

(No Model.)

C. F. WALDRON.

CARRIAGE LAMP.

No. 333,365.

Patented Dec. 29, 1885.

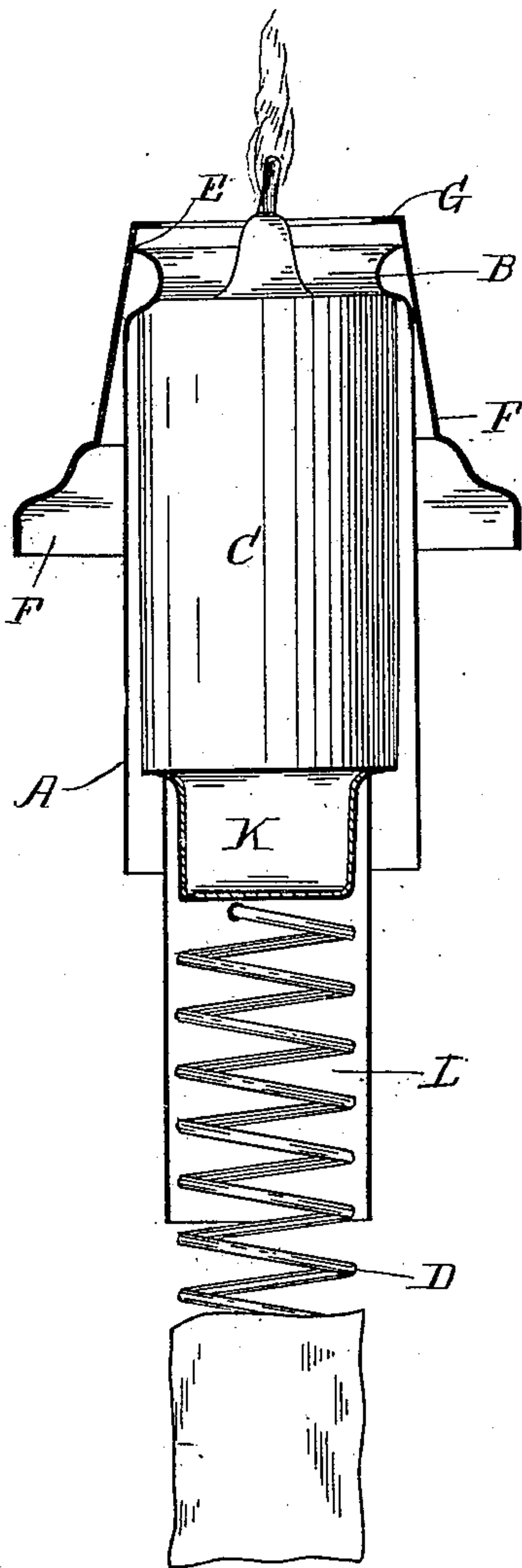


Fig. 2.

