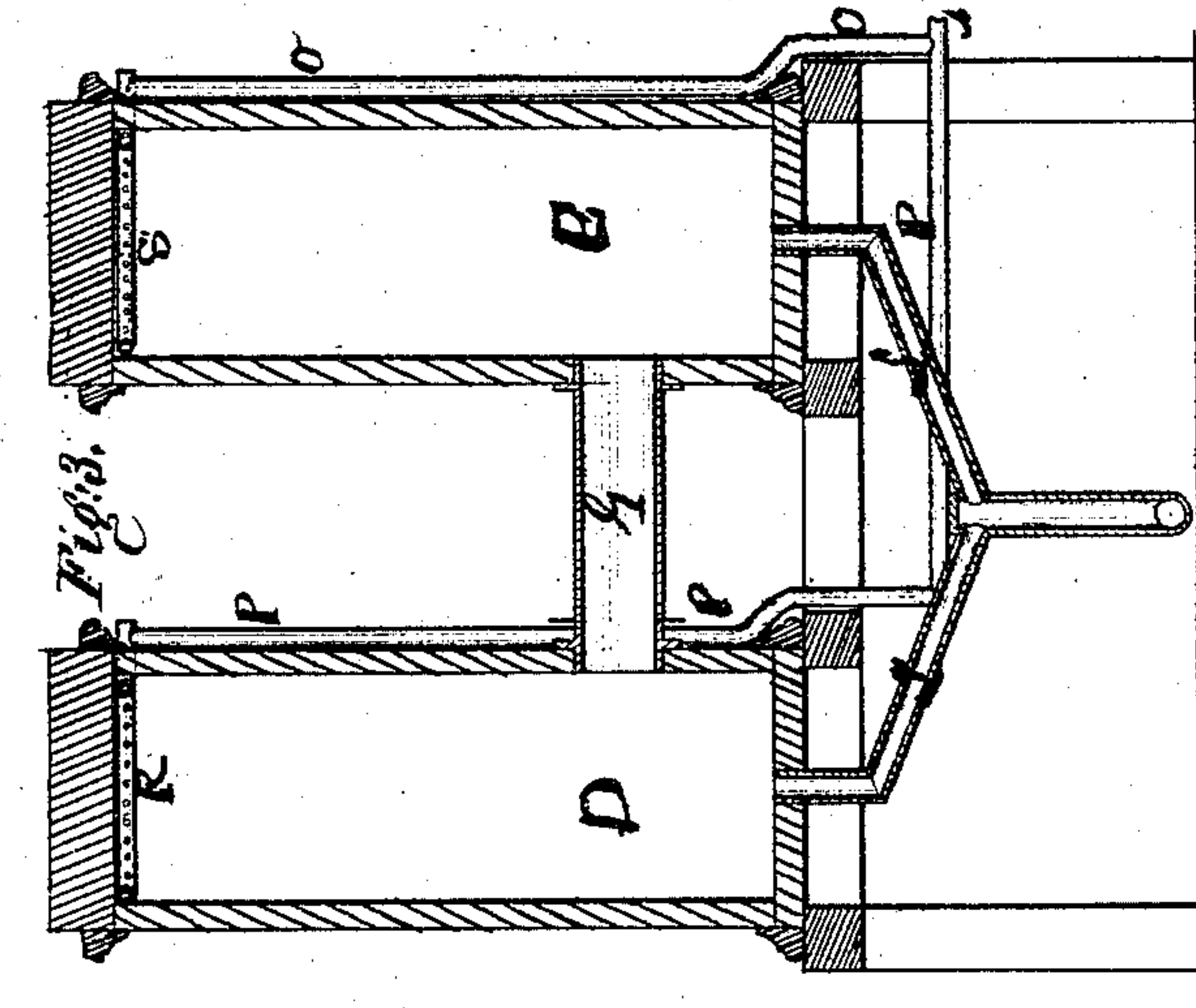


C. C. & G. F