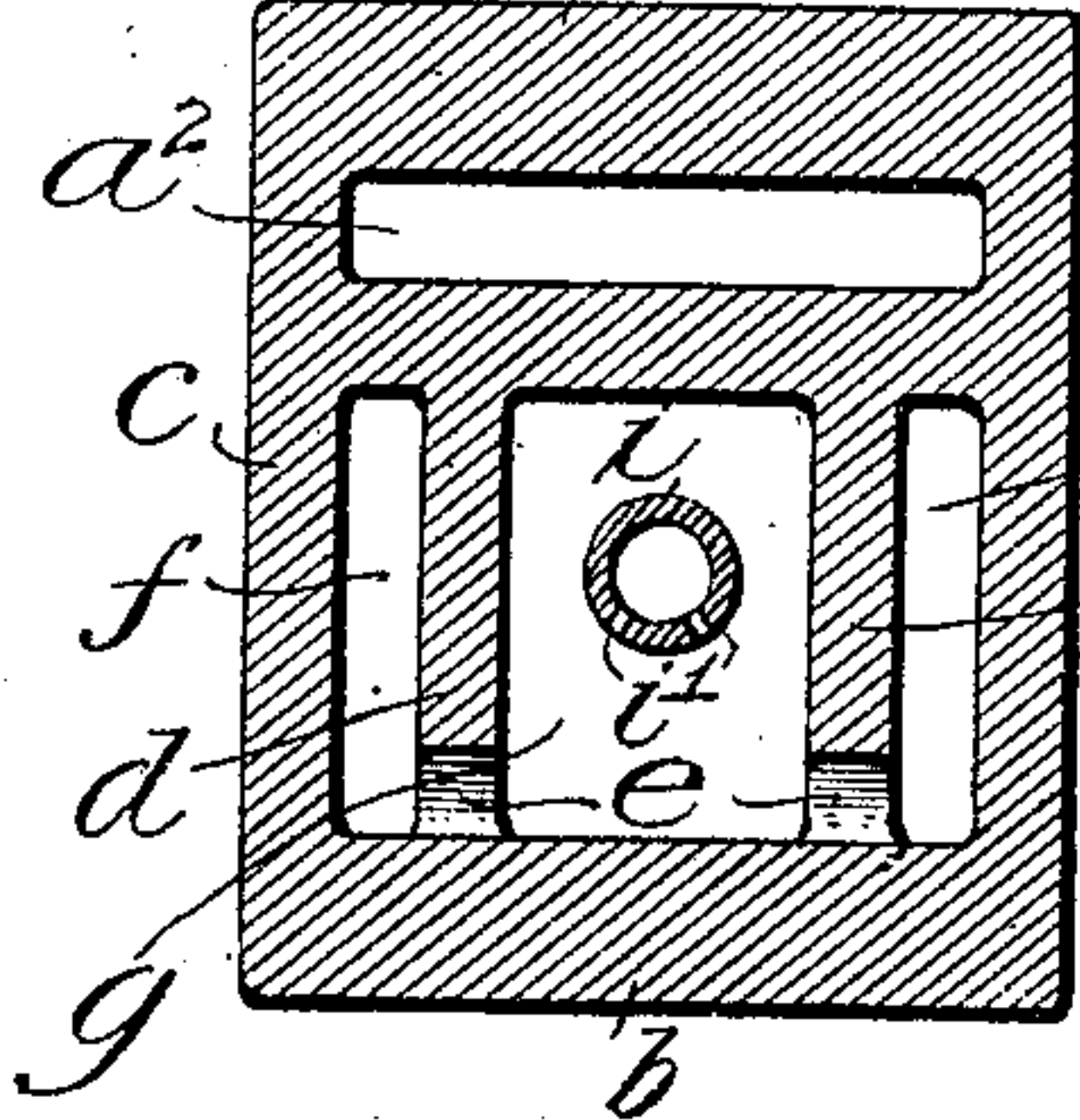
