

C. Seimel
Soldering Pan

N^o 88,419.

Patented Mar. 30, 1869.

Fig. 3.

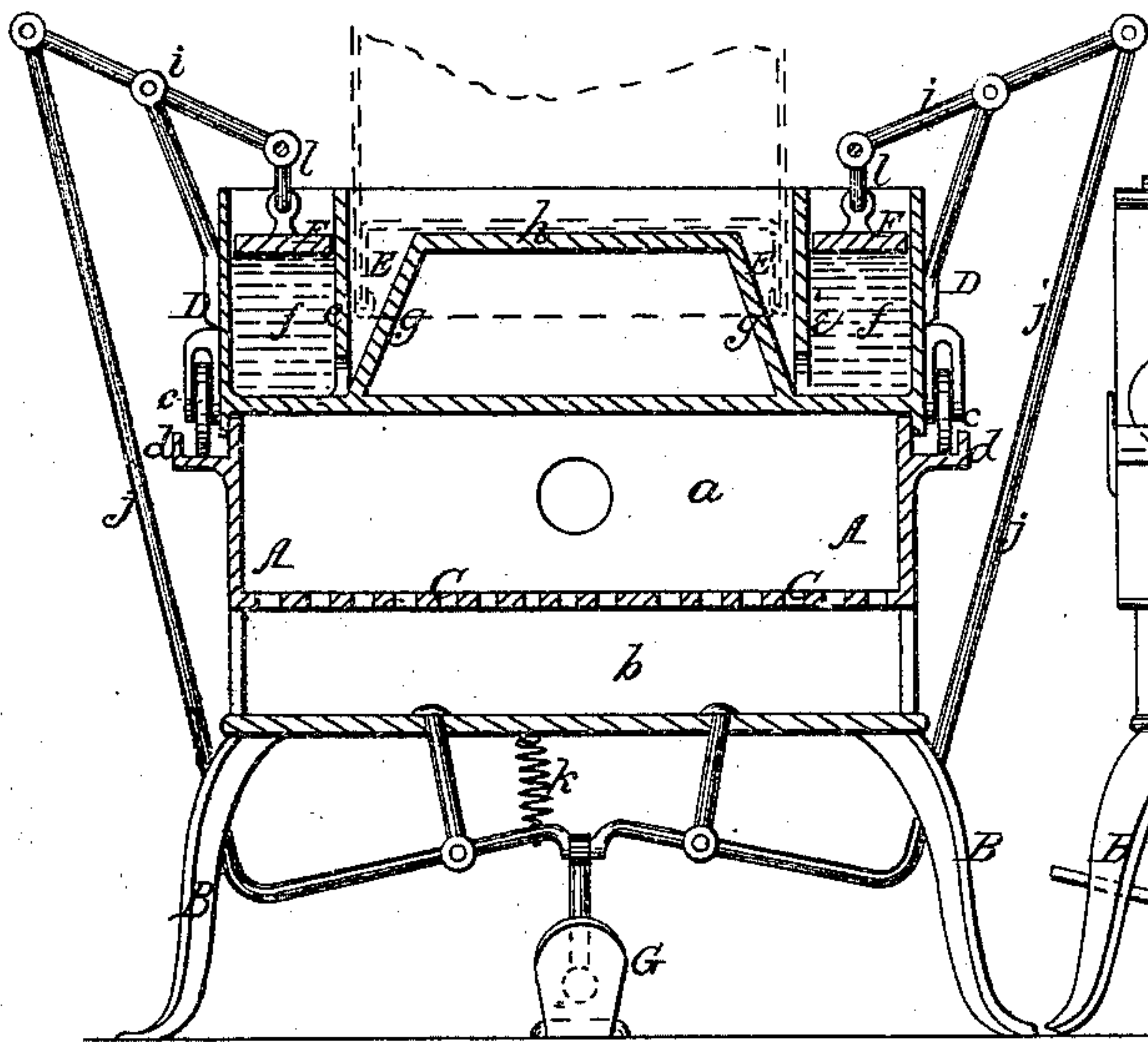


Fig. 1.

