

(No Model.)

W. J. LOCKE & I. THAYER.
SAFETY SELF EXTINGUISHING CAR HEATING STOVE.

No. 401,358.

Patented Apr. 16, 1889.

Fig. 1.

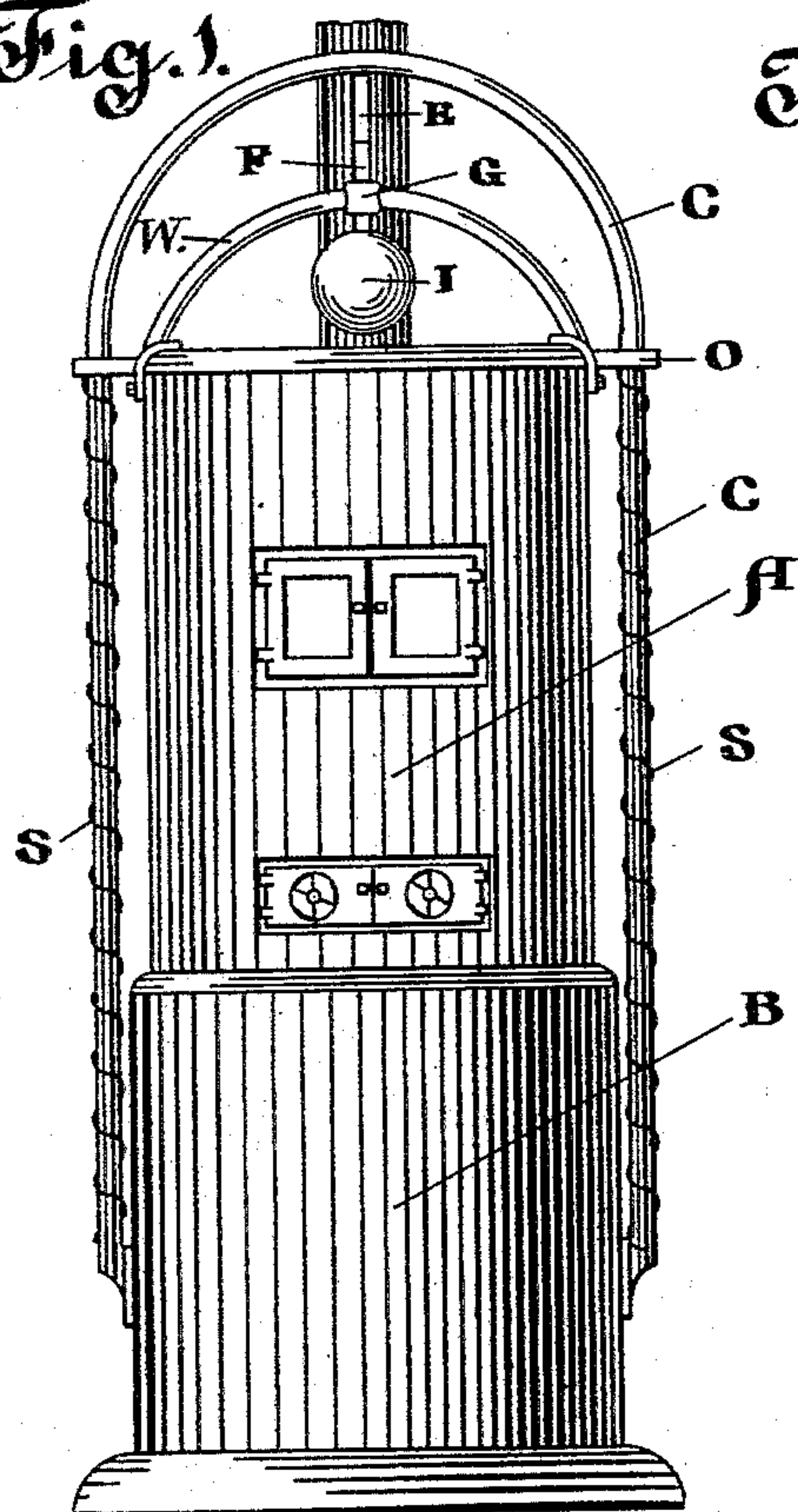


Fig. 2.

