F. G. GRIMLER.

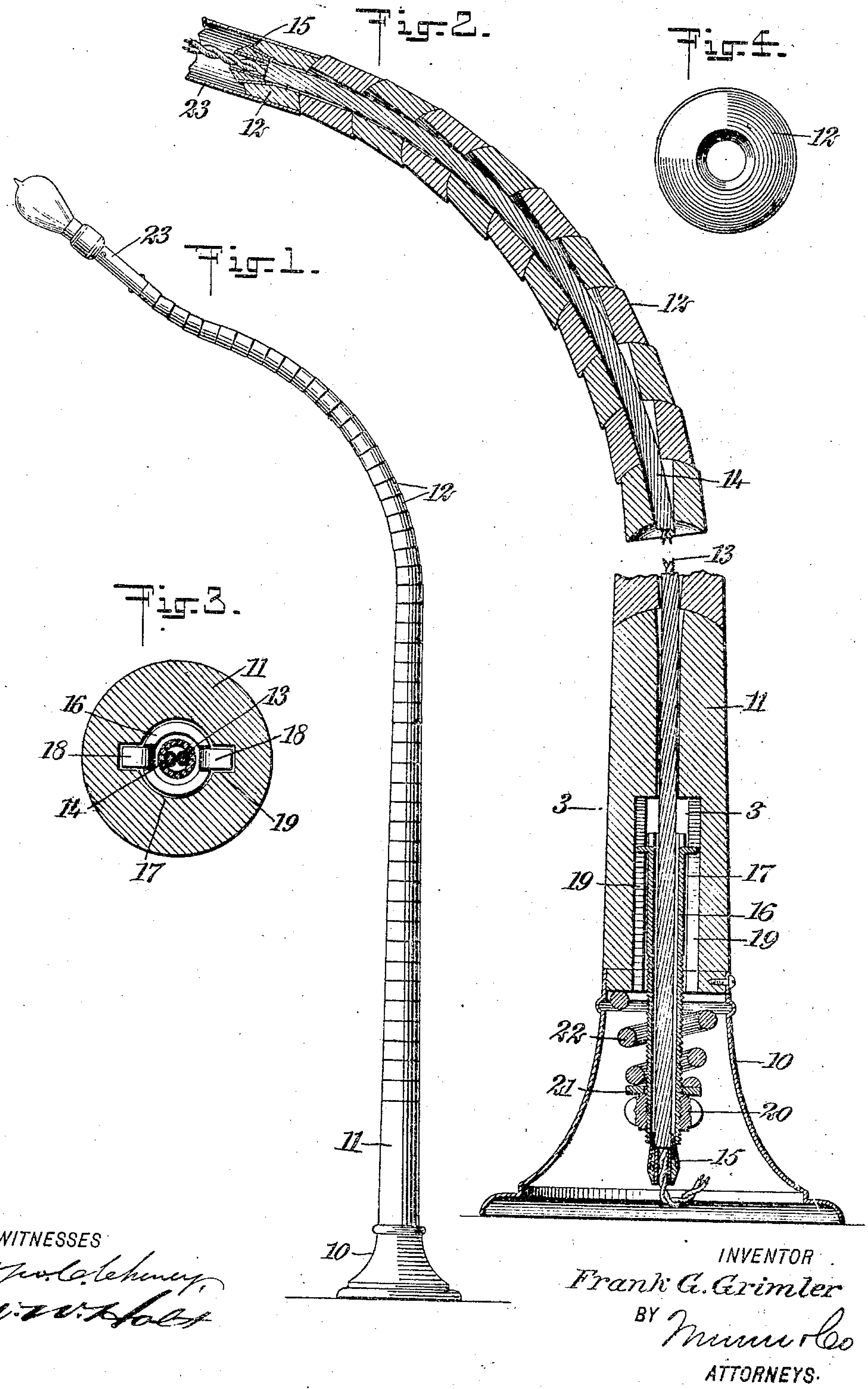
SECTIONAL STAND.

APPLICATION FILED MAR. 13, 1908.

912,308.

