

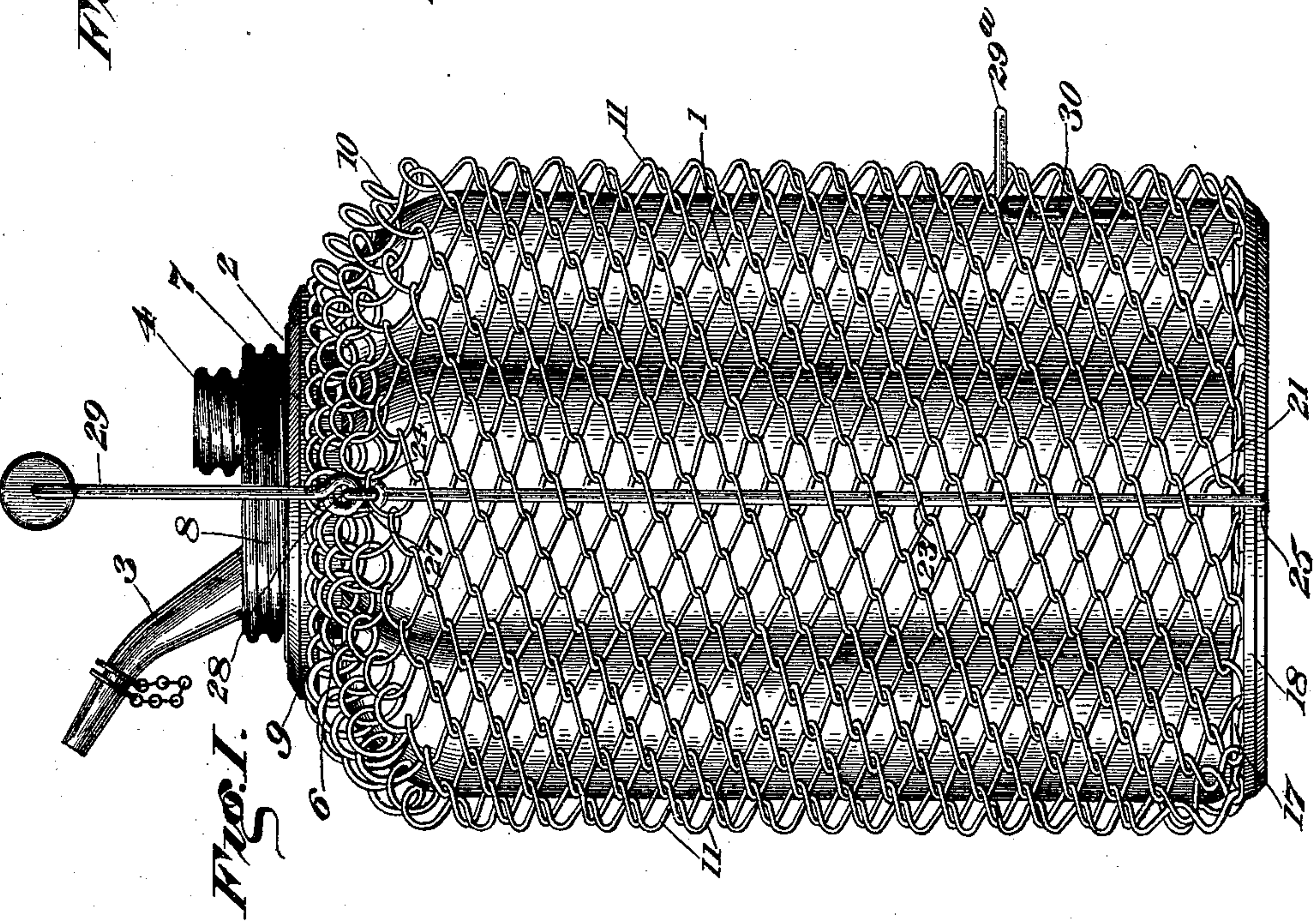
