

A. J. KENNEDY.

Sad-Iron Heater.

No. 91,450.

Patented June 15, 1869.

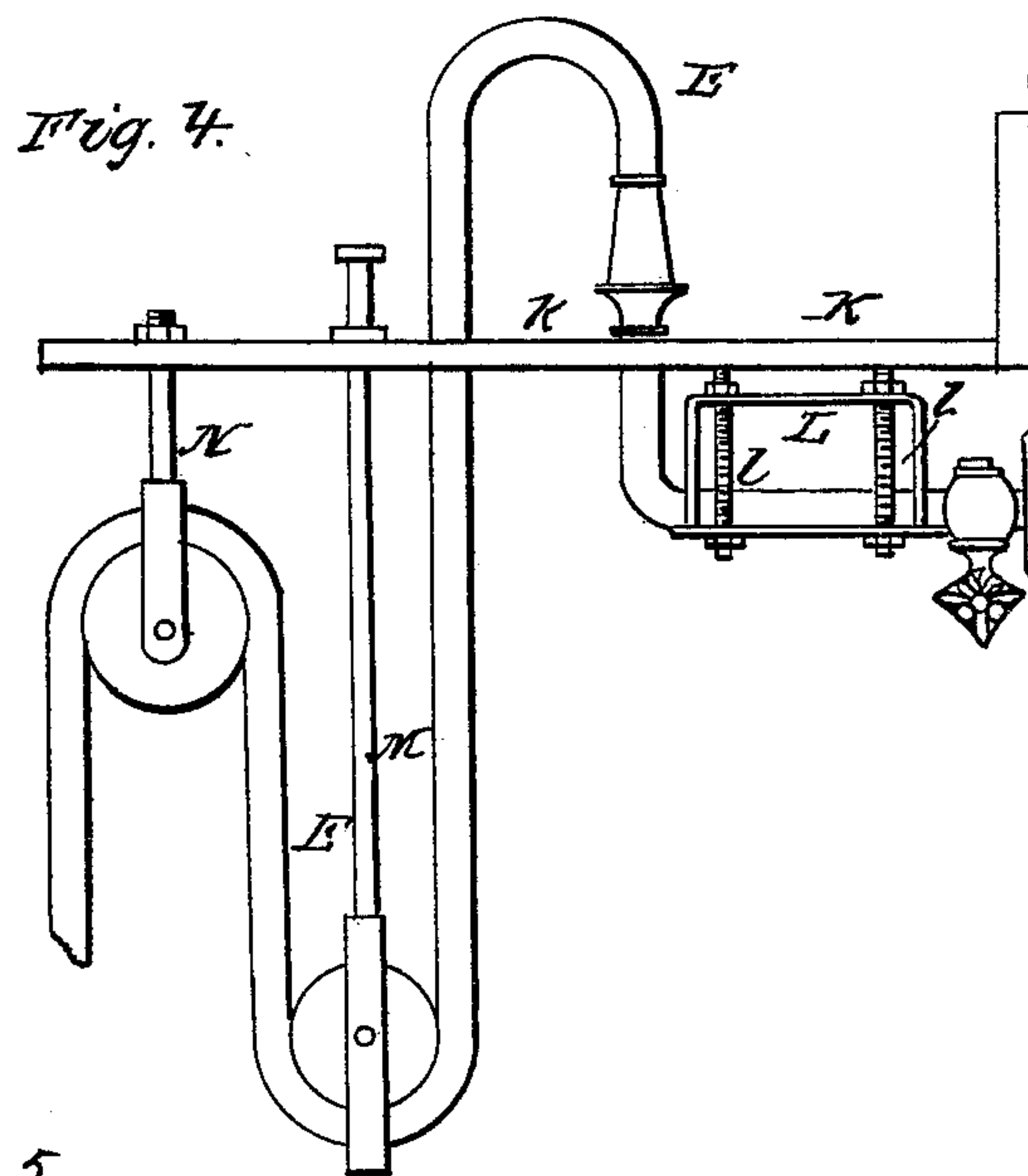
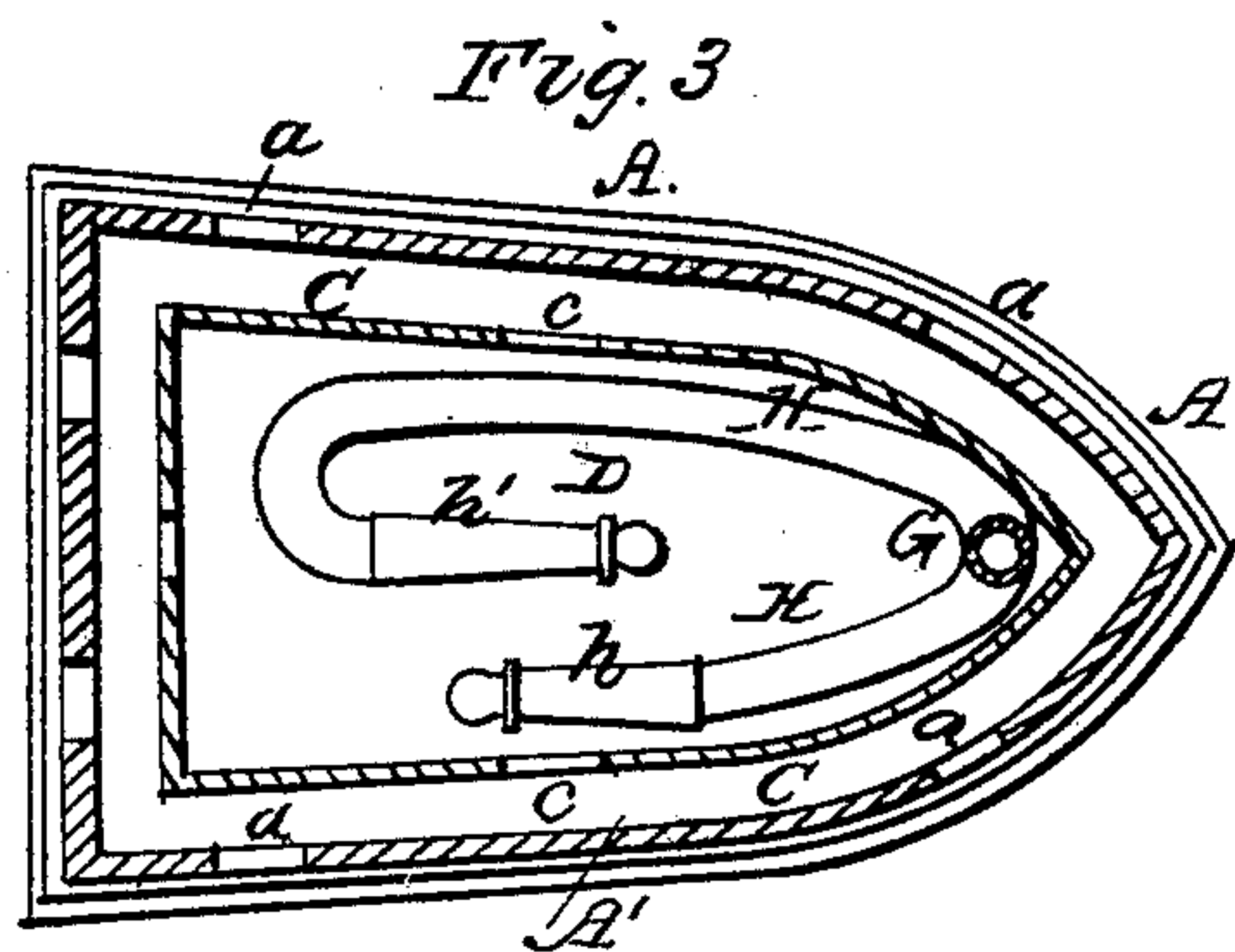