Patented Feb. 16, 1909.

2 SHEETS—SHEET 1.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 5.

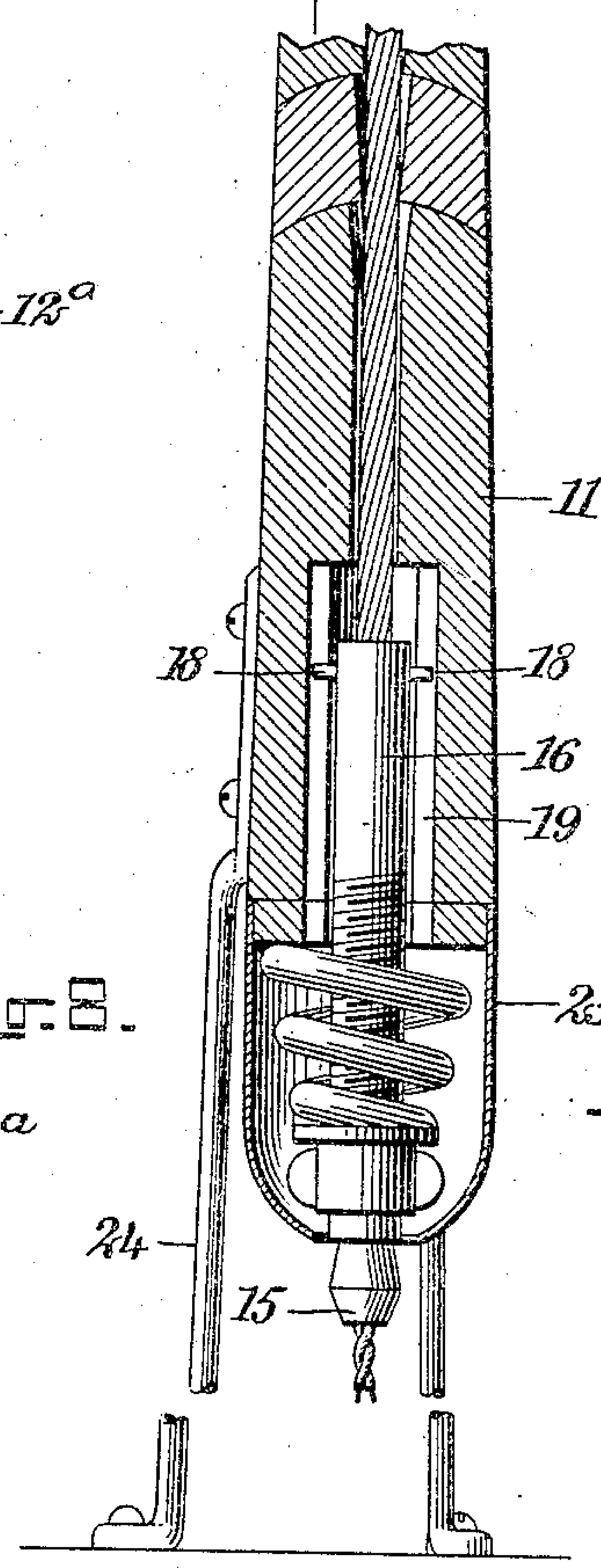


Fig. 6.