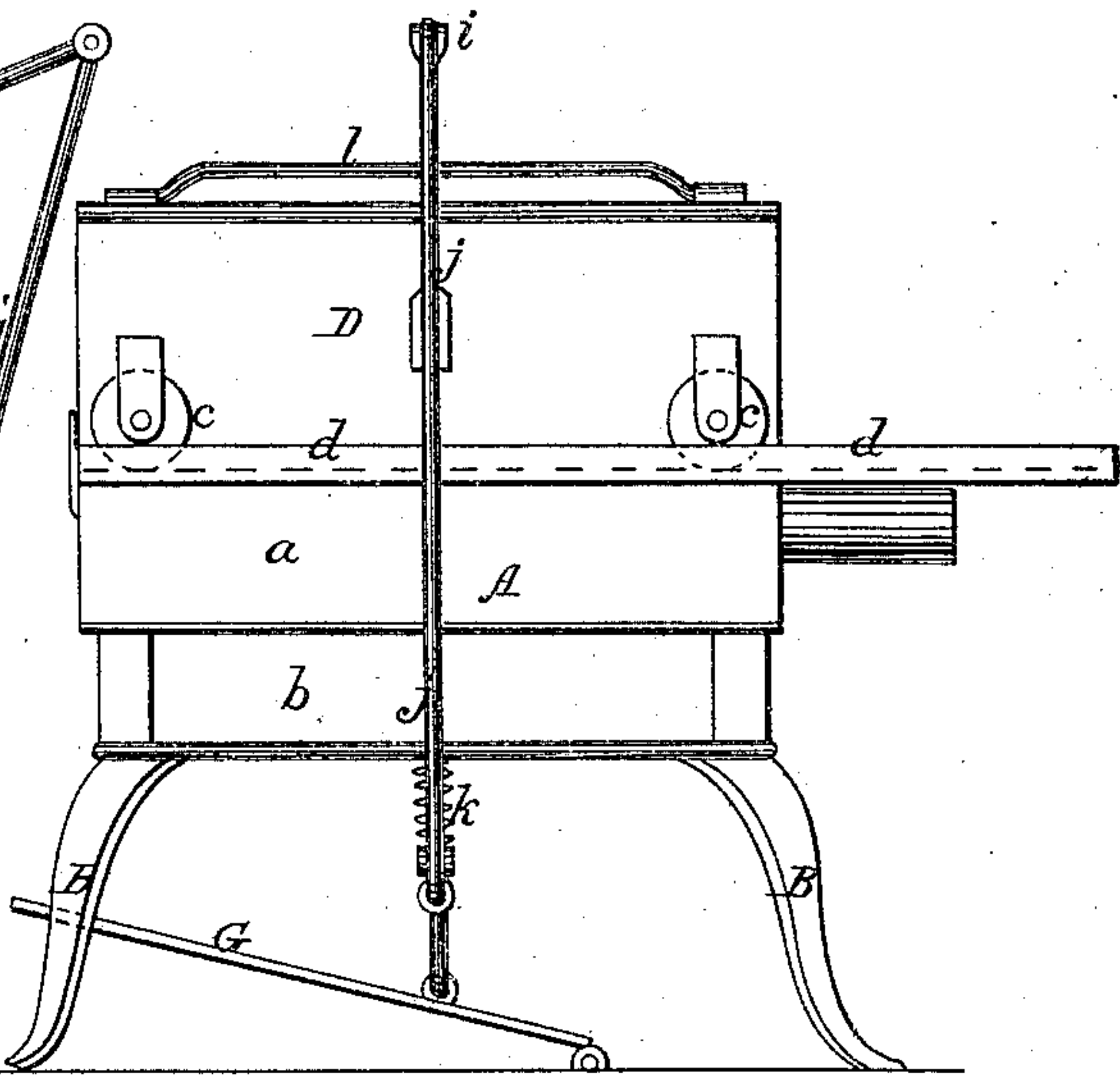
