Sept. 9, 1924. 1,507,959

V. H. HAYWORTH

CAMP STOVE

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Fig. 1.

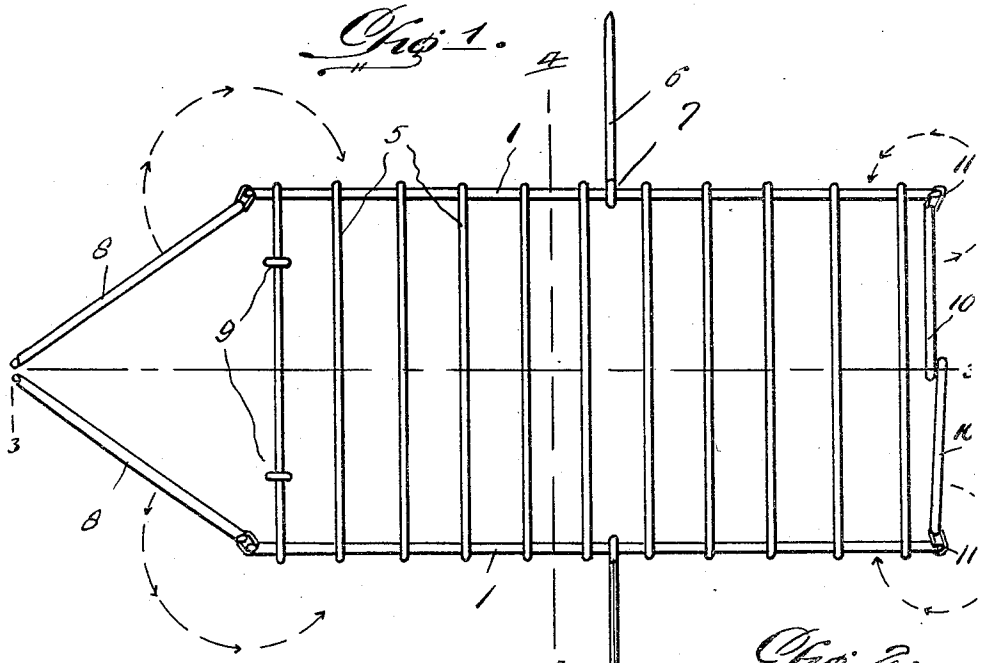
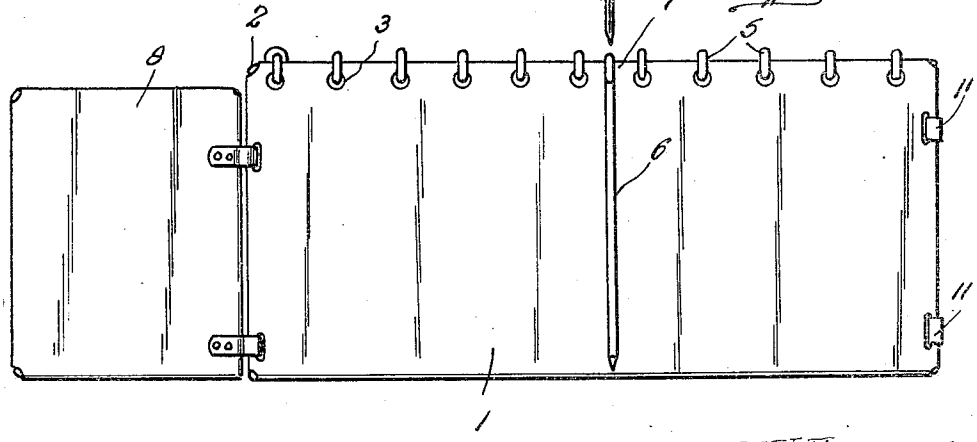


Fig. 2.



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Fig. 3.

