

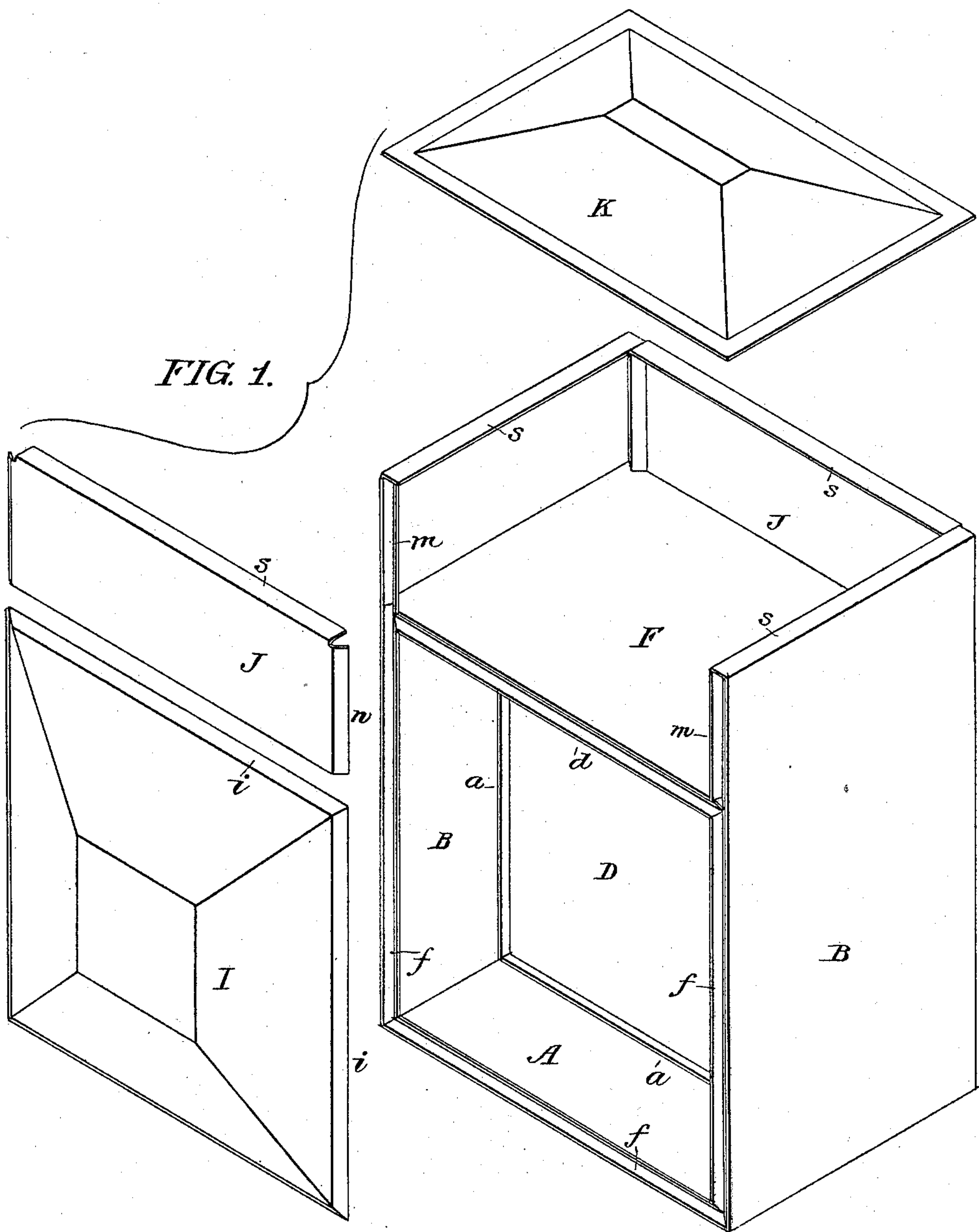
(No Model.)

2 Sheets—Sheet 1.

W. H. HOPPER & S. MILSTED.  
GAS METER CASING.

No. 586,086.

Patented July 6, 1897.



