

No. 846,719.

PATENTED MAR. 12, 1907.

C. S. BARON & J. F. HAFLEY.

PROTECTIVE COVERING FOR GLASS OR OTHER FRAGILE RECEPTACLES.

APPLICATION FILED SEPT. 26, 1904

2 SHEETS—SHEET 1.

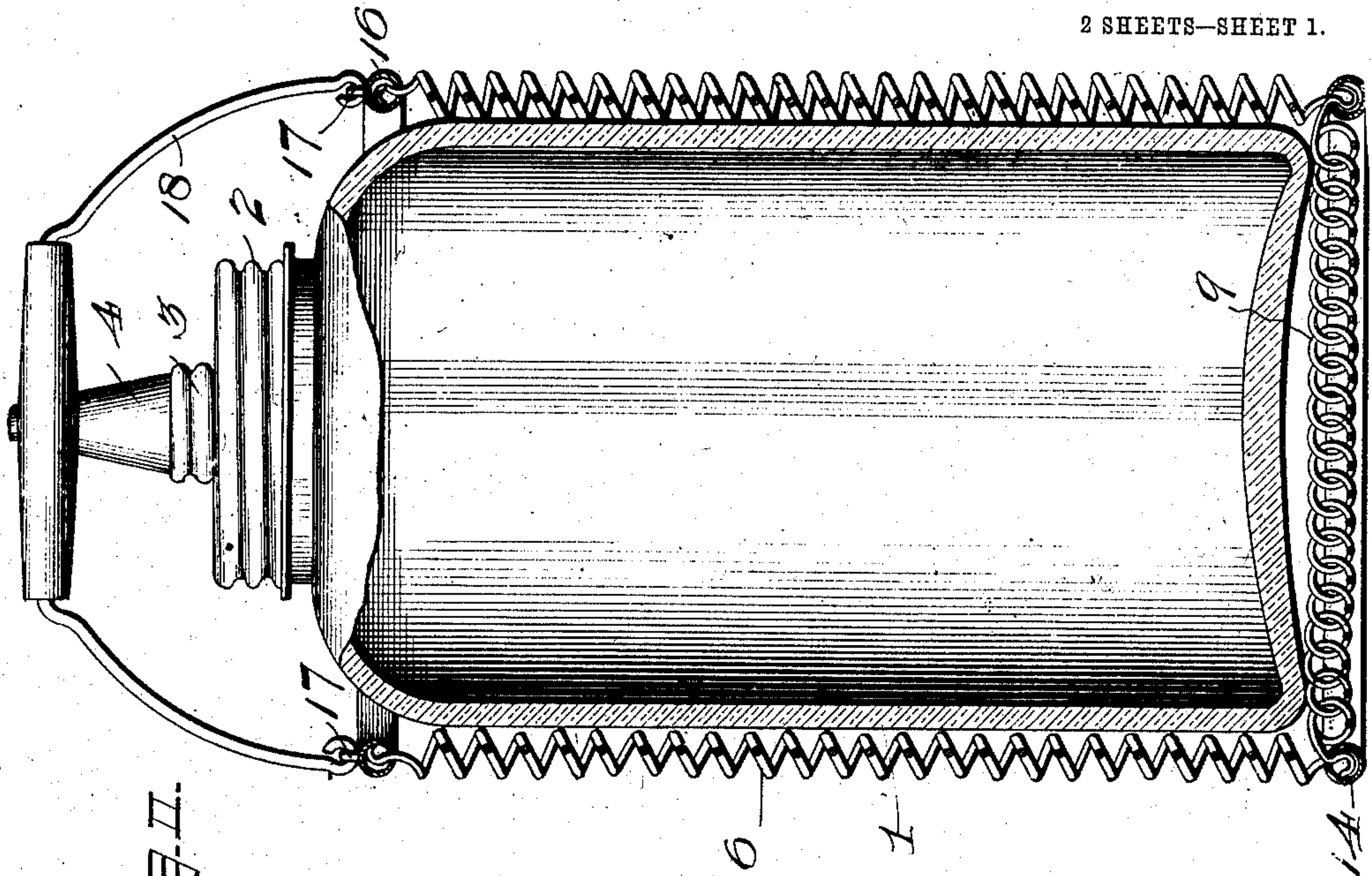


Fig. II.