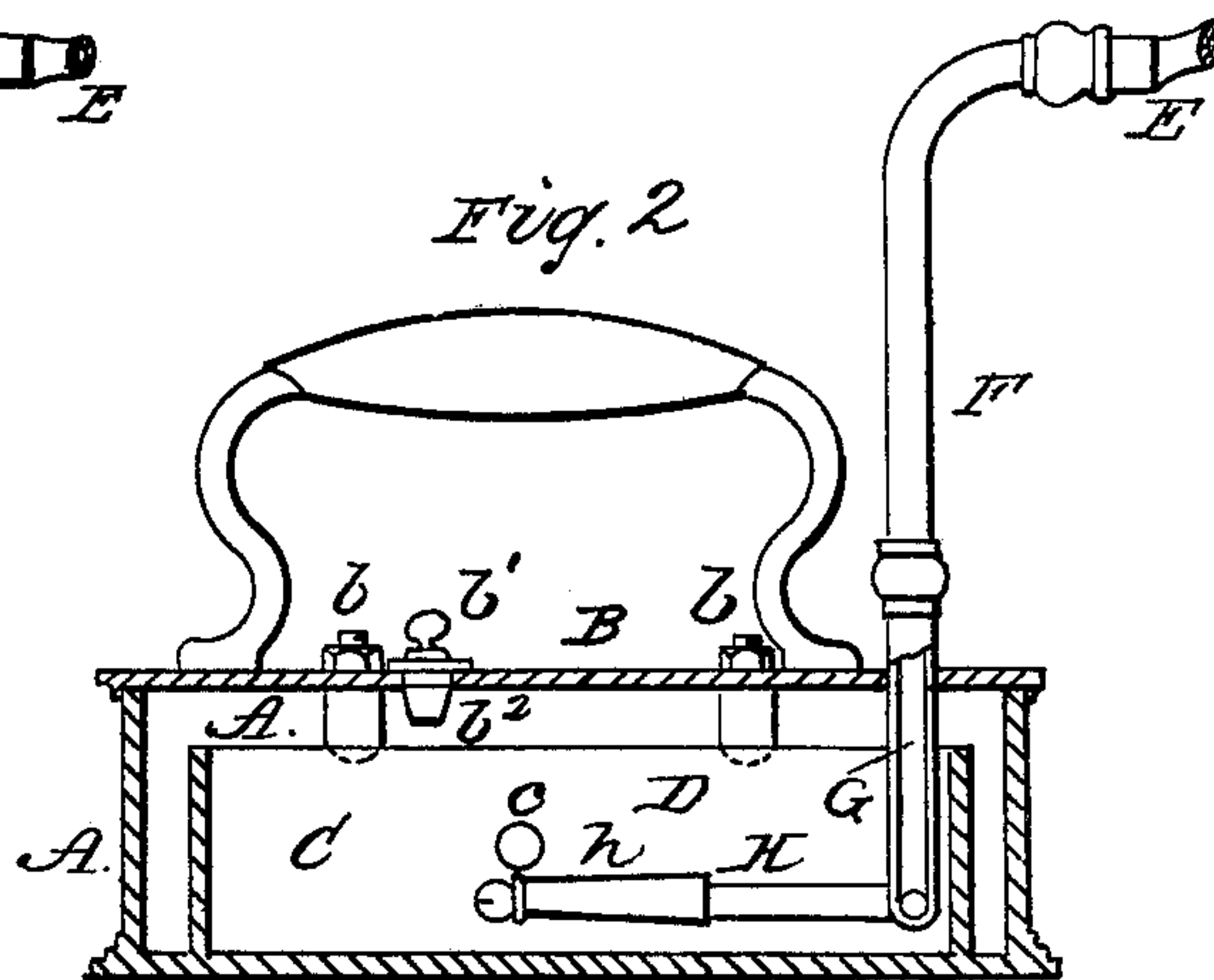