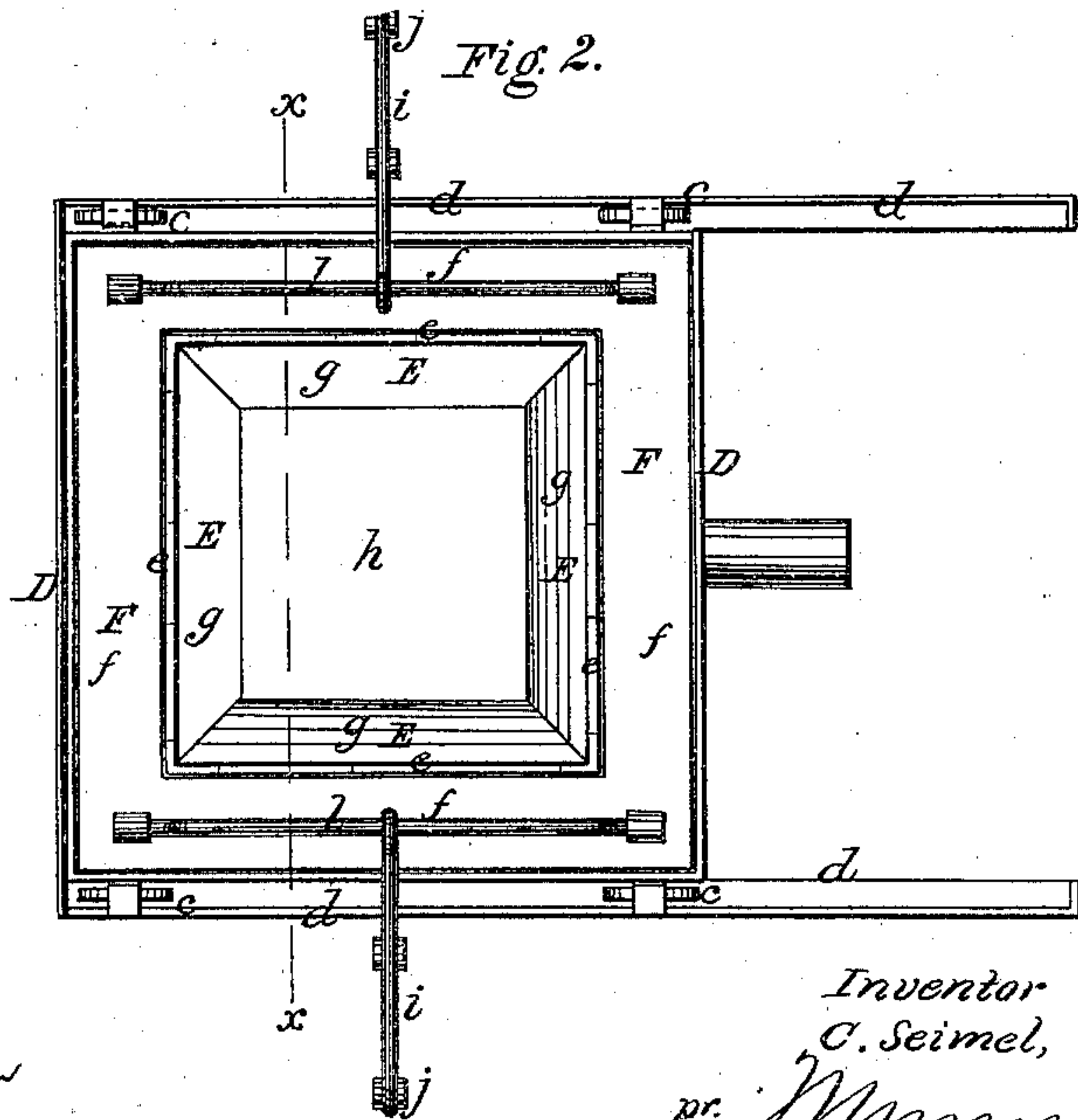


