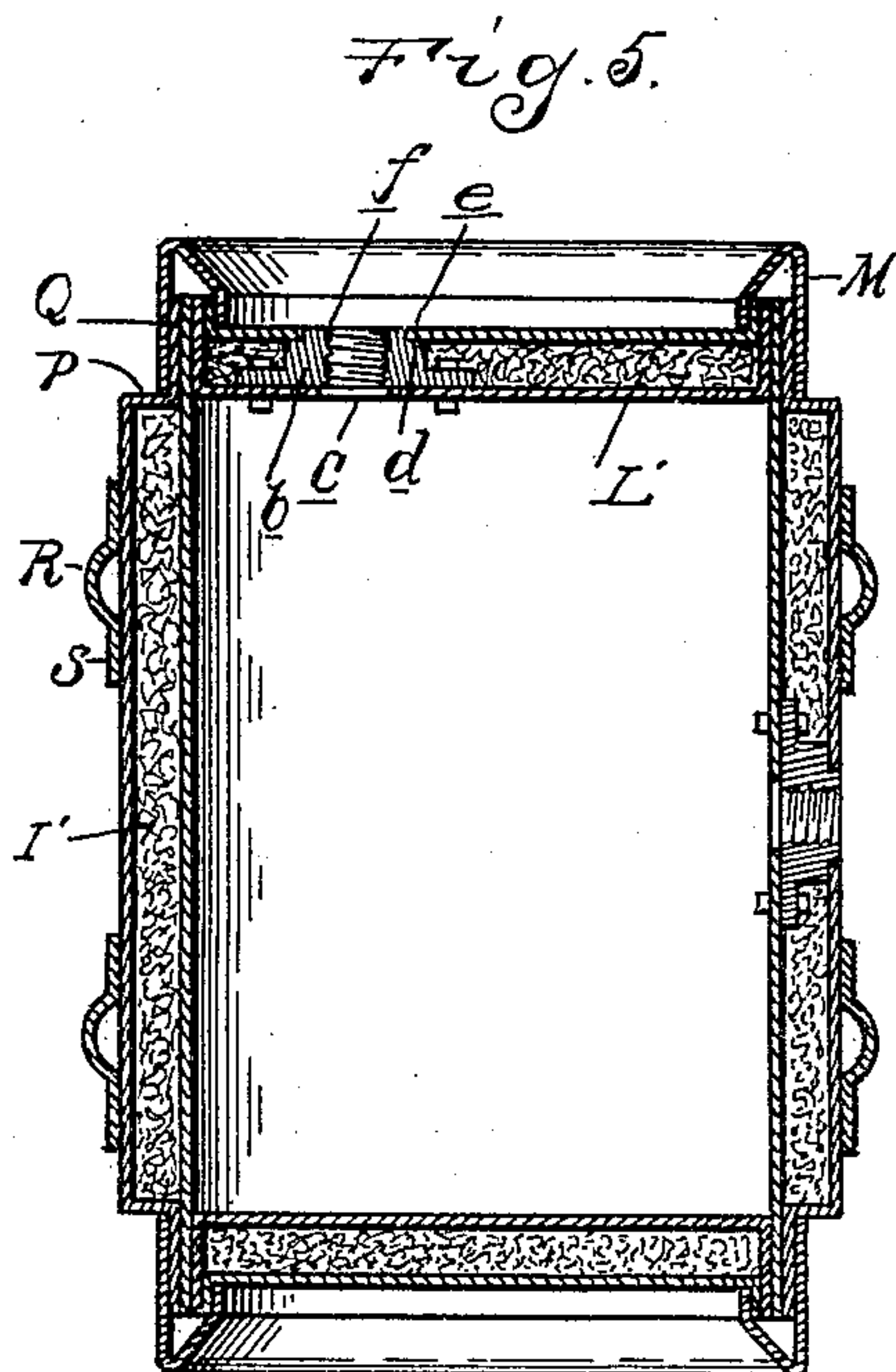
