D. D. BRONAUGH.

FOLDABLE CAMP STOVE.

APPLICATION FILED JUNE 23, 1915.

1,187,704.

Patented June 20, 1916.

Fig. 1.

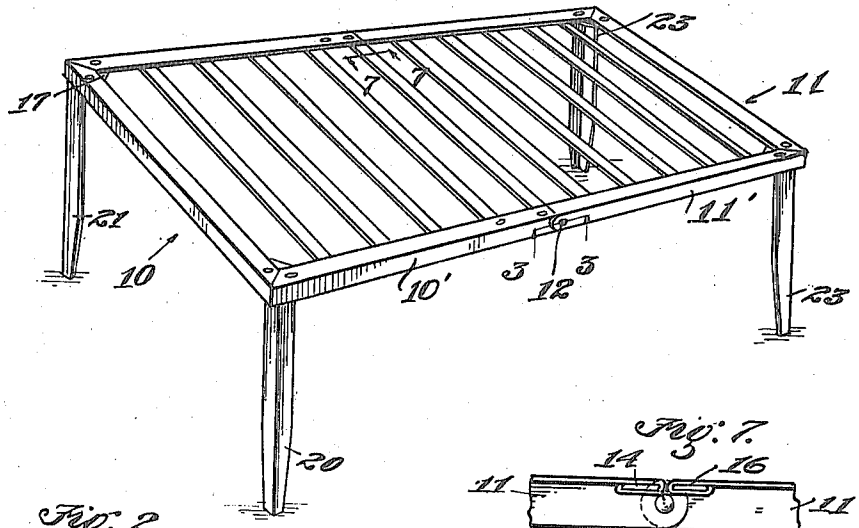


Fig. 7.

Fig. 2.

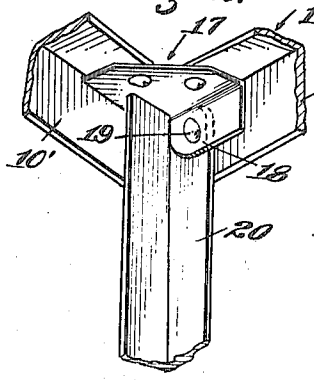


Fig. 3.

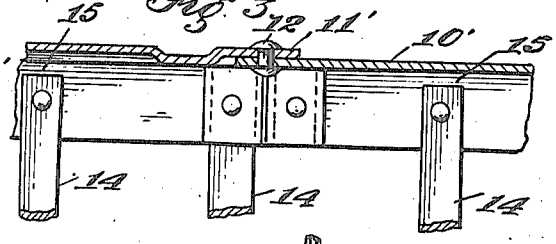


Fig. 4.

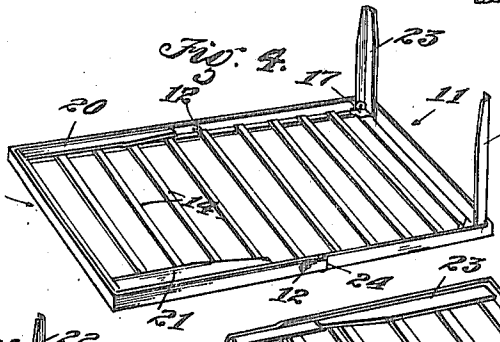


Fig. 5

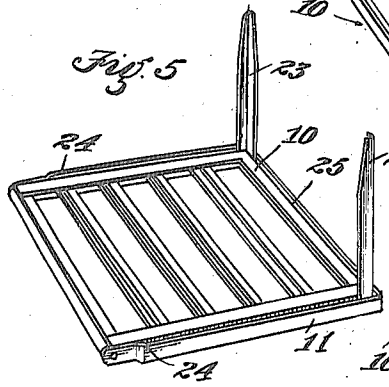


Fig. 6.

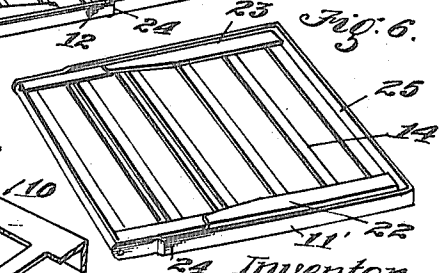
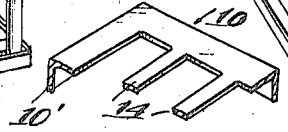


Fig. 8.



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UNITED STATES PATENT OFFICE.

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FOLDABLE CAMP-STOVE.

1,187,704. Specification of Letters Patent. Patented June 20, 1916.

Application filed June 23, 1915. Serial No. 35,755.

To all whom it may concern:

Be it known that I, DANIEL D. BRONAUGH, a citizen of the United States, residing at Long Beach, in the county of Los Angeles and State of California, have invented new and useful Improvements in Foldable Camp-Stoves, of which the following is a specification.

My invention relates to a foldable camp stove and it is an object of this invention to devise a camp stove which is durable, simple of construction, and which may easily be folded together in a compact space convenient for transportation.

With this and other objects in view which will appear as the description proceeds, my invention consists of the construction and arrangement of parts hereinafter described and claimed.

