April 17, 1934. L. C. REMINGTON 1,955,147

PORTABLE STOVE

Filed June 8, 1932

FIG. 1.

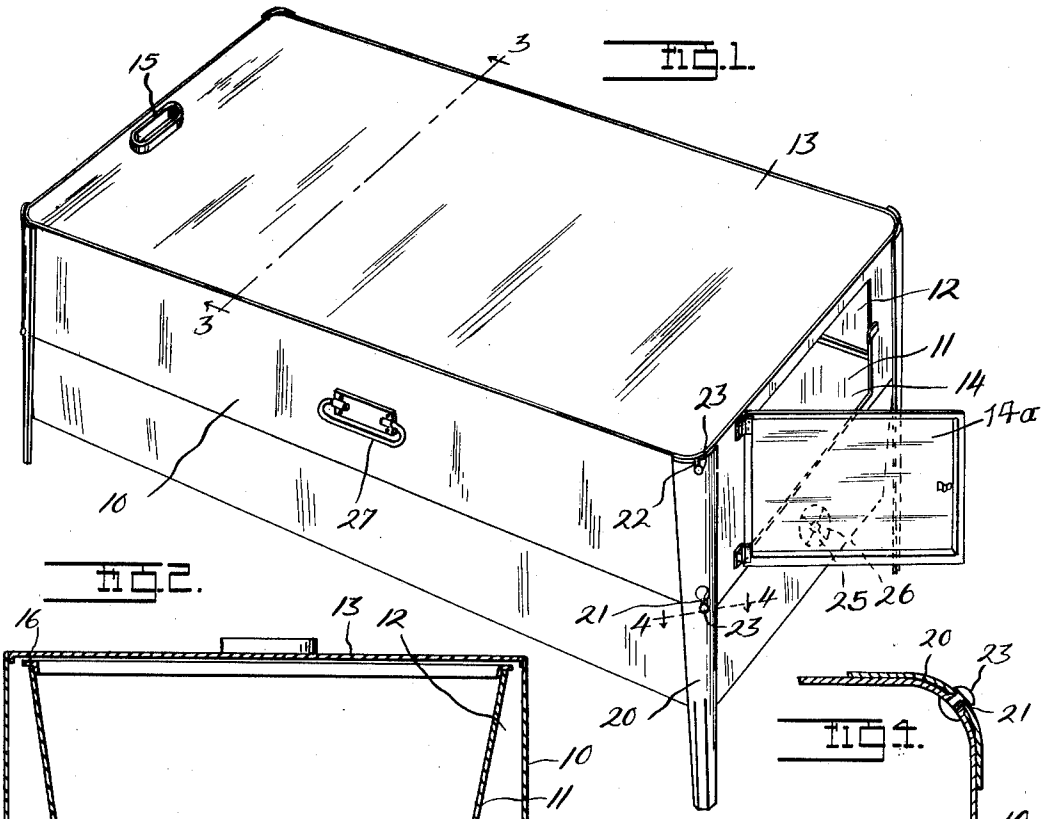


FIG. 2.

FIG. 3.

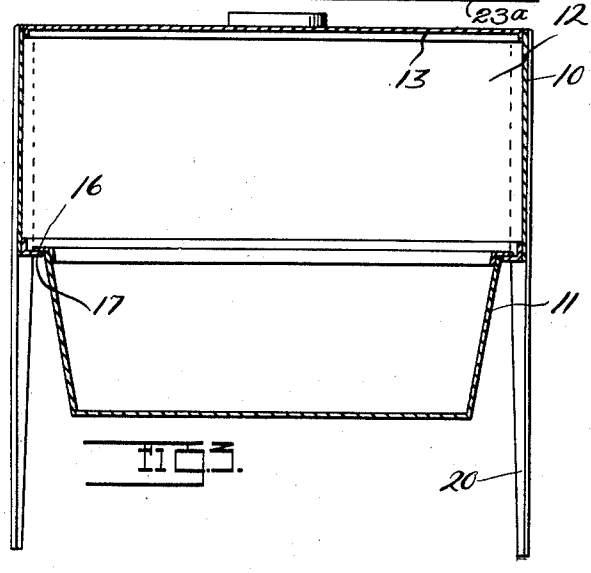


FIG. 4.

FIG. 5.