. Peirson,

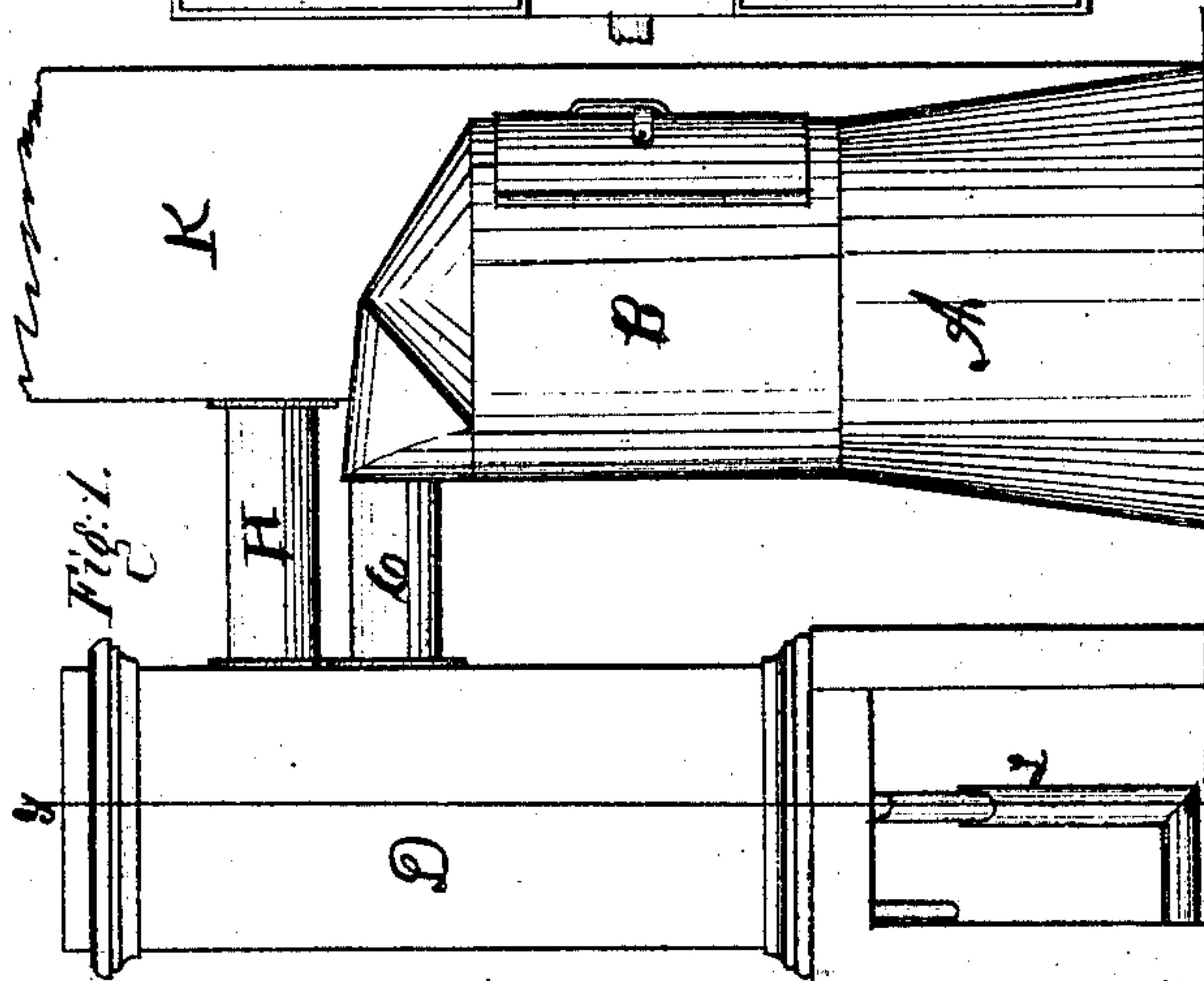