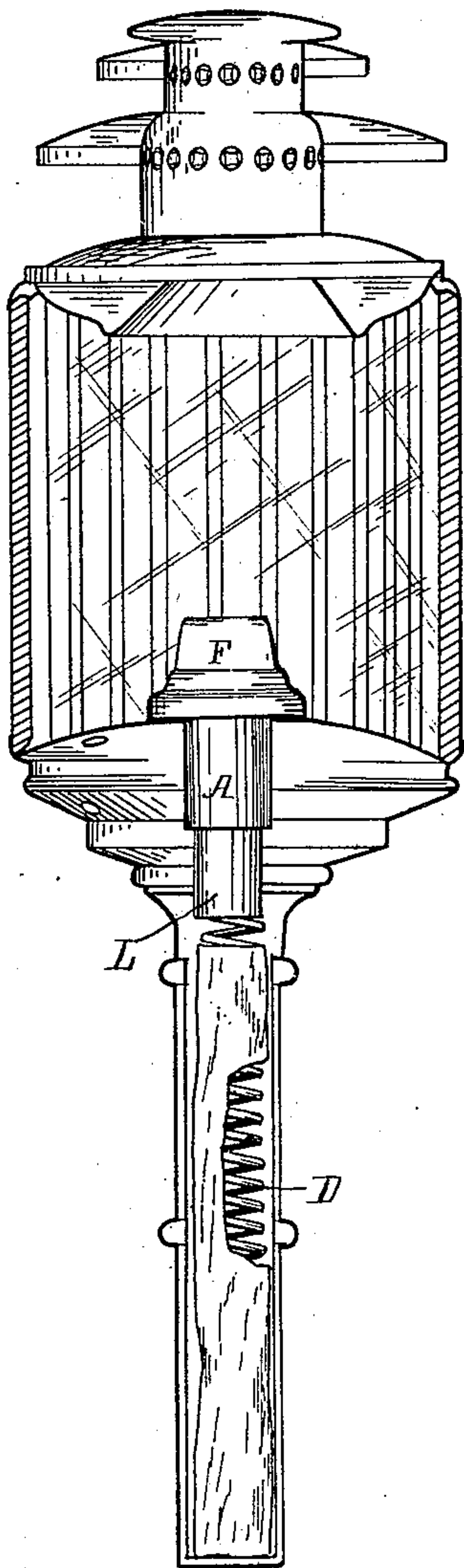


Fig. 1.

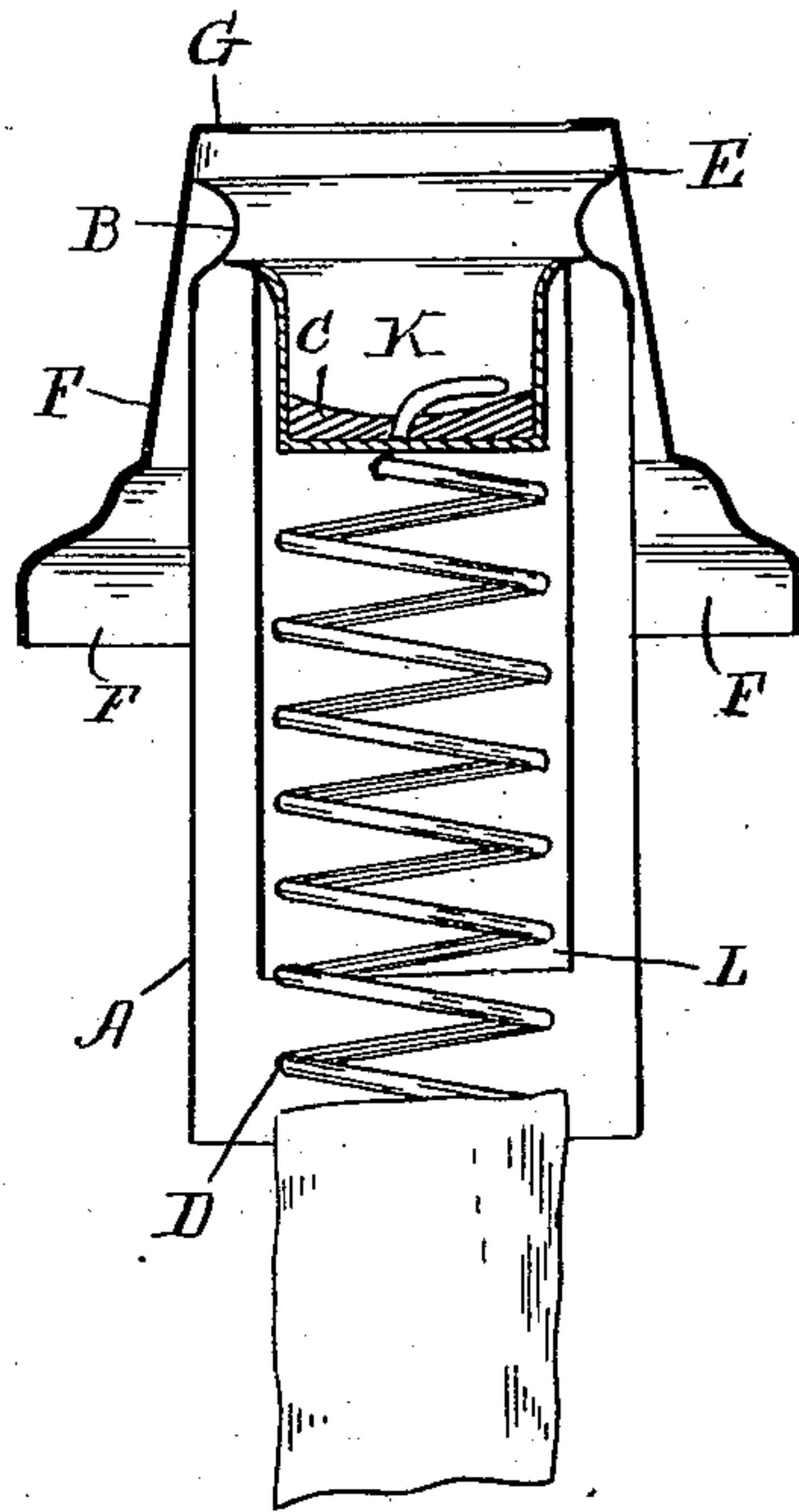


Fig. 3.