Witnesses:  
Hamilton D. Turner  
J. E. Bechtold

Inventors:  
William H. Hopper and  
Stephen Milsted  
by their Attorneys  
Hewson & Hewson

(No Model.)

2 Sheets—Sheet 2.

W. H. HOPPER & S. MILSTED.  
GAS METER CASING.

No. 586,086.

Patented July 6, 1897.

FIG. 3.

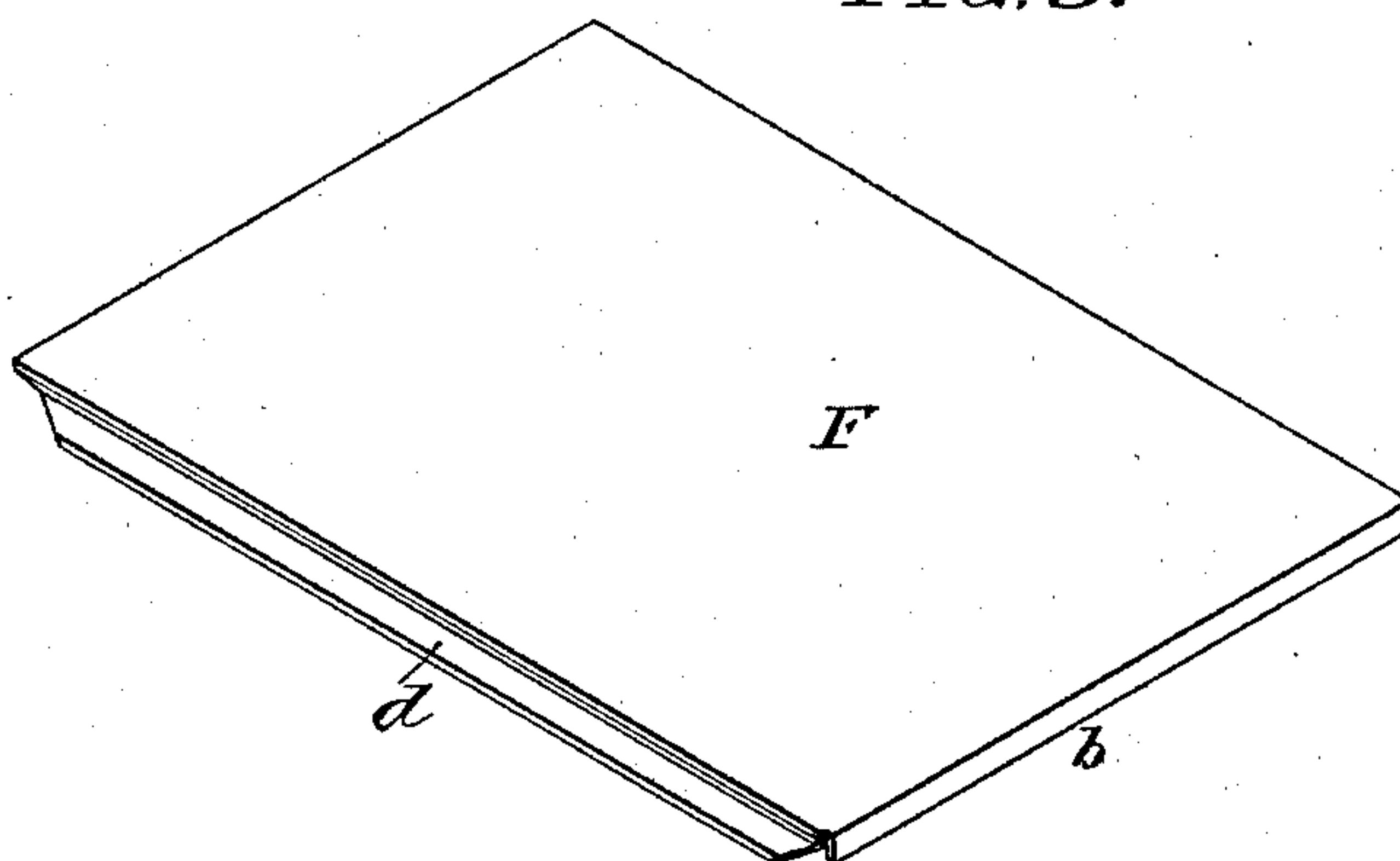


FIG. 2.