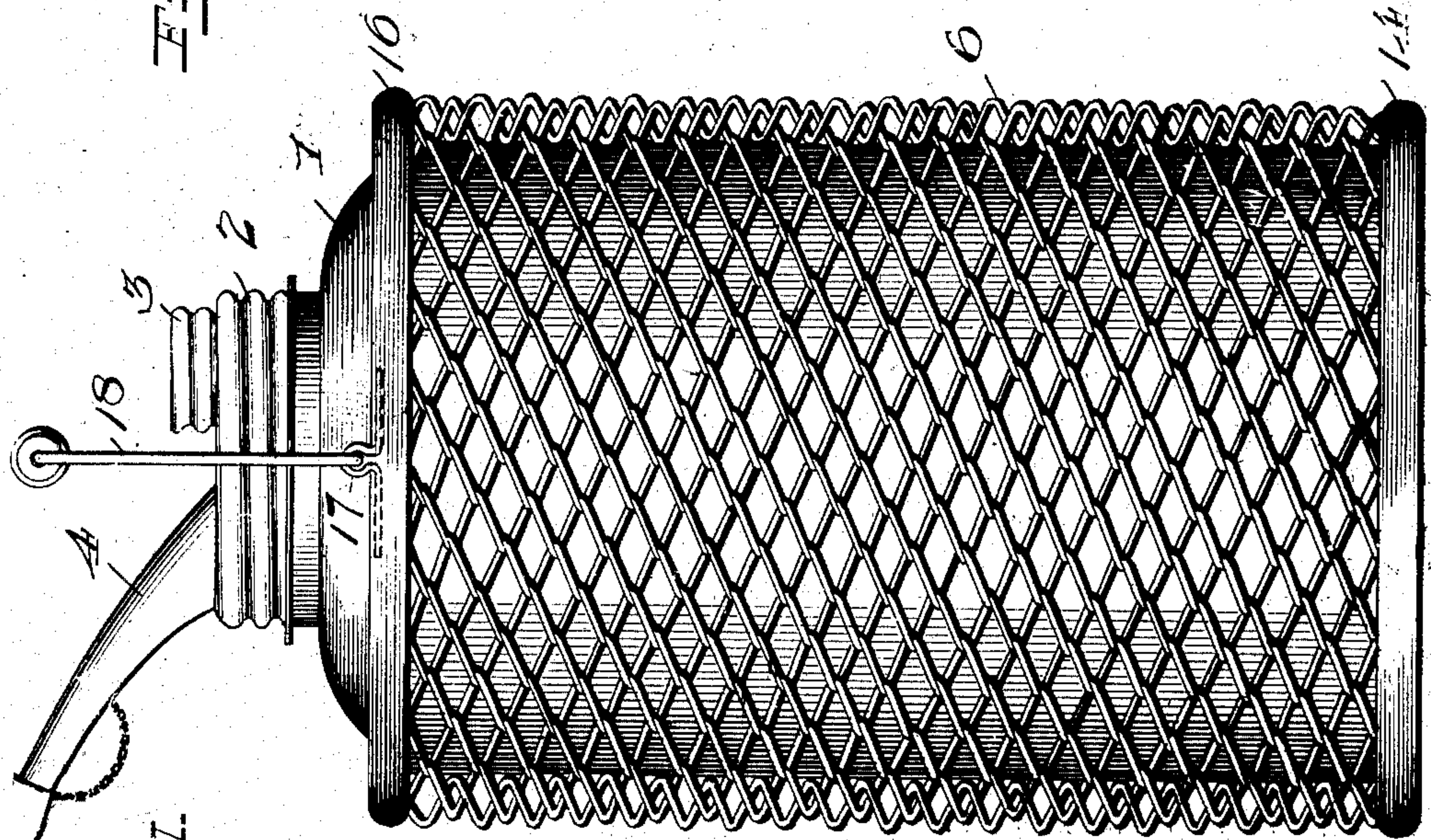


Fig. I.