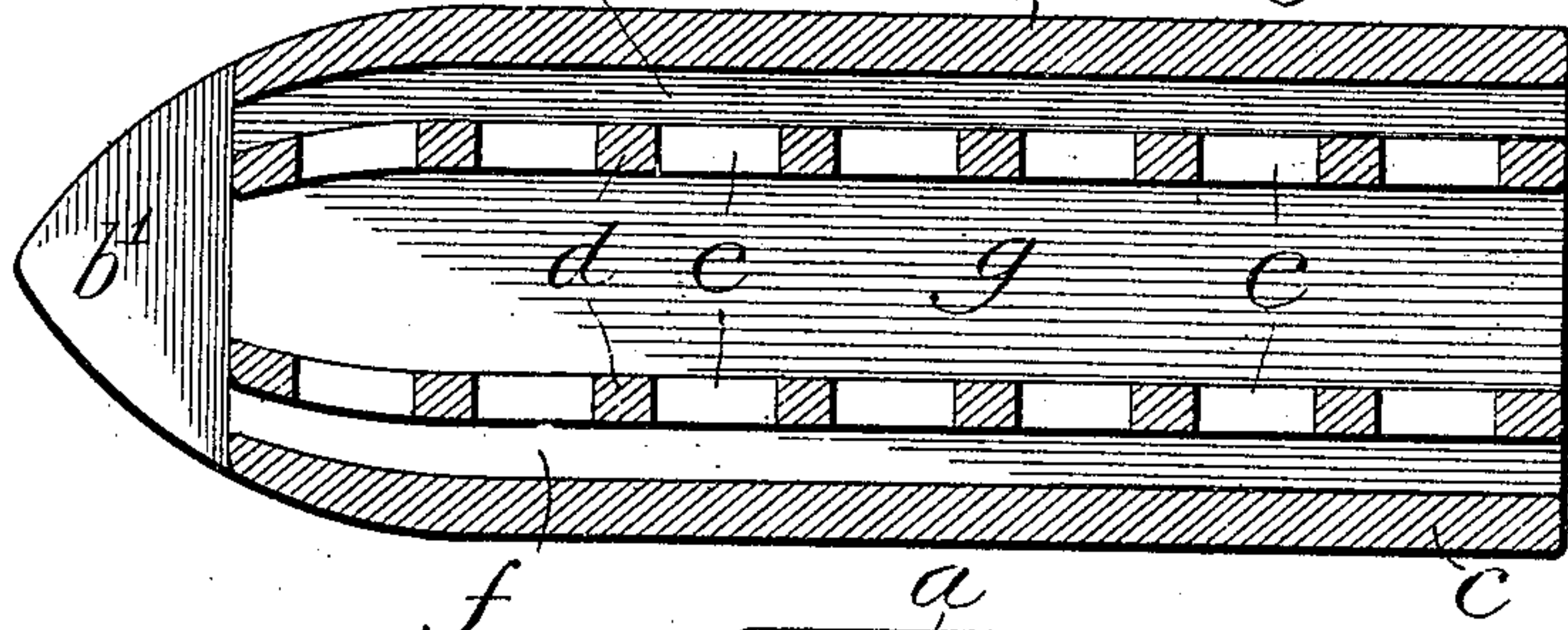
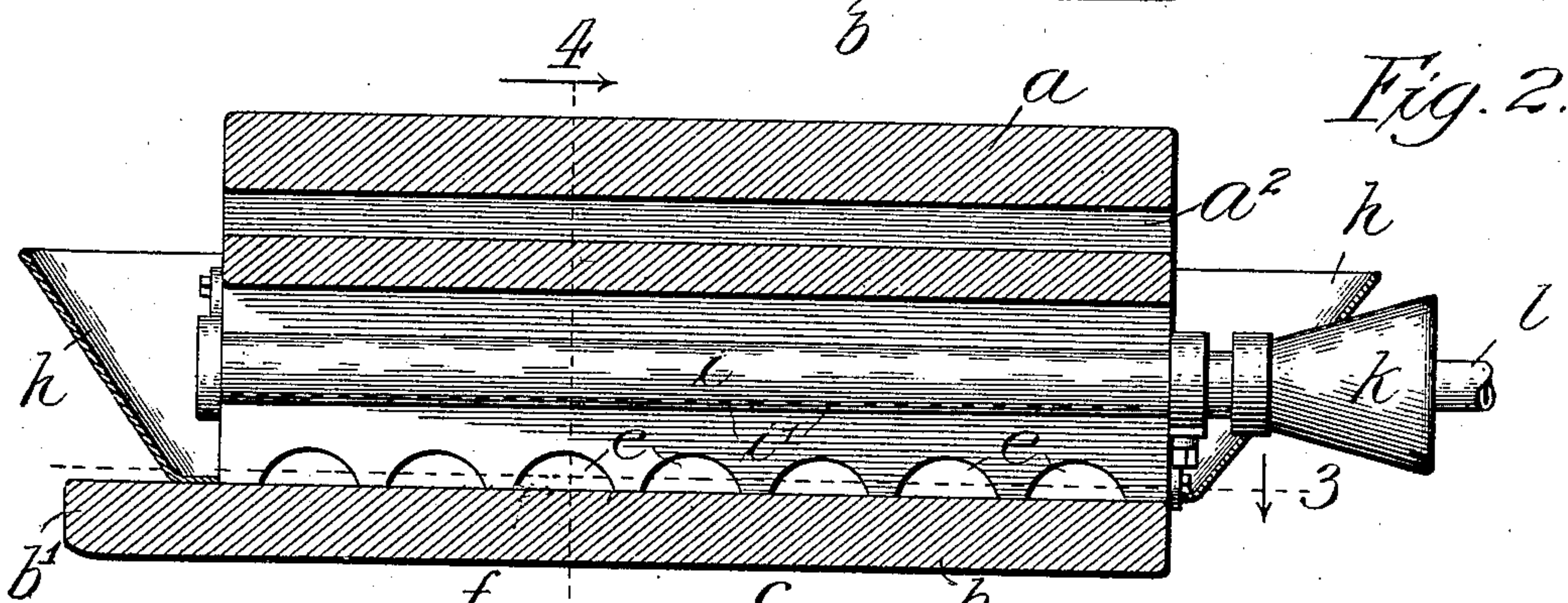
