Aug. 28, 1923. 1,466.343

H. L. ROUSE

CAMP STOVE

Filed April 18, 1922

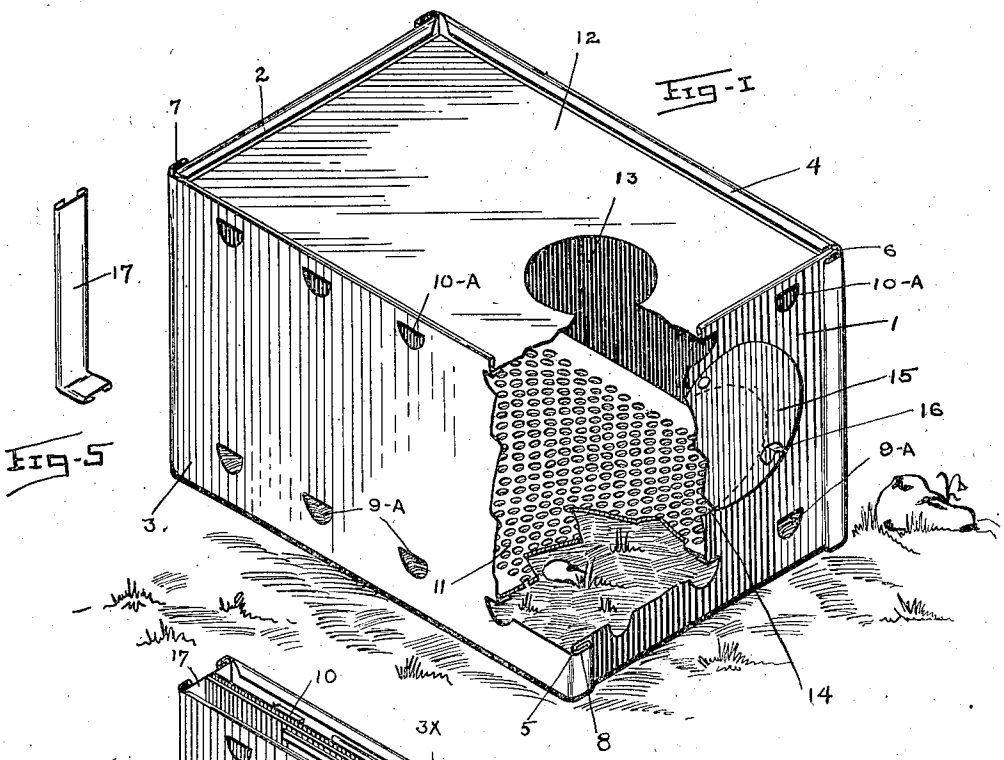


Fig-1

Fig-5

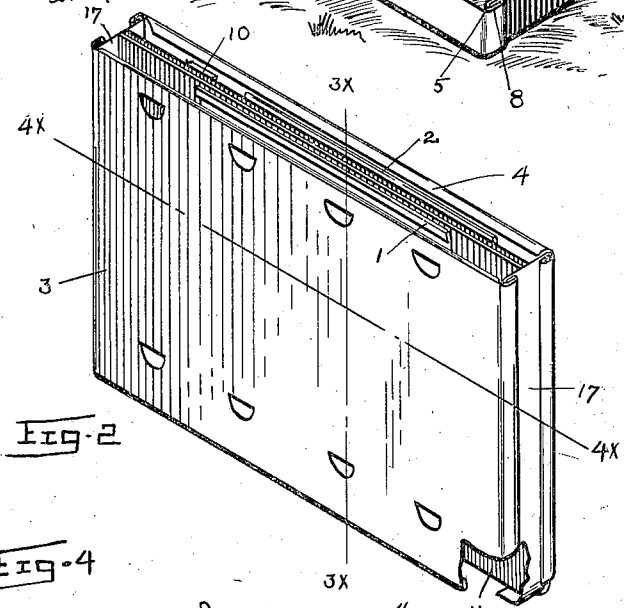


Fig-2

Fig-4

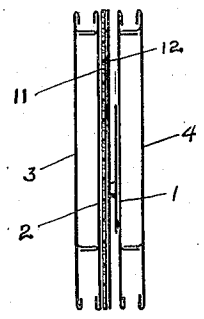
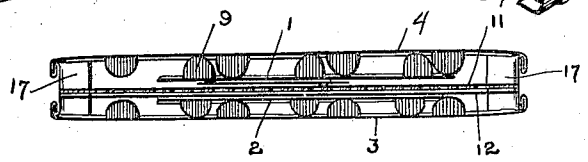


Fig-3



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UNITED STATES PATENT OFFICE.

