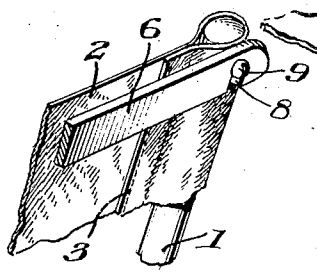
May 10, 1927. 1,628,472

N. G. PERRY ET AL

BEACH CHAIR

Filed Nov. 25, 1925

Fig. 4.



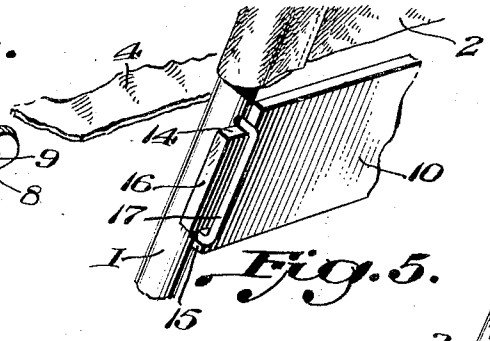


Fig. 5.

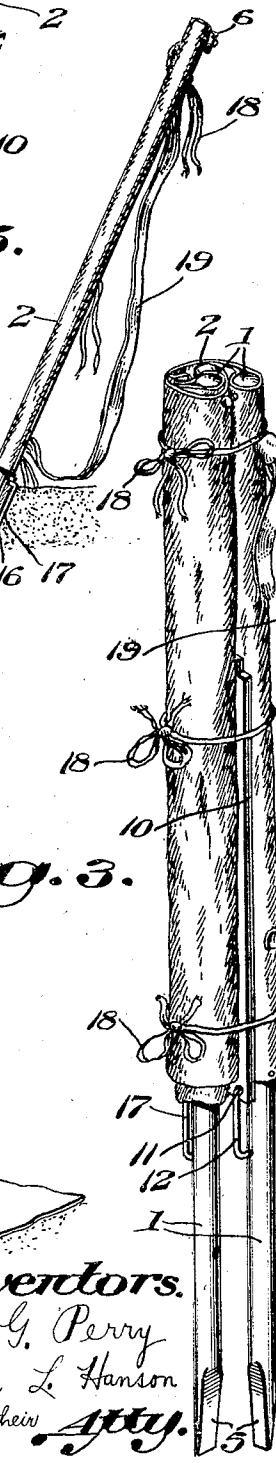


Fig. 1.

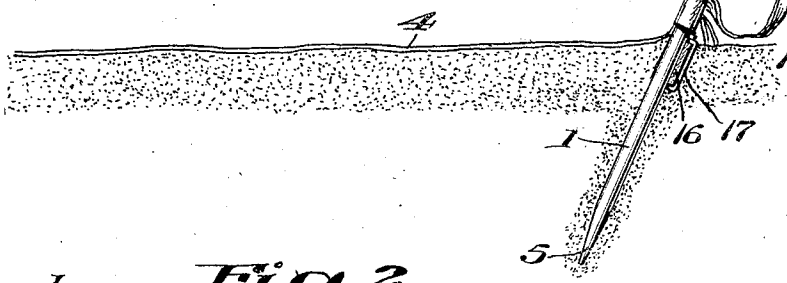


Fig. 2.

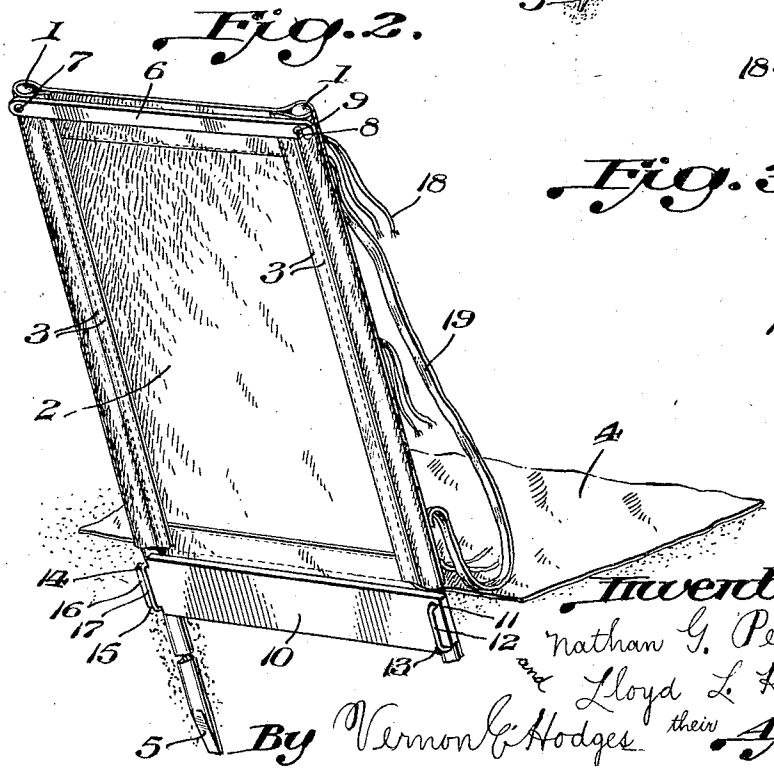


Fig. 3.