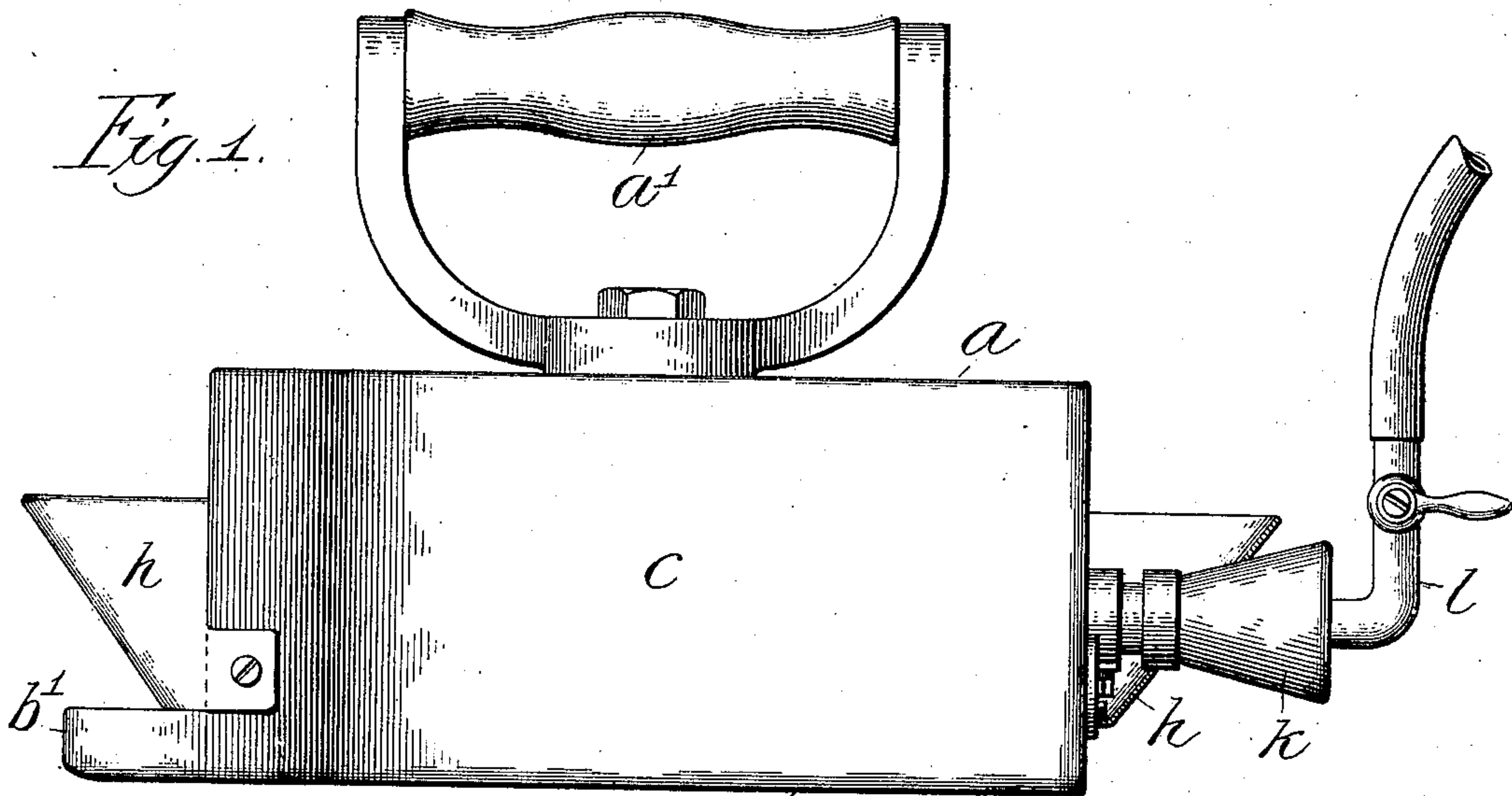