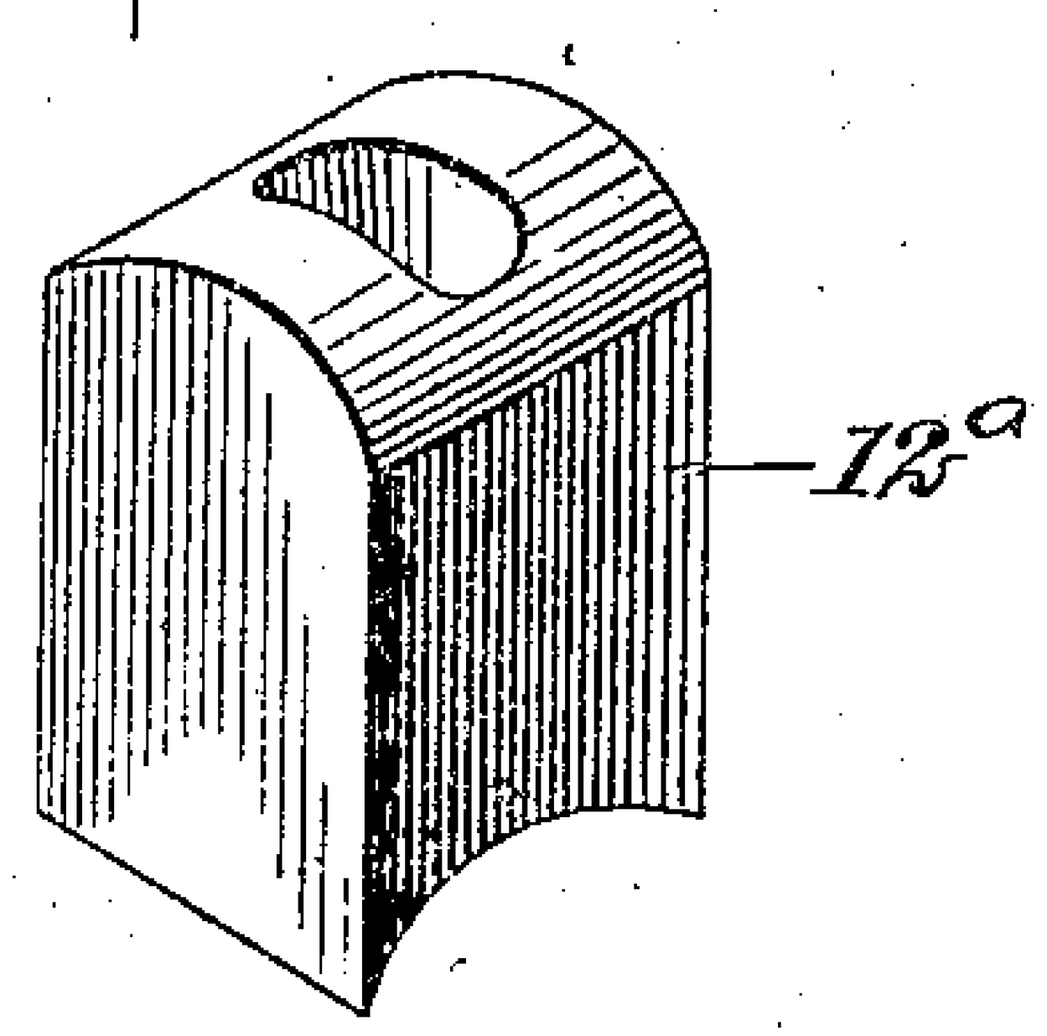


Fig. 7.