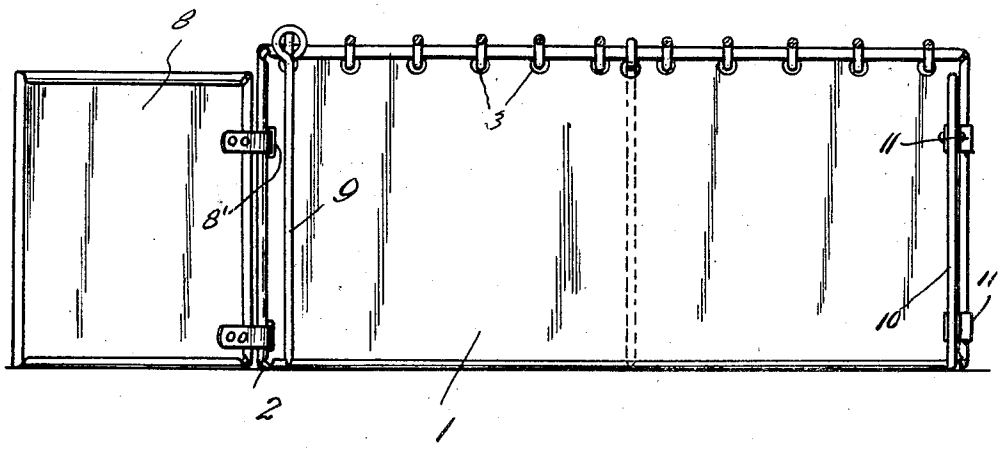
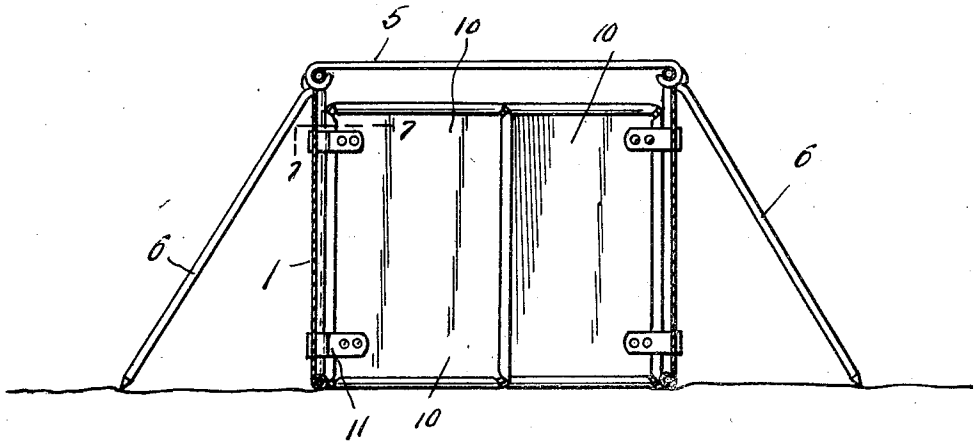


Fig. 4.



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Patented Sept. 9, 1924.

1,507,959

UNITED STATES PATENT OFFICE.

VIRGIL H. HAYWORTH, OF SANTA FE, NEW MEXICO.

CAMP STOVE.

Application filed December 3, 1923. Serial No. 678,240.

To all whom it may concern:

Be it known that I, VIRGIL H. HAYWORTH, a citizen of the United States, residing at Santa Fe, in the county of Santa Fe and State of New Mexico, have invented certain new and useful Improvements in Camp Stoves, of which the following is a specification.

This invention relates to improvements in camp stoves and particularly to a device of this character wherein the parts are adapted to be folded one upon another and fitted within a carrying case so that the stove may be readily carried from one place to another, or packed in a small space for storage.

An object of the invention is to provide a camp stove of the character described provided with means for controlling or regulating the draft to the fire built under the grid forming a part of the device.

Another object of the invention is to provide a camp stove of the character mentioned having a pair of side plates connected and held in spaced relation at the upper end by a plurality of grate bars, a pair of end plates hingedly mounted at one end to the side plates and adapted to be arranged in angular relation beyond said end plates to form a draft chamber at one end of the grate, and another pair of plates pivotally connected to the other end of the side plates are adapted for cooperation to close the space between the side plates and below the grate bars for assisting in controlling the draft to the fire.

A still further object of the invention is to provide a device of the class described, for carrying out the above mentioned objects in which all the parts are adapted to be folded one upon the other when the device is not in use into compact relation to be placed in a carrying case so that the stove may be readily carried about from place to place and which will take up a relatively small space when in closed relation.

The invention comprehends further improvements and other objects in the details of construction and arrangement of parts which are particularly pointed out in the following description and claims and in the drawings showing the preferred form of the invention, it being understood that changes may be made in the specific details of construction and arrangement of the parts without departing from the spirit and scope of the invention as expressed in the appended claims.

In the drawings,

Figure 1 is a plan view of the stove with the parts arranged in stove forming relation.

Figure 2 is a side elevation of the stove as shown in Figure 1.

Figure 3 is a sectional view taken on the line 3—3 of Figure 1.

Figure 4 is a transverse section taken on the line 4—4 of Figure 1.