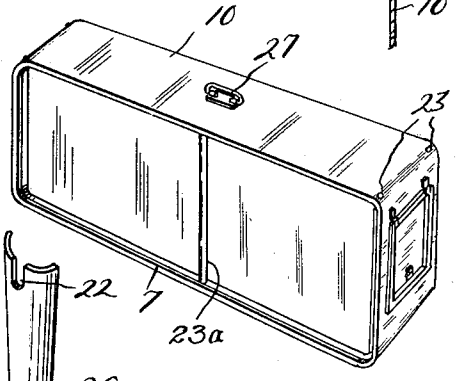


FIG. 6.



Inventor
Leigh C. Remington

By John C. Alexander
Attorney

Patented Apr. 17, 1934

1,955,147

UNITED STATES PATENT OFFICE

1,955,147

PORTABLE STOVE

Leigh C. Remington, Detroit, Mich.

Application June 8, 1932, Serial No. 615,998

5 Claims. (Cl. 126—9)

This invention relates to stoves, and more particularly to portable stoves for camp use, and may be adapted for use with liquid fuel burners if so desired, though I have chosen to illustrate the same as constructed to utilize charcoal or other similar fuels.

At the present time, when many people are availing themselves of the numerous tourist camps throughout the country, portable stoves of the collapsible or folding type are becoming quite popular, as such stoves may be conveniently carried and readily set up whenever necessary.

It is the object of my invention to provide a stove structure of the portable type, which may be very readily collapsed and stored within a minimum space.

Another object of my invention is to provide a collapsible stove structure of the portable type by associating together a plurality of interlocking and telescoping body structures, that may be readily set up for use, providing a fire box or heating chamber of adequate capacity, but which may be collapsed, to occupy a minimum of storage space, during transportation from one place to another.

A further object of my invention is to provide a safe collapsible stove structure of the portable type by associating together a plurality of interlocking and telescoping body structures, adapted to be secured in collapsed position and which may be readily distended and held distended by gravity, thereby providing a strong rigid structure having a fire box or heating chamber of maximum capacity and capable of supporting a relative heavy load of fuel, such as charcoal, coal or wood, and the like, without any danger of the stove collapsing and spilling the burning coals.

A still further object of my invention is to provide a stove structure of a portable type, which when collapsed will provide a storage compartment and when distended will provide a fire box or heating chamber of maximum capacity.

For a more detailed understanding of my invention, reference may be had to the accompanying drawing, illustrating one form of my invention, in which:

Fig. 1 is a view in perspective of a collapsible portable stove constructed in accordance with my invention.

Fig. 2 is a transverse sectional view through the body structure of the stove, when fully collapsed.

Fig. 3 is a transverse sectional view through the body structure of the stove, fully distended, and with legs attached, taken on the line 3—3 of Fig. 1.

Fig. 4 is a detail sectional view of the leg fastening means taken substantially on the line 4—4 of Fig. 1.

Fig. 5 is a view in perspective of my improved portable stove fully collapsed and adapted to be conveniently and readily carried by the hand.

Fig. 6 is a detail perspective view of one of the legs.

Referring to the accompanying drawing, my improved portable stove consists of a plurality of interlocking and telescoping body structures, that may be readily distended to provide a fire box or heating chamber of the maximum capacity and strength. The body structure of the stove comprises an outer box like shell structure 10 and an inner box like shell structure 11, arranged to telescope together, the structure 11 forming the bottom of the fire box or heating chamber 12. The shell structure 10 is provided with a top formed by a plate 13, and one end of said structure has a fuel inlet and ash removal opening 14, normally closed by a hinged door 14*a*. A suitable opening 15 is provided in the plate 13, to which a stove pipe (not shown) may be connected, if desired.

The inner shell structure 11, which telescopes within the structure 10, is provided with an outwardly extending flange 16 about the upper rim of the open top thereof, said flange being preferably formed by an angle bar attached to said rim. The outer shell structure 10 is provided with the inwardly extending flange 17 about the lower rim of the open bottom thereof, preferably formed by attachment of an angle bar to said rim. Thus, as the pair of telescoping body structures of the stove are distended, the flanges 16 and 17 engage and limit the distending movement of the said telescoping structures to prevent their complete separation, said angle bars also strongly reinforcing the two structures. The top plate 13 of the box like shell structure 10 obviously limits the collapsing movement of the paired structures, the latter being preferably designed, so that the inner structure may be entirely enclosed by the outer one, when the same are fully collapsed.

