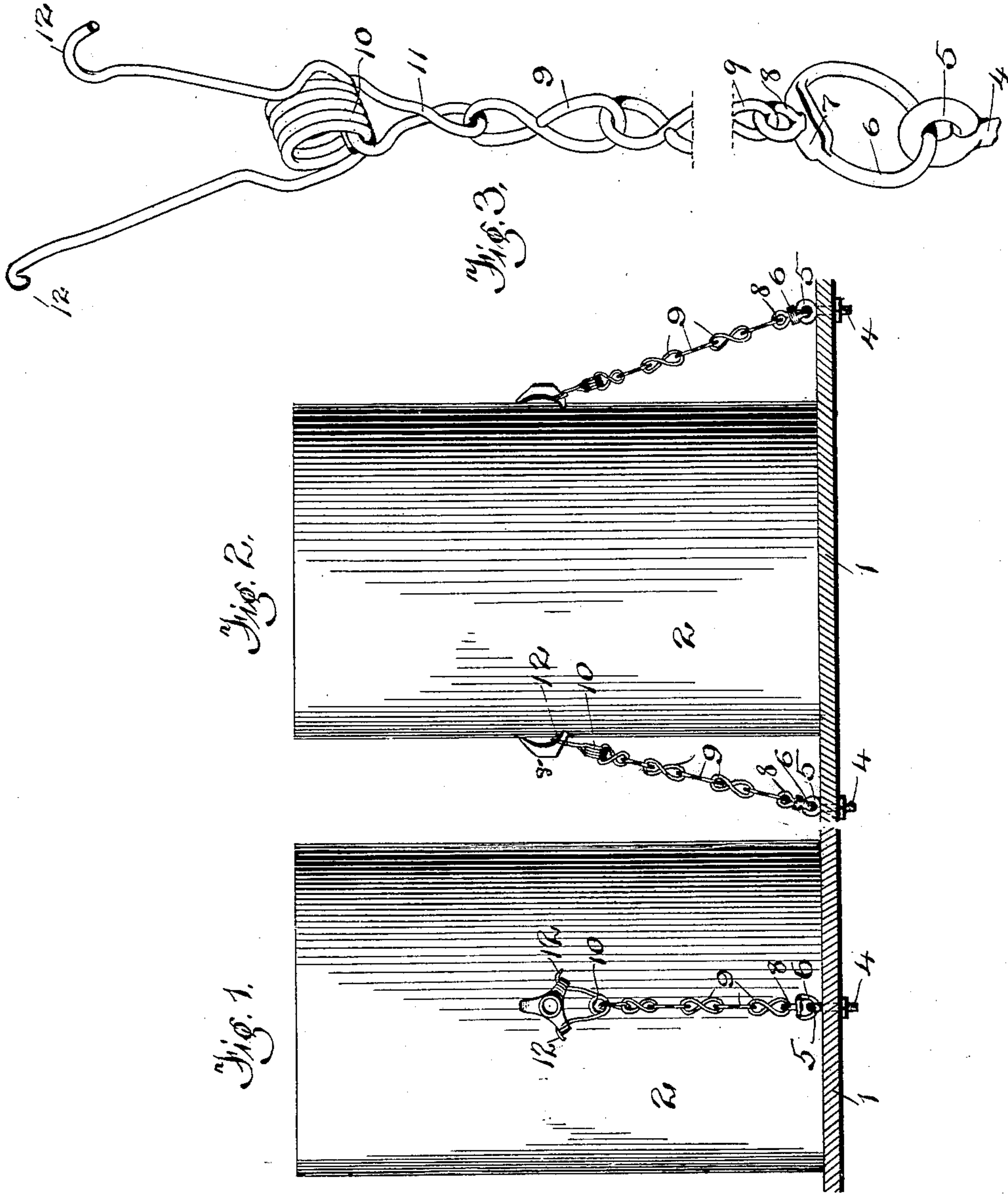


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Patented July 2, 1901.

E. EATON.
MILK CAN SECURING MEANS.
(Application filed Jan. 10, 1901.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

ELON EATON, OF EDWARDS, NEW YORK.

MILK-CAN-SECURING MEANS.

SPECIFICATION forming part of Letters Patent No. 677,566, dated July 2, 1901.

Application filed January 10, 1901. Serial No. 42,723. (No model.)

To all whom it may concern:

Be it known that I, ELON EATON, a citizen of the United States, residing at Edwards, in the county of St. Lawrence and State of New York, have invented a new and useful Improvement in Milk-Can-Securing Means, of which the following is a specification.

My invention relates to improvements in milk-can-securing means, and has particular relation to devices for removably securing cans relative to a support, such as a wagon-bed, in such manner that they will be retained in such position until removal is desired, and which devices can be readily and quickly disconnected from the can when removal is desired without changing the relative positions of the connection with the support, so that reengagement can take place without the necessity of adjustment, &c.