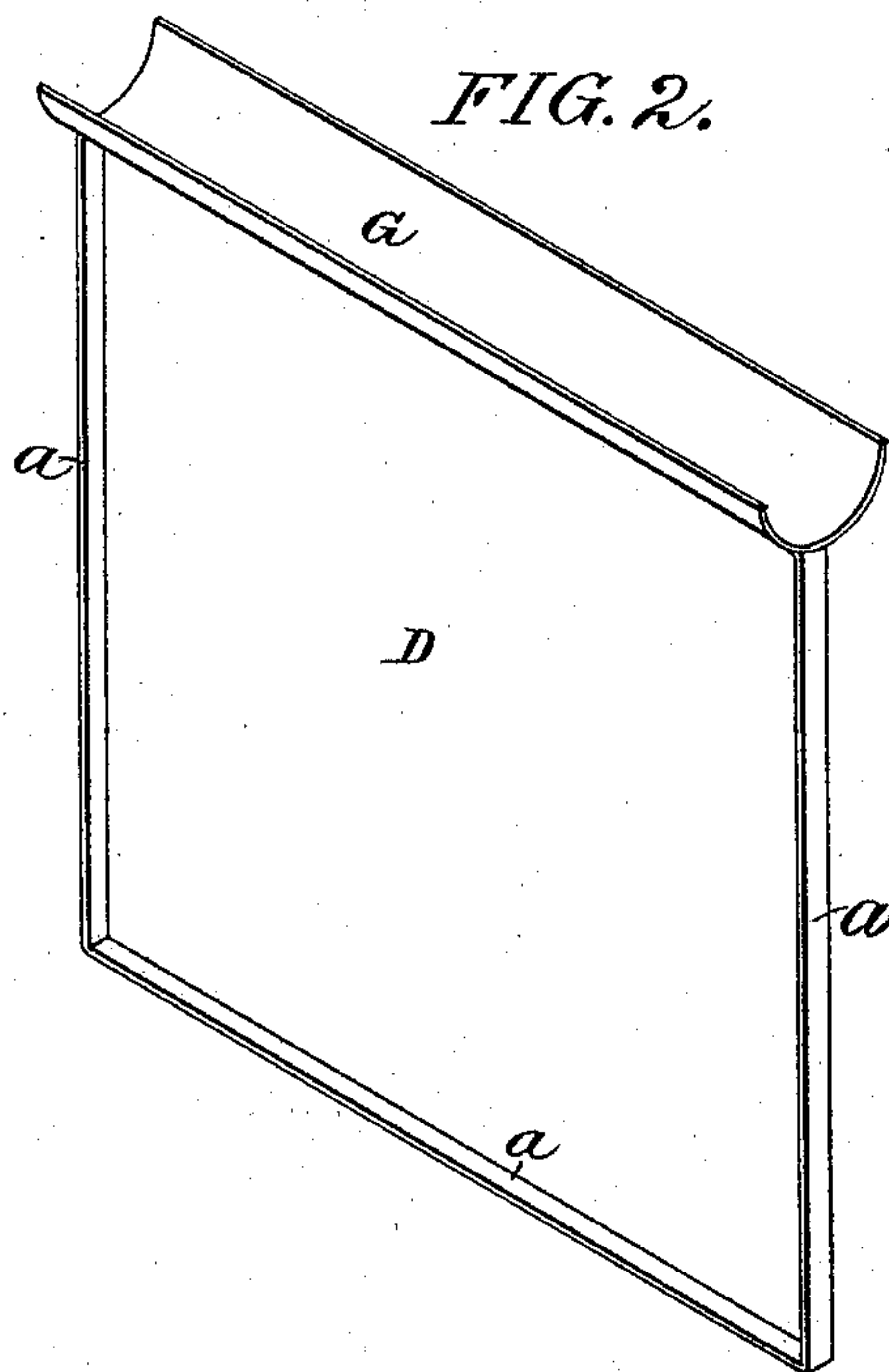


FIG. 4.

