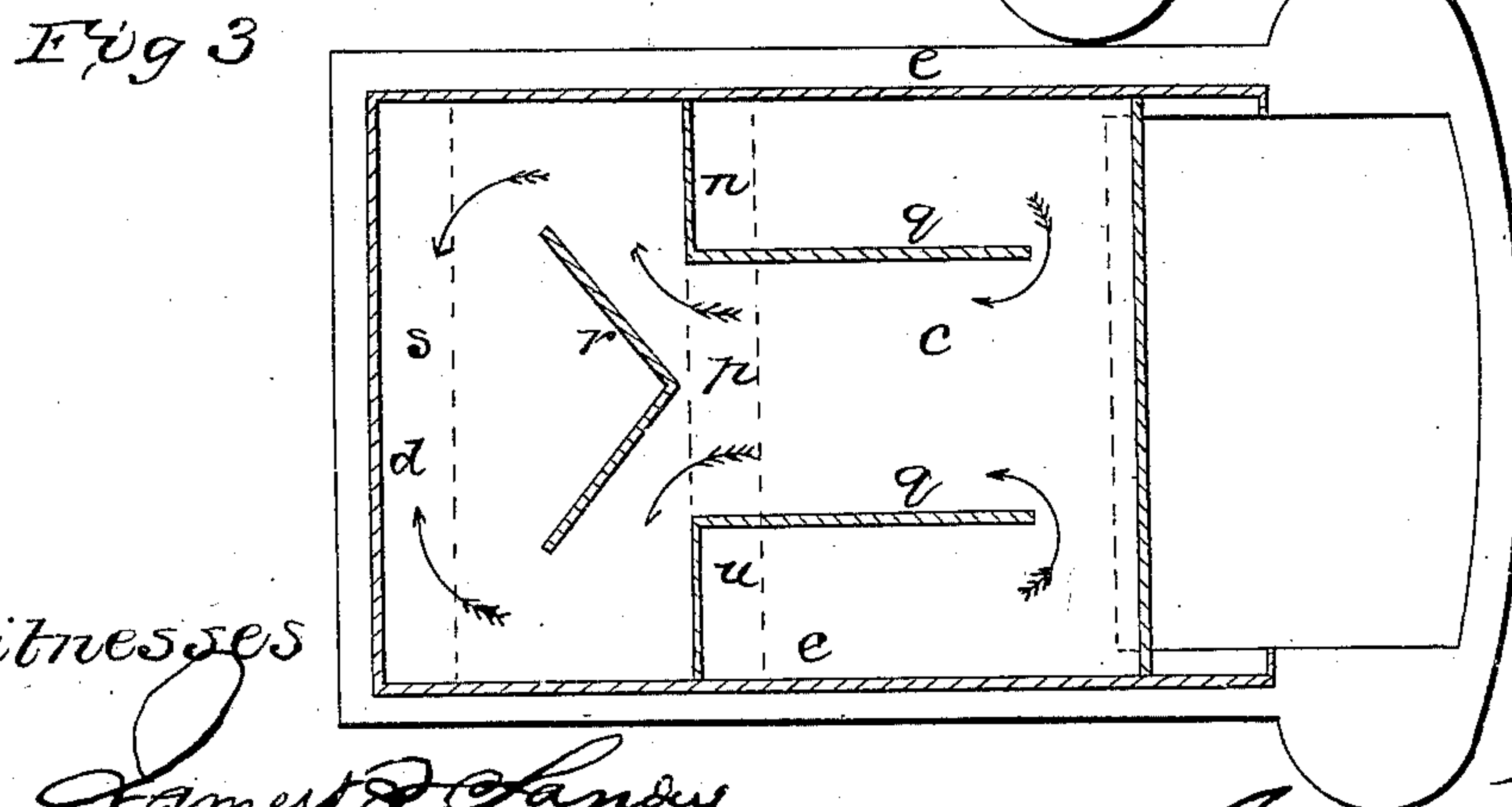