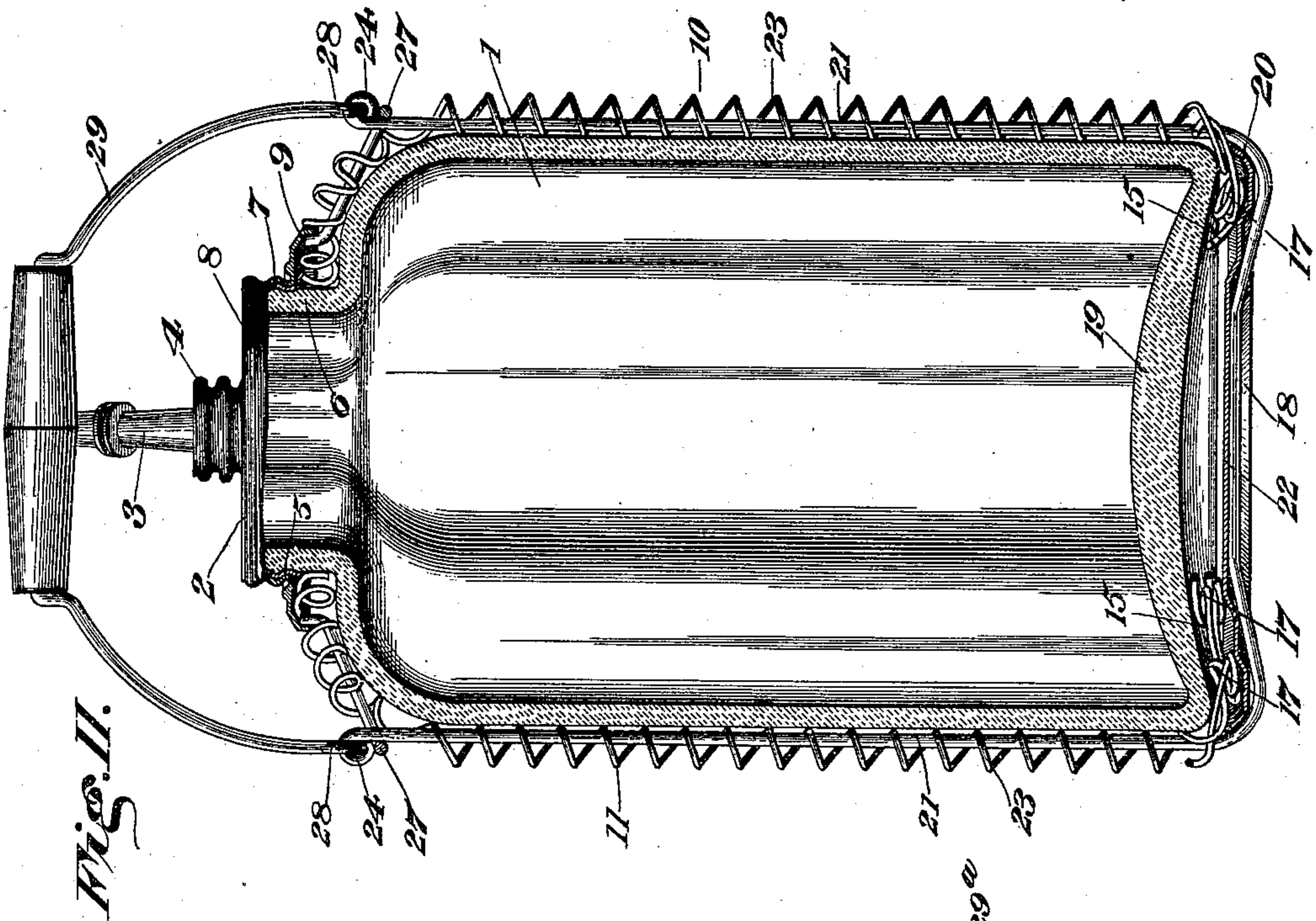
(No Model.)

