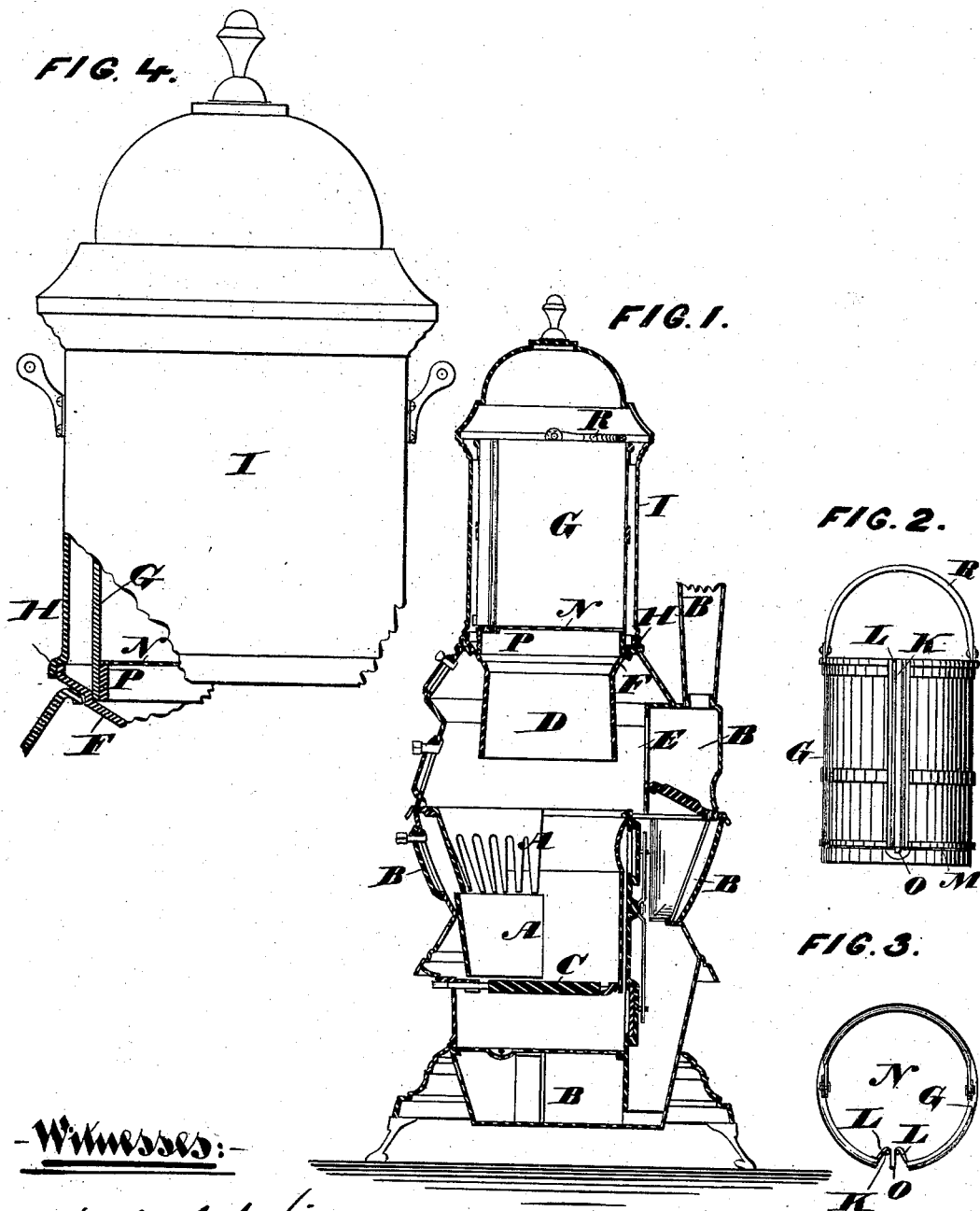


G. R. PROWSE.
Stove.

No. 215,240.

Patented May 13, 1879.



Witnesses:

Charles G. Simpson
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Inventor:

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UNITED STATES PATENT OFFICE.

GEORGE R. PROWSE, OF MONTREAL, QUEBEC, CANADA.

IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. **215,240**, dated May 13, 1879; application filed February 26, 1878.

To all whom it may concern:

Be it known that I, GEORGE ROGER PROWSE, of the city and district of Montreal, Province of Quebec, Canada, manufacturer of stoves, &c., have invented certain new and useful Improvements on Self-Feeding Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to improvements on the class of stoves used for burning coal called "self-feeders," being those in which a receptacle or reservoir is formed over the fire-pot, in which a supply of coal is placed. This supply of coal falls down out of the receptacle or reservoir by its own gravity, according as the coal in the fire-pot is consumed beneath it.

The receptacles or reservoirs at present in use have been constructed so that they form a fixed or attached part of the stove, and from their height and position, forming the top of the stove, the operation of filling them with coal, especially when the stove is hot, is rendered difficult or inconvenient; and without considerable care is taken in filling the receptacle or reservoir, the coal will be spilled in the vicinity of the stove.

By my invention I form the receptacle or reservoir in two parts, the lower part answering to the lower part of the reservoirs at present in use; but the upper part is made removable, and will serve the purpose not only of forming the upper part of the reservoir, but that of a coal-scuttle, which may be taken to the coal cellar or bin and filled, then placed at once upon the stove.

