

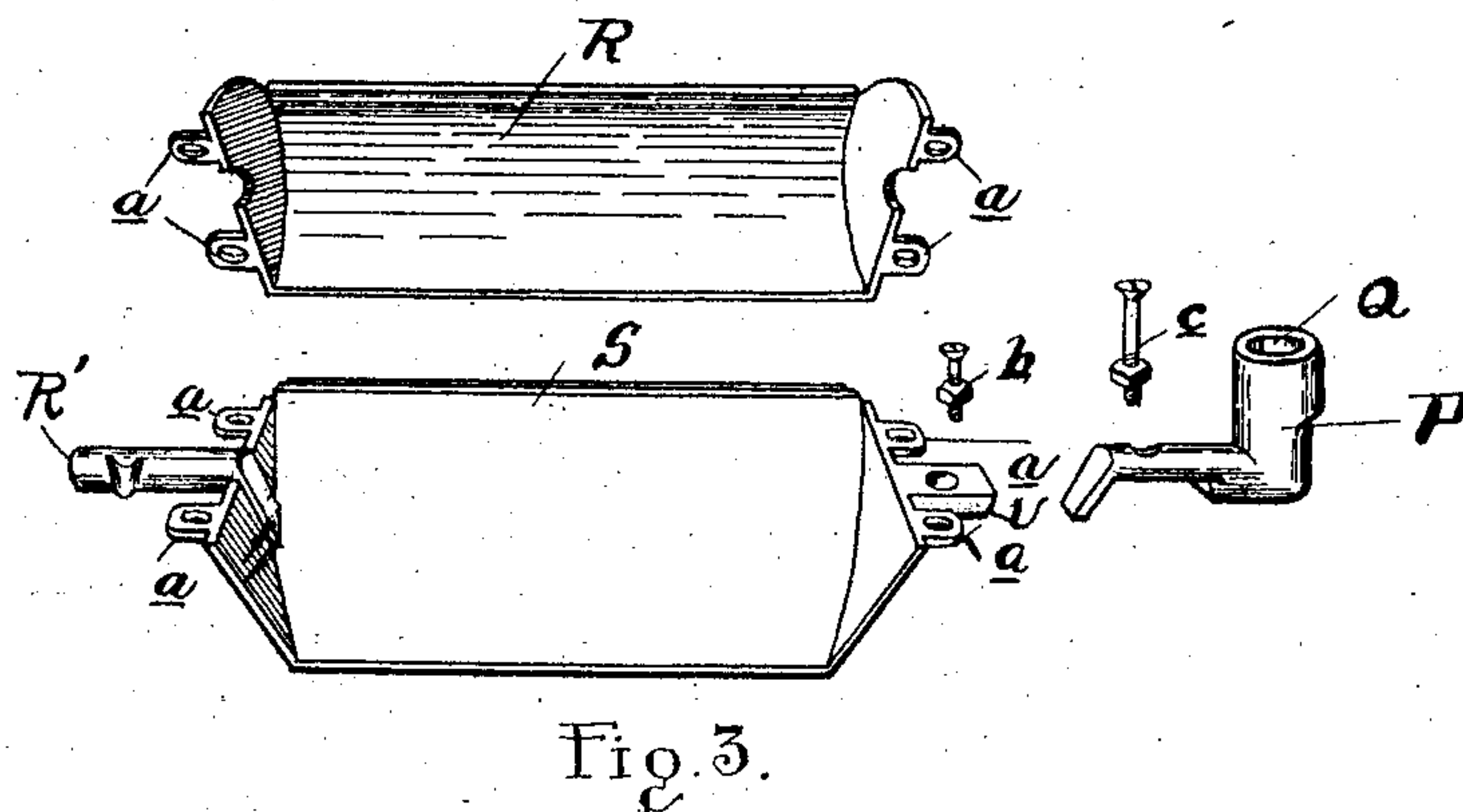