2 Sheets—Sheet 1.

A. L. BARON.
CAN GUARD.

No. 547,656.

Patented Oct. 8, 1895.



Witnesses

M. C. Fowler
S. Macker

Inventor

Alfred L. Baron

Attorney

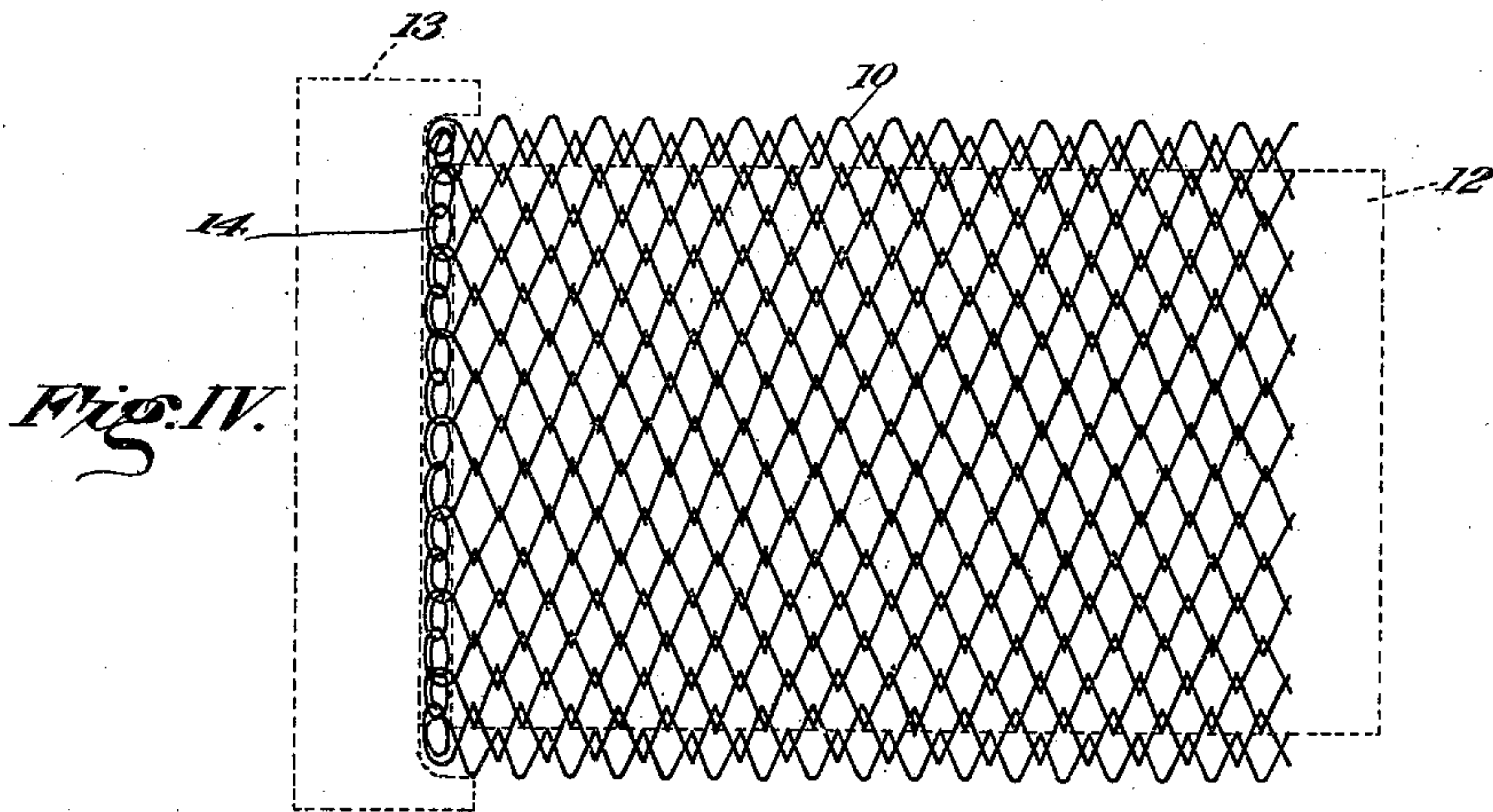
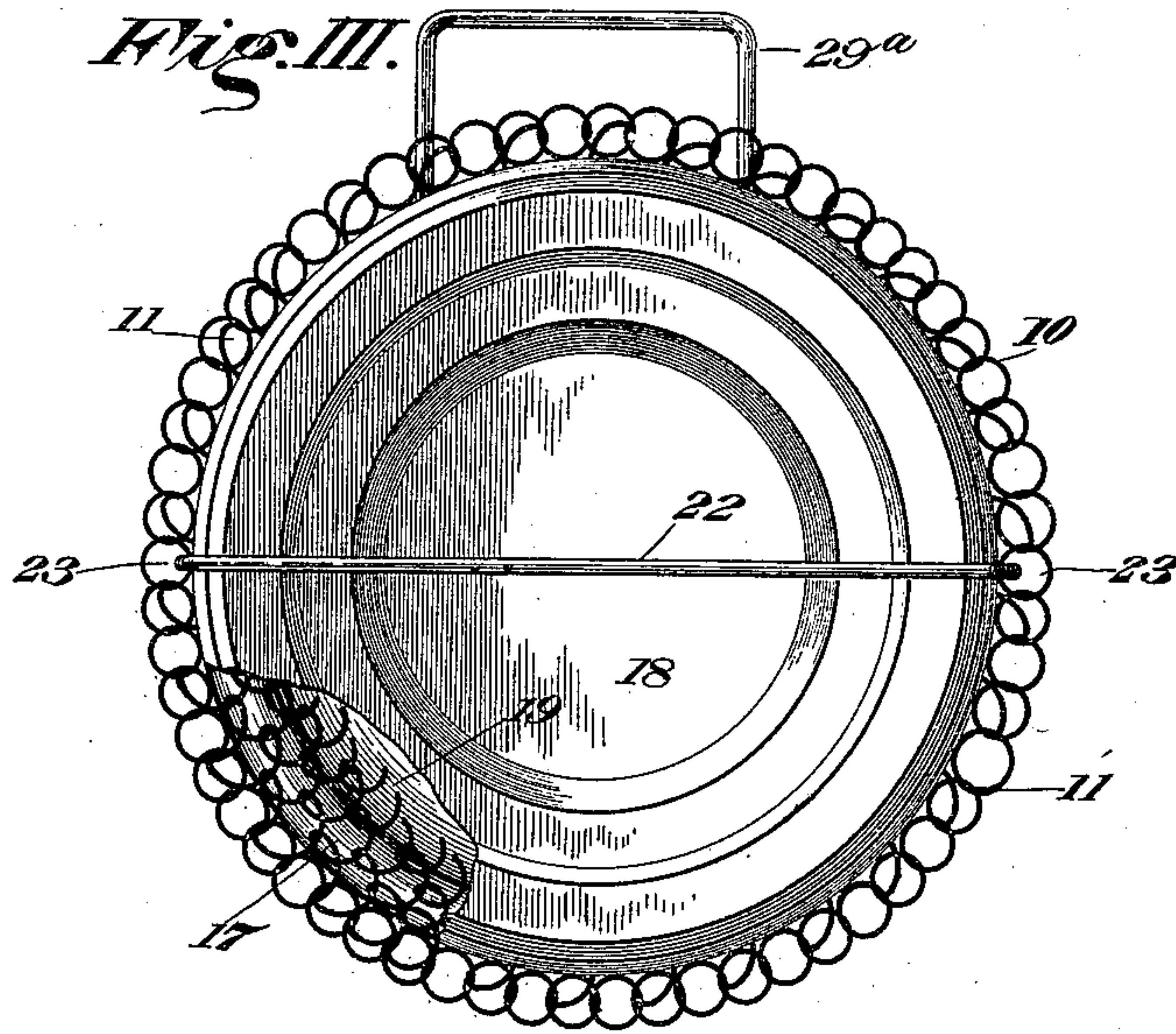
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Inventor