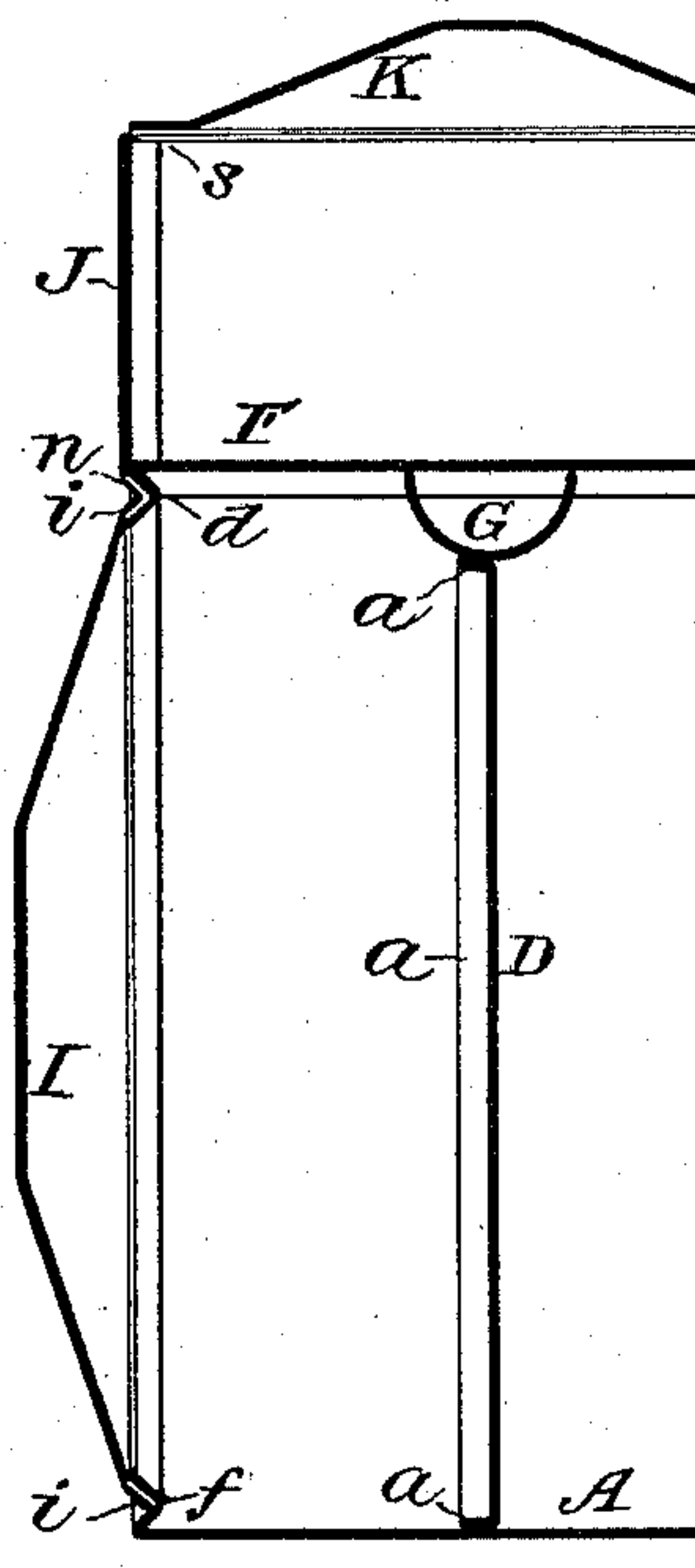
