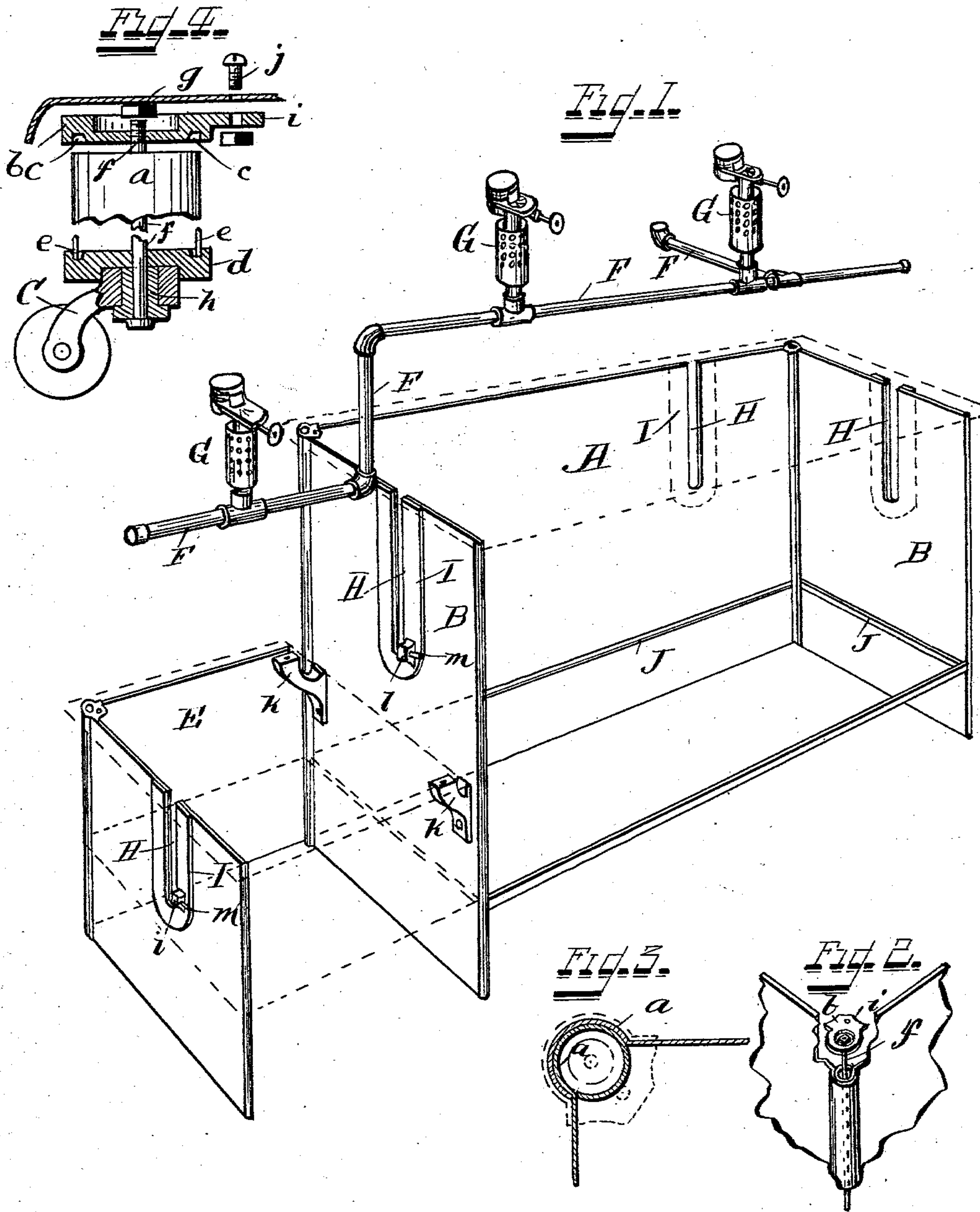


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I. KINSEY.
FRAME FOR VAPOR STOVES.
APPLICATION FILED AUG. 21, 1900.

NO MODEL.



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FRAME FOR VAPOR-STOVES.

SPECIFICATION forming part of Letters Patent No. 753,498, dated March 1, 1904.

Application filed August 21, 1900. Serial No. 27,604. (No model.)

To all whom it may concern:

Be it known that I, ISAAC KINSEY, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Frames for Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to gasolene or oil stoves; and it has for its object such a construction of the framework of the stove as will permit of easily applying the other parts of the stove, such as the burners, piping, &c.