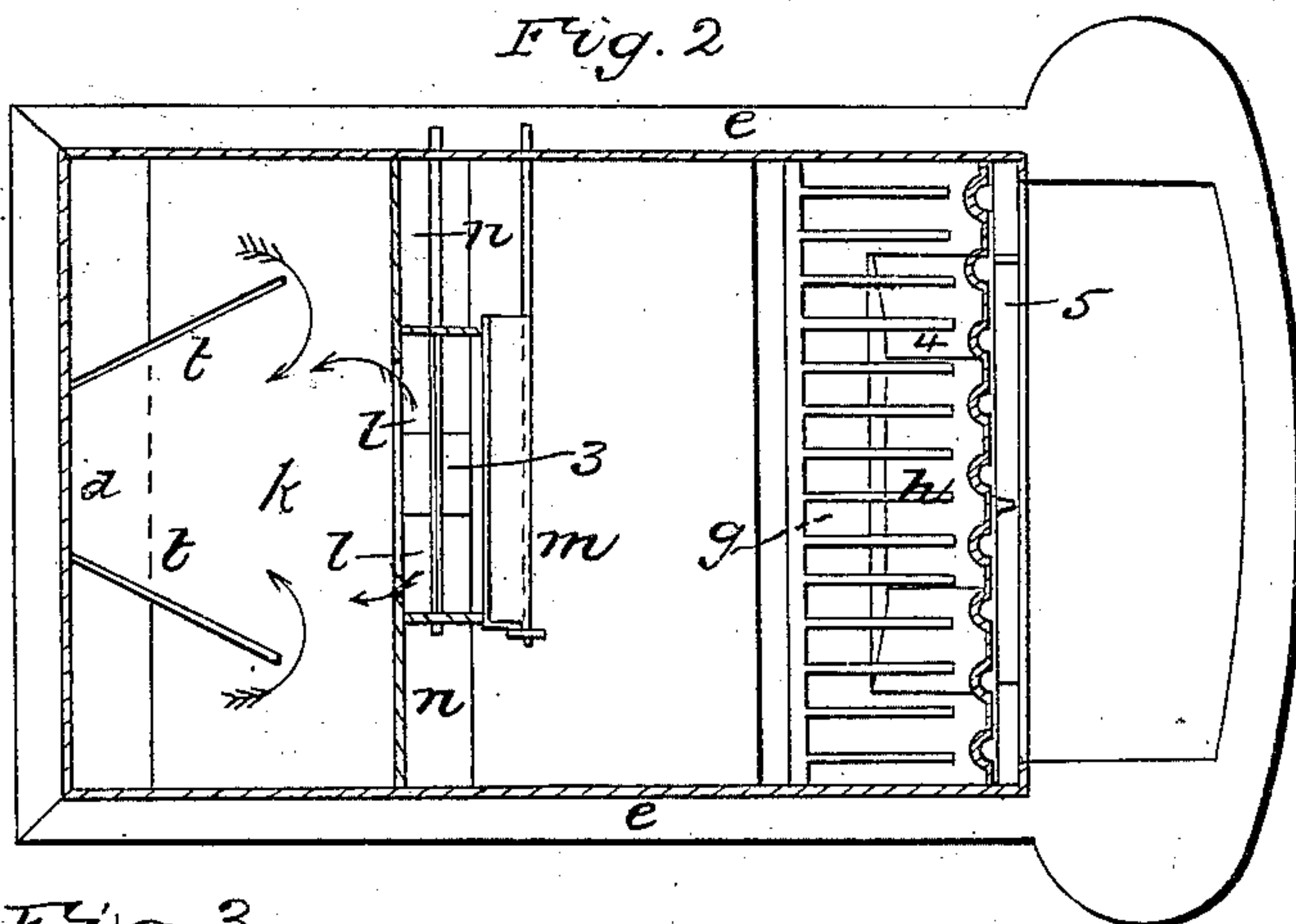