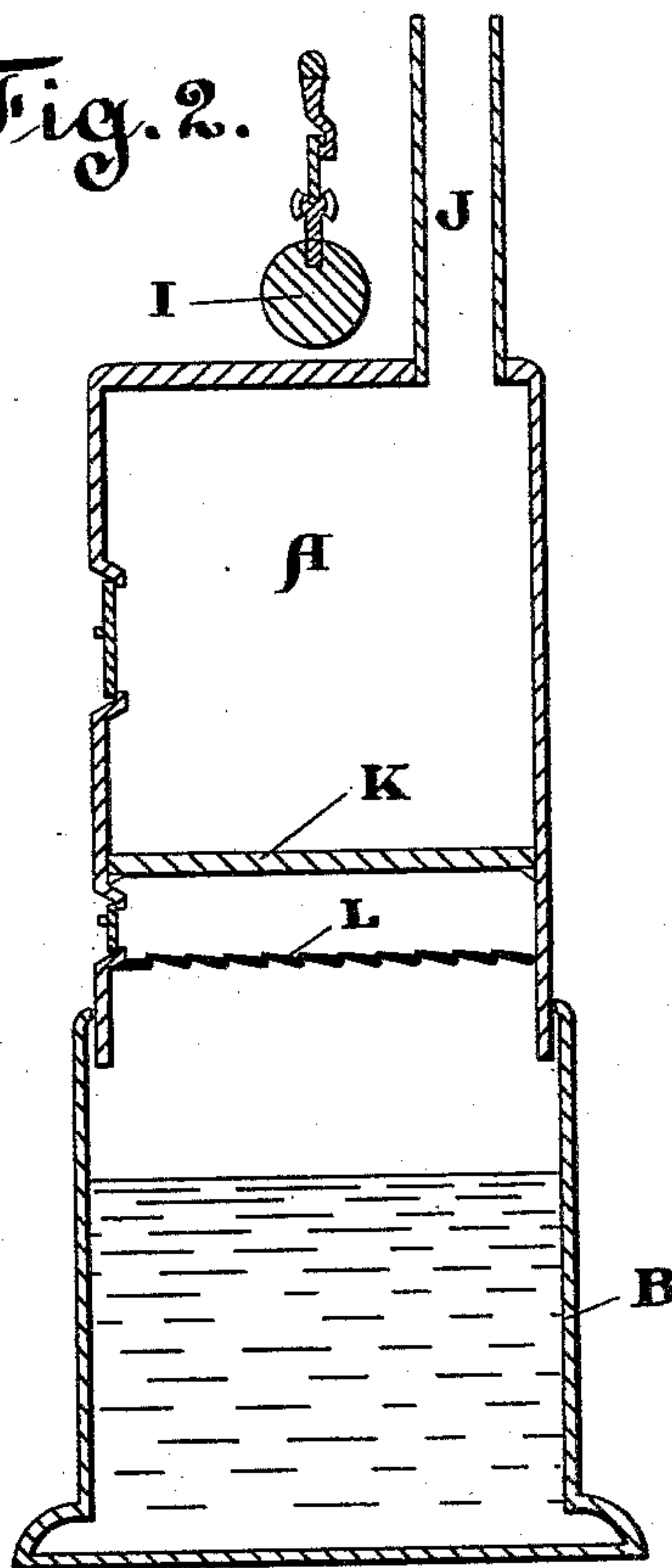


Fig. 4.

