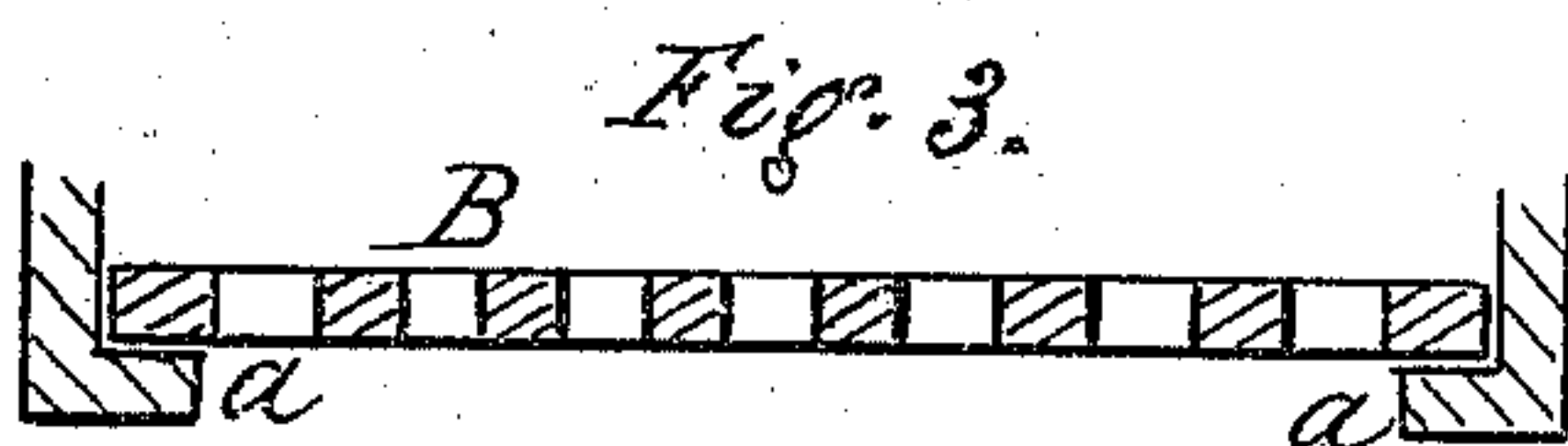
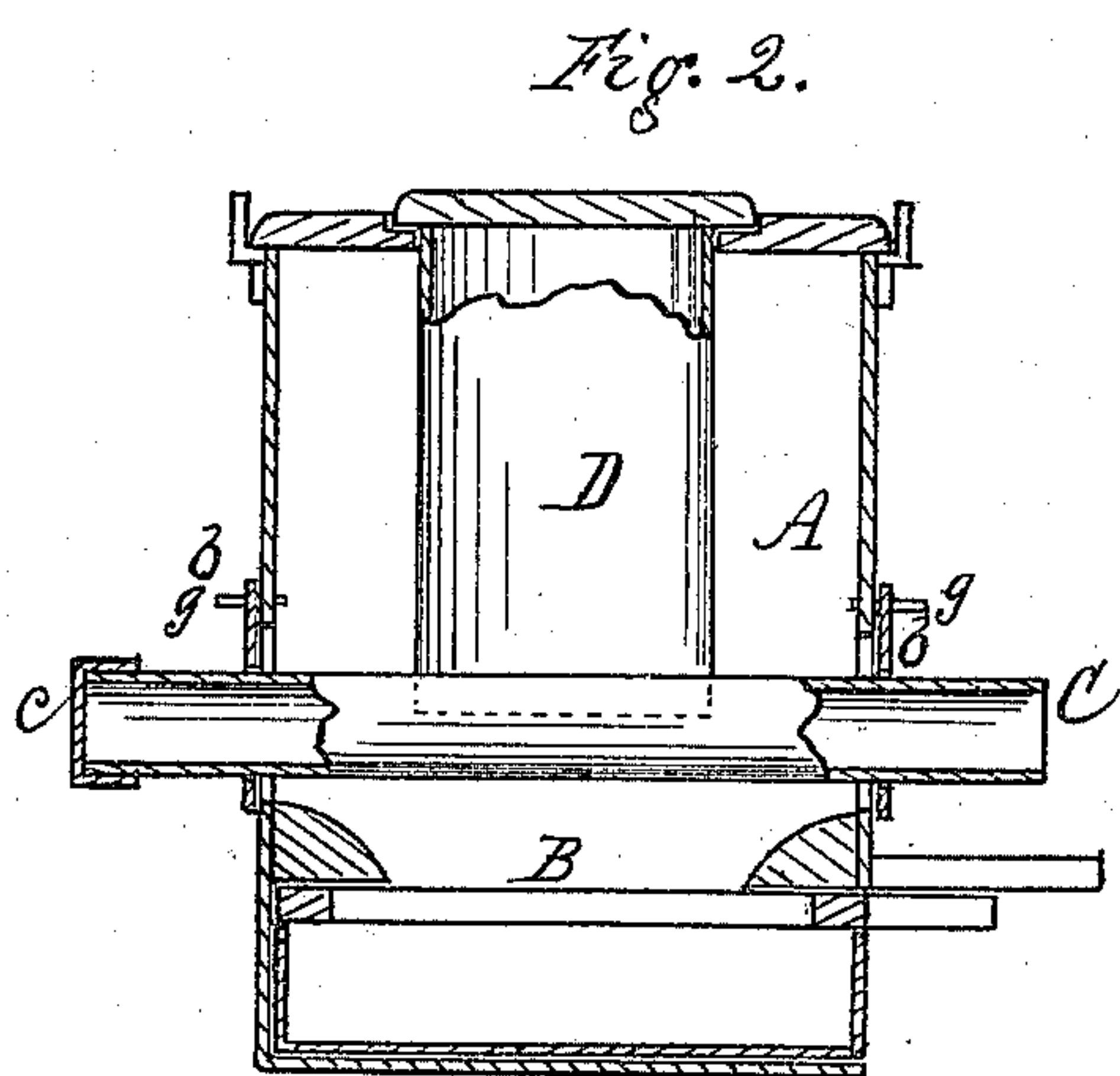