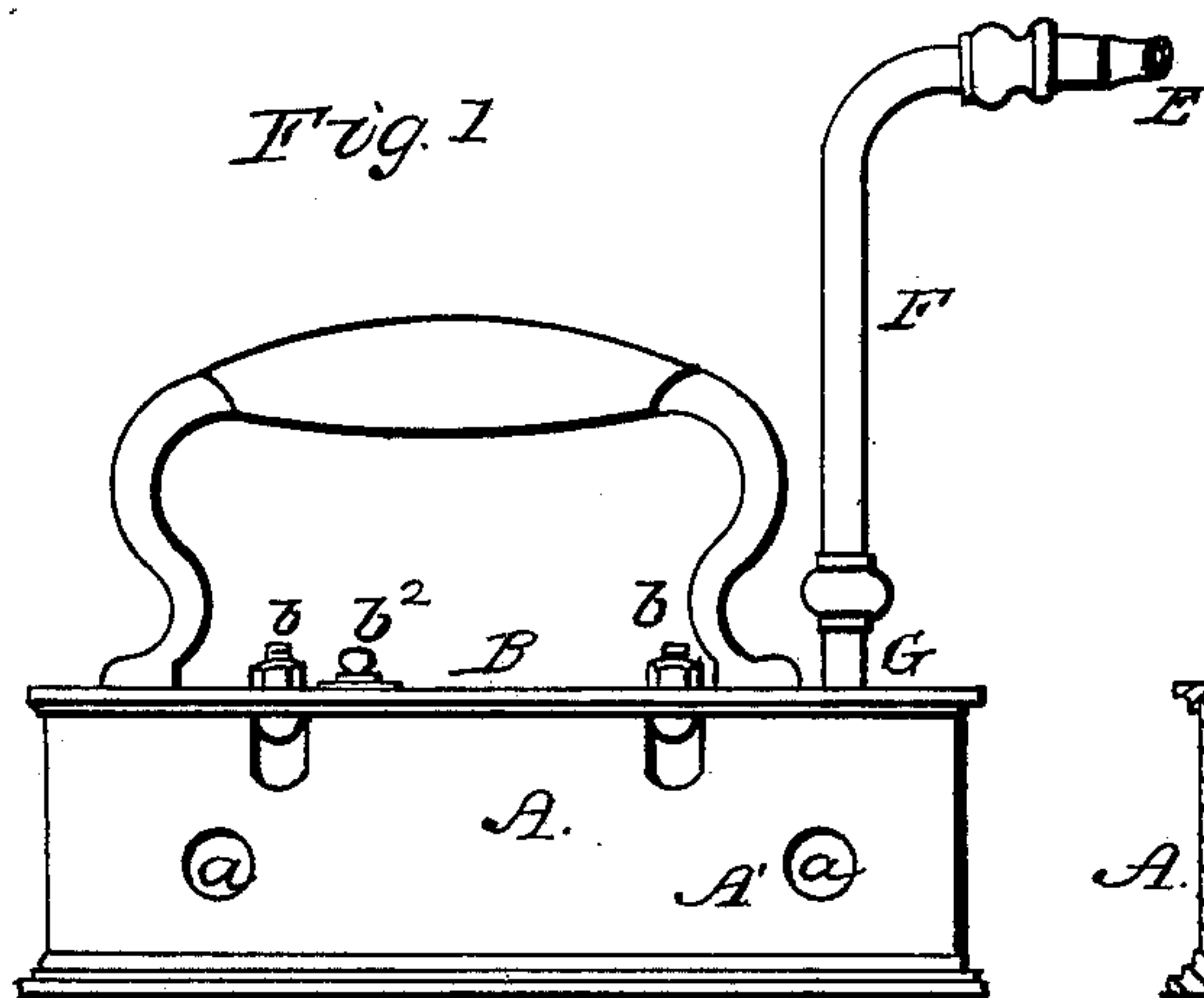
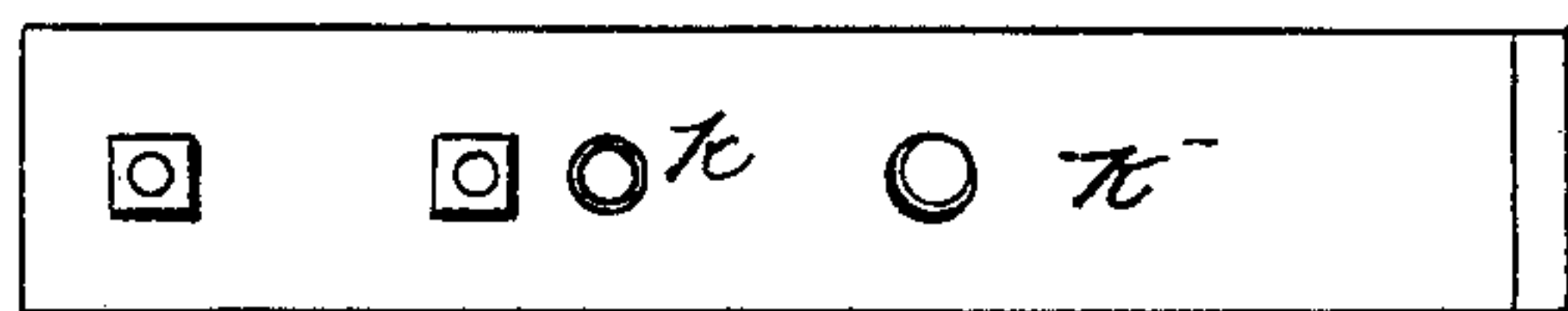