By Joseph L. Atkins
Attorney

UNITED STATES PATENT OFFICE.

ALFRED L. BARON, OF TIFFIN, OHIO.

CAN-GUARD.

SPECIFICATION forming part of Letters Patent No. 547,656, dated October 8, 1895.

Application filed March 14, 1895. Serial No. 541,771. (No model.)

To all whom it may concern:

Be it known that I, ALFRED L. BARON, of Tiffin, county of Seneca, State of Ohio, have invented certain new and useful Improvements in Can-Guards, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce improvements in cans or vessels for containing liquids, by which the cost of manufacture of the guarded can is diminished and its durability and compactness are increased, and also in coverings for cans by which the fragile material, usually of glass, of which the cans are made, is effectually protected against damage or injury from outside blows or shocks.

In the accompanying drawings, Figure I is a side elevation of my can. Fig. II is a central vertical section of the same. Fig. III is a bottom plan view thereof; and Fig. IV is a view of the lateral jacket detached, showing the means of forming the base or bottom part thereof.

Referring to the figures on the drawings, 1 indicates a can-body, which may be made of suitable shape, size, and material, usually glass.

2 indicates the head, preferably made of tin or other sheet metal and provided with a spout 3 and a screw-cap 4. It is provided with a flange 5 surrounding a collar 6 of the can-body, to which it may be secured by suitable means—as, for example, plaster-of-paris. The periphery of the head is preferably screw-threaded, as indicated at 7, to receive and hold the flanged internally screw-threaded annulus 8, of which 9 indicates the flange.

10 indicates the jacket, which is preferably made of interwoven spring-wire, preferably consisting of a series of interwoven spring-wire spirals 11.

In practice a cylindrical jacket of the material is manufactured to fit the size of the can to be protected, as illustrated in Fig. IV. It may be made by the well-known machine for weaving bed-mattresses, where interwoven spirals are employed; but any suitable method of manufacture may be substituted therefor. When the cylinder is completed, the bottom part may be formed by placing it over an

iron cylinder 12. (Illustrated by dotted lines in Fig. IV of the drawings.) This cylinder corresponds in shape and size to the can for which the cylinder or jacket is designed to be fitted. A die (indicated by dotted lines and designated at 13 in Fig. IV of the drawings) is forced against the end of the iron cylinder, so as to compress the end of the jacket and to mash the spirals thereof, thereby causing them to lie nearly at right angles to the side walls of the jacket after it is lifted from the iron-cylinder, as indicated by 14 in the drawings. It is then placed over the glass can or vessel, the inturned edges 15 forming the bottom protection for the same. Afterward the upper part of the jacket is gathered by suitable means—as, for example, a temporary confining-annulus, (not illustrated)—until the edges approach the periphery of the head 2. The annulus 8 is then screwed in place, its flange 9 serving to permanently confine the upper end of the jacket in place. When this has been accomplished, the annulus 8 may be secured in position, as by soldering, the temporary annulus being no longer necessary, and the can proper is completed. Inasmuch, however, as the raw edges 15 of the can-jacket are exposed and unless great care be exercised in the manufacture of the jacket they may tend to catch upon an obstruction with which they may come in contact, I prefer to employ the bottom peripheral bends or spirals 17 as spring cushions or yielding support for a plate-metal bottom 18. The bottom 19 of the glass receptacle is preferably concave, and the plate-metal bottom is also similarly formed so as to give a smooth, level bearing or supporting surface 20 around its lower periphery, its edge being turned up to constitute an annular groove for the reception of the convolutions of the jacket and thereby bringing the upper edge of the bottom plate substantially in line with the bottom of the can-body to form a neat finish and to prevent the lower convolutions of the jacket from coming in contact with the adjacent surfaces when the can is slightly tilted upon its edge. The plate-metal bottom may be secured to the spring-cushions in a variety of ways; but I prefer to employ for this purpose a wire frame 21, bent

to span and conform to the contour of the bottom of the can-body, as indicated at 22, and thence passing upwardly through diametrically-opposite spirals 23 in the jacket, terminating in eyelets 24 near the upper end of the jacket. An indented diametrical groove 25 in the bottom of the bottom plate serves by engagement with the frame not only to hold the bottom plate in position, but also embeds the material of the frame 21, so as to protect it against striking any obstruction with which it ordinarily may come in contact. By this arrangement a convenient means of rigidly fastening the frame 21 in place may be conveniently provided. As additional means of securing the frame 21, I prefer to employ radial loops 27, secured, as by soldering or otherwise, under the flange 9, through which the eyelets may be passed, the eyelets being free to slip through the loops when the parts are assembled. The engagement of the eyelets with the bends of the loops tends to hold the frame 21 in place, but an effective and reliable union of the frame with the loops may be insured by inserting the eyelets 28 of the bail-piece 29 through the eyelets 24 at right angles to them, the eyelets 28 being in practice of sufficient size to lock the eyelets 24 in position within the loops.