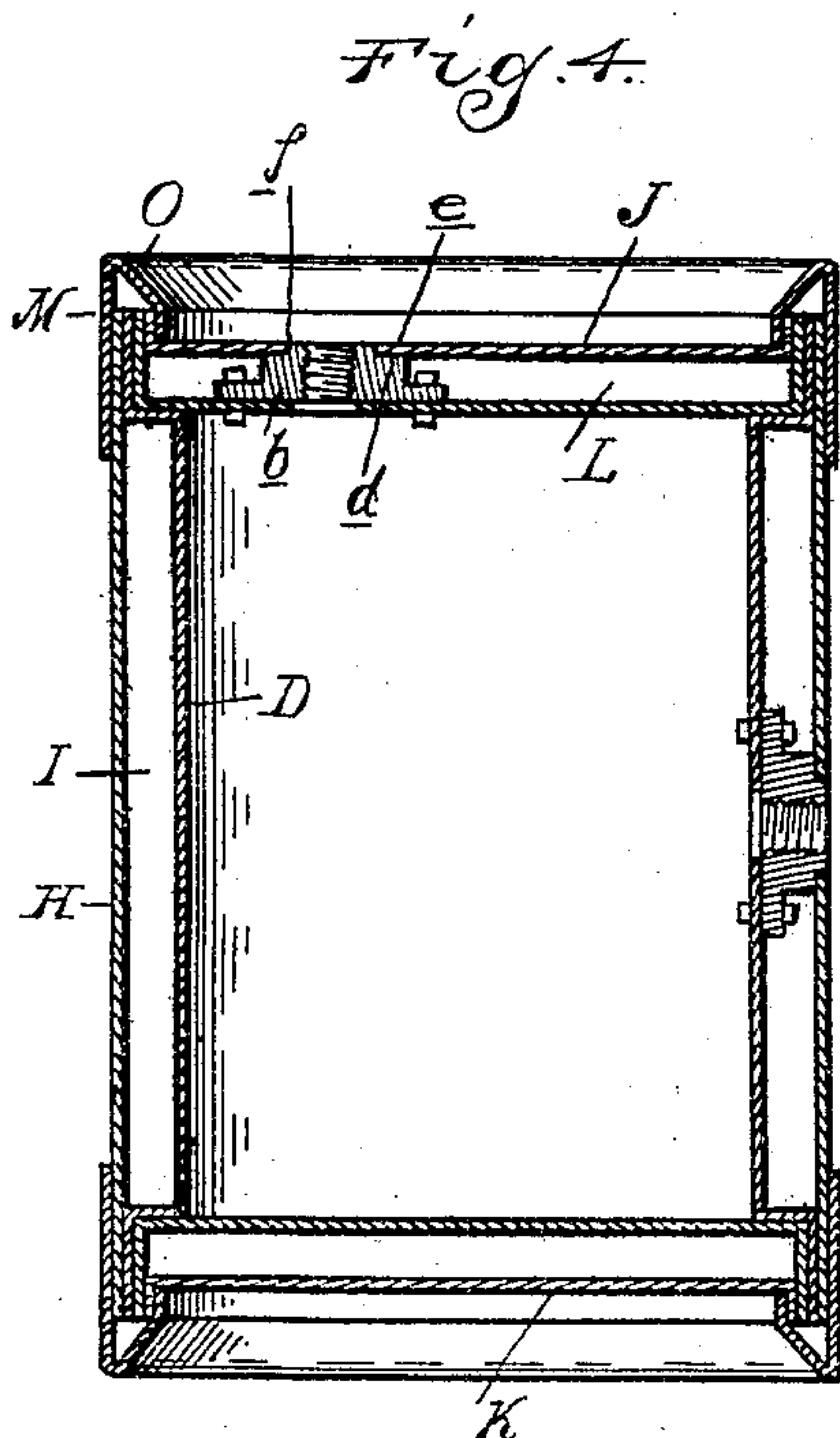
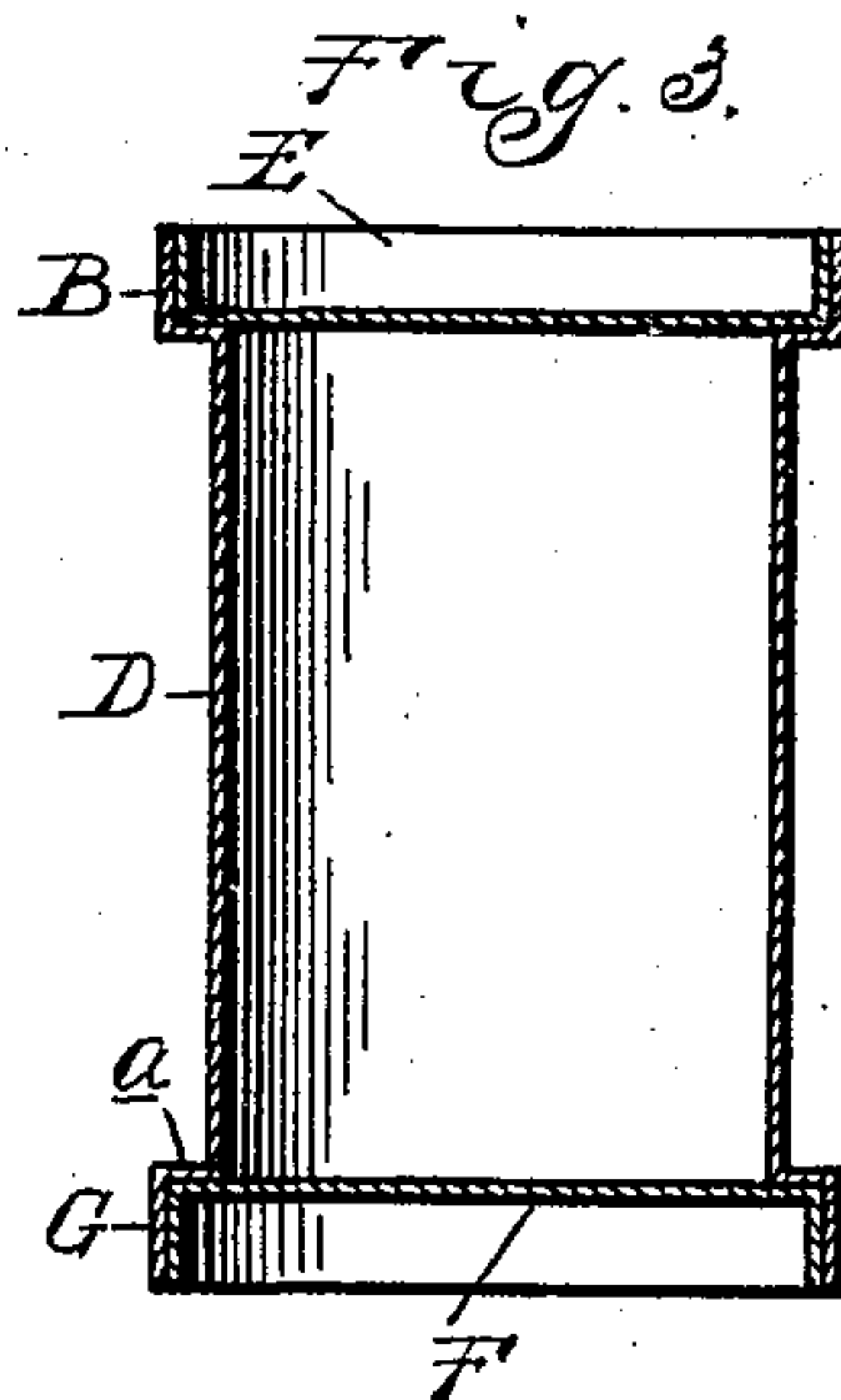