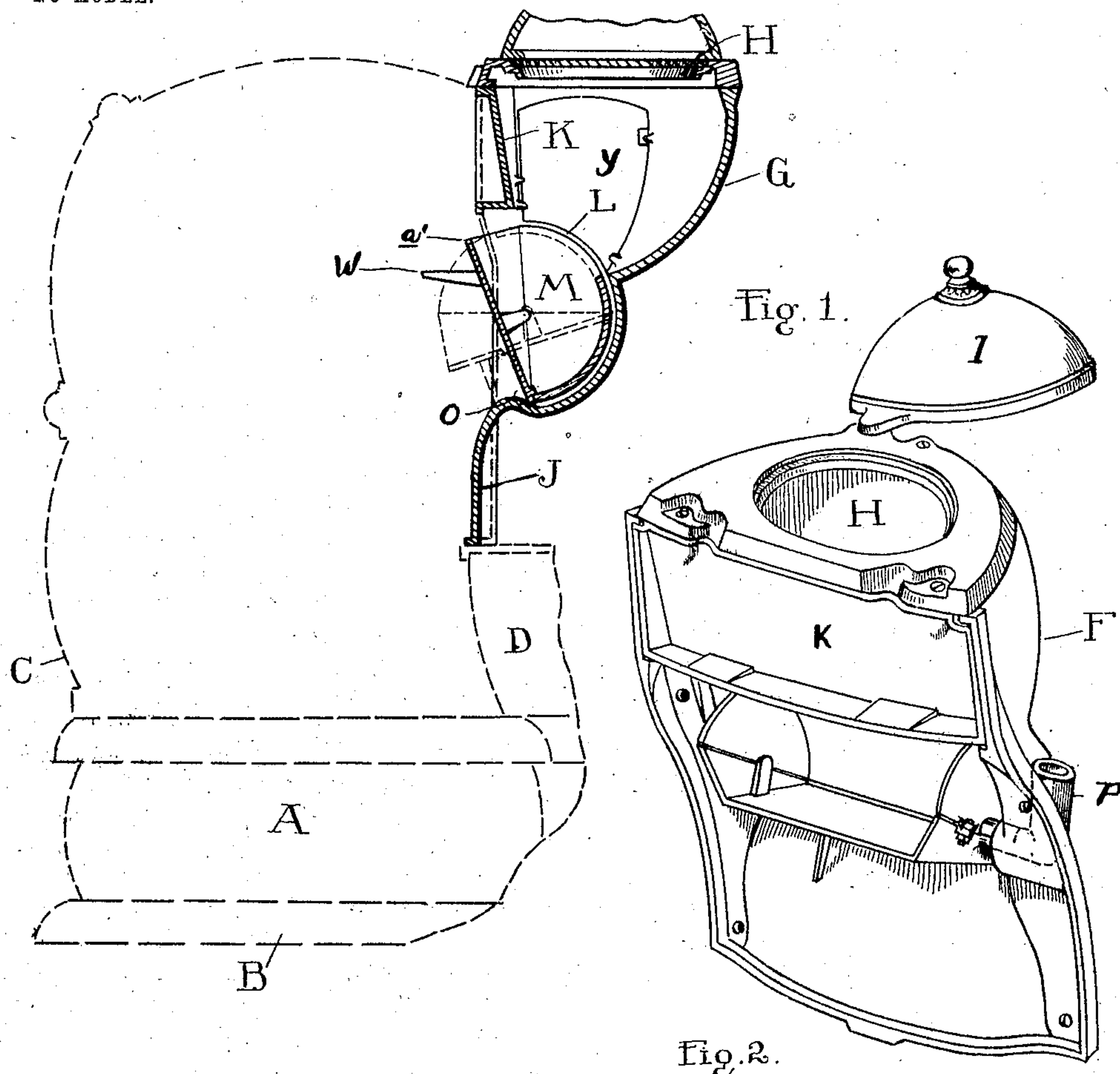
No. 768,052.