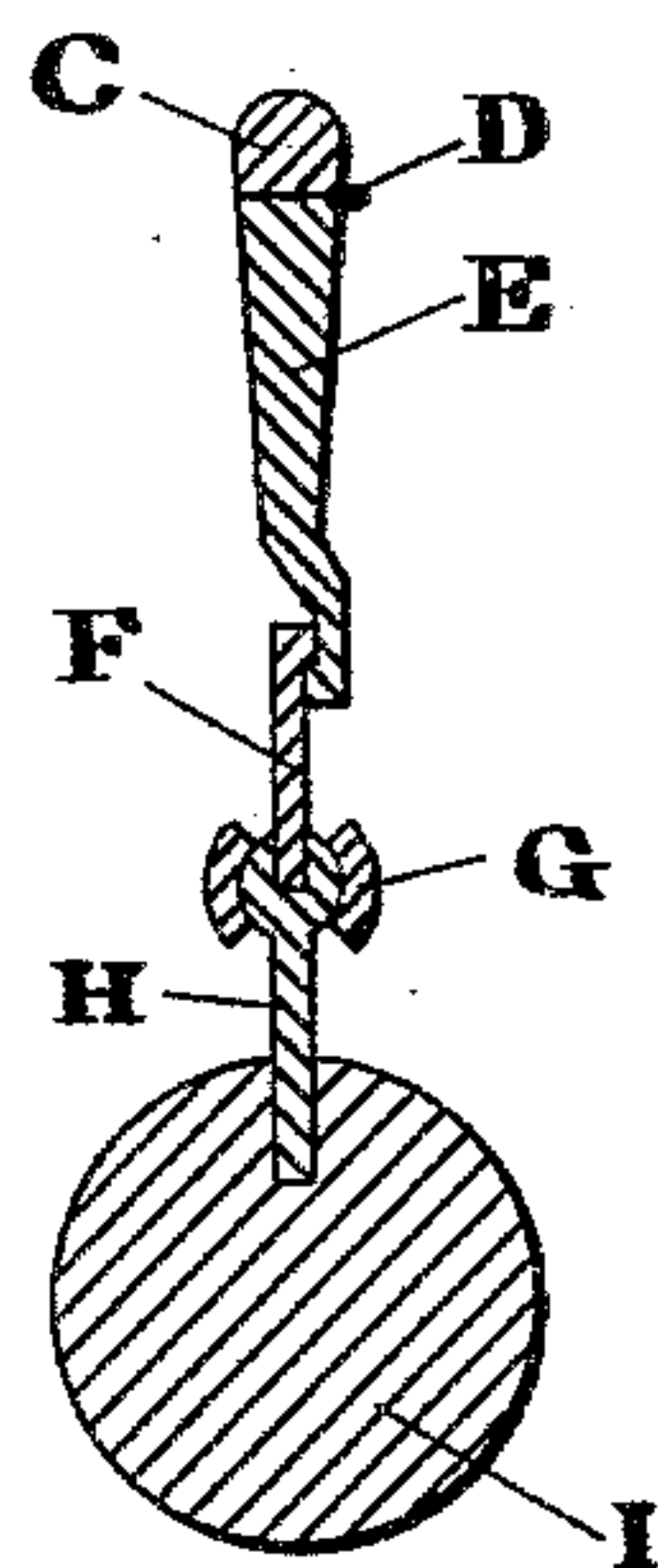


Fig. 3.