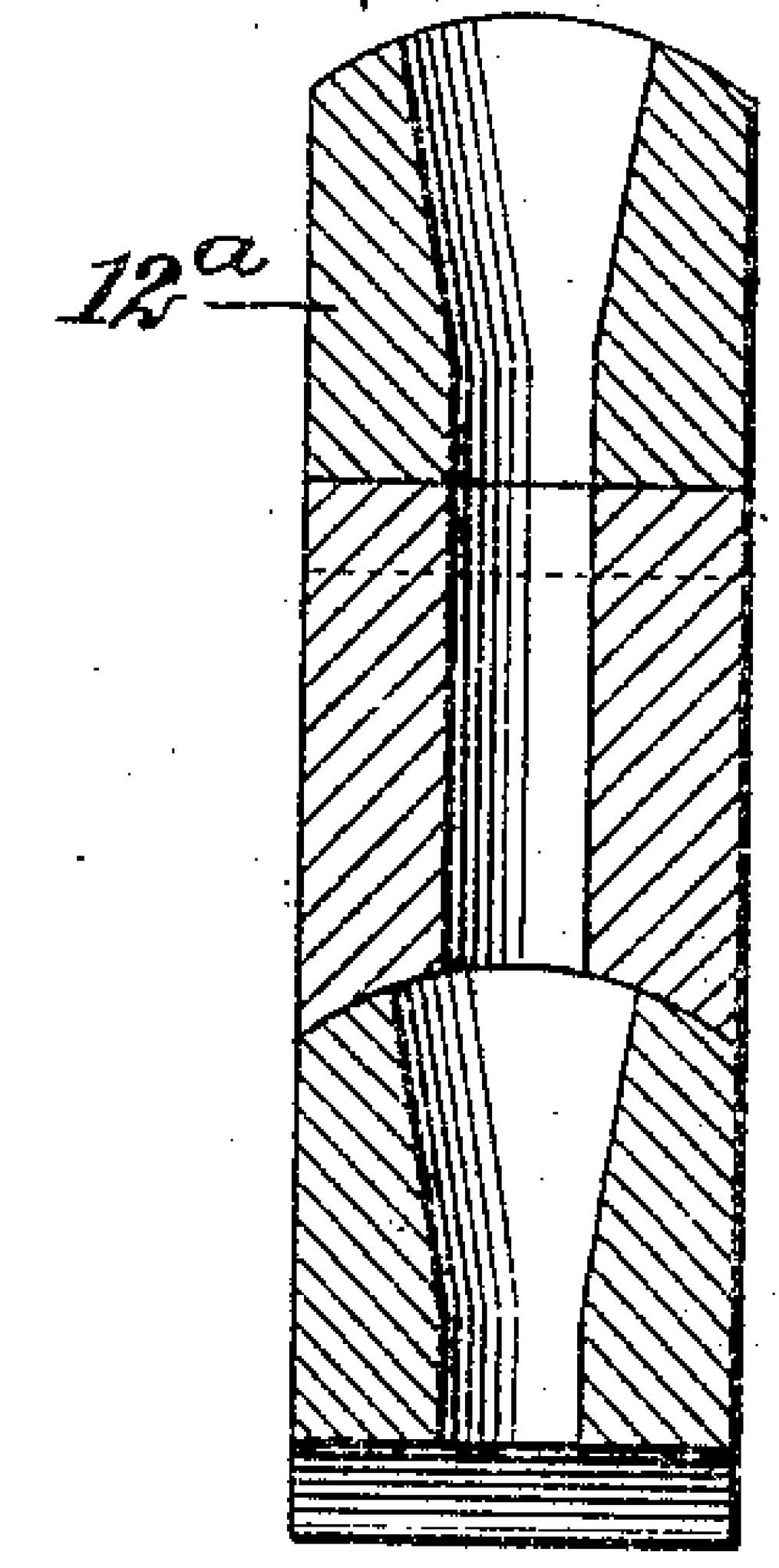


Fig. 8.