PATENTED AUG. 23, 1904.

J. H. LANE & E. D. ALLEN,
STOVE.

APPLICATION FILED MAR. 4, 1903.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN H. LANE AND EUGENE D. ALLEN, OF DETROIT, MICHIGAN, ASSIGNORS TO THE PENINSULAR STOVE COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

STOVE.

SPECIFICATION forming part of Letters Patent No. 768,052, dated August 23, 1904.

Application filed March 4, 1903. Serial No. 146,164. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. LANE and EUGENE D. ALLEN, citizens of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Stoves, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention relates to a magazine-stove; and it consists in the novel construction of the magazine whereby the stored fuel is normally cut off from the fire, but may at the will of the attendant be fed into the fire-pot in
15 such quantities and in a manner as to reduce to a minimum the formation of smoke and gases.

The invention further consists in the peculiar arrangement and combination of the magazine parts and in various details, as will be hereinafter set forth, in which—

25 Figure 1 is a sectional elevation of a stove embodying our invention. Fig. 2 is a perspective view of the magazine-section; and Fig. 3 is a view in perspective of the movable receptacle, showing the sections of which it is preferably composed detached.

30 The stove to which the invention is preferably applied comprises in its construction an ash-pit section A, mounted upon a suitable base B, an inclosing casing C, the interior of which constitutes the combustion-chamber, and a smoke-pipe connection D.

35 F represents the magazine-section, consisting of the magazine proper, G, having a fill-opening H at its top adapted to be closed by a suitable swinging cover I and provided at its lower end with a plate J, preferably integral therewith and forming a portion of the stove-back. The magazine is preferably tapered, so that the discharge of the fuel therefrom will be restricted to a certain extent, and its inner wall, or what may be termed the
40 "bridge-wall" K, forms the remainder of the stove-back. This wall, as shown, is separated from the plate J, forming a transverse open-

ing L, which constitutes the discharge-passage of the magazine. Arranged within this discharge-passage is a movable receptacle M, preferably a rotary cup journaled at its ends 50 in the sides O of the magazine and having an operating-arm P connected thereto which projects without the magazine. This operating-arm, as shown, is preferably formed with a socket Q, in which a suitable lever or other 55 like appliance may be inserted for the purpose of actuating the cup to dump its contents. In construction the cup is formed preferably of complementary sections R and S, each provided with apertured ears a, which when the 60 parts are assembled register and are connected by suitable bolts b. One of the cup-sections carries a journal R', mounted in suitable bearings in one of the magazine sides. The opposite end has an apertured lug U, to which 65 is connected the member P by means of a suitable bolt c. The section S of the receptacle M is preferably flat, normally constituting a part of the wall of the stove and closing the magazine and adapted to form a chute to discharge the contents when actuated. To prevent the fuel from clogging during the rotation of the cup when dumping, the parts are 70 so proportioned that a space or clearance will be formed between its upper edge a and the lower edge of the upper plate K when the cup is in its discharging position. The discharge end of the magazine is also in such relation to the fire-pot—in this instance at one side of the combustion-chamber and at a considerable 75 distance above the fire-section—that the contents of the cup will be thrown in the center of the fire-pot and spread evenly over the top of the fire in the desired manner.

80 The parts being arranged and combined in the manner set forth, it will be seen that means are provided that, in addition to preventing the coking of the stored fuel, permit only a limited quantity to be delivered to the fire, thus preventing the overcharging of the 85 fire-pot and the formation of smoke and gases.

To limit the forward rocking movement of

the cup, a finger or stop W is formed thereon adapted to strike against plate J. Movement in the opposite direction is controlled by the edge of the bottom of the cup abutting against the rear wall of the magazine.

Guide-plates Y are shown within the magazine, one on each side thereof, the lower edges of the plates being curved to conform with the cup-bottom. These plates are preferably used in magazines, the sides of which project or bulge outwardly to give an ornamental appearance to the stove.

From the description of our invention it will be apparent that the feed mechanism is very simple and of economical construction and may be added to heating-stoves without materially increasing the cost of their production.

What we claim as our invention is—

1. In a stove, the combination with a movable receptacle, of a magazine adapted to discharge therein, means for actuating the receptacle to discharge its contents into the fire-pot of the stove, a portion of the movable receptacle being normally arranged to constitute a part of the wall of the stove, whereby all products of combustion from the stove are excluded from the magazine, and guides upon the stove for the receptacle.

2. In a stove, the combination with a magazine, of a movable receptacle below and having a fill-opening normally communicating with the magazine, said receptacle being adjacent an opening in the stove, guides within the magazine, and means for oscillating the receptacle to discharge its contents directly into the fire-pot of the stove, a portion of the receptacle normally constituting a part of the wall of the stove, whereby the products of combustion from the stove are excluded from the magazine.

3. In a stove, the combination of a magazine, of an oscillatory cup beneath and normally communicating with the magazine, means for oscillating the cup to bring a portion thereof within the stove-body and discharge its contents into the fire-pot of the stove, a portion of the receptacle being shaped in conformity with the wall of the stove and normally constituting a part of said wall whereby the products of combustion from the stove are excluded from the magazine, and a stop on the receptacle arranged to engage the inner surface of the stove.

4. In a stove, the combination with a fire-pot, of a closed casing thereabove forming a combustion-chamber, a magazine adapted to discharge its contents within the fire-pot, a portion of said closed casing comprising an oscillatory cup at the discharge end of the magazine, having a fill-opening normally communicating with the latter, means for oscillating the cup to bring a portion thereof through an opening in the stove to discharge

its contents therein, and guideways upon the magazine.