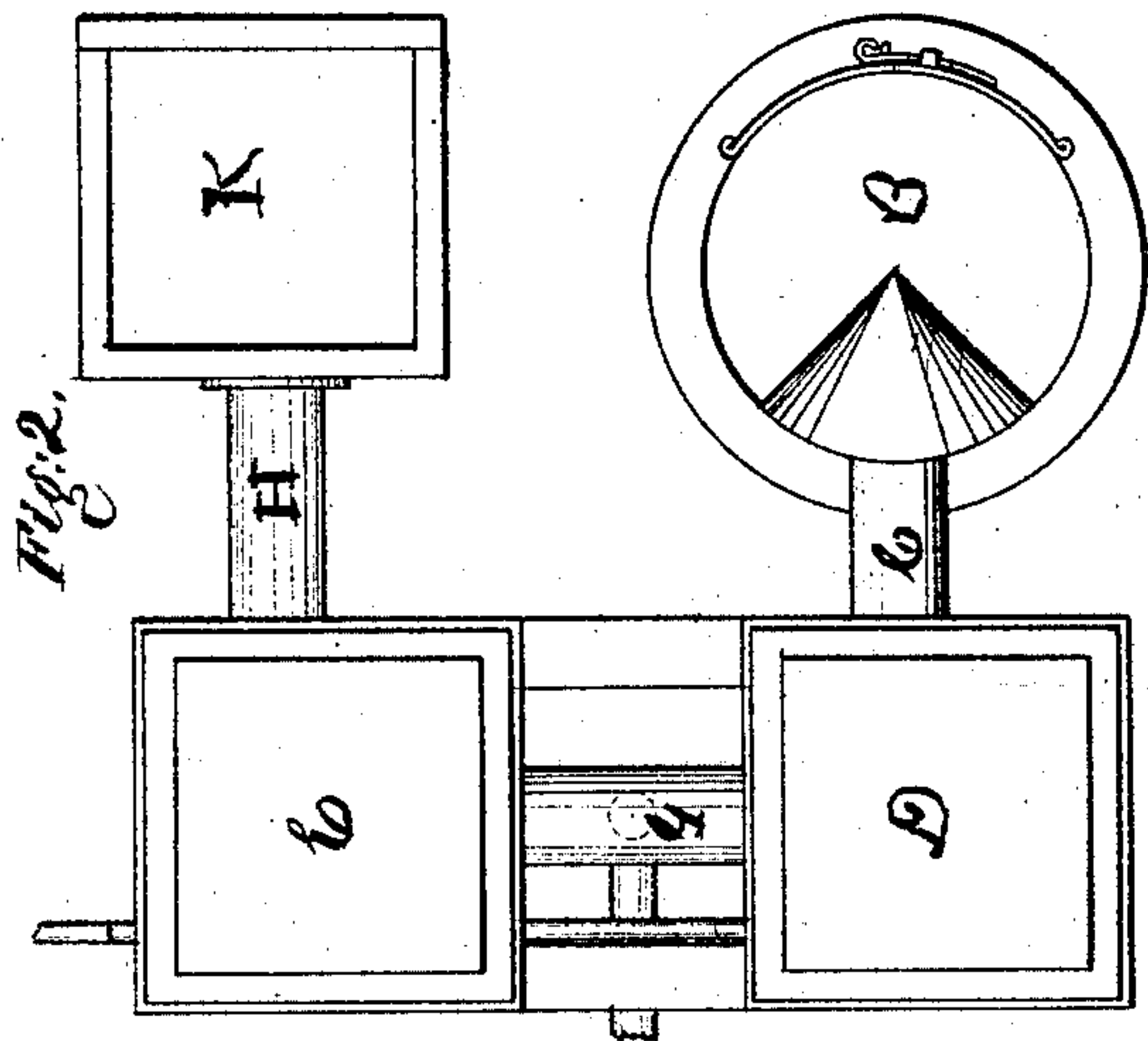
Treating Offal.

