June 12, 1956 F. M. O'CONNOR 2,749,906

HEATED CHAIR

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FIG. 1

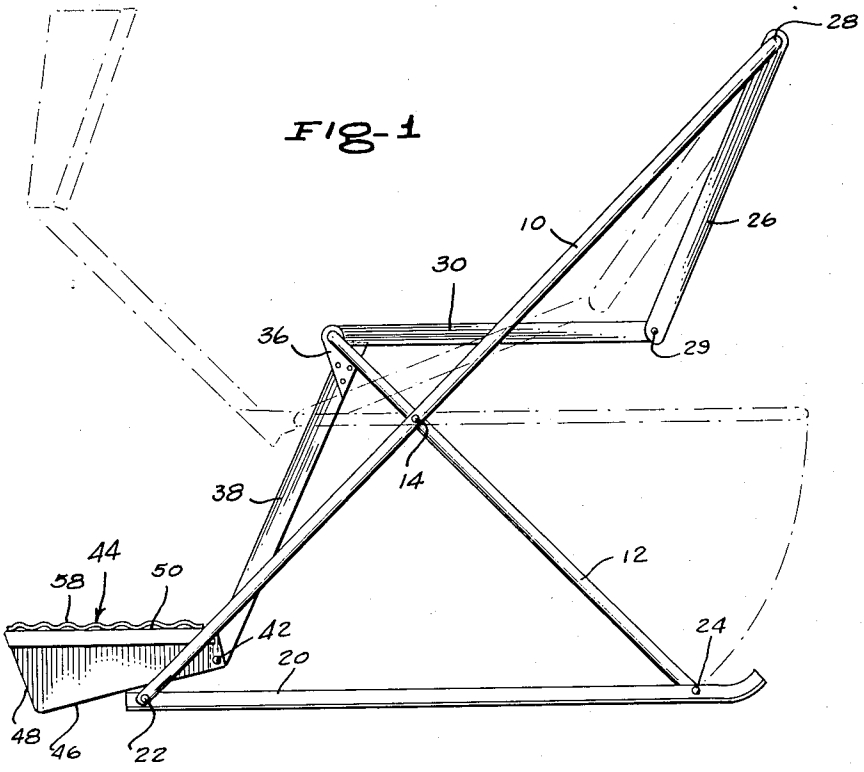
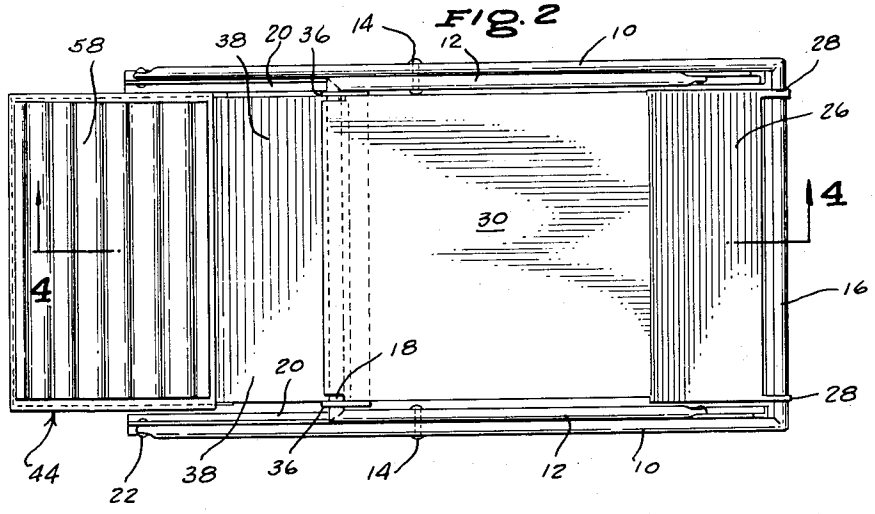