HARRY L. ROUSE, OF ROCHESTER, NEW YORK.

CAMP STOVE.

Application filed April 18, 1922. Serial No. 554,637.

To all whom it may concern:

Be it known that I, HARRY L. ROUSE, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Camp Stoves, of which the following is a specification.

The object of this invention is to provide a new and improved type and construction of knock-down or collapsible camp stoves.

This and other objects of this invention will be fully illustrated in the drawing, described in the specification, and pointed out in the claims at the end thereof.

In the accompanying drawing:

Figure 1 is a perspective view of the camp stove in its assembled form and with a portion thereof broken away to show the construction thereof.

Figure 2 is a perspective view of the camp stove in its collapsed form.

Figure 3 is a vertical sectional view of the camp stove in its collapsed form, the section being taken on the line 3^x—3^x of Figure 2.

Figure 4 is a horizontal sectional view of the camp stove in its collapsed form, the section being taken on the line 4^x—4^x of Figure 2.

Figure 5 is a detail perspective view of one of the locking strips for holding the parts of the stove together in its collapsed form.

In the several figures of the drawing like reference numerals indicate like parts.

Small camp stoves of the collapsible type are desirable because it is possible to carry such a stove on a camping or outing trip in the smallest possible space and without adding much weight to the camping outfit.

In the construction of the camp stove forming the subject matter of my present invention, the sides and ends of the stove are made to interlock with one another and provide suitable supports for the grate and top of the stove to be supported between them. As illustrated in the figures, the stove comprises the ends 1 and 2 and the sides 3 and 4. Each of the ends has a pair of small flanges 5 and 6 formed on the edges thereof forming small but deep channels thereon.

The sides 3 and 4 of the stove are similarly provided with a pair of flanges 7 and 8. These flanges 7 and 8, however, project at right angles from the sides on which they are formed and are doubled back on each other with a small space left between the outwardly and inwardly projecting portion of the flange so as to form a vertical channel on each edge of the sides 3 and 4. In locking the sides to the ends of the stove, the flanges 5 and 6 on the stove ends engage into the channels formed by the flanges 7 and 8 of the sides by a sliding movement. The channels formed by flanges 5 and 6 are engaged by the inwardly projecting portion of the flanges 7 and 8. This is illustrated in the cut-away portion of the camp stove shown in Figure 1. An interlocking joint is thus formed between the sides and ends of the stove so that these parts of the stove support one another in an upright position when they are assembled. The sides and ends are interlocking in this manner by sliding the flanges of the one into the channels formed on the other from either the top or the bottom thereof.

Each of the sides and the ends of the stove have two series of semi-circular lugs 9 and 10 struck up thereon which project horizontally into the inside of the stove. These lugs form two series of small ledges which are located at different levels on the inside of the stove. The lower series of lugs or ledges 9 are but a short distance from the bottom of the stove while the lugs or ledges 10 are provided near the top on the inside of the stove.

On the series of ledges or lugs 9 is adapted to rest a grate 11. This grate is made up of a sheet of perforated metal of a dimension that will permit its nesting between the sides and ends of the stove so that it can be supported by the lugs 9 struck up from the sides and ends.

On the lugs or ledges 10 is supported the top plate 12 of the oven. This top is formed by a metal sheet plate that has a large opening 13 stamped into it near one end thereof. The series of lugs 9 and 10 when being struck up from the sides and ends leave two series of small openings 14 and 15 in the sides which form vent holes therein. One

series of these vent holes is located below the grate while the other series of vent holes is located below the top plate of the stove.

In the end 1 of the stove is provided an opening 14. On the outside of this opening is mounted to swing the door 15. This door has a handle 16 struck up thereon with which the door 15 can be moved to cover or uncover the opening 14 in the end 1. The opening 14 is uncovered for the purpose of inserting the charcoal or wood into the inside of the stove to build and maintain a fire in the stove. The opening may be closed after the fire has been started and enough fuel has been placed into the stove to keep the fire going.