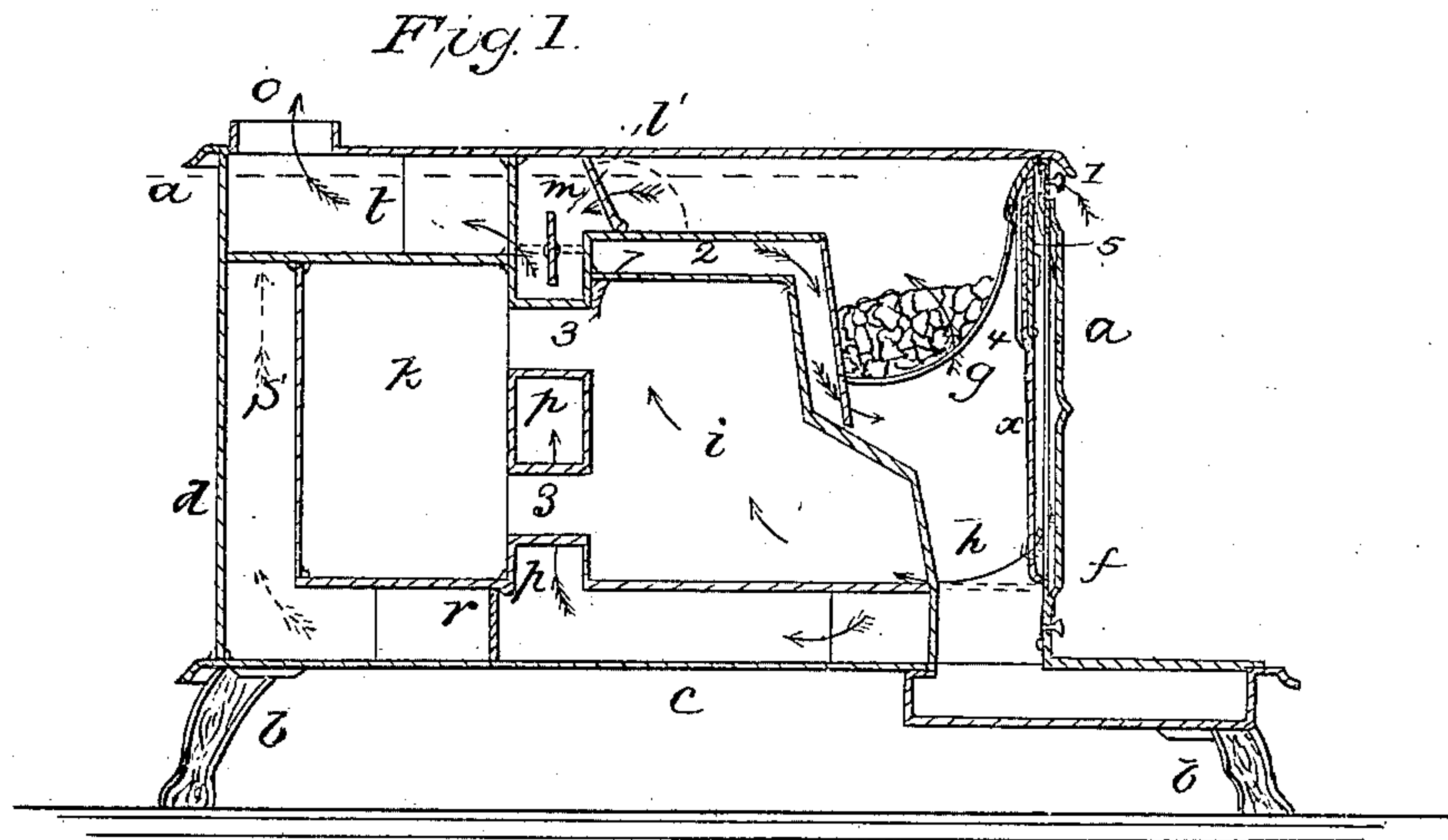