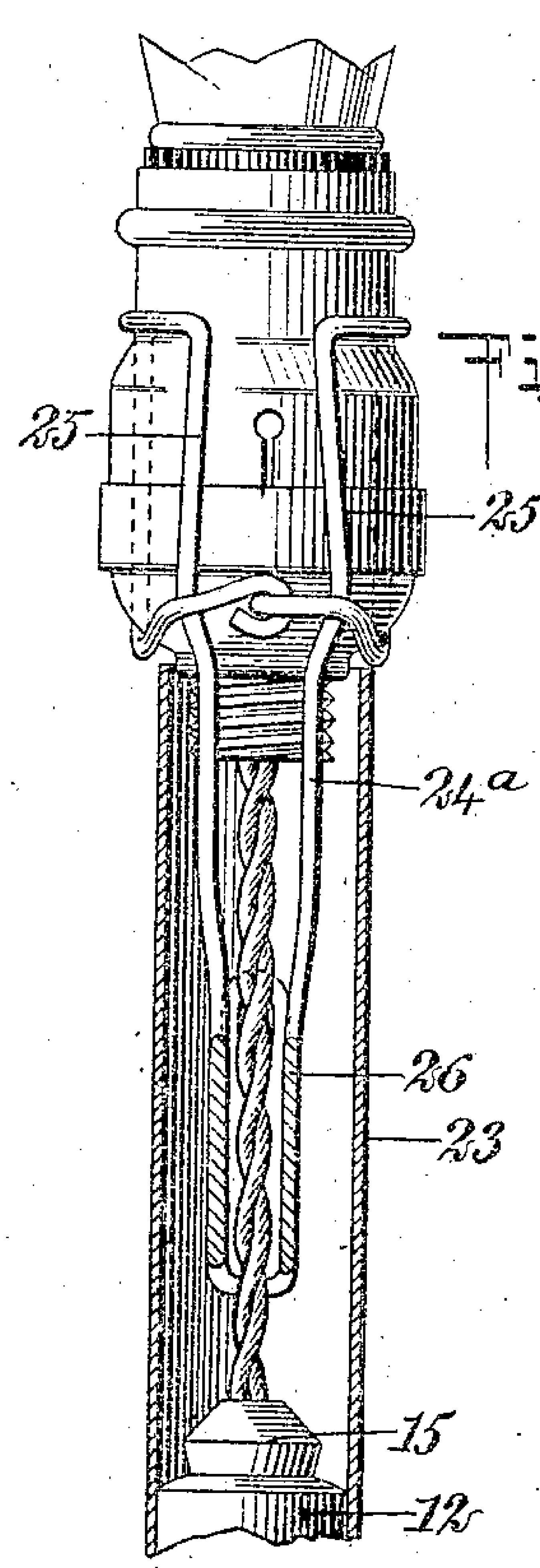


Fig. 9.