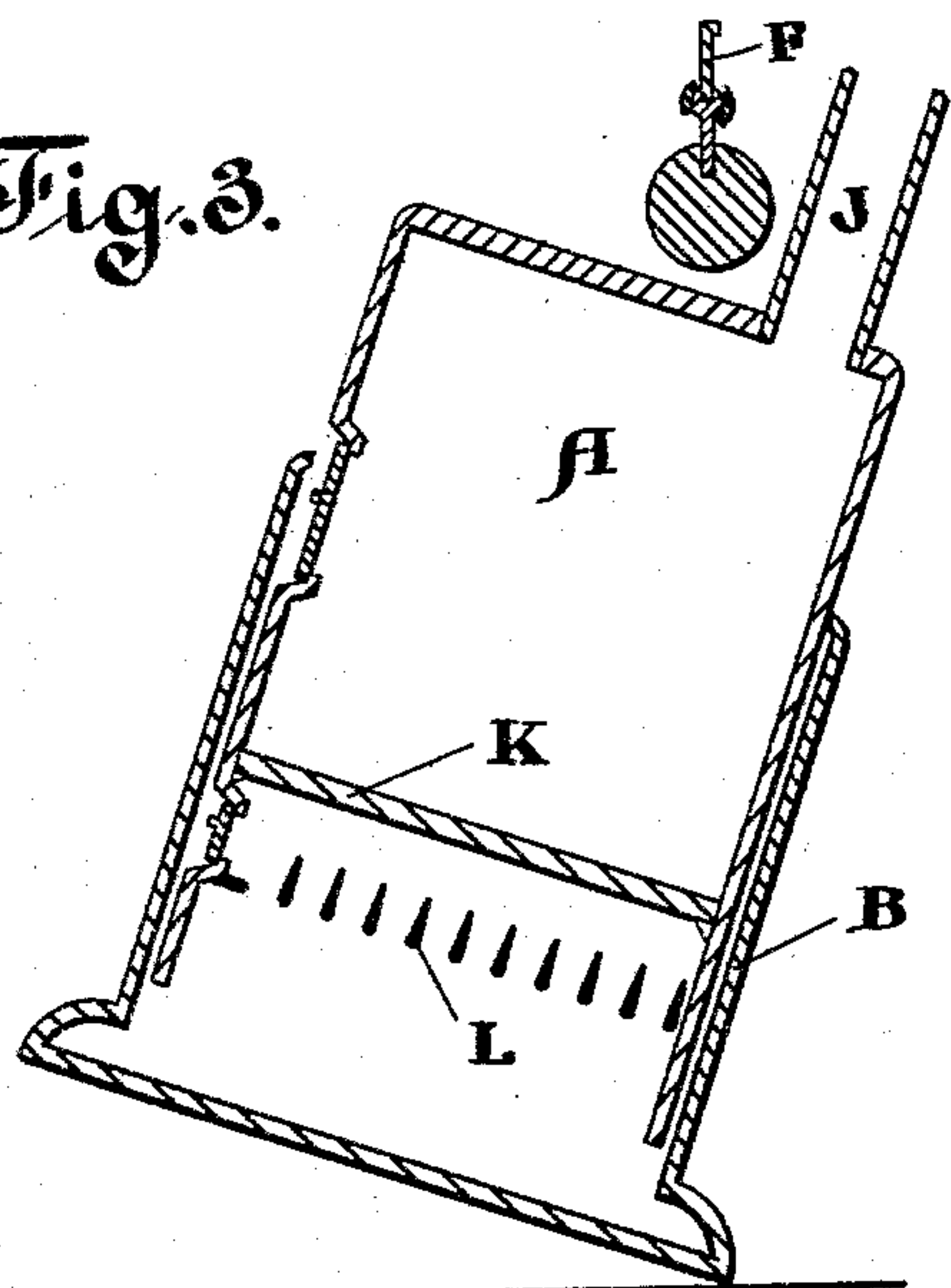
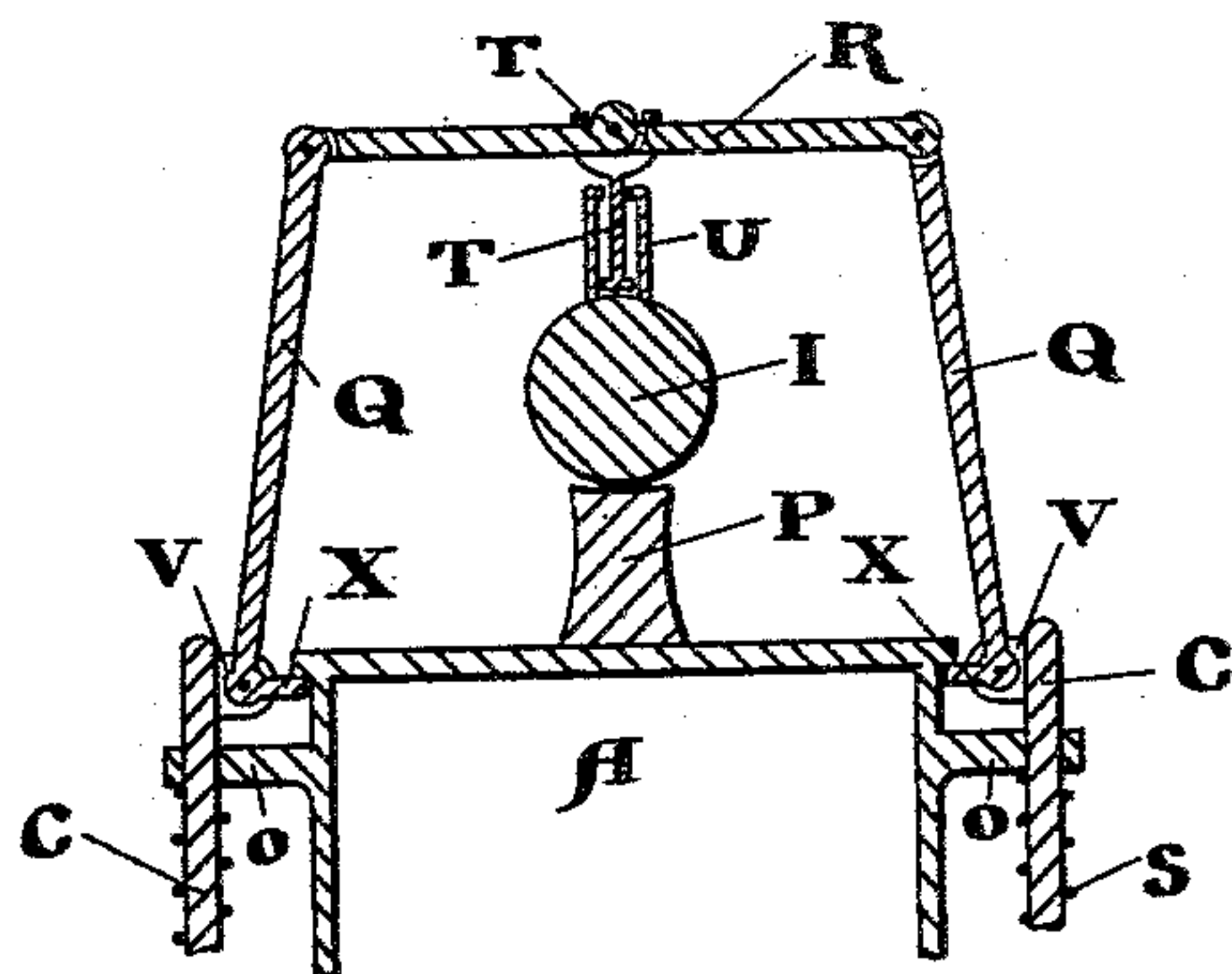