Witnesses
J. L. Mochman
Frank J. Kent.

Inventors:
Charles S. Baron and
James F. Haffey
By James W. Atkinson
Attorney

No. 846,719.

PATENTED MAR. 12, 1907.

C. S. BARON & J. F. HAFLEY.

PROTECTIVE COVERING FOR GLASS OR OTHER FRAGILE RECEPTACLES.

APPLICATION FILED SEPT. 26, 1904.

2 SHEETS—SHEET 2.

Fig. III.

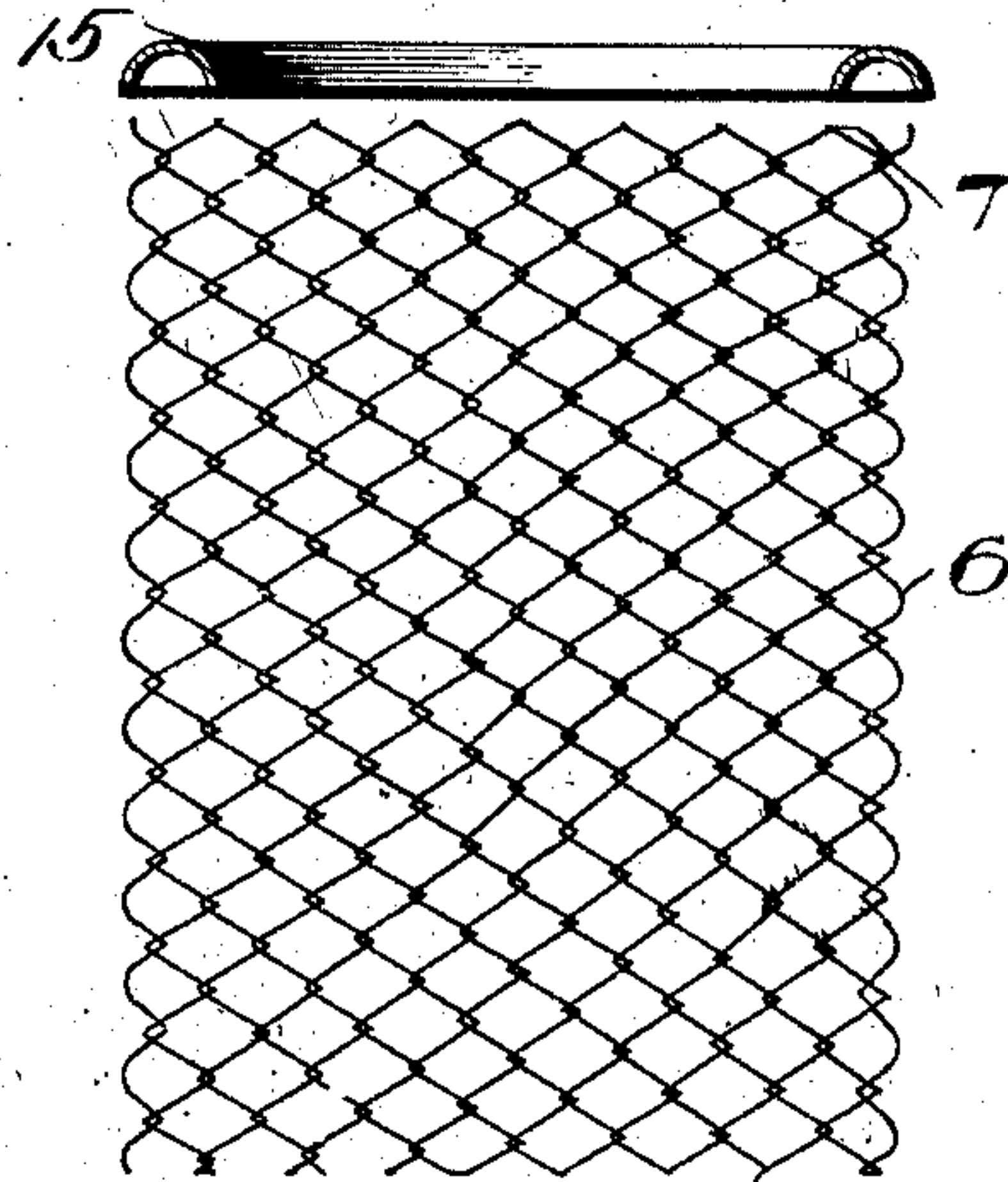


Fig. IV.

Fig. V.

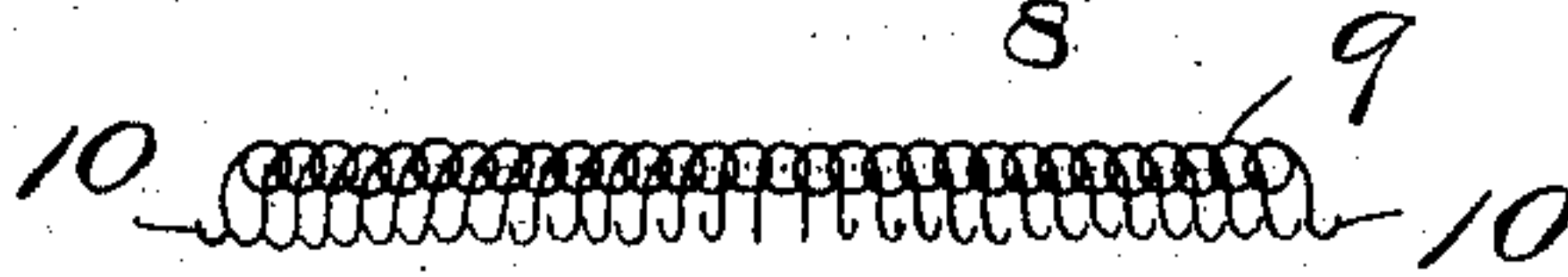


Fig. VI.



Fig. VII.

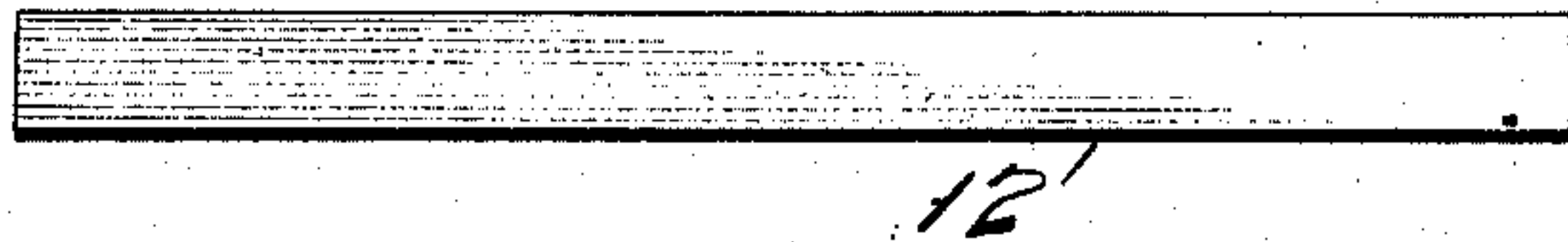


Fig. VIII.