1 indicates a pair of side plates, each of which is formed of sheet metal having its edges bent over a rectangular wire frame 2 to provide a relatively strong plate structure. Each side plate is formed along the upper edge and below the member 2 with a plurality of openings 3 arranged in spaced relation for receiving the looped ends of the grate bars 5 of the grate which secure the side plates together and hold them in relative spaced relation. A pair of bracing stakes 6 are provided with loops at one end extending through openings in the side plates and around the frame member 2 at the upper edge thereof as indicated at 7, and the other ends are pointed and adapted for insertion in the ground to effectively brace the side plates and prevent the stove from collapsing under the weight of objects on the grate bars or contact of objects with the side plates 1.

At the left hand ends of the side plates as shown in Figure 1, a pair of end plates 8 are pivotally secured to the side plates by means of straps 8′, said plates being adapted to be positioned at an angle with each other when the stove is set up for forming a chamber beyond the ends of a grate adapted to permit a draft for the fire built under the grate. These end plates 8 are formed of sheet metal having the edges bent over frame members in the same manner as the side plates 1, to prevent the burning fuel under the grate from falling into the chamber formed by the end plates, a pair of rods 9 are mounted on the end grate bar adjacent the left hand edge of the side plates through the eyes formed on one end thereof.

A pair of doors 10 formed of sheet metal having the edges bent over frame members in substantially the same manner as the side plates 1 are hingedly connected to the right hand end of the side plates as

shown in Figure 1, by strap members 11 connected with the doors and the side plates 1 in the same manner as the connections for the doors 8 which is shown in detail in Figure 6. These doors 10 are of smaller size than the plates 8 and the inner edges are adapted to overlap as shown in Figure 1, to close the open end of the chamber formed between the side plates and under the grate bars in which the fire is built for controlling the draft admitted by the plates 8 at the other end. These plates may be arranged as shown in the positions in Figure 1, or may be arranged at an angle with each other leaving an open space between the free ends for permitting a relatively weak or strong draft to act on the fire. The grate bars 5 form a supporting grid for the cooking vessel as will be obvious from the showing in Figures 1 and 2.

It will be observed from Figure 3 how the bars 9 extend downwardly from the end grate bar to prevent the coals from the fire, which may be heaped up quite high under the grate bars, from falling outwardly into the chamber formed by the plates 8. It will be also apparent from Figure 3 and also Figure 4 how the straps carried by each door or plate mount the respective parts in pivotal relation with the end plates.

When it is desired to fold the stove for placing it in the carrying case, the end plates 8 are swung outwardly on their pivots and positioned against the side plates on the outside thereof, the doors 10 are also swung outwardly against the outside of the side plate as indicated clearly by the arrows in Figure 1. The brace members 6 and the bars 9 are swung inwardly against the grate bars 5 and the side plates with the door and end plates are folded inwardly against the grate bars one on top of the other, in which position the stove is in a compact folded condition adapted for insertion in the case.

It will be clear from the above description that a foldable camp stove is provided with means for effectively controlling the draft to a fire under the grate which is foldable when not in use into a compact form for insertion into the carrying case.

What is claimed is:

1. A camp stove including a pair of side plates, a plurality of grate bars pivotally secured to said side plates and holding them in spaced relation, said side plates and grate bars forming a chamber, a pair of end plates hinged to one end of the side plates and adapted for association to form draft regulating means at one end of the side plates and the chamber formed thereby, and a pair of doors hingedly connected to the other ends of said side plates adapted for positioning relative to each other to assist in controlling the draft passing through said chamber.

2. A folding camp stove including a plurality of grate bars arranged in spaced relation, a pair of side plates hingedly secured to opposite ends of said grate bars and adapted to be arranged in angular relation to the grate bars to form a fire box, a pair of plates hingedly connected with the side plates at one end thereof and adapted for arrangement to form a draft chamber at the end of the grate bars a pair of doors hingedly connected to the other end of the side plates adapted for relative positioning with each other for controlling the draft under the grate, bracing means for the side plates, and means for preventing the coals of the fire from falling into said draft chamber.

3. A camp stove comprising a pair of side plates, adapted to be disposed in transversely spaced parallelism, a plurality of longitudinally spaced grate bars extending across the upper sides of said plates and pivotally connected at their opposite ends to the latter, pairs of horizontally swinging doors hinged to the opposite ends of said plates, supporting stakes pivotally connected at their upper ends to the corresponding ends of said plates, the lower ends of said stakes being pointed and adapted to be embedded in the ground, and vertically disposed means carried by one of the end grate bars for retaining the fuel within the fire box formed by said bars and side plates.

In testimony whereof I affix my signature.

VIRGIL H. HAYWORTH.