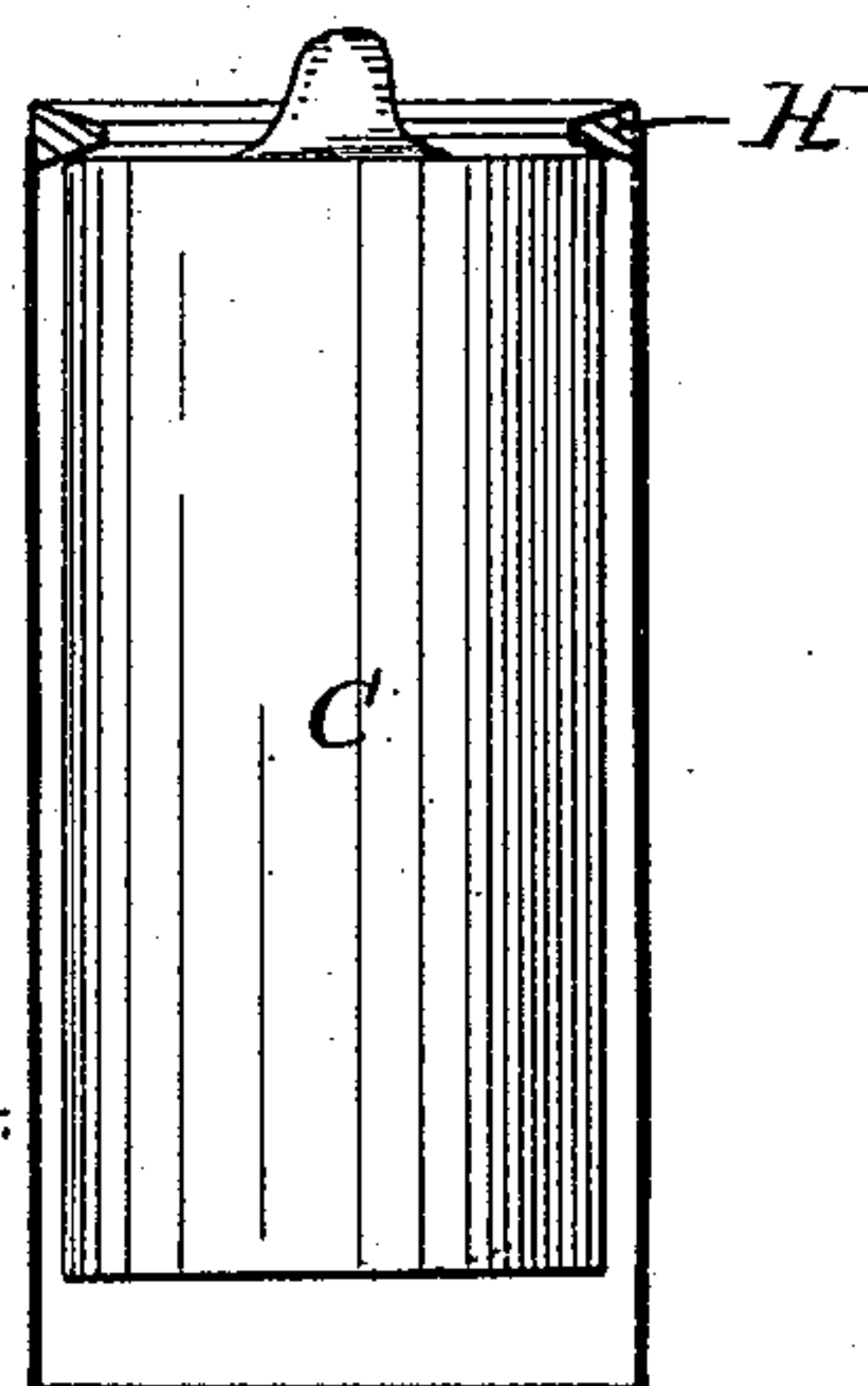


Fig. 4.

WITNESSES:
Chas. S. Gooding.
E. A. Phelps,

INVENTOR:
Charles F. Waldron,
by A. H. Shaver, Attorney

UNITED STATES PATENT OFFICE.

