

(No Model.)

M. S. BRIGGS.
FEEDER FOR STOVES.

No. 364,795.

Patented June 14, 1887.

Fig. 2.

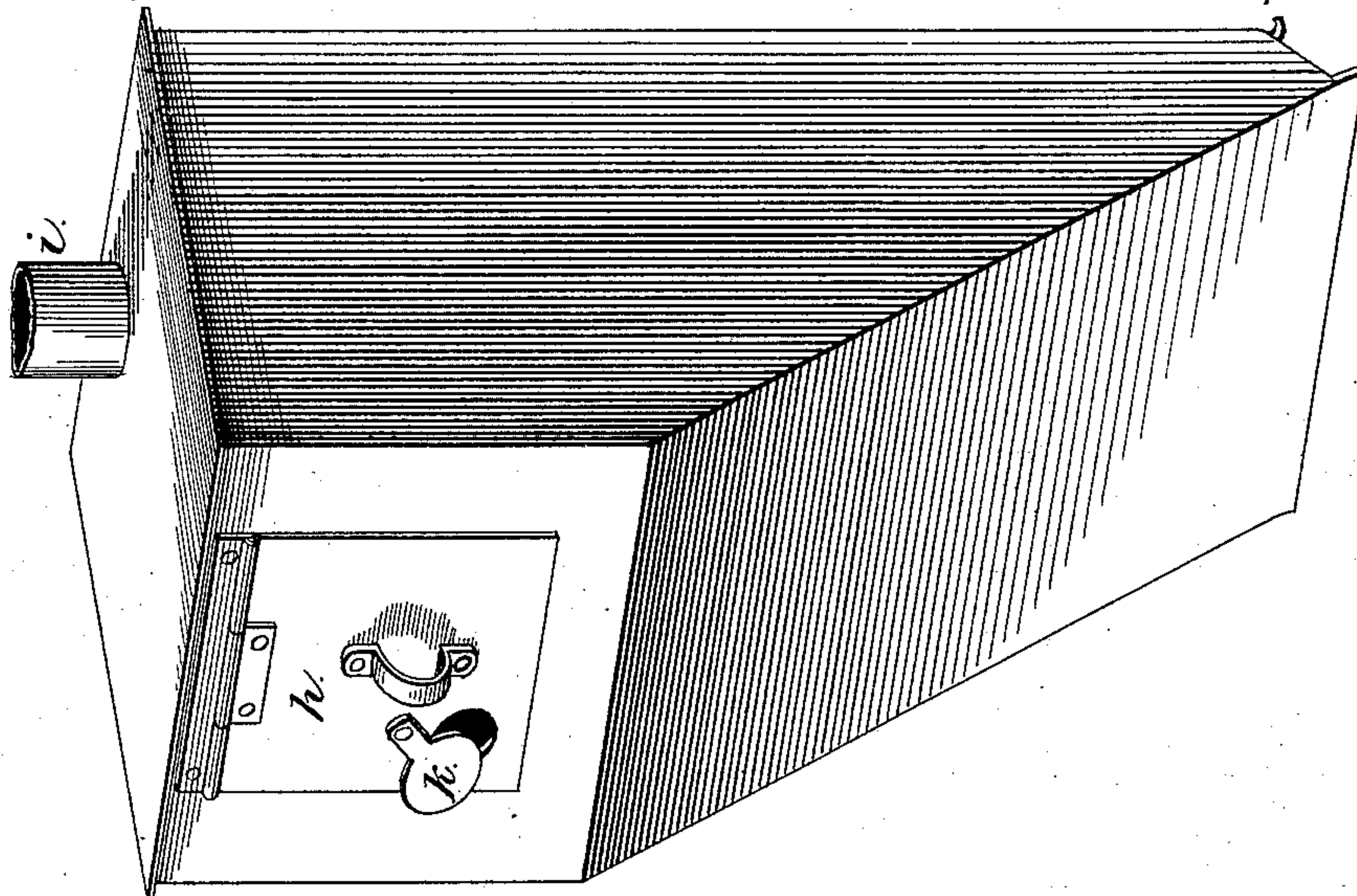
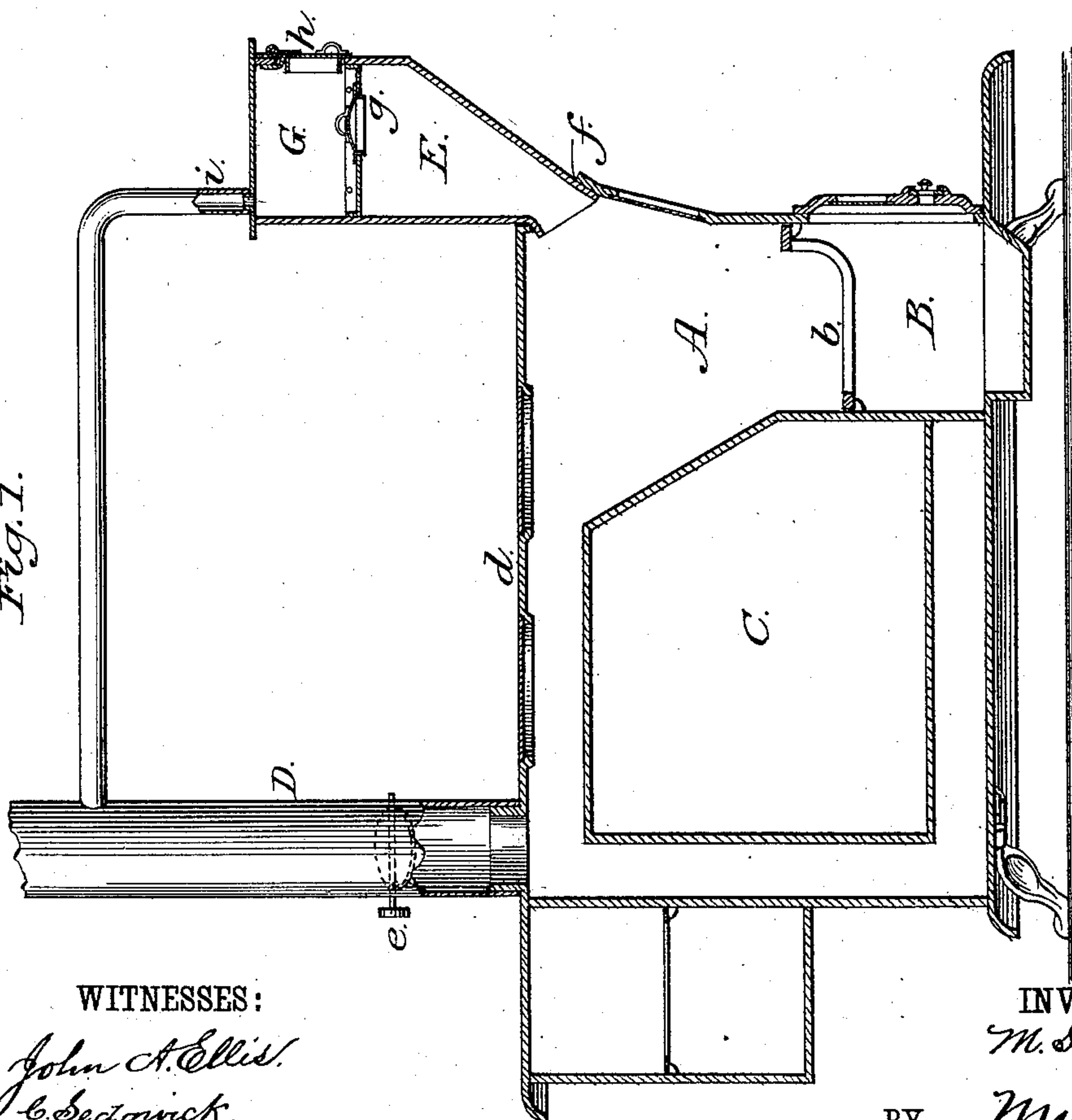