In the accompanying drawings which form a part of the specification, I have illustrated a practical and convenient embodiment of the invention and in which:

Figure 1 is a perspective view of the camp stove in operative position. Fig. 2 is a detailed sectional view showing the mounting of the foldable legs thereof. Fig. 3 is a sectional view looking upward from the bottom, showing the construction of the central hinge. Fig. 4 is a perspective view of the stove in its inverted position with one pair of legs folded. Fig. 5 is a perspective view showing one top section folded upon the other. Fig. 6 is a perspective view showing the stove in its folded position. Fig. 7 is a detail view to be referred to. Fig. 8 is a detailed view of a modified form of the device showing the transverse bars formed integral with the top sections.

The camp stove consists of two U-shaped top sections 10 and 11 made of sheet metal, whose cross section is of the shape of an angle iron.

10′ and 11′ designate the downwardly extending flanges of sections 10 and 11, respectively. The ends of the lateral members of said sections meet and form a hinged joint at 12. As shown in Fig. 3, the ends of the flanges 10′ and 11′ are rounded and pass each other for a short distance, the ends of flange 11′ being exterior to the ends of flange 10′.

A series of flat metal bars 14 is mounted in spaced and parallel relation to each other transversely to the lateral members of the U-shaped sections. A space 15 is left between the ends of said bars and the vertical flanges of the sections for a purpose hereinafter to be described. In order to strengthen the hinge 12 so that the camp stove may be able to support the cooking utensils, a flat bar 14 is mounted transversely to the ends of said lateral member of one of said sections which, in the present case, is section 11, the end of the lateral members of section 11 being bent upon themselves to inclose the bar 14, as shown in Fig. 3. The ends of lateral members of section 10 are similarly bent upon themselves and enfold a short section of a flat metal bar 16, thus providing enlarged bearing surfaces at the ends of the lateral members of sections 10 and 11 when the camp stove is in its extended and operative position. (See Fig. 7.)

The corners formed at the joints of the transverse members with the lateral members of the sections 10 and 11 are strengthened by gusset plates 17 securely mounted at the lower side of the transverse and lateral members of the sections. Foldable legs 20, 21, 22 and 23 of the shape of an angle iron and tapering toward the bottom are pivotally mounted on the inner ends of flanges 10′ and 11′. Fig. 2 illustrates the mounting of leg 20 to flange 10′, it being understood that the other legs are similarly mounted.

Extending downwardly from the gusset plate and spaced from flange 10′ of the lateral member is a lug 18. The top of the leg 20 is positioned between flange 10′ and lug 18 and a pin 19 passing transversely through flange 10′, leg 20 and lug 18 allows said leg to be folded against the flange 10′ of the lateral member on the section 10. The corners of the top of the leg 20 and of the lug 18 are rounded off so as not to interfere with the pivotal movement of leg 20 on pin 19.

When it is desired to fold the camp stove, legs 20 and 21 of the section 10 are folded first, then section 10 is folded on section 11 and finally legs 22 and 23 are folded against flange 11′ of the lateral members of section 11. In order to provide space for said legs the lateral members of section 11 are made to extend outwardly such as at 24, for a distance sufficient to accommodate the legs of section 11 when the same are folded, as shown in Fig. 6.

In order to allow the folding of legs 22 and 23 I have made the section 10 slightly

shorter than section 11, thus providing a sufficient space, such as 25, between the transverse members of section 10 and of section 11 when the same are folded together upon each other. The legs 22 and 23, in being folded downwardly, will engage the outer ends of the lateral members of section 10 and force them downwardly so that sections 10 and 11 will lie in close and parallel relation to each other. It will be noted that the sides of the legs 22 and 23 which extend in the direction of the transverse member of section 11, will lie flat and parallel on the upper face of the lateral members of section 10.

In Fig. 8 I have shown a modified construction of the transverse bars. In this construction the bars are formed integral with the top sections, the same being stamped or pressed out from the sheet metal of which the top sections are made, in one operation.

It is thus seen that I have devised a very simple and efficient camp stove which is easily set up and easily folded into a compact and small space convenient for transportation.

I claim:

1. In a foldable camp stove, the combination of a pair of U-shaped top sections provided with an outer downwardly extending flange, said sections being pivoted to each other at the ends of the lateral members of said sections and forming a downwardly closing hinge, bars transversely mounted in spaced and parallel relation on said lateral members, gusset plates mounted on the lower side of the corners of said sections, said plates being provided with downwardly extending lugs spaced from the flanges of said lateral members, legs L-shaped in cross section pivotally mounted between said lugs and said flanges at their upper ends, said legs being adapted to be folded against the inner side of said flanges, one of said sections being of slightly smaller dimension in length and width than the other section, whereby the sections may be folded on each other and the legs may be folded to lie in close and parallel relation to the inner sides of said flanges.

2. In a foldable camp stove, the combination of a pair of grate sections, one of said sections being of less width and length than the other, each section comprising a pair of parallel side members and a transverse member, the inner ends of said side members being pivoted together to form a downwardly closing hinge, legs pivoted to the outer ends of said side members and foldable against the inner faces of said side members, the side members of the larger section being bowed outwardly to admit folding a leg between the smaller section and the bowed side of the larger section.

In testimony whereof I have signed my name to this specification.

DANIEL D. BRONAUGH.