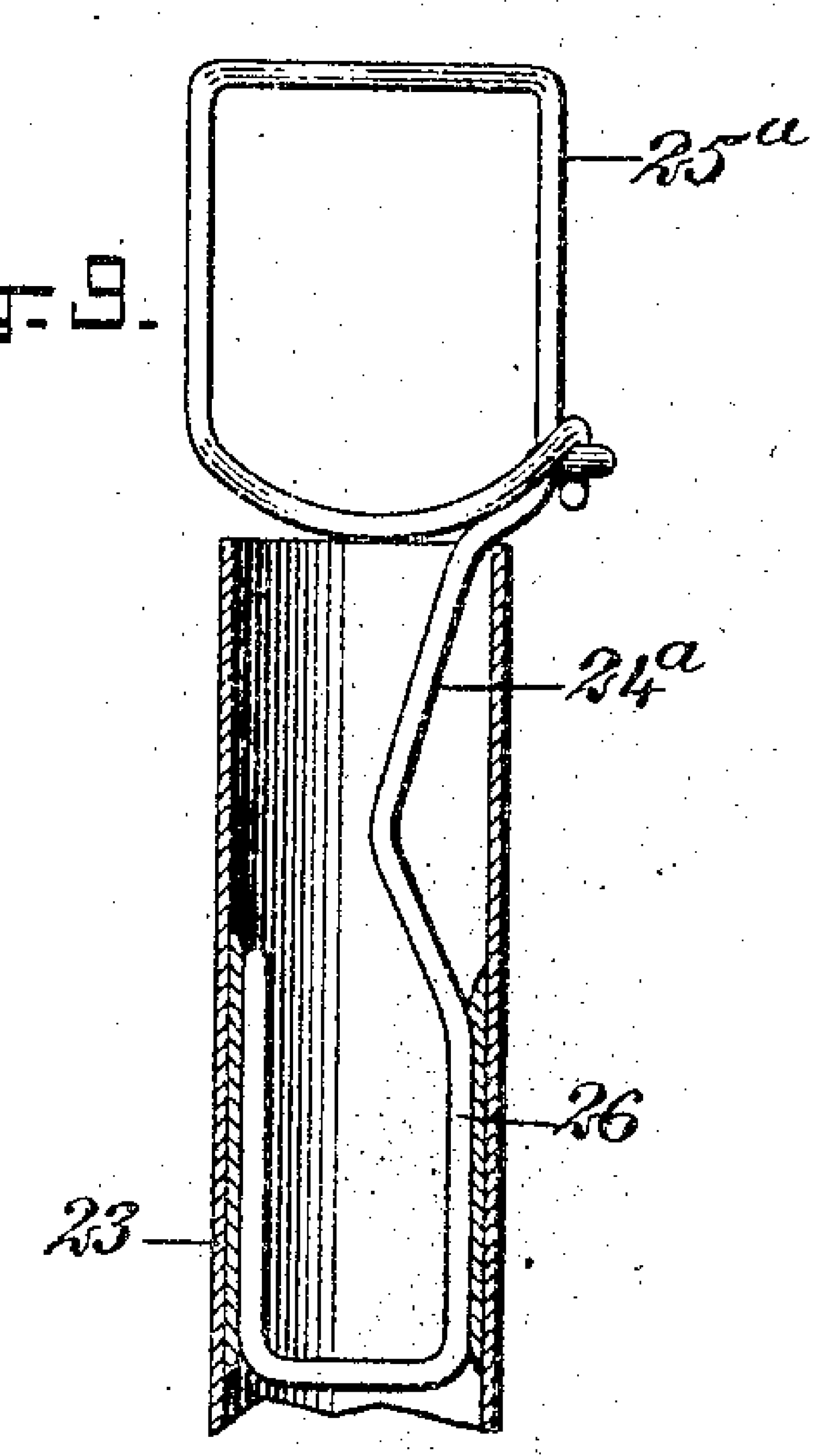
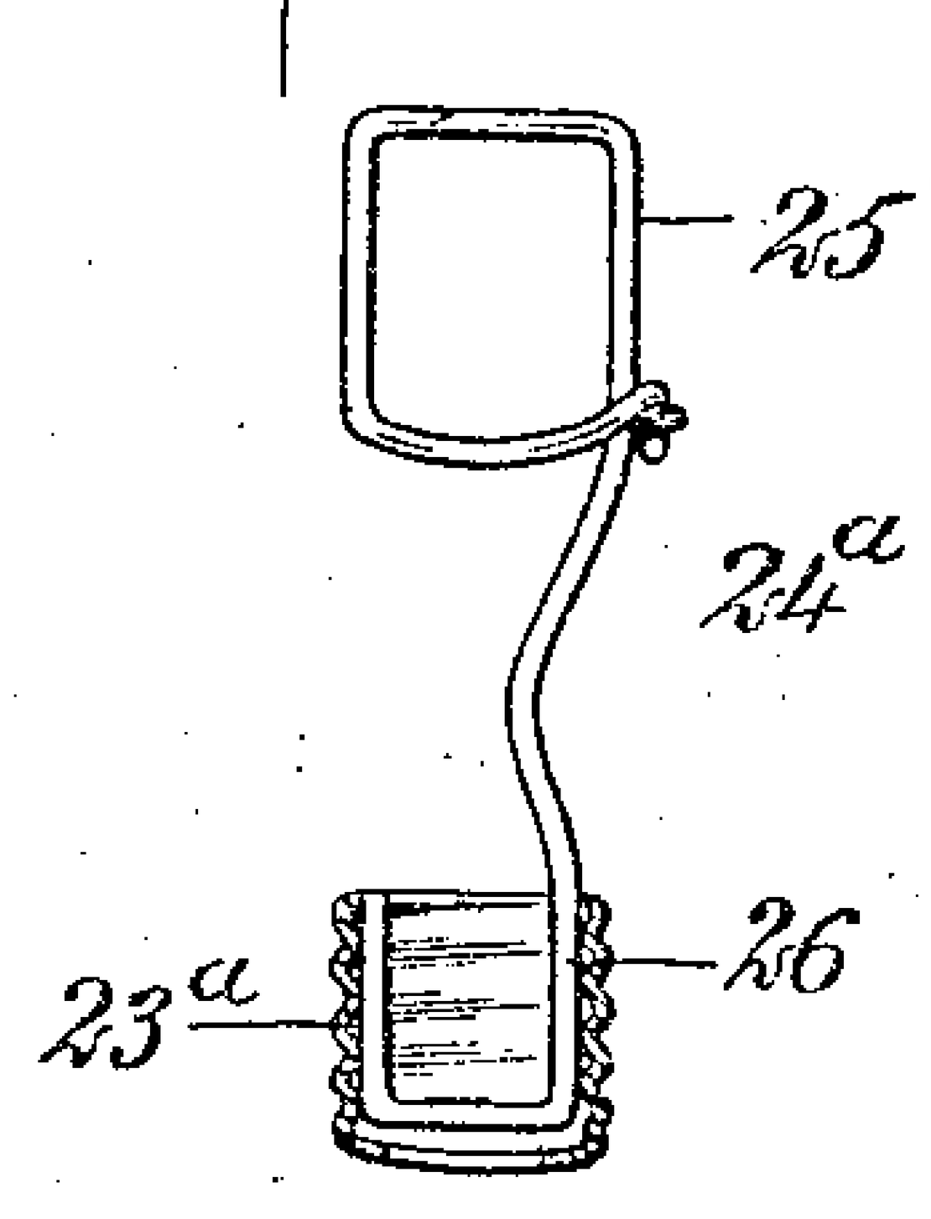