5. The combination with a stove-body having an outwardly-extended portion, forming a magazine, of a movable receptacle normally closing the lower end thereof, and arranged to receive the discharge therefrom and move to a point within the stove to deliver said discharge into the fire-pot of the stove.

6. The combination with a stove-body, normally closed throughout, having an outwardly-extended portion, forming a magazine with an opening at its lower end, of an oscillatory receptacle communicating with said opening for receiving the discharge from the magazine and delivering the same into the fire-pot of the stove, and means on the receptacle for limiting the movement of the same.

7. The combination with a stove-body, having an outwardly-extended portion forming a magazine having an opening at its lower end, of a movable receptacle for receiving the discharge from said opening in the magazine and delivering the same to the fire-pot of the stove, one portion of said receptacle being substantially flat for forming a closure for the magazine when in normal position, and an inwardly-extended stop on the receptacle to limit its inward movement.

8. The combination with a stove-body, having an outwardly-extended portion forming a magazine, of a movable receptacle for receiving the discharge from the magazine and delivering the same to the fire-pot, one portion of the wall of said receptacle being substantially flat for forming a closure for the magazine when in normal position, and a chute for the discharge when in operative position.

9. The combination with a stove-body, having an outwardly-extended portion forming a magazine, of a sectional movable receptacle for receiving the discharge from the magazine and delivering the same to the fire-pot, one section of the receptacle having a rounded wall, while the wall of the complementary section is substantially flat for forming a closure for the magazine and a chute for the discharge, and means for connecting the sections.

10. The combination with a stove-body, having an outwardly-extended portion, and a plate partially dividing the body from the extended portion, of a movable receptacle within the stove-body for receiving the discharge from the magazine and delivering the same to the fire-pot of the stove, a portion of said receptacle being substantially flat, forming a closure for the magazine, and being spaced from the division-plate.

11. The combination with a stove-body, having an outwardly-extended portion and a plate partially dividing the body from the extended portion, of a movable receptacle within the stove-body for receiving the discharge from the magazine and delivering the same to

the fire-pot of the stove, a portion of said receptacle being substantially flat, forming a closure for the magazine, said flat portion being spaced from the division-plate, and means for limiting the movement of the receptacle.

12. In a stove, the combination with a magazine, of a movable receptacle below and having a fill-opening normally communicating with the magazine, said receptacle being adjacent an opening in the stove, and a portion thereof being substantially flat forming a closure for the opening in the stove, and means for actuating the receptacle to discharge its contents.

13. The combination with a stove having an opening therein, of a magazine adjacent the opening, a movable cup-shaped receptacle normally communicating with the magazine to receive the discharge therefrom and closing the opening in the stove, and means for moving said receptacle to a point partly within the stove to discharge the contents into the fire-pot of the stove and shut off communication between the receptacle and magazine.

14. The combination with a stove, of a magazine, a receptacle communicating with the magazine for receiving the discharge therefrom, and arranged to oscillate to a point partly within the stove and deliver said discharge into the fire-pot of the stove, one portion of the wall of said receptacle being substantially flat for forming a chute for the discharge.

15. The combination with a stove, of a magazine, a receptacle communicating with the same for receiving the discharge therefrom, and arranged to move partly within the stove,

and deliver the same into the stove, one portion of the wall of said receptacle being substantially flat for forming a chute for the discharge.

16. The combination with a stove, of a magazine, a receptacle communicating with the magazine for receiving the discharge therefrom and arranged to move to deliver the same into the stove, one portion of the receptacle being substantially flat for forming a closure for the magazine when in normal position, and a chute for the discharge when in operative position.

17. The combination with a stove, of a magazine, a portion of the inclosing wall of said stove constituting a receptacle communicating with the magazine, and means for oscillating the receptacle whereby a portion thereof will extend within the stove and form a chute to deliver the contents into the fire-pot of the stove.

18. The combination with a stove, of a magazine, a portion of the inclosing wall of said stove constituting a movable receptacle, said receptacle communicating with the magazine and arranged to direct its contents into the fire-pot of the stove, and a stop intermediate the ends of said receptacle arranged to engage the inner surface of the stove-body to limit the movement of the receptacle.

In testimony whereof we affix our signatures in presence of two witnesses.

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EUGENE D. ALLEN.

Witnesses:

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H. C. SMITH.