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UNITED STATES PATENT OFFICE.

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BEACH CHAIR.

Application filed November 25, 1925. Serial No. 71,432.

This invention relates to an improvement in beach chairs.

The object of this invention is to provide an improved beach chair in which all the requisites for such an article are present, such as simplicity in construction, lightness yet possessing considerable strength, automatic operation in use, and inexpensiveness in manufacture. Our improved beach chair possesses all of these qualities, making the article such that it may be manufactured cheaply, while at the same time, it will possess considerable strength and may be easily and quickly brought into operation so that persons desiring a seat on a sandy beach may carry the chair folded up into small compact with them and open it and bring it into its operative position on the sand wherever desired.

The construction is such that the completed chair is extremely light, weighing only approximately three and one-half pounds, and one person can easily carry two or more of these chairs while leaving his hands free for carrying other articles, if he so desires.

The beach chair is formed of two standards or dowels between which is secured a canvas back throughout a portion of the length of the dowels and this canvas back terminates at its lower end in a wide free apron, which is adapted to be spread over the sand. Strainers are pivotally secured to the backs of the dowels and are adapted to form braces therebetween so as to stretch the canvas back while at the same time bracing the whole back of the chair. The lower free ends of the dowels are adapted to be inserted into the sand at any desired angle and they are long enough to effectively hold the back of the chair at this desired angle and to support considerable pressure. Means is also provided for securing the various parts of the chair in a folded-up position so that it may be easily carried wherever desired.

In the accompanying drawings:

Fig. 1 is a side elevation of our improved beach chair in position for occupancy;

Fig. 2 is a rear perspective view of the same, parts being broken away;

Fig. 3 is a perspective view of our improved chair in its folded position;

Fig. 4 is a detail perspective view of the connection between the top strainer and one of the dowels, and

Fig. 5 is a detail perspective view of the connection between the lower strainer and one of the dowels.

The numeral 1—1 indicates wooden standards or dowels between which is stretched the canvas back 2, the side of this canvas back being folded around the dowels and stitched as at 3, so as to securely fasten the canvas back to the dowels. The canvas back 2 covers the entire upper ends of the dowels and to its lower edge is secured the apron 4. The canvas back 2 and the apron 4 may, however, be made in a single piece with a slit in the side edges, so as to allow the edges of the back to be folded about the dowels and leave the wide flaps on the sides of the apron 4 as shown in Fig. 2. The free ends of the dowels terminate in sharpened chisel shaped points 5, so that they may be easily inserted into the sand and will securely hold the chair in the position desired. These flat faced chisel points on the lower ends of the dowels hold the chair securely in any desired position in the sand. It has been shown by experiments that the chisel points provide more than twenty per cent better holding qualities than the round sharp points ordinarily used. This is quite clearly shown in Fig. 1, of the drawings, and it is evident that where the lower ends of the dowels present flat faces to the sand, they develop a far greater amount of holding qualities than can possibly be obtained with the round sharp points.

At the upper end of one of the dowels 1, the top strainer 6 is pivoted as at 7 and has its opposite end provided with a notch 8 as shown clearly in Fig. 4, to receive a pin or screw 9 so as to stretch the canvas-back 2 at its upper end and hold it in its stretched position, while at the same time, forming a brace for the upper ends of the dowels.

The lower strainer 10 is provided with a hole 11 therethrough, through which passes one end of the wire loop 12, the opposite end of said wire loop passing through a notch 13, formed in the lower edge of the strainer 10. The wire loop 12 is, in reality, a flattened staple which pivotally secures one end of the lower strainer 10 to one of the dowels 1, and when this strainer is in the position

shown in Fig. 2, the wire loop 12 serves not only as a pivot for the strainer but it also serves as a guide for the same, holding this end in its proper flattened position so as to properly form a brace and stretcher for the back of the chair. This loop 12 does of course permit of the strainer being turned up into the position shown in Fig. 3, when the whole chair is folded up into the carrying position. The opposite end of the strainer 10 is provided with the corner notches 14 and 15, as shown in Figs. 2 and 5, providing a projection 16, which is adapted to be inserted into the wire loop 17, for holding this end of the lower strainer in its proper position, so as to keep the canvas-back 2 of the chair properly stretched and also forming a brace for the back of the chair. This lower strainer 10 serves a three-fold function; first, of holding the dowels 1 properly spaced apart to give the proper rigidity to the back of the chair; second, to afford a means for inserting the chair to the required depth into the sand; and third, it makes a broad bearing and anchorage in the sand, giving a rigid bracing support to the back to hold it in position, while the user of the chair leans back or reclines.