FIG. 2



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FIG. 3

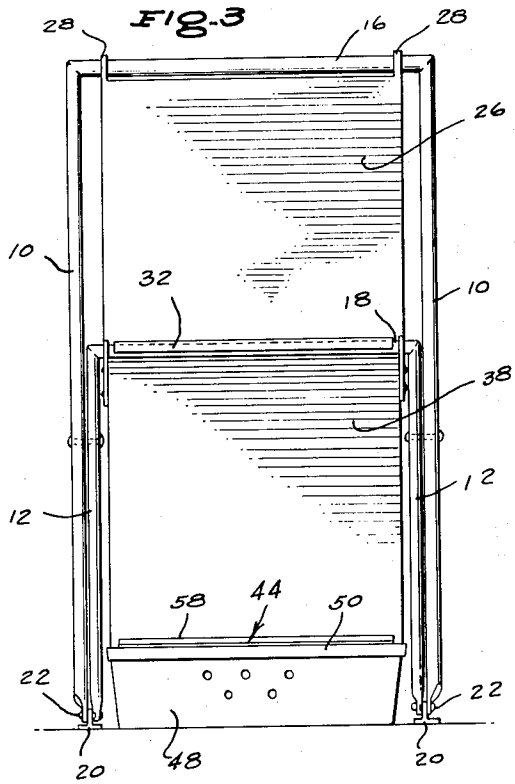


FIG. 5

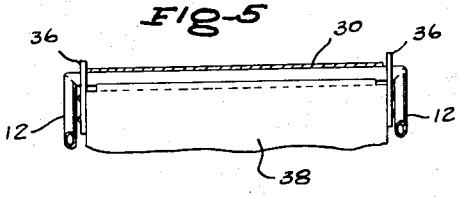


FIG. 6

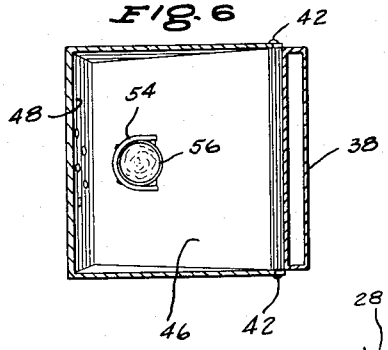
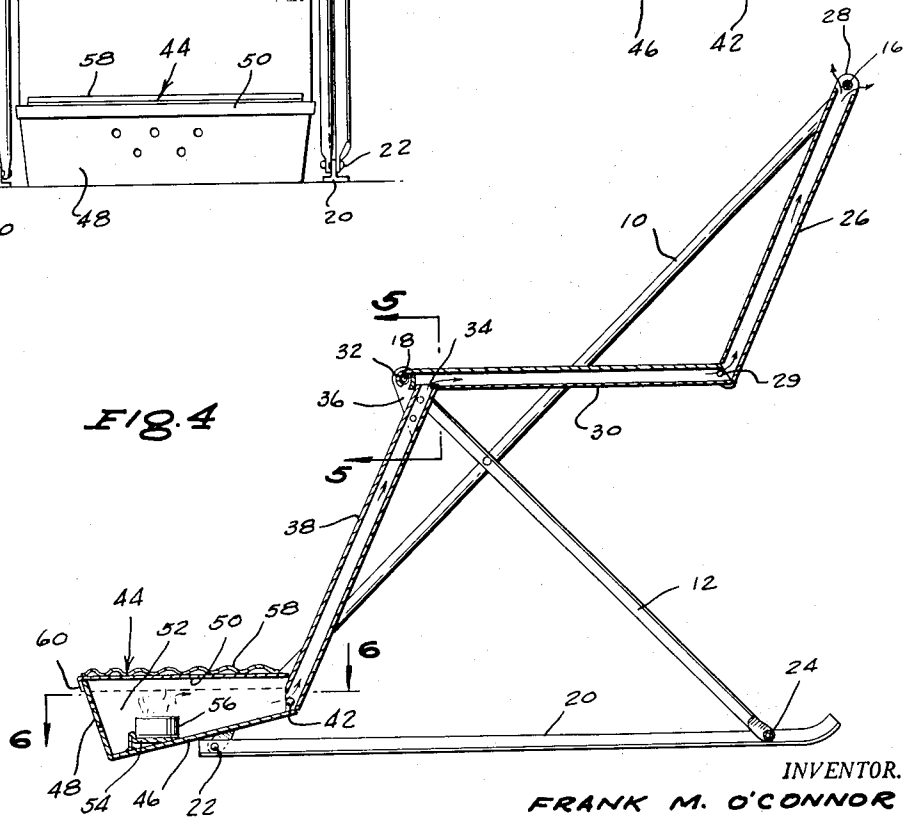


FIG. 4



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United States Patent Office 2,749,906 Patented June 12, 1956

2,749,906

HEATED CHAIR

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Application February 8, 1955, Serial No. 486,784

3 Claims. (Cl. 126—204)

This invention relates to a heated chair and has for its primary object to provide comfort and warmth for persons sitting outdoors, such as fishermen, observers of sports contests and the like.

Another object is to facilitate the easy transportation of the chair to and from a selected location.

A further object is to employ as a heat source, a solidified fuel such as that commonly sold under the trademark "Sterno."