The vent holes 14 in the sides and ends of the stove which are located below the grate 11 allow the air to enter the stove and pass through the grate to the fire on top of the grate. The smoke from the fire passes out of the openings 15 in the sides and ends of the stove below the top plate thereof. This provides for draft and keeps the cooking utensils placed on the top plate free from being smoked up.

The top and bottom edges of the sides and ends of the stove are rolled over on the inside thereof to present a smooth edge at the top and bottom of the stove.

The stove is knocked down by sliding the flanges of the ends out of engagement with the channels formed on the sides after the top plate and grate have been removed from the stove. After the ends and the sides have been separated the sides of the stove are placed side by side with their flanges facing each other. The top plate and the grate are then placed between these sides with one of the ends placed between the top plate and one side and the other of the ends placed between the grate and the other side. After all of the parts of the stove have thus been placed together with relation to each other, a pair of locking strips 17 having channeled flanges formed thereon is placed between the sides and made to interlock with the channels formed thereon by the flanges. These locking strips hold the sides together and clamp the ends, grate, and top plate of the stove in place between them. In placing the ends between the sides, the lugs which are struck up from the ends are placed so that they point toward the lugs struck up from the sides. This is illustrated in Figures 3 and 4. The locking strips hold the sides of the stove slightly in compression so that the ends, top plate and grate are firmly pressed against one another. This prevents rattling. The lower end of the locking strips are bent out at right angles thereto and when these strips are placed between the sides to hold them together, the outwardly projecting ends of these strips project under the top plate and grate and prevent them from sliding out between the sides when held in the position illustrated in Figure 2.

I claim:

1. In a collapsible camp stove having a removable grate and top plate, the combination of a pair of sides and a pair of ends, interlocking flanges formed on said ends and sides adapted to hold said ends and sides together, two series of lugs struck up on each of said sides and ends to project inwardly thereof and form two series of ledges and vent holes in said sides and ends, one of said series of lugs being located at a suitable distance from the bottom of the stove so as to be adapted to support a grate at the proper elevation therein, the other of said series of lugs being located near the upper end of said stove to support the top plate thereon, said lugs being located above the opening in said sides and ends and said top plates closing the top of said stove.

2. In a collapsible camp stove having a removable grate and top plate, the combination of a pair of sides and a pair of ends, interlocking flanges formed on said ends and sides adapted to hold said ends and sides together, two series of lugs struck up on each of said sides and ends to project inwardly thereof and form two series of ledges and vent holes in said sides and ends, one of said series of lugs being located at a suitable distance from the bottom of the stove so as to be adapted to support a grate at the proper elevation therein, the other of said series of lugs being located near the upper end of said stove to support the top plate thereon, the vent holes in the sides and ends of said stove being located below the grate and top plate thereof.

3. In a collapsible camp stove, the combination of a pair of sides and ends, a vertical flange forming a channel provided at the upright edges of said ends with a reversely bent flange at each vertical edge forming a channel at right angles to the sides at each vertical edge thereof, said flanges of said ends being adapted to slidably engage into the channels formed by said flanges on the edges of said sides to interlock said ends with said sides to support one another in a vertical position, a series of lugs struck up from said sides and ends to form vent holes therein, a grate supported on said lugs above the vent holes, a second series of lugs struck up from the sides and ends above said grate to form additional vent holes in the sides and ends above said grate, a top plate supported on said second series of lugs above the second series of vent holes in said sides and ends, one of said ends having a large opening therein, a door mounted to swing in front of the opening in said end.

4. In a collapsible camp stove, the com-

bination of a pair of sides and a pair of ends, two series of lugs struck inwardly of each of said sides and ends to form two series of ledges around the sides and ends of said stove with openings below said ledges, a perforated plate supported on top of the lower series of ledges formed by said lugs and a cover plate supported on top of the upper series of ledges, the openings in the sides and ends of said stove being arranged to allow air to enter the stove below said perforated plate, pass through the perforations in said plate and out through the openings in said sides and ends below said cover plate on all sides and ends of the stove.

In testimony whereof I affix my signature.

MARRY L. ROUSE.