Fig. 5



Witnesses

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Inventor

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ANDREW J. KENNEDY, OF ST. LOUIS, MISSOURI.

Letters Patent No. 91,450, dated June 15, 1869.

SAD-IRON HEATER.

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, ANDREW J. KENNEDY, of St. Louis, in the county of St. Louis, and State of Missouri, have made certain new and useful Improvements in Sad-Iron; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of this invention is to form a self-heating sad-iron, so that the same iron may be used for an indefinite period of time, and avoiding the delays occasioned in the usual mangling and iron-processes, by changing a cold for a hot iron.

The nature of said invention is in the use of a flexible tube for conveying illuminating-gas of the usual kind, or other gaseous illuminating and heating-substances, and in the arrangement of said tube with the hollow sad-iron, so that, by the burning of the gas, the said iron may be continually heated.

In order that combustion of gas may take place within the iron, this invention relates to the construction of air-openings and air-ducts for feeding air to the flame, and of certain openings for lighting the gas.

To enable those herein skilled to make and use my said improvement, I will now fully describe the same, referring to the accompanying—

Figure 1 as an elevation; to

Figure 2, a sectional plan; to

Figure 3 as a sectional elevation of the sad-iron in one of its ordinary and usual forms.

I construct the body A usually of cast-iron, with a polished lower surface, acting in the ordinary way upon the clothes in ironing.

Upon the body A, I arrange the top, B, securing the same, by proper screws, *b*, to the sides, A' of the body A.

Said top, B, has the usual handle.

Within the body A, I arrange the flame-wall C, extending parallel to the outer side, A', of the iron, and extending vertically close to the under edge of the top, B, and enclosing the inner chamber D.

In order to pass the heating-gas within the chamber D, I arrange a flexible tube or hose, (usually of rubber or leather,) E, connected with a gas-pipe, F, of such curvature and form as will prevent the flexible tube from kinking in the ordinary movement of the iron in ironing and smoothing clothes.

The gas-pipe F will connect with a stand-pipe, G, by a proper union, said pipe G passing, through the cover B, into the chamber D, and connecting with the bent delivery-pipe H, arranged in the form indicated in fig. 2, and having proper tips or burners, *h h'*, from which the gas will discharge, and, being lit, will emit the heating-flame required to properly perform the work herewith intended.

The form of the delivery-pipe H, and the arrangement of the burners *h* and *h'*, (or such greater number as may be deemed expedient,) will be such as to

give a proper distribution of heat within the hot chamber D, and especially on the bottom of the iron.

The flexible tube E connects, usually, with the gas-fixtures of the apartment, so that, by turning the stop-cock on the fixtures, the supply of gas to the iron may be regulated or checked.

Said tube E should be of proper length, so that the operator may move the iron as much as necessary, without undue strain on the gas-delivery tubing or pipeage.

In order that the air needed for the gas-flames here used shall pass into the chamber D, and that the carbonic acid formed by the combustion may readily pass off without undue loss of heat, I arrange the openings *a* in the sides, A', of the iron.

From said openings, the air passes in, and the gases arising from combustion pass out through the passage between the flame-wall C and said sides A'.

In order that the air may properly enter the inner chamber D, I arrange openings, *c*, in the flame-wall C; but, to prevent the gas-flame from passing out of the space enclosed by the sides A', the openings *c* will be arranged between the openings *a*, and at proper distances therefrom.

In order that the operator may readily light the gas-jets in the chamber D, I arrange an opening, *b'*, in the cover B, which will ordinarily be closed by a plug, *b''*.

I prefer to use at least two burners, *h h'*. If the flame of one of said burners were extinguished by too rapid movement of the iron, the other burner, being still lit, would relight the extinguished gas-jet, without the use of a taper, or intermission of the work.

In order to properly hold the tube E, I use a regulator-support, constructed as shown in Figures 4 and 5.

The bracket K hereof is secured to a side wall, and arranged to receive the burner-pipe.

In order that the said pipe may be adjusted to the bracket K, I use the stirrup L, and its screws *l* passing about the said pipe. The hose or tube then passes from the tip of the burner, through the hole, *k*, in the bracket, to the pulley-slide M, and finally over the fixed pulley N, being thereby supported.

As the tube E is drawn up, by moving the sad-iron, the slide M adjusts its position to the length of the tubing required.

The slide M may be weighted, to draw up the slack of the tubing, if required.

Having thus fully described my invention,

What I claim, is—

The sad-iron heater, when constructed with the shell A, having apertures *c*, partition C, having apertures *a*, and chamber D, with the gas-tube H, coil, and two or more burners, *h* and *h'*, all arranged in the manner and for the purpose set forth.

ANDREW J. KENNEDY.

Witnesses:

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J. W. HERTHEL.