The described stove is provided with four legs 20, quickly attachable to the body structure 10 at the edges thereof. Thus, each leg is formed intermediately of its ends with a key-hole slot 21, and has a uniform slot 22 downwardly extended from its upper end. In attaching each leg, the slots 21 and 22 are engaged with the shanks of headed pins 23, a pair of which is rigidly carried by each edge of the structure 10 respec-

tively adjacent to the top and bottom of said structure. Said pins are riveted to or otherwise rigidly secured to the structure 10, as best appears in Fig. 4, their heads being outwardly spaced from said structure to permit insertion of the legs beneath said heads.

In attaching the legs, the enlarged circular ends of the slot 21 are first registered with the lower pins 22 to permit the legs to be pressed firmly against the edges of the structure 10. A slight upward shifting of the legs then engages the upper pin 23 in the slot 22 and the lower pin 23 in the restricted lower portion of the slot 21. The weight of the stove body, when carried by the legs, firmly maintains the described engagement. A reverse manipulation of the legs permits their ready removal from the stove. Thus it is seen that attachment or detachment of the legs involves no manipulation of nuts, screws, or other clamping means, and may consequently be very quickly and easily accomplished.

When the stove is collapsed, as shown in Figs. 2 and 5, to form a portable unit, the structure 11 is securely and firmly retained within the structure 10 by securing a latch bar 23—*a* against the bottom plate of the structure 11, the extremities of said bar frictionally engaging between said plate and the flanges 17. The bar 23—*a* is preferably formed of spring sheet-metal, transversely arcuately curved, and is proportioned so that its ends may be sprung to a flatter curve in inserting the bar in place, whereby the resiliency of said bar maintains such place. The legs 20 are preferably formed of stamped sheet-metal for economical reasons and to minimize their weight, and said legs are preferably transversely curved to conform to the rounded edges of the body 10.

A draft opening 25 is preferably located in a wall of the lower box like structure 11, the size of said opening being regulated by a draft cover 26, or other suitable regulating means. A handle 27 is preferably attached to the outer telescoping structure. In addition, the door 14 may be provided with any standard form of clasp or catch to latch said door.

It will thus be noted, that I have provided an improved portable stove having an exceptionally large size fire box or heating chamber, and which may be very economically manufactured and distributed, and which furthermore, can be very readily set up for use with a minimum of time and effort. Furthermore, the legs and all other detached parts may be readily stored within the interior of the stove body, when the latter is collapsed. Thus, all the available space is utilized, and the collapsed stove structure is very compact and occupies a minimum of storage space.

Although I have illustrated but one form of my invention, and have described in detail but a single application thereof, it will be apparent to those skilled in the art to which my invention pertains, that various modifications and changes may be made therein without departing from the spirit of my invention or from the scope of the appended claims.

What I claim is:

1. A stove comprising a body formed of telescoping upper and lower members adapted to fit one within another when not in use, a plurality of headed pins projecting outwardly from the upper member and paired in vertically spaced relation, and a plurality of legs slotted to engage said pins below the heads thereof, and adapted to be held in such engagement by the weight of the body.

2. A stove comprising a rectangular body having a pair of upper and lower headed pins rigidly projecting from each of its edges, and legs attachable to said stove at its edges having slots downwardly opening from their upper ends for engaging the upper headed pins, and formed between their ends with key-hole slots for receiving the lower headed pins.

3. A stove comprising a pair of telescoping upper and lower body members, the lower member fitting within the upper, and angle bars projecting inwardly from the lower edge of the upper member and outwardly from the upper edge of the lower member, for supporting the inner member in a lowered position upon the outer member, and legs for holding the outer member at an elevation.

4. A stove body comprising a pair of telescoping upper and lower members, the lower member being proportioned to assume a stored position within the upper member, the lower edge of the upper member and the upper edge of the lower member being provided with flanges interengageable to support the lower member in its lowered position, and a bar engageable between the lower member and said flange of the outer member in a collapsed position of said body, for maintaining such position.

5. A stove body as set forth by claim 4, said bar being transversely curved and formed of spring material adapting it to be resiliently stressed through insertion in its position of use, and to be held in such position by its reaction to such stress.

LEIGH C. REMINGTON.