The above and other objects may be attained by employing this invention which embodies among its features pairs of spaced legs pivotally connected together intermediate their ends for movement about a common substantially horizontal axis, cross bars carried by the legs for movement in spaced arcuate paths concentric about the common axis, stretcher bars pivotally connected to one pair of legs adjacent the ends thereof remote from their respective cross bar, means detachably connecting the stretcher bars to the opposite pairs of legs adjacent the ends thereof remote from their respective cross bar, a hollow panel carried by the cross bar of one pair of legs and extending downwardly therefrom between the legs to define a combined chair back and stack, a second hollow panel carried by the first mentioned hollow panel and extending horizontally therefrom adjacent the lower end thereof to define a combined chair seat and duct, a third hollow panel carried by the horizontal hollow panel and extending downwardly therefrom remote from the first hollow panel to define a leg rest and heat duct, a combined combustion chamber and foot rest carried by the third hollow panel and extending substantially horizontally outwardly therefrom adjacent the end thereof remote from the second hollow panel, and the combustion chamber and the hollow panels communicating with one another to successively convey products of combustion and heat generated in the combustion chamber to atmosphere.

Other features include a hooked flange carried by the second panel and extending outwardly therefrom for detachably engaging the cross bar of the second pair of legs to hold the seat panel substantially horizontal, the second panel having an elongated slot extending therethrough adjacent the edge thereof carrying the hooked flange to define an opening through which products of combustion may pass from the third hollow panel to the second hollow panel and thence through the stack.

In the drawings:

Figure 1 is a side view of a chair embodying the features of this invention;

Figure 2 is a top plan view of the chair illustrated in Figure 1;

Figure 3 is a front view in elevation of the chair illustrated in Figure 1;

Figure 4 is a longitudinal sectional view taken substantially on the line 4—4 of Figure 2;

Figure 5 is a fragmentary sectional view taken substantially on the line 5—5 of Figure 4; and

Figure 6 is a fragmentary horizontal sectional view taken substantially on the line 6—6 of Figure 4.

Referring to the drawings in detail, pairs 10 and 12 of legs are pivotally connected intermediate their ends as at 14 to move about a common horizontal axis. A cross bar 16 is carried by one pair of legs and extends transversely therebetween remote from the common axis and a similar cross bar 18 is carried by the other pair of legs and extends therebetween, the cross bars 16 and 18 being adapted to move about the common axis in spaced concentric paths. Stretcher bars 20 are pivotally connected as at 22 to the legs 10 adjacent the end thereof remote from the cross bar 16, and detachably coupled as at 24 to the stretcher bars 20 are legs 12.

A hollow panel 26 is provided adjacent its upper end with upwardly extending ears 28 which encircle the cross bar 16 and pivotally suspend the panel 26 therefrom. The panel 26 defines a back rest and stack through which products of combustion may pass on their way to the atmosphere. Pivotally connected as at 29 to the panel 26 adjacent the lower end thereof and extending substantially horizontally outwardly from said panel 26 is a hollow panel 30 defining a combined seat and heat duct which, as illustrated in Figure 4, communicates with the interior of the panel 26, so that products of combustion passing through the heat duct and seat panel 30 will be conveyed through the chair back and stack 26 to atmosphere. A hooked flange 32 is carried by the hollow panel 30 along the edge thereof remote from the hollow panel 26 and is adapted to engage the cross bar 18 carried by the legs 12 to hold the panel 30 in substantially horizontal position. Extending through the panel 30 adjacent the end thereof carrying the flange 32 is an elongated slot 34, the purpose of which will hereinafter appear. Suspended on the cross bar 18 adjacent opposite legs 12 for rocking movement about said cross bar are ears 36 carrying a hollow panel 38 which, when the chair is in extended position, aligns with and enters the slot 34 to establish communication between the interior of the panel 38 and the interior of the panel 30.

Pivotally connected as at 42 to the hollow panel 38 remote from the ears 36 is a combined foot rest and combustion chamber designated generally 44 which comprises a bottom panel 46, a front wall 48 and a top wall 50 with the top wall and bottom wall or panel 46 converging as they recede from the front wall to define at the junction of the foot rest 44 with the hollow panel 38 an opening through which products of combustion may escape from the combustion chamber 52 defined within the foot rest into the hollow panel 38 defining a leg rest and duct. A suitable supporting base 54 is carried by the bottom wall or panel 46 of the foot rest 44 within the combustion chamber 52 on which is supported a suitable container 56 in which a solidified fuel is retained. A suitable corrugated plate 58 is supported on the top wall 50 which is detachably connected to the front wall by a downturned flange 60 so that access may be had to the combustion chamber for the introduction of the fuel container 56 thereinto.