The frame which I have invented is of such construction as to permit the assembled piping, burners, and other adjuncts to be dropped into place in the frame after the knockdown frame has been set up, so that the piping and burners which handle the burning fluid may be properly connected up and tightly jointed in the factory and, with the knockdown frame, be shipped from the factory, thus eliminating the risk of leaky joints due to the setting up and connecting of the pipes and burners by inexperienced persons. At the same time economy of space in packing the stoves is provided for, since the frame itself, which is the bulky portion, may be packed and shipped from the factory in knockdown condition in small compass and may be set up by persons of little skill. To stiffen the frame, I provide upper and lower cap-plates or castings of peculiar construction which engage tubular interlocked corners on the sheet-metal panels, said cap-plates being connected by tie-rods which traverse the tubular frame corners and hold the parts of the frame together. The top of the stove is supported upon the frame thus made up, being preferably bolted to the upper cap-plates.

The novelty of my invention will be hereinafter more fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a stove embodying my invention with the frame assembled and with the piping and burners connected and ready to be let down in the frame. Fig. 2 is a de-

tail perspective view at one of the corners of the frame. Fig. 3 is an enlarged sectional plan view at one of the corners. Fig. 4 is an enlarged sectional elevation at one of the corners, showing the tie-rod, cap-plates, and means for uniting the parts.

The same letters of reference are used to indicate identical parts in all the figures.

A represents the sheet-metal back wall of an ordinary gasolene-stove, and B the end walls or panels thereof, likewise of sheet metal and japanned or enameled with suitable ornamentation in the usual or any suitable manner. The vertical edges of these walls are curved or bent into tubular or partially-tubular form, as seen at *a*, Fig. 3, so that they may be slipped together endwise and become interlocked. A cap-plate *b*, Figs. 2 and 4, with an annular groove *c* on its under side to fit over and engage the tubular portions *a*, is placed at each corner of the frame on its top, and a similar cap-piece *d*, Fig. 4, with an annular groove *e* on its upper side to fit over the tubular portions *a*, is placed at each corner of the frame on the bottom, and a tie-rod *f* is passed through central perforations in the cap-pieces *b* *d* and has a nut *g* screwed upon its upper threaded end to bind the parts firmly together, said nut occupying a recess in the top of the cap-plate *b*. If desired, a caster C may be secured in any suitable manner to each of the bottom cap-pieces *d*. In Fig. 4 I have shown the caster as pivoted on a thimble *h*, which is held in place by the tie-rod *f*. The top cap-plates *b* have a perforated extension *i*, by means of which the top of the stove D (see dotted lines, Fig. 1) is united to the frame by means of screws *j*.

Where the stove has a supplemental low frame to support an oven or boiler, such as indicated at E, Fig. 1, said frame is constructed and put together in the same manner as the main frame and is screwed to brackets *k*, projecting from and secured to the adjacent end wall of the stove.

The piping F, carrying the burners G, is represented in Fig. 1 and is all put together and tested in the factory. To put and secure it in place, slots H have to be cut from the

top of the walls of the frame in order to let the piping down to its place to bring the burners to proper position, and this has to be done before the top D of the stove is put into place, as will be readily understood. To stiffen the walls of these slots, I prefer to use U-shaped plates I, which border the slots and are riveted to the side walls. These plates are provided with lugs l near their bottoms for the passage of set-screws m, which are passed through the lugs and bear upon the pipe F to lock it in place when lowered. It will be seen that the relatively heavy U-shaped plates I not only stiffen the panels and prevent the buckling of the panels around the slots, but they also form bearings for the piping, so that breaking or jamming of the thin sheet metal at the edges of the slots is avoided.

In Fig. 1, J is a rectangular frame to be secured by screws or rivets to the lower part of the frame to receive and hold the ordinary drip-pan. (Not shown.)

From the foregoing description, in connection with the drawings, it will be readily understood that a knockdown stove of the character described can be very readily put together and taken apart with all of the advantages enumerated in the beginning of this specification.

Having thus fully described my invention, I claim—

1. In a vapor-stove and in combination, suitable burner-piping, a sheet-metal frame having open slots extending from the edges of the panels or walls to receive said piping and support the same with its burners in operative position, stiffening-plates bordering the edges of said slots to form bearings for the said piping and give rigidity to the slotted panels, lugs formed integral with said stiffening-plates, and set-screws mounted in said lugs and adapted to impinge upon said piping and clamp it against the opposite walls of the slots.

2. In a sheet-metal stove and in combination, walls or panels having interlocking joints, recessed plates capping the interlocked joints and having integral extensions, tie-rods traversing said interlocked joints and having their securing nuts or heads lying within the recesses to provide a flush smooth surface, and a stove-top resting upon said walls or panels and secured to the integral extensions on the said recessed cap-plates.

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