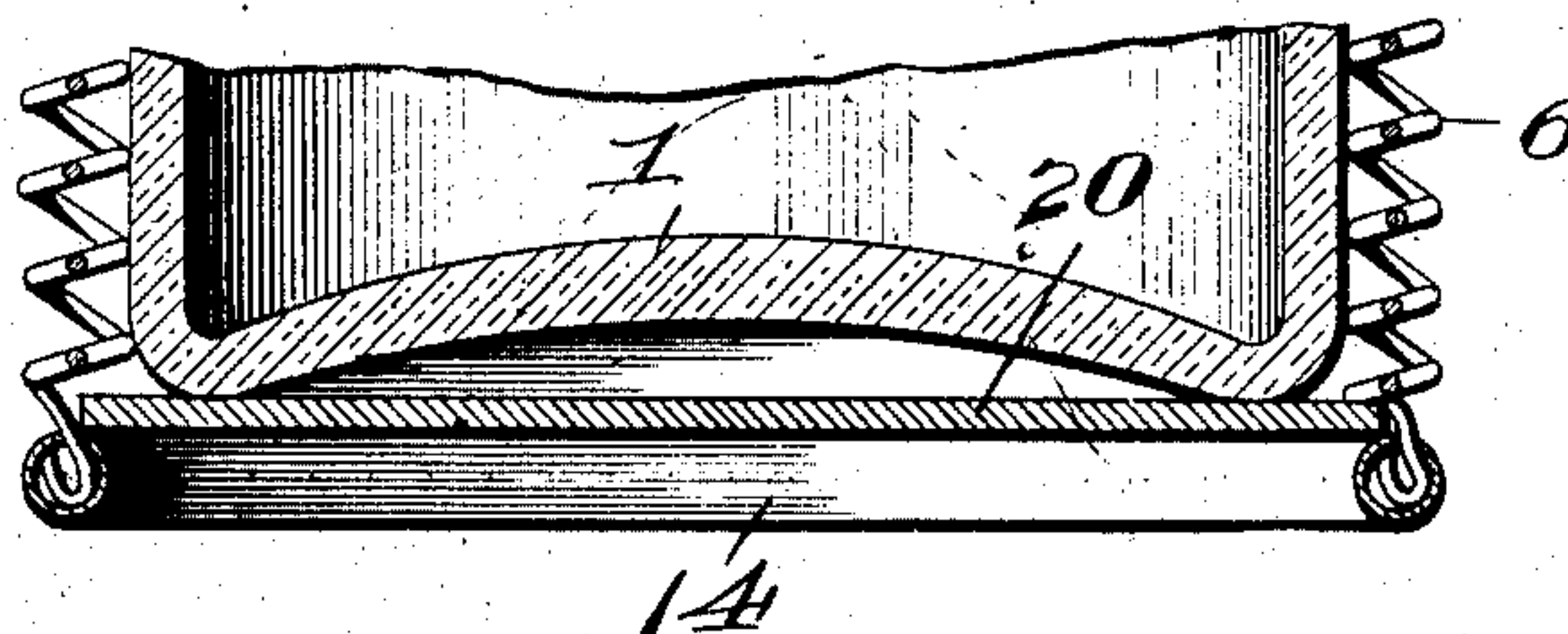