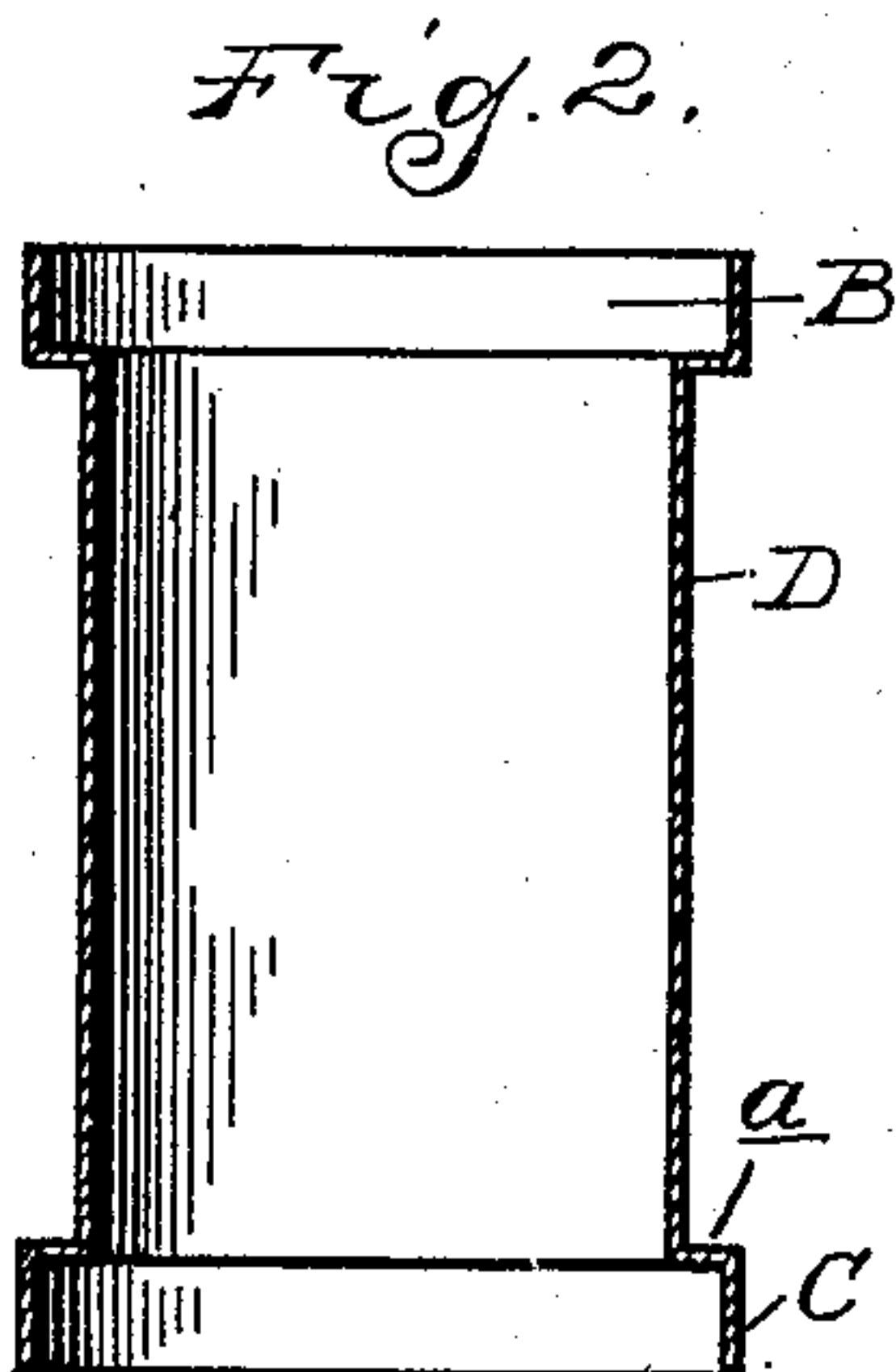