Fig. 1.



WITNESSES:

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FEEDER FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 364,795, dated June 14, 1887.

Application filed January 5, 1887. Serial No. 233,498. (No model.)

To all whom it may concern:

Be it known that I, MELBURN S. BRIGGS, of Oxford, in the county of Furnas and State of Nebraska, have invented a new and useful Improvement in Feeders for Stoves, of which the following is a full, clear, and exact description.

This invention consists in a magazine or self-feeder for cooking and other stoves, of novel construction, the same including a fuel-box arranged outside of the stove and having combined with it an upper external smoke and air chamber adapted to pass the fuel into said box, and a pipe for carrying off any escaping smoke into the main smoke pipe or flue of the stove, substantially as hereinafter described, and pointed out in the claim.

The feeder, which may be of any desired shape, is mainly designed to be used in connection with that class of cooking-stoves which are provided with an opening in front for putting in the fuel. This opening is usually closed by a door, and instead of said door I apply the magazine or feeder, that may be of any desired shape at its mouth to fit said opening in stoves now in use, or to adapt it to stoves specially constructed at such opening for support and attachment of the feeder. Stoves of this description are in common use in certain sections of the country and in which the fuel is of a rapidly-combustible character—such as corn, corn-cobs, sunflower-stalks, hay, straw, and soft coal; and while my invention is not restricted to the use of any particular kind of fuel, its advantages are more conspicuous in connection with such quick-burning fuel, that when supplied in the ordinary way, through the opening in front of the fire-place, requires almost constant attention to keep up the supply, produces great irregularity of temperature, and is very wasteful, owing to the point at which combustion takes place.

My invention obviates these and other defects, and is largely economical, convenient, and advantageous, as will hereinafter be explained.

Figure 1 represents a mainly vertical section of a cooking-stove of the description above referred to with my invention applied, and Fig. 2 is a view in perspective, upon a larger scale, of the feeder detached.

A indicates the fire-place of the stove, and *b* its grate; B, the ash-box, having a door fitted with a slide for regulating the draft; C, the oven; *d*, the top of the stove; D, the stove-pipe, and *e* the usual damper therein. The opening for the passage of fuel into the stove is indicated at *f*, and is located, as usual, in the upper portion of the fire-place in front.

E is the fuel-box of the feeder, of any suitable dimensions, and arranged to stand up from the stove in front, with its mouth or lower end contracted and adapted to conform to the opening *f*, and its body constructed to facilitate the feed of the fuel down it by gravity into the fire-place through the upper front opening *f*.

G is an air and smoke chamber upon the top of the fuel-box E and in communication therewith by an aperture closed by a lid, *g*, also provided with a door, *h*, for putting in the fuel when supplying the fuel-box E after removing the lid *g* for the purpose. This air and smoke chamber is provided on its top with an outlet duct or pipe, *i*, that leads from it to the smoke-pipe D of the stove above the damper *e*.

In starting the stove the corn-cobs or other fuel are first fed down through the fuel-box E into the fire-place A till this is filled, and the feeding then continued until the fuel-box E is full. The lids or doors *g h* of the feeder are then closed and combustion takes place in the fire-place of the stove and at the mouth of the feeder; but the draft is from below and backward, and the fire does not work up into the feeder, which simply serves to supply fuel that settles down from above to take the place of the consumed fuel. When the lid *g* is closed, the passage of smoke from the fuel-box E is only accidental, but still will occur to a slight extent around or past said lid when the damper *e* in the stove-pipe has been too far closed, or the griddles in the top of the stove removed, and this is very objectionable in a room. The upper chamber, G, however, and its connection by the duct or pipe *i* with the main stove-pipe, which provides for the passage of such escaping smoke to the chimney or main stove-pipe, does away with this objection.

By means of this feeder the fire is replen-

ished with fuel without constant watching, and a much more regular temperature is or may be maintained. Time and labor are economized in charging the stove and a more effective
5 heat is obtained; also, greater economy of fuel, as practically combustion takes place in the stove, or is more active near and at the mouth of the fuel-box or front part of the fireplace instead of at its back; likewise, a better
10 ventilation is secured by opening a damper, *k*, in the door *h* of the chamber *G*, thereby creating a draft.

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

The combination, with the cooking-stove having the usual feed-opening, *f*, at its front, the pipe *D*, and the damper *e* in the lower end of the pipe, of the magazine *E*, registering at its lower end with the feed-opening *f*, and 20 provided at its upper end with a chamber, *G*, having a lid, *g*, fitting an opening in its bottom and door *h*, and the pipe *i*, leading from the chamber *G* to the stove-pipe above its damper *e*, substantially as set forth.

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Witnesses:

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