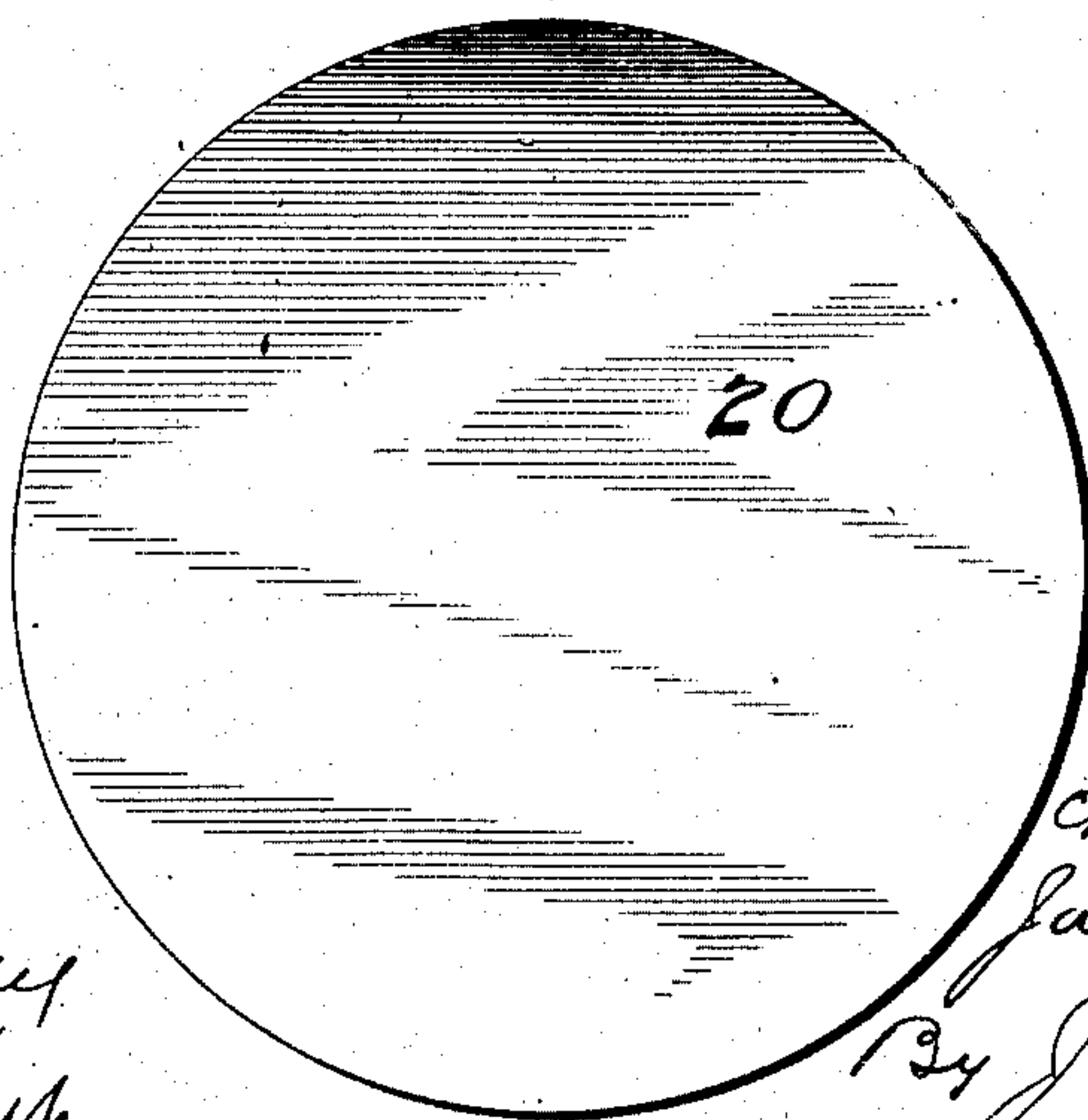


