(No Model.)

R. S. STRATTON.
PAIL OR TUB.

No. 419,377.

Patented Jan. 14, 1890.

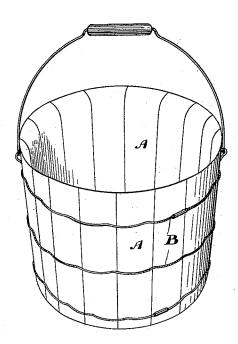
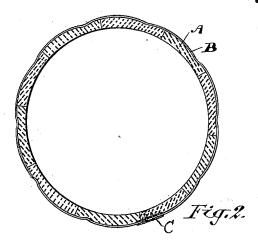
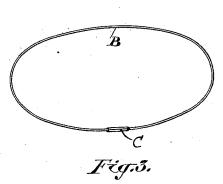


Fig.L



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## UNITED STATES PATENT OFFICE.

ROBERT SAMUEL STRATTON, OF ORILLIA, ONTARIO, CANADA.

## PAIL OR TUB.

SPECIFICATION forming part of Letters Patent No. 419,377, dated January 14, 1890.

Application filed May 1, 1889. Serial No. 309,264. (No model.)

To all whom it may concern:

Be it known that I, ROBERT SAMUEL STRATTON, carpenter, of the town of Orillia, in the county of Simcoe, in the Province of Ontario, 5 Canada, have invented a certain new and useful Improvement in Pails, Tubs, &c., of which the following is a specification.

The object of the invention is to provide a substitute for the ordinary band-hoops now 10 used in pails, tubs, &c., which substitute will not fall from the pail, tub, &c., when once placed in position, and will maintain an elastic pressure against the staves of the pail or tub, so as to hold the same firmly in position, and at the same time permit the necessary expansion caused by the moisture absorbed by the wood; and it consists, essentially, of a wire hoop or hoops bent inwardly at certain intervals, so as to indent and em-20 bed itself at these points into the staves of the pail or other utensil, the ends of the wire forming the hoop being bent and embedded in the wood after passing through holes made in a sleeve used to connect them together, 35 substantially as hereinafter more particularly explained.

Figure 1 represents a pail provided with my improved hoops. Fig. 2 is a view of the hoop before it is placed in position. Fig. 3 is a sectional plan of the pail through x y.

Flat hoops now commonly used to bind together the staves of pails, tubs, &c., are liable to fall off when the staves of the pail or tub shrink through dryness, and as there is no elasticity in these flat hoops the slightest dryness of the staves will cause the seams to open. By the adoption of my invention I not only secure a cheap substitute for the flat band-hoops, but I also provide a hoop which will always remain in position, and, owing to the manner in which it is fixed in position, an elastic pressure is directed by each hoop against the staves sufficient to follow up any ordinary shrinkage of the staves, and also accommodate itself to the expansion caused by the staves absorbing moisture.

In the drawings, A represents the staves of a pail arranged together in the ordinary way.

B represents the hoops, each hoop being composed of a piece of wire formed into a 50 hoop to surround the staves A and fit the portion of the pail or tub it is intended to clasp. The ends of the wire forming each hoop are bent, as indicated, and are connected together by a sleeve C, which is merely 55 a piece of sheet metal with two holes in it for the bent ends to pass through, the said piece of sheet metal being bent into the sleeve C after the bent ends have been passed through the holes.

When the hoop is placed in position, it is bent inwardly at certain intervals—say two inches apart—so as to indent and embed itself at these points into the staves. (See Fig. 3.) By this stamping the hoop in this manner a 65 series of spring-sections is formed around the pail or tub, each section imparting an inward pressure against the staves it is in contact with, and at the same time permitting the hoop to accommodate itself to any expansion caused by the staves absorbing water. The series of indentations formed in the staves holds the hoop in position and prevents its falling out of place.

What I claim as my invention is—
The combination, with a pail, tub, or other cylindrical utensil, of a wire hoop or hoops bent inwardly at certain intervals, so as to indent and embed itself at these points into the staves of the pail or other utensil, and the 80 perforated sleeve C, the ends of the wire of which the hoop is composed passing through these perforations and being embedded in the pail, as set forth.

Orillia, March 21, 1889.

## ROBERT SAMUEL STRATTON.

In presence of— JAMES B. HENDERSON, GEO. D. GRANT.