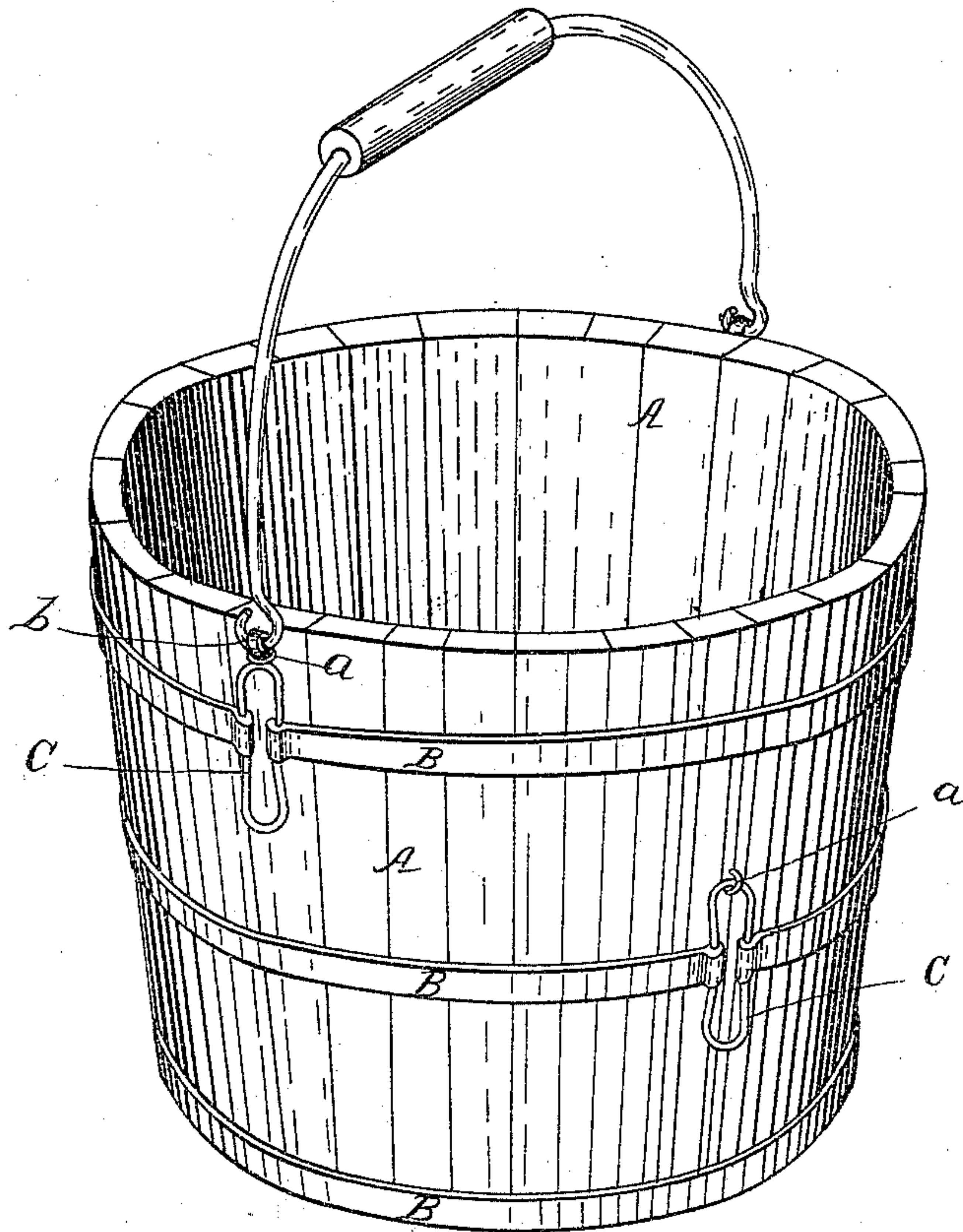


(No Model.)

F. ROY.
HOOP FOR VESSELS.

No. 335,720.

Patented Feb. 9, 1886.



Witnesses:

Alf. Charbonneau

A. B. B. B.

Inventor.

François Roy

By J. Coursolle
Atty.

UNITED STATES PATENT OFFICE.

FRANÇOIS ROY, OF AYLMER, QUEBEC, CANADA.

HOOP FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 335,720, dated February 9, 1886.

Application filed July 29, 1885. Serial No. 172,926. (No model.) Patented in Canada May 29, 1885, No. 21,767.

To all whom it may concern:

Be it known that I, FRANÇOIS ROY, a citizen of Canada, residing at Aylmer, in the county of Ottawa and Province of Quebec, Canada, have invented certain new and useful Improvements in Hoops for Vessels, (for which I have obtained a patent in Canada, No. 21,767, bearing date May 29, 1885,) of which the following is a specification.

My invention relates to improvements in hoops for vessels which have their sides formed of staves bound together by hoops or bands; and it consists in having such hoops or bands provided with springs, which will allow for the swelling or shrinking of the staves by moisture or heat, and hold the staves together with the necessary compressive force, whether they are swollen by moisture or contracted by heat.

The annexed drawing, which illustrates my invention, represents my improved hoop as applied to a wooden pail, although it is equally applicable to the largest tanks.

A A are the staves of the pail. B B are the hoops. In making these hoops the ends of the band of which they are made are not joined together, as hoops are now made, but are joined to the opposite sides of a loop-spring, C. Two or more of such springs may be placed in each hoop. Vessels having stave sides are generally tapered in form, being either larger at the top than the bottom, or vice versa, and the hoops would naturally be liable to slip toward the smaller end. This I

prevent by means of the pins or staples *a*, driven at suitable points into the staves.

From the above it will be evident that by the application of my invention all risk of the bursting of the hoops by the swelling of the staves, as well as the dropping of the staves when the staves are dry, is avoided.

When my improved hoop is applied in the construction of wooden pails, the lugs *b*, to which the bail is hooked, are preferably, but not necessarily, attached to the loop-springs of the top hoop, as shown in the drawing.

What I claim as my invention is—

1. The hoops B, provided with the springs C, substantially as and for the purpose set forth.

2. The combination, in a vessel, of the staves A with the hoops B, provided with the springs C, substantially as shown and described.

3. In a wooden tank or vessel, the combination of the staves A with the hoops B, attached to the springs C, and the pins or staples *a*, arranged to hold said hoops against the staves A, substantially as and for the purpose set forth.

4. In a wooden pail or vessel, the combination of the hoops B, provided with the springs C, with the lugs *b*, for the attachment of the bail, substantially as shown and described.

Signed at Ottawa this 4th day of July, 1885.

FRANÇOIS ROY.

In presence of—

ALF. CHARBONNEAU,
J. B. C. DUNN.