Fig. IX.



Witnesses

J. L. Mochan
Frank J. Kent

Inventors:

Charles S. Baron &
James F. Haffey

By Joseph H. Atkins
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES S. BARON AND JAMES F. HAFLEY, OF TIFFIN, OHIO; SAID HAFLEY
ASSIGNOR TO SAID BARON.

PROTECTIVE COVERING FOR GLASS OR OTHER FRAGILE RECEPTACLES.

No. 846,719.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed September 26, 1904. Serial No. 226,069.

To all whom it may concern:

Be it known that we, CHARLES S. BARON and JAMES F. HAFLEY, both of Tiffin, in the county of Seneca, State of Ohio, have invented certain new and useful Improvements in Protective Coverings for Glass or other Fragile Receptacles, of which the following is a specification.

The object of our invention is to produce improvements in guards, preferably of the woven-wire description, of the general type shown in United States Letters Patent No. 536,947, dated April 2, 1895, which, although they find a special applicability to oil-cans, are adapted to a variety of uses.

Our invention is intended to afford, besides means of assemblage, a simple, economical, durable, and ornamental finish for the raw edges of the guard structure, which, without some provision for disposing of them or covering them, would project at top and bottom of the can.

Heretofore in can-guards made of metal resiliently supported upon and against the sides of the can, and more particularly in such guards made of woven wire, the method of finishing generally employed has been that of confining the raw edges of the woven-wire fabric at top and bottom of the can; but this is objectionable, because it reduces the resiliency of the guard at certain points, because it constitutes a comparatively permanent guard to a can, and because it affords unsatisfactory means for replacing the glass portion of a guarded can in case of breakage in shipment or otherwise. An effort to meet some of these objections has been made in finishing the upper edge of a can-guard with a transverse course of spiral wire interwoven with the side of the guard. This method, however, is not only unsatisfactory in practice, but is expensive to make. No provision has hitherto been made for equipping a woven-wire guard with a woven-wire bottom to protect the bottom of a can, as well as the sides thereof.

By our invention we produce a complete self-contained woven-wire can-guard, one having rigid and unyielding portions adjacent to the top and bottom of the can, respectively, one in which the bottom as well as the

sides may be made of woven-wire fabric, one in which provision is made for securely attaching the bail to the guard, and one which may be readily slipped, as occasion may require from or upon the glass receptacle which it is designed to protect.

In the accompanying drawings, which constitute a part of this specification, Figure I is a side elevation of a preferred form of embodiment of our invention as applied to an oil-can. Fig. II is a vertical diametrical section, partly in elevation, of the subject-matter of Fig. I and taken at right angles to the view shown in Fig. I. Fig. III is a diametrical vertical section of the upper bead-blank of our can-guard. Fig. IV is an elevation of the side portion of the can-guard. Fig. V is a vertical central section of the bottom guard member; and Fig. VI is a view similar to Fig. III, illustrative of the lower bead-blank. Figs. III to VI, inclusive, constitute a group illustrative of the mode of manufacture of our can-guard in its preferred form of embodiment. Fig. VII illustrates a straight strip of tin or blank for the manufacture of a bead for our guard. Fig. VIII is a view similar to Fig. II, illustrating the lower part of a can and its guard with the interposition between them of a metallic disk-shaped bottom plate. Fig. IX is a top plan view of the bottom plate shown in Fig. VIII detached.

Referring to the numerals on the drawings, 1 indicates a glass oil-can, representative of any receptacle of fragile material which it is desired to protect against breakage from shock, jar, or blow delivered against its sides or bottom. The oil-can 1 is provided with the usual metallic cap 2, filling screw-nipple 3, and discharge-spout 4. The guard for the can is preferably made of metal having resilient bends bearing against the surface of the can and supported thereby about the same. We prefer to make the guard of the woven-wire type 6, as illustrated, and now of familiar use in the art. The side member of the guard is preferably a sleeve of woven wire of suitable dimensions to fit the can 1. The said sleeve is trimmed square across at top and bottom, as indicated at 7 and 8 in Fig. IV. A bottom member 9 is made to fit within said sleeve and is

provided with a circular depending edge 10, which when the bottom member 9 is inserted into the sleeve against the end of a mandrel or cylinder, which we preferably employ as a temporary assembling member in manufacture, assumes a position in practicable proximity to the bottom 8 of the sleeve. In that position a partially-bent circular bead-blank 12, (compare Figs. VI and VII,) having been previously shaped to required diameter, is applied over the juxtaposed ends of the sleeve and of the bottom member 9, where, being held in that position, it is converted, as by the operation of a suitable machine, into the perfect bead or finish member 14. (Clearly shown in Figs. I, II, and VIII.) The edges of the blank 12 are in the beading operation forced close together against the material of which the sleeve and the bottom member 9 are made, and it suffices of itself not only to assemble and securely unite the bottom and sides of the guard, but also to stretch the bottom member 9 taut across the mandrel, which in manufacture corresponds to the can which is afterward substituted for it. The bead-blank 12 may be made into circular form from a strip of metal, as shown in Fig. VII, and united at its contiguous ends by a soldered connecting-piece.