CHARLES F. WALDRON, OF BOSTON, MASSACHUSETTS.

CARRIAGE-LAMP.

SPECIFICATION forming part of Letters Patent No. 333,365, dated December 29, 1885.

Application filed February 13, 1885. Serial No. 155,811. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. WALDRON, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Carriage-Lamps; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

10 This invention is in the nature of an improvement on that set forth in the Letters Patent No. 280,101 granted to me June 26, 1883, for carriage-lamp. In said patent I showed a lamp adapted to consume a candle
15 pressed upwardly by a spring; and a peculiarity of that invention was a cap having near its top an inward bead for the upper end of the candle to press against, and above the outward swell or bead an inward-turned barrier to prevent slopping the melted wax or
20 tallow. The foot of the candle rested on the upper edges of a cup seated within the top coil of the supporting-spring.

My present improvement relates to the same
25 class of lamps, and accomplishes the same results by somewhat different means. The cap is destitute of the inward bead, but has the inward-turned barrier at its extreme top, and gradually enlarges from that point down-
30 wardly. Within this tapering cap is a candle-tube distinct from the cap, and having at its top the inward bead or an equivalent annular rest for the candle, serving to keep it from being pressed upwardly too far. The
35 upper edge of this tube above the bead is pressed against the tapering inner surface of the cap. The cup at the foot of the candle rests in a tube or sleeve within which the supporting-spring is secured.

40 In the drawings, Figure 1 shows in section a lamp provided with my improvements. Figs. 2 and 3 are enlarged details. Fig. 4 is a modification of the candle-tube.

A is the cylindrical candle-tube having
45 near its upper end the inward bead, B, against which the candle C is pressed by the spring D.

F is the cap, spun up from a disk of sheet metal and given a tapering form, about as shown. At its extreme upper edge is a hori-
50 zontal barrier, G, turned inward toward the candle-wick. The flaring upper edge, E, of

the tube bears against the tapering inner wall of the cap at a point just below the barrier G, the contact being close owing to the upward pressure of the spring, and the parts
55 being proportioned to each other. I prefer to solder the tube permanently in this position within the tapering cap. By this arrangement a chamber is formed around the top of the candle by the tube and cap con-
60 jointly to retain the melted wax or tallow, so that it shall not be slopped over or thrown out by any ordinary movements of the vehicle.

In the manufacture of these candle-tubes I propose to make the cylindrical part of tin, 65 with the seam closed by solder, and to form the beaded top of it of a grooved continuous ring of thin brass soldered to the end of the tin tube. I sometimes employ the construction indicated in Fig. 4, where an equivalent
70 for the bead B and edge E is formed by securing a beveled ring, H, at the top of the tube as a stop for the candle. The candle is pressed against the bottom of the ring, and the outer edge of the ring bears against the
75 tapering cap, as in the corresponding parts B E in the other figures. The foot of the candle rests on the upper edges of the flanged metallic cup K at the top of a tin sleeve, L, which surrounds the upper end of the spring, to
80 which it is secured. The body of the spring is inclosed in a bag or wrapper to prevent it rattling in the long stem of the lamp, as usual.

It is not essential that the cap F should have the uniform taper shown in the drawings. 85

I disclaim the construction shown in the patent on candle-lamps, No. 105,020, granted to Williams and Taber, July 5, 1870. In said patent a slotted plate or shield is introduced between the upper end of the candle and its
90 flame, the slot allowing the wick to protrude through and be lighted above it, while the shield prevents the direct radiation from the flame downward to retard melting the wax. Furthermore, said patent does not provide an
95 annular barrier above the melted wax to prevent its slopping; but the top of the candle-tube flares outwardly and does not come into contact with the inner surface of the cap, thus differing from my device in two essential fea-
100 tures. My improvement, therefore, insures a much stronger light, since I provide abun-

dant food for the flame; and by the joint action of the tube and cap an inclosed chamber is formed, preventing the melted wax from spilling down inside of the lamp.

5 I claim as my invention—

In a carriage-lamp provided with the candle-spring D, cup K, and sleeve L, the combination of the cap F, having at its upper edge the inward-turned barrier G, with the candle-
10 tube A, formed at its upper end with the in-

ward bead or ring B, and held firmly in contact with the inner surface of the cap F, substantially as and for the purpose set forth.

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

CHAS. F. WALDRON.

Witnesses:

A. H. SPENCER,
E. A. PHELPS.