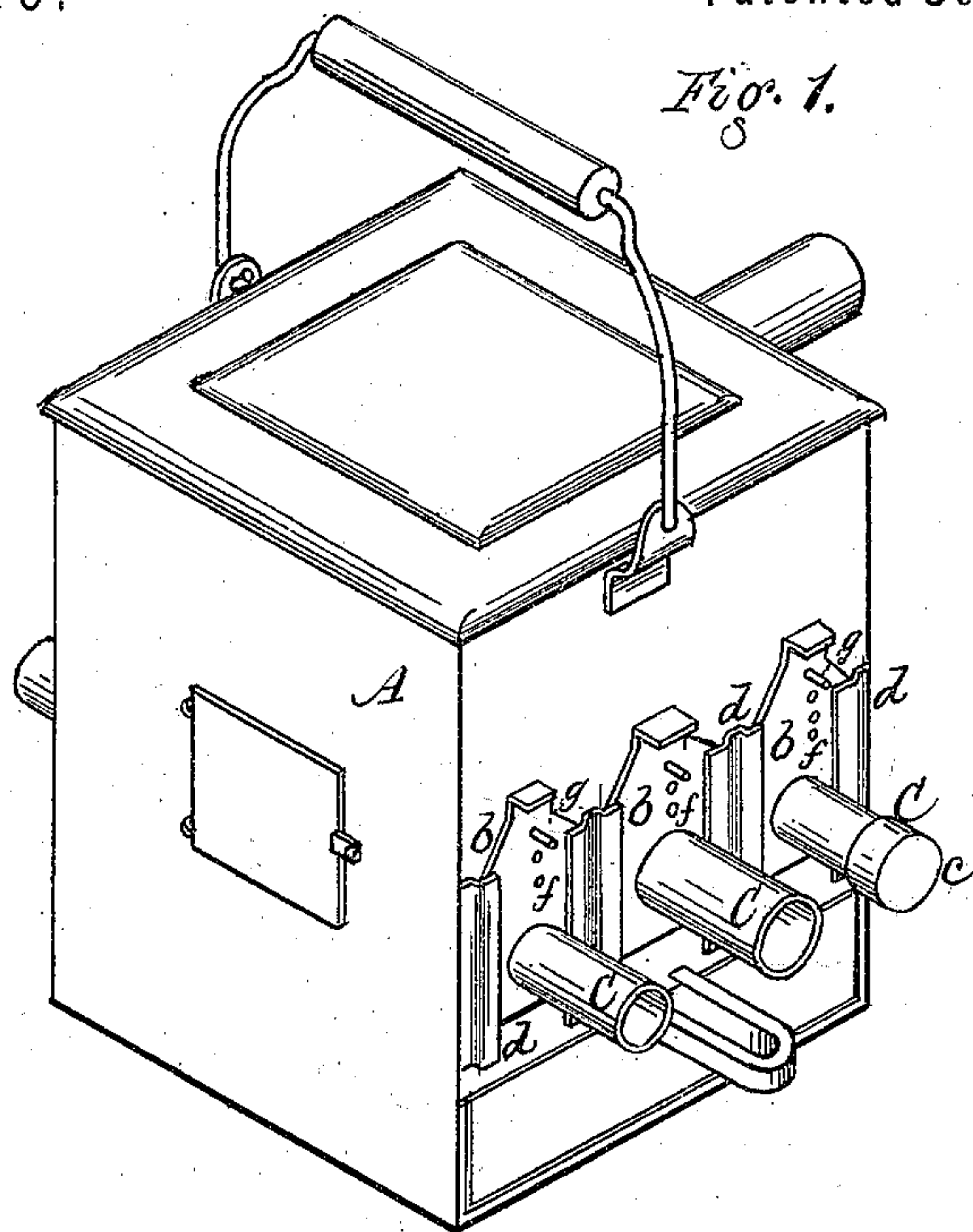