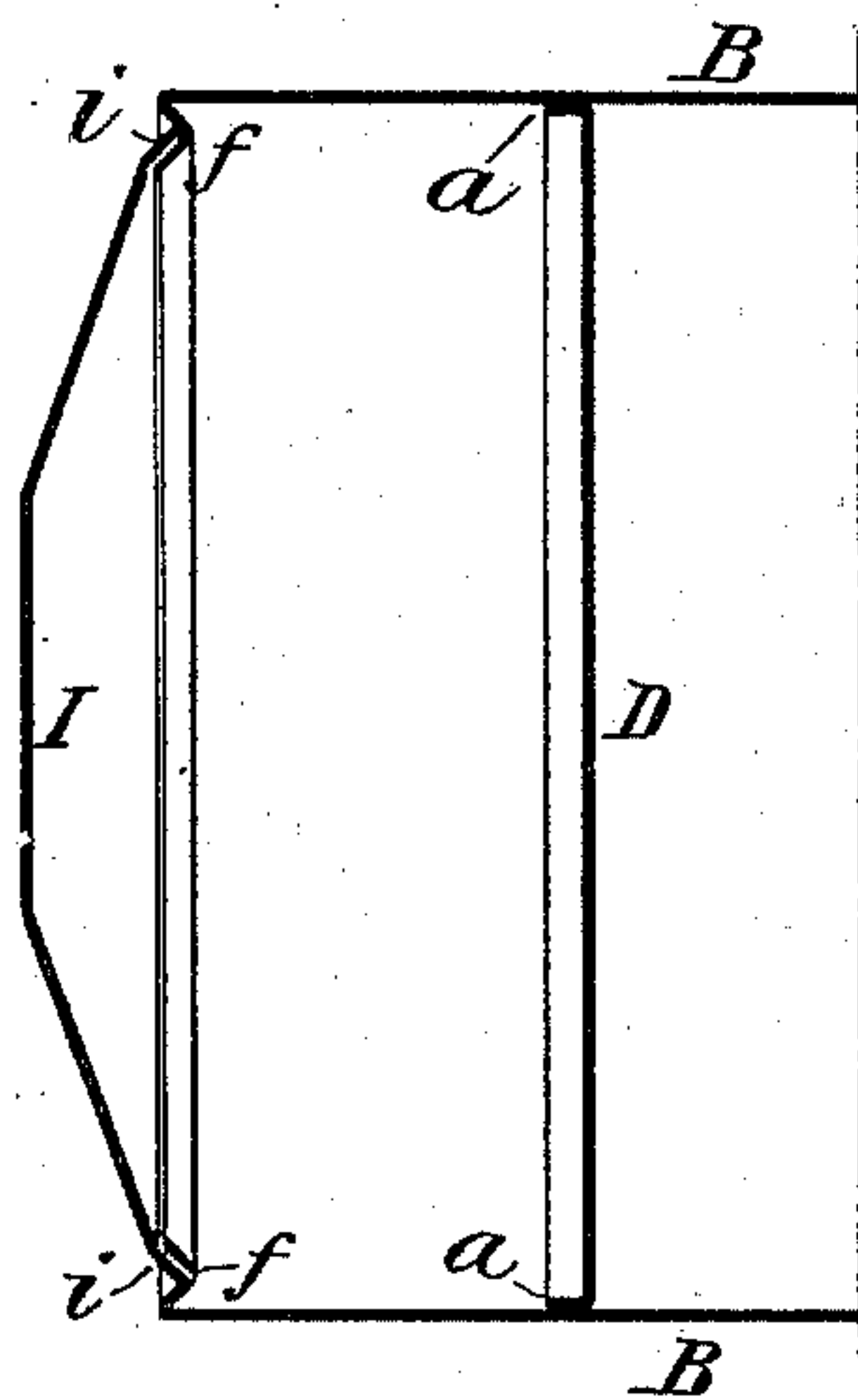