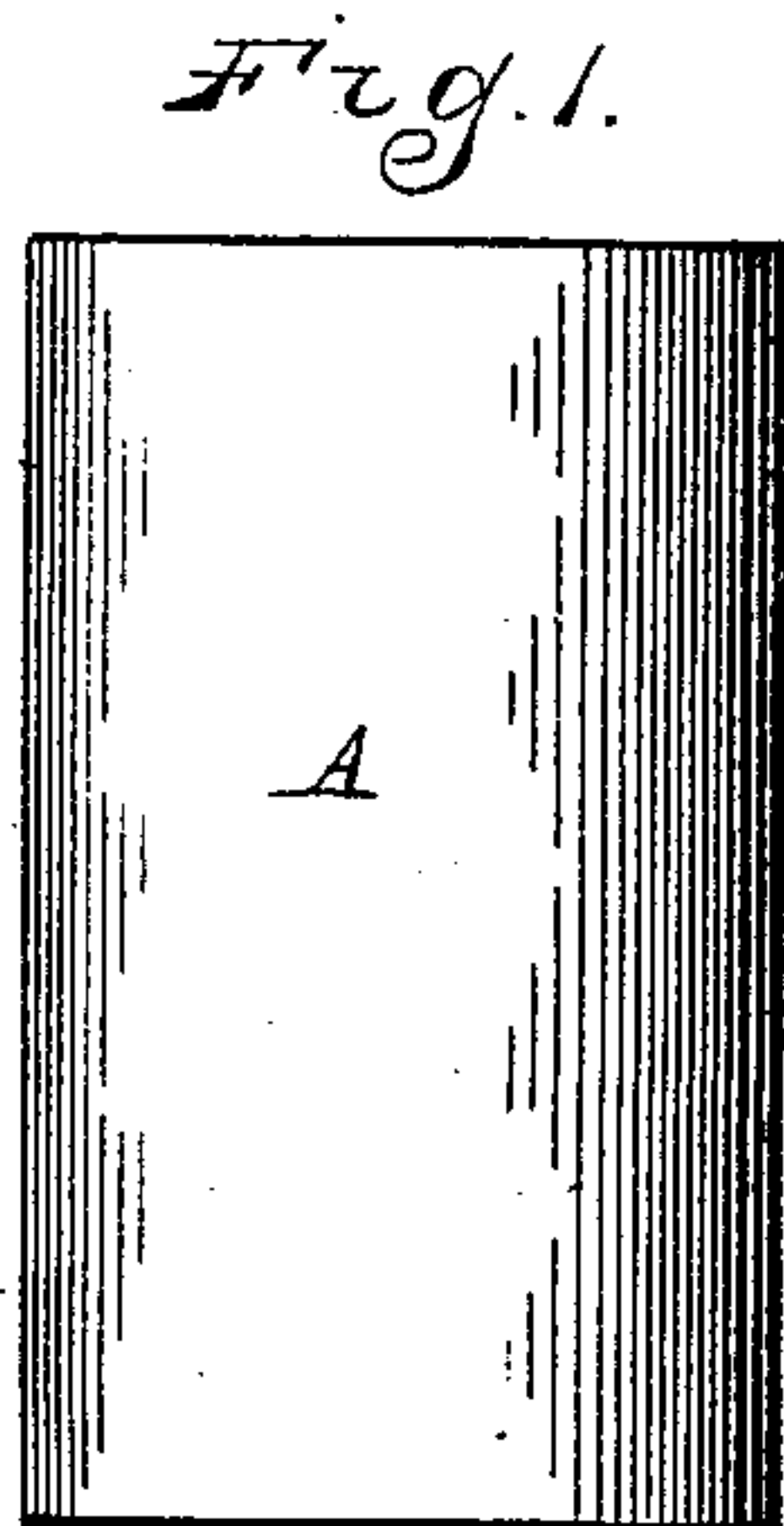


