is a specification.

The staves of hooped vessels—such as buckets, tubs, and measures—made of wood shrink when they become dry, allowing the hoops to loosen and fall down and the vessels to go to pieces.

To remedy the defect referred to I connect the hoops of such vessels by upright bands, strips, or plates, thus forming a frame-work which holds the staves in position until the hoops can be tightened, no matter how much shrunken the staves may be.

In the annexed drawings, representing a bucket in elevation, Figure 1 shows an edge view of the upright bands, and Fig. 2 a front view of one (any) of said bands in position.

The bands marked a are fastened to the bottom hoop, b, by rivets c, and to the upper hoop, d, by rivets e, each of which rivets e passes through a slot, f, or hole in the upright band a, and has a head on the under side to give it a hold on the hoop.

If more hoops than one besides the bottom hoop are employed, the upright bands are fasto ened to all the upper hoops by rivets passing through slots or holes made for them in the

bands in the manner described; or instead of making slots in the bands a for rivets, as above set forth, screws or nails may be driven through the upper hoop or hoops and bands into the 35 wood-work.

In the case of buckets and tubs the upper ends of the bands a may be utilized as points of attachment for the handles, and in the case of measures which have no handles the bands 40 a may be fastened to the wood-work by screws or nails.

If desired, more than two of the upright

When a dry or shrunken vessel hooped and 45 banded as described is inadvertently lifted before its hoops have been tightened the vessel is kept from falling to pieces by the framework composed of the hoops and bands, and the hoops may then be tightened, thus avoid-50

ing the destruction of the vessel.

The upright bands, strips, or plates a, in combination with the hoops of a wooden vessel, forming a frame to keep the vessel from 55 falling to pieces when its staves are shrunken, substantially as set forth.

T. RICHARDS, Jr.

Witnesses:
Thos. A. Burtt,
John A. Wiedersheim.