No. 828,023.

PATENTED AUG. 7, 1906.

J. ECKER.
SAD IRON.

APPLICATION FILED JAN. 25, 1905.



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UNITED STATES PATENT OFFICE.

JACOB ECKER, OF CHICAGO, ILLINOIS.

SAD-IRON.

No. 828,023.

Specification of Letters Patent.

Patented Aug. 7, 1906.

Application filed January 25, 1905. Serial No. 242,659.

To all whom it may concern.

Be it known that I, JACOB ECKER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Sad-Irons, of which the following is a specification.

My invention relates to an improvement in the class of gas-heated sad-irons which I have devised more particularly, but not essentially, for use with cloth-pressing machines of the character of that forming the subject of my application for Letters Patent, Serial No. 242,657, filed concurrently herewith on the 25th day of January, 1905.

My improved device is also intended for hand use.

The primary object of my invention is to provide a novel and improved construction of sad-iron whereby free and copious circulation of air through it and through combustion of the gas from its contained burner shall be induced and uniform distribution of the resultant heat effected and whereby the hot products of combustion shall be caused to discharge from the iron in a manner to avoid danger of burning or scorching the work.

To these ends my invention consists in the general as also in the more specific construction of my improved sad-iron illustrated in the accompanying drawings, in which—

Figure 1 is a view of the improved sad-iron in side elevation; Fig. 2, a longitudinal vertical section of the same; Fig. 3, a section taken at the line 3 on Fig. 2 and viewed in the direction of the arrow, and Fig. 4 a section taken at the line 4 on Fig. 2 and viewed in the direction of the arrow.

The body of the device is a metal casting formed with a top *a*, provided with the usual or any suitable handle *a'* and containing, by preference, an insulating air-chamber *a²*, a flat bottom *b*, projecting at the front end of the iron beyond that of the top and tapered, as shown, to form the point *b'*, and with outer imperforate walls *c c* and inner walls *d d*, the latter containing near their bases series of openings *e*. The walls form side chambers *f f* and a central chamber *g*, communicating with the side chambers through the openings *e*, and all the chambers are open at both ends. On the front end of the chambered body or on each end thereof, as shown, is secured a deflector *h*, provided for the purpose hereinafter

explained. A gas-burner in the form of a tube *i*, containing a series of openings *i'* along its under side, is supported to extend centrally lengthwise through the chamber *g*, near the top thereof, the outer end of the tube being equipped with a conical mixing-chamber *k*, into which a valved gas-supply pipe *l* leads from a suitable source with which it is adapted to be connected by a length of rubber hose. (Not shown.)

In use the iron is heated by the flame of the burning gas discharging from the openings *i'* in the central chamber, from which the hot products of combustion are reverberated into the side chambers *f*, thereby becoming thoroughly mixed with air circulating through the open-ended chambers and heating the ironing-bottom of the device with substantial uniformity, and the spent gases discharge at the open ends of the several chambers to prevent the hot gases from scorching or burning the work, additional precaution against that result being provided in the deflecting-shields *h*, which direct the discharging gases upwardly and outwardly from the work. The air-chamber *a²* tends to protect the top of the sad-iron against overheating to the discomfort of the operator in manipulating the sad-iron at its handle *a'*.

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

1. A sad-iron comprising, in combination, a hollow metal body having imperforate outer side walls, inner walls forming a central chamber and, with said outer walls, side chambers, the chambers being open at their ends and said inner walls having openings through which the chambers intercommunicate, and a gas-burner in said central chamber.

2. A sad-iron comprising, in combination, a hollow metal body having imperforate outer side walls, inner walls forming a central chamber and, with said outer walls, side chambers, the chambers being open at their ends and said inner walls having openings through which the chambers intercommunicate, a gas-burner supported in the central chamber, and shields on said body at the open ends of the chambers.

JACOB ECKER.

In presence of—

J. H. LANDES,
L. HEISLAR.