No. 80006.

Patented July 14. 1868.



Inventors
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C. C. PEIRSON AND GEORGE F. PEIRSON, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 80,006, dated July 14, 1868.

IMPROVEMENT IN APPARATUS FOR CONDENSATION OF VAPORS IN LARD-BOILING, &c.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that we, C. C. PEIRSON and GEORGE F. PEIRSON, of Philadelphia, in the county of Philadelphia, and State of Pennsylvania, have invented a new and valuable Improvement in the Condensation of Offensive Vapors Arising from Boiling Fat, Bones, &c., by the application of water in the form of shower-baths; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawings, represents a front external view of our device.

Figure 2 is a plan view, and

Figure 3 is a sectional view thereof, on the line *y y* of fig. 1.

The object of our invention is to provide means for condensing, deodorizing, and carrying off all offensive vapors arising from boiling fat, bones, and the like, and thereby to prevent the carrying on of said business in the neighborhood of human dwellings from being considered a nuisance.

The letter A, of the drawings, shows the furnace and kettle by which offensive substances are boiled.

Letter B is a cover to the kettle and furnace. It is constructed with doors, as represented, through which the fat, or other like substance, is passed to and from the kettle.

Letter C is a pipe, leading from the top of said cover, on the rear part thereof, to the condenser D, next mentioned.

Letter D is a condensing-box, constructed in the form shown on the drawings. It is connected with the cover B by means of the pipe C, and with the condenser E by the pipe G, as represented.

Letter E is a condensing-box, constructed, in all respects as to form and size, a duplicate of condenser D; and the two condensers are united by the pipe G, in the manner represented.

Letter H is a pipe, leading from condenser E to the chimney or smoke-stack K.

The letters L L are conduit-pipes, adjusted, at their upper ends, respectively, to the bottoms of condensers D and E. They are united, in the manner shown, in one tube at the bottom, and serve to carry off the water and condensed vapor, as hereinafter set forth.

Letter M is a conduit-pipe, leading from the street-main, or other proper hydraulic reservoir, to the lower rear side of condenser E, where it unites with conduit O, that leads to the top of said condenser, and also with the conduit P, that leads to condenser D, and to the top thereof, as represented. The conduits O and P respectively enter the tops of condensers D and E, where they respectively unite with the shower-pipes, hereinafter described.

On the extreme summit of condenser D, below the cap or cover, and on the inside thereof, we adjust the shower-pipe R. This shower-pipe is a continuation of conduit P, extending around the inside of condenser D, in the manner represented, and perforated with small holes, to produce a shower when water is passed through it.

The letter S is a shower-pipe, adjusted inside of condenser E, in the same manner as pipe R is arranged in condenser D. It also is perforated, to produce a shower from passing water, and it is connected with conduit O, in the manner shown.

The chimney should be built high in the air, for the purpose, first, of producing a powerful draught, and, secondly, to carry off high in the atmosphere any offensive odor that may not have been condensed and carried off, or otherwise dissipated, by the condensers and shower-pipes above mentioned.

We also advise that the conduit-pipes L L be continued, after their union, into the street-sewer, or other suitable subterranean passage.

It will readily be perceived that, by means of the several pipes connecting the kettle-cover to the chimney, a draught is created, by means of which all the odors and vapors rising from the substance boiling in the kettle must be carried, first, through condenser D, second, through condenser E, and, lastly, to the chimney.

Now, our device is arranged in such manner that a constant stream of water shall pass through the shower-pipes R and S, and produce a constant shower whenever the process of boiling is being carried on. By this means, the offensive vapor from the boiling substance becomes condensed and united with the water that passes off through conduits L L into the ground.

We sometimes find it useful to increase the number of the condensing-boxes and shower-pipes; but for all ordinary purposes two of each are sufficient.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The shower-pipes R and S, constructed and operating substantially as and for the purposes specified.
2. A condensing and deodorizing-apparatus, having cover B, condensing-boxes D and E, shower-pipes R and S, chimney K, and conduit-pipes, as described, constructed, arranged, and operating substantially as described.

In testimony that we claim the above, we have hereunto subscribed our names in the presence of two witnesses.

C. C. PEIRSON,
GEO. F. PEIRSON.

Witnesses:

E. T. MATHEWS,
ERASTUS POULSON.