Fig. 5.



Inventors,

William J. Locke.
Isaac Thayer.

Attest.

J. H. Redstone.
K. B. Redstone.

UNITED STATES PATENT OFFICE.

WILLIAM J. LOCKE AND ISAAC THAYER, OF SAN FRANCISCO, CALIFORNIA.

SAFETY SELF-EXTINGUISHING CAR-HEATING STOVE.

SPECIFICATION forming part of Letters Patent No. 401,358, dated April 16, 1889.

Application filed September 25, 1888. Serial No. 286,314. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM J. LOCKE and ISAAC THAYER, both citizens of the United States, and residents of the city and county of San Francisco, and State of California, have invented a new and useful Improvement in Safety Self-Extinguishing Car-Heating Stoves, of which the following is a specification.

Our invention relates to improvements in safety self-extinguishing car-heating stoves, which will be understood by reference to the accompanying drawings and the letters referring thereto.

Figure 1 is a front elevation; Fig. 2, a section cut vertically through the center. Fig. 3 is a sectional view similar to Fig. 2, except that the stove is tipped and telescoped into the water-tank. Fig. 4 is a sectional view of the drop-weight; Fig. 5, a broken sectional view showing the drop-weight and supported in a different manner from that shown in the other figures, merely to illustrate how the same invention may be carried out in another manner.

The following is the construction of the same.

The upper part of the stove A and the fire-box are constructed similarly to the ordinary car-stove, with a grate, K, and underhinged lattice-floor L. It is suspended over the water-tank B by the bail W, and ball-and-socket joint G, and trip and catch-rod F upon the hook of the hanger E, which is sometimes hinged at D. The hanger E is supported by the guide-frame C, which is arched at the top for the purpose. The guide-frame C is attached to the water-tank B for the purpose of supporting the stove perpendicularly over the water-tank. We place the spiral springs S, to draw the stove down in case it tips too suddenly to be dropped by its gravitation. The lattice-slats are pivoted at the thick edge, marked L in Fig. 3, and when they strike the water they are thrown open and the water rushes into the fire, putting it out.

The following is the operation of our improved safety self-extinguishing car-heating stove.

The stove A, being raised and hooked in

the hanger E, is steadily held in the guide-bar O at the top. The tripping ball or weight I, while hanging down, locks the stove firmly in position; but when the weight I is thrown sufficiently aside by any great concussion or by the tipping over of the car, such as would endanger the turning over or displacement of the stove, it is disconnected, and the stove immediately drops into the tank B, and the slats of the lattice-floor L are immediately thrown open and the water allowed to rush in and extinguish the fire. Thus when the cars collide forcibly, so as to displace the stove and endanger the burning of the car by fire from the stove when the car tips over, the weight I is thrown aside, unhooking from the hanger E, and the stove immediately drops into the tank and the fire is extinguished.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, in safety-heating stoves for cars, is—

1. The car-stove described, consisting, essentially, of the water-chamber, the fire-chamber arranged above the same and adapted to move therein and having the pivoted lattice-work beneath the fire-grate, the guide-frame C, secured to the water-tank and looped over the fire-chamber, the springs encircling the guide-frame and secured at one end to the fire-chamber and at the other end to the water-chamber, the bracket-arm, and the weighted connection having a ball-and-socket joint for connecting the fire-chamber with the bracket, substantially as specified.

2. In a car-stove, the combination of the water-chamber, the fire-chamber arranged above the same and adapted to move therein, the guide-frame C, secured to the water-chamber, the springs encircling the guide-frame and secured at one end to the fire-chamber and at the other end to the water-chamber, the bracket-arm, and the weighted connection having a ball-and-socket joint for connecting the fire-chamber with the bracket, substantially as specified.

WILLIAM J. LOCKE.
ISAAC THAYER.

Witnesses:

JOHN H. REDSTONE,
K. B. REDSTONE.