**J. DAY.**  
**Soldering-Furnaces.**

No. 143,126.

Patented September 23, 1873.



Witnesses.  
 Henry M. Thomas  
 Fred A. Balch.

Inventor.  
 Justus Day,  
 by R. F. Osgood,  
 atty.

# UNITED STATES PATENT OFFICE.

JUSTUS DAY, OF HOLLEY, NEW YORK.

## IMPROVEMENT IN SOLDERING-FURNACES.

Specification forming part of Letters Patent No. **143,126**, dated September 23, 1873; application filed April 30, 1873.

*To all whom it may concern:*

Be it known that I, JUSTUS DAY, of Holley, in the county of Orleans and State of New York, have invented a certain new and useful Improvement in Tinmen's Fire-Pots; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

My invention consists in combining with a tinman's fire-pot an arrangement of tubes and slides, which are adjustable up and down, and serve to receive the irons to be heated, as hereinafter fully described.

In the drawings, Figure 1 is a perspective view; Fig. 2, a vertical section of the fire-pot through one of the adjustable tubes; Fig. 3, a cross-section through the grate.

A represents the fire-pot or furnace, in which is a magazine or fuel-chamber, D, similar to that in a base-burning stove. B is the grate, which rests on lugs or ledges *a a*, Fig. 3, and has a shaking motion, in and out, to remove ashes. C C are tubes, resting on slides *b b*, and extending through the fire-pot, so as to project at each end, as shown. The ends are open to receive the soldering-irons, but may be covered by caps *c c*, when not in use. If desired, a portion of the tubes may be made short, not extending through the whole furnace, as shown in the center in Fig. 1; but the inner end of the tube in that case is closed, and it serves to receive soldering-irons that have a hook or bend. The slides *b b* adjust up and down in ways *d d*, and they are

provided with a series of holes, *f f*, through which passes a pin, *g*, by which the adjustment is made higher or lower.

The tubes receive the irons and impart the necessary heat without bringing them in contact with ashes, which clogs and impedes them in applying solder, and it renders the wiping of the irons unnecessary. The adjustment of the tubes higher or lower graduates the heat applied to the irons, as may be necessary, and also adapts the same to the intensity of the fire in the fire-pot. The slides at the same time cover the slots in which the tubes slide.

By the use of this invention ordinary hard coal may be used in place of charcoal, which has generally been employed. The tubes shield the irons from the action of the sulphur which forms one element of the coal.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with the fire-pot A, of the tubes C C and slides *b b*, when arranged for vertical adjustment, in the manner and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JUSTUS DAY.

Witnesses:

HARDIN BEEBE,  
B. J. PERRIGO.