Fig. 10.



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UNITED STATES PATENT OFFICE.

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SECTIONAL STAND.

No. 912,308. Specification of Letters Patent. Patented Feb. 16, 1909.

Application filed March 13, 1908. Serial No. 420,787.

To all whom it may concern:

Be it known that I, FRANK G. GRIMLER, a citizen of the United States, and a resident of Buffalo, in the county of Erie and State of New York, have invented a new and Improved Sectional Stand, of which the following is a full, clear, and exact description.

This invention is an improvement in sectional stands of the character disclosed in Letters Patent Number 870,429, granted to me November 5, 1907.

The present invention resides in an improved means by which the several movable members or units of the stand are held in assembled relation; also in improvements in certain species of the units themselves, together with means for detachably holding the lamp socket at the upper end of the stand.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of a stand embodying my improvements; Fig. 2 is a central vertical section of the same on an enlarged scale; Fig. 3 is a cross-section on the line 3—3 of Fig. 2; Fig. 4 is a plan of one of the units of which the stand is composed; Fig. 5 is a central sectional view through the lower portion of a slightly modified form of stand; Fig. 6 is a perspective view of a modified form of unit; Fig. 7 is a fragmentary sectional view through a stand made up of the units shown in Fig. 6; Fig. 8 is a view partly in central vertical section, showing a modification of the means for holding the lamp; Fig. 9 is a vertical section of the holder shown in Fig. 8, taken at substantially right-angles thereto; and Fig. 10 is a view partly in section, showing a modified form of holder.

Referring more particularly to the form of the invention shown in Figs. 1 to 4 inclusive, it will be seen that the stand comprises a base 10, preferably constructed of sheet or cast metal of ornamental form, a fixed unit 11, a series of units 12, relatively shorter than the unit 11, and conductors 13, passing through the base and several units, having connections operating to retain the several units in assembled relation. This is effected by providing the conductors with a casing 14, preferably of wire spirally wrapped, which is secured at opposite ends to conical plugs 15, said plugs respectively seating in a counterpart recess formed in the upper end of the top unit and the lower end of a tubular guide member 16, the latter having the lower portion thereof threaded and is slidable in an enlarged or counterbored portion 17 provided in the lower end of the fixed unit 11. The tube 16 is held against rotation by providing gibs at opposite sides, preferably at its upper end, formed by bending the metal outwardly from the body of the tube, as indicated at 18, which gibs slide in ways 19, formed in the counterbore of the unit 11. On the threaded portion of the guide tube 16 are a nut 20, a washer 21, and a spring 22 arranged between the washer and the unit 11, this construction obviously providing for the adjustment of the tension on the flexible casing 14 of the conductors, whereby the force with which the several units are pressed together, and consequently the stiffness of the stand, may be varied.

The units 12 have concave and convex opposite ends, as in the construction disclosed in my patent above referred to, but are, however, modified to the extent of forming their central apertures of uniform taper instead of enlarging these apertures in the upper portion of each unit only. In attaching the lamp in this form of my invention I have shown a tube 23 which fits over and is secured to the top unit 12, the lamp socket being received and held in the outer end of this tube.