My invention, furthermore, provides a suitable cover for this said removable portion of the reservoir. As it is subjected to the wear and tear in the operation of filling and carrying back and forward—an operation performed by those whose duty it is to do it, usually with but little care; consequently it (the removable portion of the reservoir) requires to be made of strong rough material, while the cover of the same, for the sake of decent appearance, requires to be well and often finely finished to be in keeping with the remainder of the outer shell of the stove; and this part of my invention particularly facilitates not only the furnishing of a handsome top portion to the stove, but also the cleaning and maintaining of the top part in its polish and finish.

In the drawings hereunto annexed similar letters of reference indicate like parts, and Figure 1 is a sectional elevation embodying my invention. Fig. 2 is an elevation of the removable or portable reservoir. Fig. 3 is a plan of Fig. 2. Fig. 4 is an elevation of cover of removable or portable reservoir, showing joint with stove, &c., in section.

Letter A is the fire-pot of the stove, constructed as commonly in use. B is the outer shell, ash-pit, damper, and flue. C is the grate, in the construction of all of which I do not claim any invention; neither are their exact form, arrangement, or construction of consequence to the carrying into effect of my invention, which only requires the reservoir D should substantially bear the same relative position over or above the fire-pot A as shown in the drawings, so that the consumption of coal in the fire-pot will allow the coal in the reservoir to descend into the fire-pot A. The draft-hole E for the escape of the products of combustion to the pipe or flue is shown as ordinarily in use above the fire, and it is only necessary for my invention to have it substantially so situated.

The reservoir D, instead of extending up the full height of the stove, is terminated in a flare or flange, F, suited to form a base for the removable reservoir G to sit firmly upon, and having its edge suitably arranged to form a close joint, H, with the cover I. This close joint is for the purpose of preventing the free escape of the gases in case of occasional back or down drafts in the chimney or flue to which the stove may be working. As well as this useful purpose, the cap I serves to conceal the reservoir G. The cover I, being simply held in place, as described, is not only easy of removal by the handles shown upon it in the drawings, for the purpose of changing or replenishing the reservoir G, but it enables the cap to be taken off and thoroughly cleaned and polished cool, and without the necessity of standing over the hot stove during the operation, and this without materially interfering with the working of the stove for the short time it is removed.

The upper part of the reservoir is thus constructed: It consists of a cylindrical vessel, G, having a slot, K, extending from its top to very nearly its bottom. L are flanges formed

at the edges of the cylinder when the slot K is formed, to strengthen and support said edges. M is a slot cut horizontally at the bottom of the reservoir, as shown, of sufficient width to allow the bottom N to be drawn out horizontally by taking hold of the projection O with any suitable handle, griper, or tool for the purpose. P is a band formed on the inner side of the cylinder G, giving a suitable ledge for the bottom N to rest upon, and extending up so far that when the bottom does rest upon it the bottom N is in the proper position to be drawn out through the slot M.

In using the removable or portable reservoir, I light the fire in the stove and fill up the stationary part D of the reservoir, having the movable part G filled with coal. It is then put in place, as shown in Fig. 1, by the handle R. The bottom N is then withdrawn by the projection O and placed upon the top of the coals. The cover I is then put on. As the coals descend in G the bottom N works its way with them, and finally rests upon the band P. When the coal has burned so low as to have emptied the reservoir G it can be removed, refilled, and replaced. During the time that the reservoir G is absent, as above, the stove will have the coal in the reservoir D, to be going on with. This latter will hold sufficient to last for several hours; but where convenience is rather the consideration than expense, two reservoirs, G, may be provided, so that upon the removal of the one empty the other one full may at once be put in its place.

Although I have hereinbefore given an exact description of that part of my invention consisting in the construction of the portable reservoir G, the said construction being, in my opinion, the best for it, yet it is evident that the part of my invention referring to the adoption of a reservoir, the top G of which will be portable, and the bottom D of which will be stationary, may be carried out in a variety of forms of removable parts G. For example, the slot K and flanges L may be dispensed with, and projection O, the bottom N merely being drawn out and put on the top of G, being made so that it may work its way down with the coal, or can be put in place in the bottom G after G is removed from the stove.

The reservoir G has also been described as a cylindrical vessel, whereas it may be made

square, hexagonal, octagonal, &c., depending upon the configuration of the stove to which it is applied.

The central part of the bottom N may be made to drop downward, after the fashion of common drop-bottoms that are hinged to one side and are loose on the other, being free by the withdrawal of a bolt, similar to the drop on which a man stands when about to be hanged. The portion of the bottom not so forming the drop portion may be inclined, after the fashion of a hopper. In this case the slot M will not be required.

Many other forms of construction might be resorted to for the reservoir G without departing from the spirit and essence of this part of my invention.

The cover I may be of a great variety of forms, to suit taste, &c., its only requisite being that it is large enough to cover G and form a close joint with the lower reservoir or lower part of the stove, as at H, for the purposes hereinbefore mentioned.

What I claim as my invention, and wish to secure by Letters Patent is as follows:

1. The combination, in a magazine-stove, of a stationary reservoir, D, portable reservoir G, and removable cover, I, substantially as and for the purposes set forth.

2. The reservoir D, in combination with the reservoir G, having slots K and M, flanges L, and movable bottom N, substantially as described.

3. The combination, in a magazine-stove, of a stationary reservoir, D, having flared flange F, portable reservoir G, and removable cover I, substantially as and for the purposes set forth.

4. The removable cover I, having joint H, in combination with stationary reservoir D, having flared flange F, and removable reservoir G, substantially as and for the purposes set forth.

5. The removable cover I, in combination with the portable reservoir G, substantially as and for the purposes set forth.

Montreal, February 19, A. D. 1878.

GEO. R. PROWSE.

Witnesses:

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