J. C. HENDERSON.

Cooking Stove.

No. 32,691.

Patented July 2, 1861.



Witnesses

James D. Sanday
A. V. DeWitt.

Inventor

Jos. C. Henderson.

UNITED STATES PATENT OFFICE.

JOSEPH C. HENDERSON, OF ALBANY, NEW YORK.

STOVE.

Specification of Letters Patent No. 32,691, dated July 2, 1861.

To all whom it may concern:

Be it known that I, JOSEPH C. HENDERSON, of Albany, in the county of Albany and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Cooking-Stoves; and I 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 drawing, making part of this specification, wherein—

Figure 1 is a vertical longitudinal section. Fig. 2 is a plan at the line *a, a*, of Fig. 1, the top plate being removed, and Fig. 3 is a plan of the flues below the oven.

Similar marks of reference denote the same parts in all the figures.

My said invention is an improvement upon that for which Letters Patent were granted to me May 1st, 1860, for cooking stoves. With the said stove an oven or heater has been applied at the rear, the same being movable, and generally formed of tin.

My present invention consists in an arrangement of flues applied in a stove containing two ovens; also in a peculiar register fitted in front of the grate in such a manner that a roaster can be applied to the front of the stove, and receive the direct rays of heat from the fire in the grate.

In the drawing *b, b* are the legs of the stove.

c, is the bottom plate, *d*, the back plate and *e, e*, the side plates; *f* is the front plate and doors similar to those in my aforesaid patent; and the draft enters by the register at 1, descends between the doors and plate *w*, entering the oven on each side of the ash tube *h*, thence through the space 2, over the oven to the fire in the grate *g* the same as in said patent, except that I introduce a basket or similar grate so as to keep the fire from contact with the register plates 4 and 5, that are provided in the plate *w*; the object of said register being to allow the direct rays of heat from the fuel to pass through said register, when open, to any articles contained in a reflector or roaster placed in front of the stove, the doors *f f*, being opened for that purpose. The register being located so near to the fire is exposed to considerable heat which would warp and twist the plates forming said register, I therefore make the vertical sections in a curved or corrugated shape as shown in Fig. 2, which not only prevents

the vertical sections or bars from warping by the heat, but also allows the edges of the plates coming in contact to be finished off true, with greater facility, so that the register shuts much tighter.

The direction of the draft through the oven is indicated by the arrows, and from the fire the draft passes either through the descending side flues *n, n*, thence along the bottom flues beneath the oven, formed by the plates *q, q*, and to the pipe *o*, as hereafter indicated, or when the damper *m*, is open for the purpose of kindling, the draft goes direct to said pipe at *o*.

k is a second oven connected with the oven *i*, by the pipes 3, 3, so that there is not only a circulation of the heat, but also a ventilation of the oven *k*.

p is the flue in the center between the ovens *i*, and *k*, and *l*, is a damper to said flue.

r, is a deflecting plate beneath the oven *k*, to direct the heat as it emerges from the center flue, (under *i*,) toward the ends of the oven *k*, and thus equalize the heat, and the draft ascends through the back flue *s*, and passes over the top of the oven *k*, as indicated by the dotted arrows, in consequence of the division plates *t*, Figs. 1 and 2.

It will now be seen that when the dampers *l*, and *m*, are closed the ovens *k* and *i*, are both heated; the oven *i*, will not however be injuriously affected because the heat travels around the said oven *i*, in the usual manner, and the heat ascends in the flue *p*, but does not travel through the same; hence becomes a "dead flue"; but if the damper *l*, is open the oven *k*, will not be so much heated and can be used for warming articles instead of cooking. I am thus enabled to include within my stove two distinct ovens, that may be used either separately for distinct operations or may both be heated almost uniformly so as to be capable of performing corresponding duties.

The flues or pipes 3, 3, might be provided with dampers if desired. A separate heater to the back of the stove is dispensed with by my construction; and the oven *i*, is not exposed to any cooling influences.

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

1. The arrangement of the ovens *i* and *k*, and flues *n, n*, and *p*, and damper *l*, in the manner and for the purposes specified.

2. The arrangement of the deflector *r*,

and plates t, t , in combination with the flues p and n, n , for directing the draft as it passes around the oven k , so as to equalize the heat as set forth.

- 5 3. The arrangement of the grate g , front plate x , and register (5, 4,) in the manner and for the purposes specified.

As witness my signature this first day of April 1861.

JOS. C. HENDERSON.

Witnesses:

JAMES B. SANDERS,
A. V. DE WITT.