A simple and convenient form of tilting handle consists of a wire frame 29^a, having its ends 30 bent at right angles to the frame and inserted through the meshes of the jacket before it is placed upon the can. After it is in position upon the can it is firmly held in place by the pressure of the interior wall of the jacket against the exterior wall of the can-body.

What I claim is—

1. The combination with a can body, a bottom plate and intermediate yielding spring cushions, of a frame passing underneath the bottom plate, and mechanism upon the under side of the bottom plate co-operating with the frame to hold the same in place, substantially as specified.

2. The combination with a can body, a bottom plate and intermediate yielding spring cushions, of a frame passing underneath the bottom plate, and a groove in said bottom plate for the reception of said frame, substantially as specified.

3. The combination with a can body, of a concave bottom plate having its outer periphery upturned to form an annular groove or seat, an intermediate cushion between the bottom of the can body and the bottom plate consisting of interwoven spring wire spirals, the convolutions of which adjacent to the periphery of the can body bottom being seated in the annular seat of the bottom plate, and means for securing the bottom plate to the can body, substantially as specified.

4. The combination with a can body, jacket composed of spring wire spirals, and cushions

therein upon the bottom of the can body, of a bottom plate, a diametrical groove therein, a wire frame embedded in the groove and extending upwardly through opposite spirals in the jacket, and means for securing the wire frame in place, substantially as set forth.

5. The combination with a can body, jacket composed of interwoven spring wire spirals, and cushions below the can body, of a bottom plate, frame supporting the bottom plate, and a top jacket confining part confining the upper end of the jacket and supporting the frame, substantially as specified.

6. The combination with a can body, interwoven wire jacket, and top jacket confining part, of a frame piece surrounding three sides of the can body, eyelets on the end thereof, loops secured to the top confining piece, adapted to receive the frame eyelets, and a bail having eyelets at its ends inserted in the eyelets in the frame and adapted thereby to secure the frame rigidly in position, substantially as set forth.

7. The combination with a can body, interwoven wire jacket, and top jacket confining piece, of a bottom plate, a wire frame piece passing around three sides of the can including the bottom plate, loops secured to the top confining piece, eyelets on the end of the frame piece passing through the loops, a bail piece and eyelets on the ends thereof engaging with the eyelets on the frame piece to unite the parts together, substantially in the manner and for the purpose specified.

8. The combination with a can body, an interwoven spring wire jacket, and cushions below the can body, of a bottom plate provided with a diametrical groove, a wire frame embedded in the frame and extending upwardly, a jacket confining part, and loops secured to the jacket confining part and to the frame, substantially as specified.

9. The combination with a can body, interwoven spring wire jacket, cushions below the can body, of a bottom plate provided with an annular groove or seat and with a diametrical groove, a frame embedded in the groove and extending upwardly through the opposite spirals in the jacket, a jacket confining part, and loops connected to the jacket and to the frame, substantially as specified.

10. The combination with a can body, of an interwoven spring wire jacket, a flanged annulus securing the jacket, loops supported by the annulus, a bottom plate confining the lower edge of the jacket and provided with a diametrical groove, a frame sustaining the bottom plate, the upper ends of which project through the loops and are provided with eyelets, and a bail piece provided with terminal eyelets engaging with the eyelets of the frame, substantially as specified.

11. The combination with a can body, interwoven spring wire jacket, of a diametrically grooved bottom plate, a frame sustain-

ing the bottom plate and having its upper
extremities connected by a pivoted bail, and
a handle having its extremities bent at right
angles and sustained between the jacket and
5 the can body, said handle being retained in
place by the jacket and said jacket being re-
tained by the bottom plate and frame, sub-
stantially as specified.

In testimony of all which I have hereunto
subscribed my name.

ALFRED L. BARON.

Witnesses:

HARRY TAGGART,
PETER GARDNER.