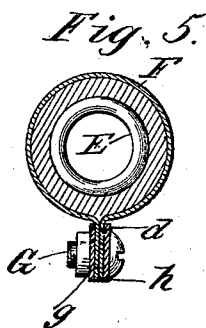
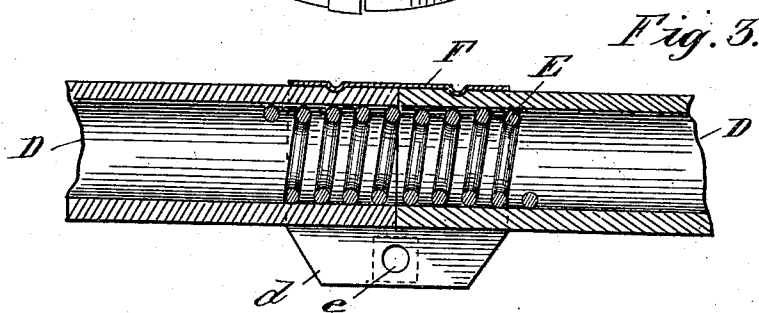
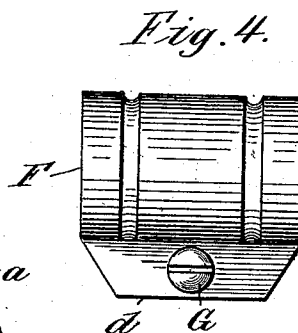
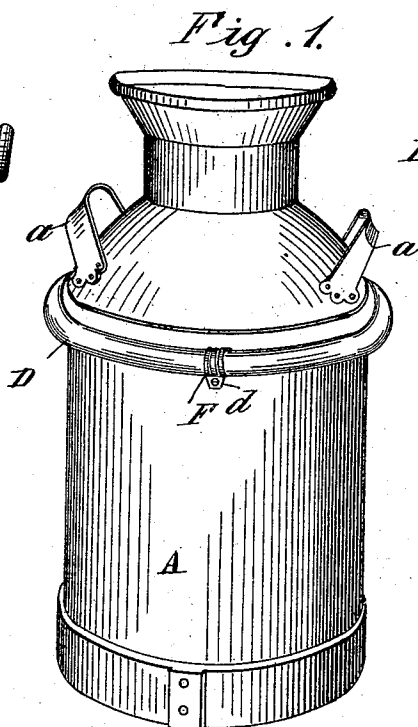


(No Model.)

W. H. NEHLS.
MILK CAN PROTECTOR.

No. 551,992.

Patented Dec. 24, 1895.



Attest.

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Inventor:

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by
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UNITED STATES PATENT OFFICE.

WILLIAM H. NEHLS, OF BENTON, WISCONSIN.

MILK-CAN PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 551,992, dated December 24, 1895.

Application filed May 20, 1895. Serial No. 549,905. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HERMAN NEHLS, a citizen of the United States, residing at Benton, in the county of Lafayette and State of Wisconsin, have invented certain new and useful Improvements in Protectors for Milk-Cans; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to metal milk-cans used for shipping milk, and has for its leading object to protect the side of the can from injury consequent upon the jostling of cans against each other in handling and shipping.

In describing my invention reference will be had to the following drawings and letters of reference marked thereon.

Figure 1 is a perspective of a can with protector applied. Fig. 2 is a coiled wire within the protector as part of coupler. Fig. 3 is a longitudinal section of the coupler and the two ends of the protector. Fig. 4 is a plan view of one of the coupling-plates. Fig. 5 is a cross-section of the coupler and end of the protector.

Like letters of reference designate similar parts in all of the drawings.

In the drawings, A denotes the body of a milk-can having the handles *a a* and cover B. Around the upper portion of the body A of the can is stretched a yielding hose or tube D, preferably of rubber, with its ends coupled together, as shown in Fig. 1.

The coupler for uniting the ends of the hose D together consists of a coiled wire E, (shown in Fig. 2,) inserted in the opposite ends of the hose D. Around the outside of the hose D, where the two ends of the hose D are united and within which ends is the coil E, is placed a metal band F, having the ears *d d*, which project at right angles to the band F, and pierced at *ee* for receiving a retaining-bolt G. Upon the outer side of each ear *d* is placed a plate *h*, with hole *g* corresponding with the hole *e* in the ear *d*. The bolt G has the usual head at one end and nut threaded at the other end. If a rope or a solid band of any kind be used, then the coil E is dispensed with, but the coupling would be the same in other respects.

The ears *d* serve a double function. They

not only enable the metal band to be closed tightly on the two ends of the hose, but should pressure from any source be applied to force the protector downward upon the can the ears catch or strike against the side of the can and by frictional contact help to resist the displacement of the protector.

The mode of uniting the ends and applying the protector to a can is as follows: The coil E is slipped into the two ends of the hose D at about equal distance in each end and the band F is bent around the hose D and coil E, and the plates *h h* placed against the outer side of the ears *d d* of the band F with their holes *g g* corresponding to the holes *ee* in the ears *d d*, and the bolt G forced through the holes *ee* and ears *d d*, and the nut H screwed upon the bolt G, thereby drawing the band F firmly around the two ends of the hose D and compressing the ends of the hose snugly upon the coil E. The protector thus united is pressed onto the body A of the can near the top, as shown in Fig. 1.

It will be seen that by the use of the plates *h h* equal pressure is exerted against the entire width of the ears *d d*, which will hold the band firmly at all parts of contact with the ends of the tube. It will also be observed that by the use of the coil E inside of the ends of the hose the band will conform to the curve of the can excepting just the width of the band F. Further, since the hose is drawn taut around the can and coupled in the manner shown, there will be sufficient friction to prevent the protector from falling off, even though the can has the same diameter at the top that it has at the bottom.

Having now described my invention and the mode of operation, what I claim, and desire to secure by Letters Patent, is—

1. A shipping can having continuous straight sides, combined with a flexible and yielding protecting band, having its ends united by a coupling provided with depending lips which catch or strike against the side of the can; the protecting band extending continuously around the can and being sustained in position by frictional contact with the can, substantially as shown.

2. A new article of manufacture, for protecting the side of shipping cans, consisting of a yielding and flexible tube with its

ends united together, a metal coil within the
ends of said tube, coupling band around the
outside of the ends of the tube and said coil,
with means for compressing the ends of the
5 tube firmly upon said coil, all arranged to
operate substantially as, and for the purposes
shown.

3. In combination with a shipping can a
tube D, and a coupler for the ends of said

tube, having the coil E, band F, ears *d*, plates *h*,
h, and bolt G, substantially as described and
shown.

In testimony whereof I affix my signature
in presence of two witnesses.

W. H. NEHLS.

Witnesses:

J. BUCHAN,
FRANK METCALF.