No. 774,041.

PATENTED NOV. 1, 1904.

C. L. COFFIN.  
METALLIC VESSEL.  
APPLICATION FILED MAY 4, 1903.

NO MODEL.



Witnesses

*Geo. H. C. ...*  
*Jas. P. Barry*

By

Inventor  
Charles L. Coffin

*James Whittemore*  
att'y.



# UNITED STATES PATENT OFFICE.

CHARLES L. COFFIN, OF DETROIT, MICHIGAN, ASSIGNOR TO ELECTRIC METAL WORKING COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

## METALLIC VESSEL.

SPECIFICATION forming part of Letters Patent No. 774,041, dated November 1, 1904.

Application filed May 4, 1903. Serial No. 155,666. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES L. COFFIN, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Metallic Vessels, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates generally to metallic vessels, preferably in the form of sheet-metal kegs or barrels adapted to contain liquids; and it consists, essentially, in a vessel formed of complementary sections spaced one from another, forming an intermediate chamber for insulating purposes, as will be more fully hereinafter set forth.

The invention further consists in the novel and simple arrangement and combination of the parts of the vessels and in certain details of construction, as fully illustrated in the drawings, in which—

Figure 1 is a view in elevation of a blank from which the inner section is formed. Fig. 2 represents in vertical section the shaped inner section. Fig. 3 is a view similar to Fig. 2, showing the section headed. Fig. 4 is a vertical central section through the finished vessel in the form of a keg, and Fig. 5 is a similar view of a modification.

In the drawings thus briefly described, A represents a cylindrical shell of which the inner section is formed, preferably expanded in any suitable manner at its ends to form the annular flanges B and C, spaced from the cylindrical body D of the section by offsets *a*. Fitted within the expanded ends of the body D are the heads E and F, resting upon the offsets and carrying annular flanges G. The flanges on the head and body abut, as shown, are connected in any suitable manner, preferably by welding, and constitute end extensions projecting beyond the heads and forming the section-chimes.