Fig. 2.



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United States Patent Office.

CONRAD SEIMEL, OF GREENPOINT, NEW YORK.

Letters Patent No. 88,419, dated March 30, 1869.

IMPROVEMENT IN SOLDERING-FURNACE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, CONRAD SEIMEL, of Greenpoint, Kings county, New York, have invented a new and improved Soldering-Pan; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation of my improved soldering-pan.

Figure 2 is a plan or top view of the same.

Figure 3 is a vertical transverse section of the same, the plane of section being indicated by the line *x x*, fig. 2.

Similar letters of reference indicate corresponding parts.

This invention relates to a new apparatus for soldering the upper and lower edges of sheet-metal cans, of cylindrical, prismatic, or other desired shape.

The invention consists in an arrangement about the pan, in which the soldering of the edge, or joint of the can is to be effected, of a reservoir holding the solder, which reservoir has an adjustable cover, so that by forcing the said cover down, by means of suitable levers, the solder will be forced into the soldering-pan, wherein it will rise to a suitable desired height to surround the edge of the can to be soldered. When the levers are released, the cover will be raised by spring or weight, and will draw the solder back into the closed vessel, in which it is protected from the injurious influences of the air. The soldering-pan is endless, either round, square, or oblong, or of other suitable form, according to the shape of the box to be soldered.

It also consists in making such arrangement of means adjustable to, and to be used in combination with a furnace, in the manner described.

It also consists in an arrangement of the treadles, and levers and springs attached thereto, in the manner described.

A, in the drawing, represents a furnace, of square, or other suitable form, supported on legs, B, or other supports.

C is its grate, or fire-floor, by which it is divided into a fire-chamber, *a*, and into an ash-pan, *b*.

D represents a box, placed upon the furnace, preferably so that it can move thereon.

For this latter purpose, I have arranged wheels, *c c*, on the box, and a track, *d*, on the furnace, as shown, so that the box can be moved on the track, to open the furnace.

In the box D is arranged a vertical partition, *e*, which forms an endless channel, *f*, on the outside of the box, in which the solder is placed.

Inside of the partition *e* is arranged another parallel, vertical, or inclined partition, *g*, which forms, between itself and *e*, the soldering-pan E.

The upper edge of the endless partition *g* supports a platform, *h*, upon which the pan to be soldered is placed, as indicated in fig. 3.

F represents a cover, of such size that it can slide up and down in the channel *f*, and that it will at all times close the said channel.

It is suspended from levers, *i i*, that are pivoted to supports projecting from the side of the furnace, and that are, by rods *j j*, connected with a treadle, G, as shown. By pressing on the treadle, the cover F will be forced down upon the solder in the channel *f*, and will force the solder, through openings in the partition *e*, into the pan to such a height that it will surround the part of the box to be soldered, which is suspended into the pan.

As soon as the treadle is released, a spring, *k*, or some equivalent device, will automatically elevate the cover, so that the solder will be drawn again into the channel *f*, to be there kept away from atmospheric influence.

Rails, *l l*, are arranged on the cover F, to receive the ends of the levers *i*, if the box D is made sliding, to allow its displacement without straining the levers and treadle-connections.

It will be seen that by the use of the channel *f* and cover F, the solder can be kept free from injurious influence, and can, whenever it is needed, be forced to the height of the seam, or as high as may be desired.

Fuel of any suitable kind may be used.

The levers *i* may be made detachable from the cover F, in which case the rails *l* may be dispensed with.

I claim as new, and desire to secure by Letters Patent—

1. Arranging a channel, *f*, around the solder-pan E, to receive the solder, substantially as set forth.

2. The combination of the furnace with a removable trough and reservoir, when constructed and arranged in the manner substantially as described.

3. The solder-pan E, arranged as described, so that the furnace may be closed during the operation of soldering, and thereby prevent escape of heat, substantially as set forth.

4. The application of the treadle G, and of the levers *i j*, and spring *k*, as constructed and arranged, for operating the adjustable plunger F.

CONRAD SEIMEL.

Witnesses:

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