This bottom strainer, serving as it does to provide a broad bearing and anchorage in the sand, forms a firm bearing against back pressure, thus permitting the elimination of all back braces. This anchorage in the sand, providing a rigid bracing support to the back of the chair, makes the chair absolutely self sustaining and is an important feature of this invention.

When the chair is folded up into the position shown in Fig. 3, it may be securely held in this position by means of the straps 18 or other suitable means and a carrying web 19 is secured to one of the dowels so that the folded chair or any number of them may be hung over the shoulder of the person carrying the same, leaving his hands free for other purposes.

To bring the chair into the proper position for use after it has been in the folded position shown in Fig. 3, it is necessary first to untie the straps 18 and unroll the canvas-back 2, unfolding the apron 4 as far down as it will go. Next, the lower strainer 10 is moved down into the position shown in Fig. 2 with its end 16 inserted into the wire loop 17. The top strainer 6 is then brought up into the position shown in Fig. 2, where the notch 8 receives the pin 9 so that the top end of the dowels are also held spaced apart and these two strainers stretch the canvas-back 2 sufficiently to afford a rigid back rest. The apron 4 is spread over the sand and the lower ends 5 of the dowels are pushed into the sand at the desired angle by means of foot pressure on the bottom strainer until this lower strainer is in the sand when the apron 4 is again spread out properly and the chair is ready for use.

It will thus be seen that this invention provides an improved beach chair which is simple and light, yet is strong and rigid in actual use and may be folded up and carried about wherever desired, the simplicity of making being such that the chair may be manufactured at a comparatively low cost so that the cost of the completed article will only be fair and reasonable.

We claim:

1. A beach chair including dowels, a flexible back secured to the dowels, strainers for the dowels, a loop secured to a dowel for receiving an end of at least one of the strainers, said strainer having notches formed in opposite sides of said end to be received in said loop.

2. A beach chair including dowels, a flexible back secured to the dowels, a strainer for the dowels, said strainer having notches formed in an end thereof, and a loop secured to one of the dowels for receiving the notches of said strainer.

3. A beach chair including dowels, a flexible back secured to the dowels, strainers for the dowels, at least one of said strainers having notches formed in an end thereof, providing a projection between the notches on the end of said strainer, and a loop secured to one of said dowels for receiving the projection, said loop fitting into the notches on opposite sides of the projection.

4. A beach chair including dowels, a flexible back secured to the dowels, strainers for the dowels, at least one of said strainers having notches formed in an end thereof providing a projection between the notches on the end of said strainer, a loop secured to one of the dowels for receiving said projection, and a loop secured to the other dowel, the opposite end of said strainer being pivotally connected to said last-mentioned loop, and having a notch formed in an adjacent edge for removably receiving the loop.

5. A beach chair including dowels, a flexible back secured to the dowels, top and bottom strainers for the dowels, said top strainer being pivoted to one of the dowels, and having a notch formed in the opposite end thereof, a pin connected with the opposite dowel for receiving the notched end, and loops secured to the dowels adjacent the lower ends thereof, said bottom strainer being pivoted to one of the loops adjacent an edge thereof and having the opposite edge notched to receive the opposite side of the loop, the opposite end of said bottom strainer being notched on opposite sides thereof to fit into the other loop.

6. A beach chair including dowels, a strip of flexible material secured therebetween forming a back, top and lower strainers for holding the dowels spaced apart, the lower

strainer having notches formed in its ends and wire loops secured to the dowels for receiving the notched ends of the lower strainer, said lower strainer being pivoted to one of said loops.

7. A beach chair including dowels, a strip of flexible material secured thereto forming a back and terminating at its lower edge in an apron adapted to be spread upon the sand, the dowels terminating at their lower ends in chisel shaped points for insertion into the sand, top and lower strainers for holding the dowels in their spaced relation, the lower strainer having notches formed in its ends providing extensions, and wire loops secured to the dowels for receiving the notched-end extensions, said lower strainer being pivoted to one of said loops.

8. A beach chair including dowels, a strip of flexible material secured thereto forming a back, and terminating at its lower edge in an apron adapted to be spread upon the sand, the dowels terminating at their lower ends in chisel shaped points for insertion into the sand, top and lower strainers for holding the dowels in their spaced relation, the lower strainer having notches formed in its ends providing extensions, and wire loops secured to the dowels for receiving the notched end extensions, said lower strainer being pivoted to one of the loops, the chisel shaped points of the dowels being adapted to be inserted into the sand to a point higher than the lower edge of the bottom strainer for partly embedding said lower strainer in the sand forming a firm bearing against back pressure for the chair.

In testimony whereof we affix our signatures.

NATHAN G. PERRY.
LLOYD L. HANSON.