In dairy-product districts it is the general practice for the dairyman to transport his milk to the creameries in large receptacles or cans each containing from forty to sixty gallons, and therefore each having a considerable weight. These cans are generally made for the purpose and are particularly adapted for use in connection with wagon-bodies supported at the ends, and hence having their bed portion intermediate the ends capable of a springy movement to a slight extent. This is to allow the wagon to pass over rough roads with a minimum tendency of a jolting action to the cans, such movements being gradual, and hence not liable to greatly disturb the condition of the milk. As is obvious, the cans being arranged in alinement longitudinally of the wagon might have a tendency to move toward and from each other during such springing movement of the bed, and it is the purpose of the present invention to form a connection between the can-body and the support which will serve to prevent such movement and yet automatically adjust itself to the slight variations in differences between the handle of the can-body and the point of the connection with the support of the device due to this springy movement of the bed. At the same time the connection is such that it can be quickly broken for the removal of the can from the wagon and can be replaced quickly and without the necessity of readjustment.

The object of my invention is therefore to provide a connection or connecting device which will serve to form a means for removably securing cans relative to a support therefor; and it consists in the improved construction and combination of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the appended claims.

In the drawings, in which similar numerals of reference indicate similar parts, Figure 1 is a view of a support having a can-body thereon and showing my improved connection in position. Fig. 2 is a similar view taken at right angles to Fig. 1. Fig. 3 is a detail view of the connection.

1 designates a support which represents a section of a wagon-bed, and 2 designates the can-body, the latter having on opposite sides suitable handles, one form of which is shown at 3.

As before explained, the support or bed is substantially unsupported, excepting at its ends, and any suitable construction may therefore be used. It is to be understood, of course, that the bed may be supported intermediate its ends; but such construction would serve to accentuate the effects of any jolting, as heretofore pointed out.

The device or connection which forms the subject-matter of the invention is illustrated in the drawings, but in greater detail in Fig. 3, and consists of the bolt 4, which is connected to the bed at some distance away from the normal position of the can-body, as shown in Fig. 2, and has its screw-threaded portion of any suitable length, so as to enable a ready adjustment of the connection to different-sized cans. The upper end of the bolt is provided with an eye 5, through which passes a substantially ring-shaped portion 6, having an extended upper portion 7, in which is swiveled a suitable eye 8, the latter being secured to the lower end of a series of links 9, as shown.

10 designates a spring-coil, which is connected to the upper end of the series of links 9 by a link 11, the ends of which pass through the coil, as shown in Fig. 3. The ends of the coil 10 are first bent at an angle to bring them into substantial lateral alinement and are then carried upwardly at an angle to each

other, (giving the appearance of a V,) the outer ends being bent in a suitable manner to form hooks or engaging portions 12. These latter are adapted to pass within the handles 5 and by the resiliency of the spring press outward and over the coacting portions of the handle. As shown, the normal position of the ends of the spring are inclined relatively to each other, so that while there is a substantially fixed length to the connection when in position such length can be slightly increased by the movement of the free ends toward each other; but such movement is under tension of the coil and tends to cause the ends to resume their normal position, and this movement can be used in connection with the tightening of the tension of the coil by adjusting the bolt in an obvious manner.

Any movement of the bed which would tend to separate the can-body and bed would cause an increase of the tension of the spring and tend to reduce any such movement, yet permitting the bolt to move with the bed and without liability of the connection breaking. There may therefore be said to be formed a connection between the support and the can-body which is positive and yielding to permit a slight relative vertical movement of the can and support.

In practice the upper ends of the cans are positioned by means of suitable recessed blocks which are interposed between the cans, thus holding them from movement toward each other during the springy movement of the bed.

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

1. The combination of a support; a can-

body seated thereon and having handles; and connections between the handles and the support, each connection being positive and yielding to a limited extent to permit of a slight relative movement of the can and support in the direction of the axis of the can. 40

2. The combination of a support; a can-body seated thereon and having handles; and connections between the handles and the support, each connection being adjustably carried by the support, the opposite end of the connection having spring engaging members adapted to be received by and exert pressure against opposite sides of said handles and removable therefrom without disturbing the position of the connection relative to the support. 50 55

3. As a means for securing cans relative to a support therefor, connections between the support and the handles on the can, comprising a series of links having at one end a bolt adapted to be connected adjustably with said support, said bolt having a swiveled connection with the series of links, and a spring-coil located at the opposite end of said links, said coil having its free ends extended and terminating with hook-shaped ends, the intermediate portions of said free ends being bent to place the hook-shaped ends in lateral alinement, said ends being adapted to be removably secured in the can-handles. 60 65

In witness whereof I have hereunto set my hand in the presence of two witnesses. 70

ELON EATON.

Witnesses:

J. H. WINSLOW,
G. HUGHES.