The upper edge 7 of the sleeve is in practice capped with a partially-bent bead-blank 15, which when applied after the manner of application of the bead-blank 12 is likewise completed into a bead or finish member. (Shown in Figs. I and II.) The bead 16, like the bead 14, firmly holds the wires of the guard and is also preferably provided upon opposite sides with eyelets 17, into which are inserted and secured the bent ends of a suitable bail 18. Each eyelet 17 may consist of a properly-bent piece of wire shaped like a cotter-key, for instance, and after insertion into an aperture in the bead blank 15 may be spread as to its ends flat against the inner wall of the bead-blank, as shown in Fig. I, and so secure the bail to the guard, if desired, without the use of solder.

If desired, the bottom member may be supplied by a disk-shaped metal plate 20 (compare Figs. VIII and IX) for additional protection for the bottom of the receptacle 1, against which it is held in place by the bead 14. The plate 20 is preferably only a flat metal disk and may be, as specified, employed for additional protection of the bottom of the receptacle 1 in connection with the woven-wire bottom member 9. For clearness of illustration it is shown in Fig. VIII without said bottom member, being supported, whether with or without the same, by the finish member 14. The bead-blank 15 having been applied to the sleeve, which constitutes the side of the guard, and

secured in place by the bending of said bead-blank into the bead 16, the sleeve being slipped upon its mandrel and the bottom member 9 being placed into position, the parts are secured together by the application thereto in the manner described of the bead-blank 12 and its subsequent completion into the bead 14. The bail 18 is preferably secured, in the manner described, to the bead 16 by the eyelets 17, that step of the manufacture being taken, as has been specified, before the bead-blank 15 is applied and secured to the sleeve.

After the completion of the guard by the application and finishing up of the bead 14 the guard is withdrawn from the mandrel and is then ready for proper application for use to the can of proper dimensions. The can corresponds, as has been specified, to the mandrel, and the guard may be easily slipped over it, when it should fit it snugly at all points. If the disk-bottom 20 be employed, it is first set into position in the bottom of the sleeve above the bead 14, when upon the insertion of the can 1 it will be securely held in the required position. If the can 1 should break or if it become clouded with dust or require to be removed from the guard for any purpose, that may be readily effected by simply pulling the can and the guard apart, while the guard may be again applied to the same or another can by a reverse operation whenever required.

What we claim is—

1. In a can-guard or the like, the combination with a side member provided with resilient bends, of a bottom member having an edge in proximity to the edge of the side member, and a bead securing the parts together and covering the edges of said members.
2. In a can-guard or the like, the combination with a side member, of a separate woven-wire bottom member assembled with and secured thereto.
3. In a can-guard or the like, the combination with a side member, woven-wire bottom member, and bead securing the side and bottom members together.
4. In a can-guard or the like, the combination with a woven-wire side member and woven-wire bottom member, of a bead securing the side and bottom members together, and a bead secured to the upper edge of the side member and constituting a finish therefor.
5. In a can-guard or the like, the combination with woven-wire side and beads substantially as set forth, of a metal-disk bottom adapted to fit within the side member against the bottom bead, substantially as and for the purpose set forth.
6. In a can-guard or the like, flexible side

and bottom members united by a bead-blank
formed to constitute a rigid finish member.

7. In a can-guard or the like, the combina-
tion with a side member made of woven wire,
5 of a detachable bottom member assembled
within and secured thereto, independently of
the can.

In testimony whereof we have hereunto

signed our names in the presence of two sub-
scribing witnesses.

CHARLES S. BARON.
JAMES F. HAFLEY.

Witnesses:

RUSH ABBOTT,
CHANCE E. DEWALD.