FIG. 5.



Witnesses:

Hamilton D. Turner

J. E. Bechtold

Inventors:

William H. Hopper and  
Stephen Milsted  
by their Attorneys

Howson & Howson



# UNITED STATES PATENT OFFICE.

WILLIAM H. HOPPER, OF PHILADELPHIA, PENNSYLVANIA, AND STEPHEN MILSTED, OF HAMMONTON, NEW JERSEY.

## GAS-METER CASING.

SPECIFICATION forming part of Letters Patent No. 586,086, dated July 6, 1897.

Application filed September 28, 1896. Serial No. 607,222. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM H. HOPPER, of Philadelphia, Pennsylvania, and STEPHEN MILSTED, of Hammonton, Atlantic county, New Jersey, citizens of the United States, have invented certain Improvements in Gas-Meter Casings, of which the following is a specification.

The main object of our invention is to simplify and cheapen the construction of the casing of a gas-meter, an object which we attain by lessening the number of component parts in said casing and the consequent number of solder-joints necessary to secure these parts together.

A further object is to stiffen and strengthen the structure, which object is attained by a special construction of the flanges, whereby the parts are united.

In the accompanying drawings, Figure 1 is a perspective view of our improved gas-meter casing, showing the front, one of the "gallery-plates," and the top detached from the body portion. Fig. 2 is a perspective view of the central vertical partition-plate of the meter. Fig. 3 is a perspective view of the horizontal partition plate or "table" which separates the measuring-chamber of the meter from the chamber containing the registering apparatus and valve mechanism. Fig. 4 is a vertical section of part of the meter-casing, and Fig. 5 is a sectional plan view of part of the same.

In ordinary gas-meters the front and back, the sides, the bottom, the top, and the partition and gallery plates are all composed of sheet metal and are separated from each other. Hence a great number of solder-joints are necessary in securing these parts together, the casing is weakened thereby, the cost of making the casing is heavy, and the risk of leakage due to defective joints is in direct proportion to the number of joints in the casing. In carrying out our invention, therefore, we make the bottom A and sides B B of the casing from one piece of sheet metal bent into proper shape, so that no joints are necessary at the junction of the bottom and sides of the casing, the parts A B B being secured in proper position in respect to each other by connection with the central

vertical partition-plate D and horizontal partition plate or table F, which serves to separate the measuring-chamber of the meter from the upper chamber, containing the registering devices and valve-operating mechanism.

The vertical partition-plate D is of rectangular form and has around each of its four sides a projecting flange *a*, the side and bottom flanges being secured, respectively, to the side and bottom portions of the casing and the top flange being secured to the semi-tubular channel-plate G, the upper edges of which are secured to the under side of the horizontal partition plate or table F, so as to form immediately beneath the latter a central conduit, such as is usually required in gas-meters.

The horizontal partition plate or table F has end flanges *b* secured to the sides of the casing, and said table also has side flanges *d*, similar to the flanges *f*, which project inwardly from the edges of the bottom and side portions A B B of the casing, these flanges *d* and *f* completely surrounding the measuring-chamber of the meter and serving for the attachment of the front and back plates I, which complete the inclosure of said measuring-chamber.

The flanges *d* and *f* are preferably grooved or V-shaped in cross-section and the front and back plates I have edge flanges *i*, adapted to enter the grooved flanges *d* and *f*, to which they are secured by soldering or brazing, the V form of the flanges serving to stiffen the same and hence materially increasing the strength of the structure.

The side portions B B of the casing are continued upwardly beyond the horizontal partition plate or table F and have edge flanges *m*, preferably grooved or V-shaped for the reception of flanges *n* at the ends of the gallery-plates J, which also have bottom flanges *n*, adapted to the grooved flange *d* of the table F, the flanges *n* being secured to the V-shaped flanges *d* and *m* by soldering or brazing.

The sides B of the casing and the gallery-plates J have at the top inturned horizontal flanges *s*, to which are secured the top K of the meter.



In constructing a meter-casing in accordance with our invention not only are the assembling and fitting of the parts facilitated, but the strength and security of the casing are increased, the number of soldered joints to be formed is decreased, and the expense of constructing the casing is correspondingly diminished, less skill being required in the operation than is demanded in making an ordinary casing, thereby effecting an additional saving in cost.

Having thus described our invention, we claim and desire to secure by Letters Patent—

1. A meter-casing consisting of a single strip of sheet metal bent to form the bottom and sides of the casing, a horizontal partition plate or table secured to said sides of the casing, grooved or V-shaped flanges extending inwardly from the edges of the bottom, sides and table, and front and back plates having flanges secured to said grooved or V-

shaped flanges on the body of the casing, substantially as specified.

2. A meter-casing consisting of a single strip of sheet metal bent to form the bottom and sides of the casing, a horizontal partition plate or table secured to said sides of the casing below the top of the same, grooved or V-shaped flanges extending inwardly from the edges of the bottom and sides of the casing, and front, back and gallery plates having flanges secured in said grooved or V-shaped flanges on the body of the casing, substantially as specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

WM. H. HOPPER.

STEPHEN MILSTED.

Witnesses:

JOS. H. KLEIN,

F. E. BECHTOLD.