Sleeved over the inner section described is an outer shell or casing H, projecting at its ends to the chimes of the inner section and connected thereto, preferably by welding. As shown, the outer shell is uniformly cylindrical

and is spaced circumferentially from the body of the inner section, forming an intermediate annular air-chamber I. As thus constructed it will be observed that the air-chamber forms an insulation about the body, and thus serves to maintain the liquid contents of the keg or receptacle at the desired temperature, preventing the contents from becoming overheated in summer and keeping it at the proper temperature in colder weather.

For the purpose of insulating the heads of the keg in the same manner as the body the keg is formed of two closed sections, the inner one previously described and an outer casing consisting of the cylindrical shell referred to provided with the flanged heads J and K, secured to the end extensions of the inner section spaced from its heads to form air-chambers L.

To obtain a more rigid construction of package, I preferably shrink a chime-hoop M on each end of the keg, each hoop being bent or turned over at its upper edge, as at O, to extend within the head of the outer section.

Bungs are formed in the customary manner in the side of the package when in barrel form and in the end. Preferably they are apertured plugs *b*, threaded interiorly and riveted to the head and the body of the inner section about suitable openings, as *c*. The outer portion of each plug is reduced to form a shoulder *d*, upon which rest the marginal portions *e* of the outer section about the openings *f*. The body-sections of the keg are so proportioned that the reduced ends of the bung will project slightly beyond the outer shell, and in assembling the parts the shell is forced over the projection until the opening in the shell-body registers with the corresponding opening in the inner section. The marginal portions of the outer member are then flattened or bent down upon the shoulder previously referred to.

In Fig. 5 a modified type of vessel is shown wherein the inner section is uniformly cylindrical in form and the outer section or shell carries the inwardly-extending spacing offsets P and the annular flanges Q.



Hoops R may also be applied to the barrel, as indicated in Fig. 5, the hoops being preferably semicircular in form, flanged as at S, and shrunk upon the keg or barrel body.

5 From the description of the invention as set forth it will be apparent that the inner section is rigidly connected to the outer section of shell at the extreme ends thereof only and as thus suspended is protected from any blow  
10 that the barrel may receive except that which may strike only the bung. If the barrel receives a blow on the chimes, they merely yield by turning over slightly, while if the body of the barrel is struck the outer casing yields to  
15 the blow and becomes dented slightly. By affording the protection described to the inner section not only is a more durable and serviceable barrel structure produced, but the lining for the interior of the barrel, which is  
20 usually of enamel to prevent rusting and permit of the ready cleaning of the barrel, is prevented from being cracked. A lining of this character is particularly desirable where the package is to be used for beers or like beverages where it is necessary to cleanse the barrel  
25 frequently.

What I claim as my invention is—

1. A metallic vessel comprising a body portion formed of two shells spaced apart, and  
30 having their edges projected into contact with each other and thence outward to form chimes and fixedly secured together, and hollow heads secured to the extended edges.

2. In a metallic vessel the combination with  
35 an inner and an outer shell spaced apart at their centers, having their edges arranged parallel extended outward to form chimes and fixedly

edly united, and heads secured to the parallel edges.

3. A metallic vessel consisting of two separated shells arranged one within the other, lateral portions on one member extending across the space between the two and bent to have its ends beyond such lateral portions lie in contact with the end portions of the other member and welded thereto, of two disk-shaped  
45 separated heads secured at each end, one within the other, and end hoops extending beyond and over the end joint thus formed thereby forming a space between the hoop and edge of the joint and extending within and resting against  
50 the inner head.

4. A metallic vessel consisting of an inner and an outer shell, separated at their middle portion and having at their ends parallel contacting portions secured together, of a head  
55 secured between such securing portions, and hoops at the ends bent over the edge of the joint and resting against the head.

5. A metallic vessel consisting of two shells  
60 of uniform length spaced apart in the middle portion and having at their ends parallel contacting portions secured together, of two disk-shaped flanged heads one secured within the other to form a double-walled head, the flange  
65 of the heads lying parallel with the securing portions of the vessel ends and secured thereto.

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

CHARLES L. COFFIN.

Witnesses:

H. C. SMITH,  
JAS. P. BARRY.