The construction illustrated in Fig. 5 is in all respects the same as that just described, except at the lower portion of the stand, where, instead of supporting the unit 11 on a sheet metal base, the latter is replaced by supporting legs 24, and a casing 25 telescoping over the lower end of the unit 11 and inclosing the adjusting mechanism.

In Figs. 6 and 7 I have shown units 12^a, corresponding to the units 12, each unit having curved faces contacting with the counterpart faces of the next adjacent unit, and with the direction of curvature of the faces of the same unit extending at substantially right-angles to each other. In this form of construction it is necessary to enlarge the aperture at one end of each unit only in the direction in which the next adjacent unit turns, since in any stand made up of units thus constructed, two adjacent units will move as though rigidly connected together, when the stand is bent in one direction, and when the

stand is bent in the opposite direction the position of the units which move in unison will be shifted.

Figs. 8 and 9 illustrate a slightly different arrangement for holding the socket of the lamp, wherein, instead of retaining the socket by screws in the tube 23, as shown in Fig. 1, I provide in connection with the tube, a wire holder 24ª frictionally engaged or permanently fixed within the tube and having oppositely-disposed clamping jaws 25ª for embracing the lamp socket at opposite sides. This wire holder is preferably constructed of one piece of wire by bending the wire upon itself intermediate its length, and providing the looped or double portion with a U-shaped member 26, of such size to bind within the tube, and then forming opposed laterally curved loops in the free ends of the wire and joining the extremities thereof, as illustrated in Fig. 8, thus producing the jaws of the holder. If desired, the conductors may be run to the lamp at the outside of the tube by moving the clamping jaws a sufficient distance above the top edge of the tube.

In Fig. 10 I have shown the wire holder secured within a threaded thimble 23ª which replaces the tube 23 and is designed to be threaded directly into a socket.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A sectional stand composed of a series of units, certain of said units having curved faces contacting with counterpart faces of the next adjacent units, and the direction of curvature of the faces of the same unit being different.

2. A sectional stand composed of a series of units movable one upon the other, certain of said units having curved contacting faces, with the direction of curvature of one face arranged at substantially right-angles to the direction of curvature of the other face.

3. A holder having oppositely-disposed clamping jaws for embracing a lamp socket, and a U-shaped shank adapted to frictionally engage within a tube.

4. A holder constructed of a single piece of wire bent upon itself intermediate its length and into U-shape for engaging within a tube, and with the free ends of the wire bent to form oppositely-disposed clamping jaws for embracing the socket of a lamp.

5. A sectional stand composed of a series of units relatively movable one upon the other and each having an aperture, a flexible member passing through the apertures of the units, having means for engaging the stand at one end, a guide tube surrounding and held on the member at the opposite end and having a threaded portion, a nut on the threaded portion of the guide tube, and a spring interposed between the stand and nut.

6. A sectional stand composed of a series of units relatively movable one upon the other, each having an aperture, a flexible member passing through the apertures of the units, a guide tube, plugs secured to the opposite ends of said member, respectively engaging the stand and the guide tube, a nut threaded on the guide tube, and a spring interposed between the stand and nut.

7. A sectional stand composed of a series of units relatively movable one upon the other and each having an aperture, and the bottom unit provided with a counterbored portion on its under side, a guide tube slidable in the counterbored portion of the bottom unit, having a gib projecting from the side thereof engaged in a way in the bottom unit, a flexible member passing through the apertures of the units and through the guide tube, having conical plugs attached to its opposite ends respectively engaging with the top unit of the stand and with said tube, a nut threaded on the tube, and a spring interposed between the nut and the bottom unit of the stand.

8. The combination of a stand for carrying a lamp, a tube telescoping over the upper end of the stand, and a wire holder having a substantially U-shaped shank, engaging within the tube, and provided with opposed clamping jaws adapted to embrace the lamp.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK G. GRIMLER.

Witnesses:
K. A. GRIMLER,
G. J. BURLEY.