In use, it will be evident that by removing the top wall 50 from the combustion chamber 52, a supply of solid fuel may be introduced thereinto and placed on the support 54 after which it may be ignited and the cover or top wall 50 replaced over the combustion chamber. As the fuel burns within the combustion chamber, the products of combustion and heat generated in the combustion chamber will pass upwardly through the hollow panel 38 and through the slot 34 into the hollow panel 30 from whence it will pass upwardly through the hollow panel 26 to be discharged to atmosphere through the open upper end of said hollow panel 26. Obviously, as the products of combustion and heat pass through the respective panels,

the heat will be radiated outwardly through the walls of the panels to warm the occupant of the chair. Obviously, by disconnecting the legs 12 from the stretcher bars 20, the legs may be folded against the stretcher bars and due to the pivotal connections of the panels to one another and to the legs, it will be evident that the chair may be folded into a compact bundle for transportation or storage.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that minor changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

What is claimed is:

1. A heated chair comprising pairs of spaced legs pivotally connected together intermediate their ends for movement about a common substatnially horizontal axis, cross bars carried by the legs for movement in spaced arcuate paths concentric about the common axis, stretcher bars pivotally connected to one pair of legs adjacent the ends thereof remote from their respective cross bar, means detachably connecting the stretcher bars to the opposite pairs of legs adjacent the ends thereof remote from their respective cross bar, a hollow panel carried by the cross bar of one pair of legs and extending downwardly therefrom between the legs to define a combined chair back and stack, a second hollow panel carried by the first mentioned hollow panel and extending horizontally therefrom adjacent the lower end thereof to define a combined chair seat and heat duct, means carried by the second panel engaging the cross bar of the second pair of legs to hold the seat substantially horizontal, a third hollow panel carried by the horizontal hollow panel and extending downwardly therefrom remote from the first hollow panel to define a leg rest and heat duct, a combined combustion chamber and foot rest carried by the third hollow panel and extending substantially horizontally outwardly therefrom adjacent the end thereof remote from the second hollow panel, and the combustion chamber and the hollow panels communicating with one another to successively convey products of combustion and heat generated in the combustion chamber to atmosphere.

2. A heated chair comprising pairs of spaced legs pivotally connected together intermediate their ends for movement about a common substantially horizontal axis, cross bars carried by the legs for movement in spaced arcuate paths concentric about the common axis, stretcher bars pivotally connected to one pair of legs adjacent the ends thereof remote from their respective cross bar, means detachably connecting the stretcher bars to the opposite pairs of legs adjacent the ends thereof remote from their respective cross bar, a hollow panel carried by the cross bar of one pair of legs and extending downwardly therefrom between the legs to define a combined chair back and stack, a second hollow panel carried by the first mentioned hollow panel and extending horizontally therefrom adjacent the lower end thereof to define a combined chair seat and heat duct, a hooked flange carried by the second panel and extending outwardly therefrom for engaging the cross bar of the second pair of legs to hold said seat substantially horizontal, a third hollow panel carried by the horizontal hollow panel and extending downwardly therefrom remote from the first hollow panel to define a leg rest and heat duct, a combined combustion chamber and foot rest carried by the third hollow panel and extending substantially horizontally outwardly therefrom adjacent the end thereof remote from the second hollow panel, and the combustion chamber and the hollow panels communicating with one another to successively convey products of combustion and heat generated in the combustion chamber to atmosphere.

3. A heated chair comprising pairs of spaced legs pivotally connected together intermediate their ends for movement about a common substantially horizontal axis, cross bars carried by the legs for movement in spaced arcuate paths concentric about the common axis, stretcher bars pivotally connected to one pair of legs adjacent the ends thereof remote from their respective cross bar, means detachably connecting the stretcher bars to the opposite pairs of legs adjacent the ends thereof remote from their respective cross bar, a hollow panel, ears carried by the hollow panel and extending upwardly therefrom in encircling relation to the uppermost cross bar to suspend said panel between the legs to define a back rest and stack, a second hollow panel pivotally connected to the first mentioned hollow panel and communicating therewith through the lower end thereof, a hooked flange carried by the second panel and extending outwardly from the end thereof remote from the first panel for engaging the cross bar of the second pair of legs and holding said second panel substantially horizontal and in communication with the stack to define a combined chair seat and heat duct, said second panel having an elongated slot extending therethrough adjacent the hooked flange, spaced ears pivotally mounted on the cross bar of the second pair of legs, a third hollow panel carried by the ears and communicating with the second panel through the slot to define a combined leg rest and heat duct, and a hollow foot rest carried by the third panel in communication with the interior thereof and defining a combustion chamber in which fuel may be burned and from which the heat and products of combustion are conveyed through the hollow panels.

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