

E. WATERS.
Camp-Stool.

No. 217,178.

Patented July 1, 1879.

Fig. 1.

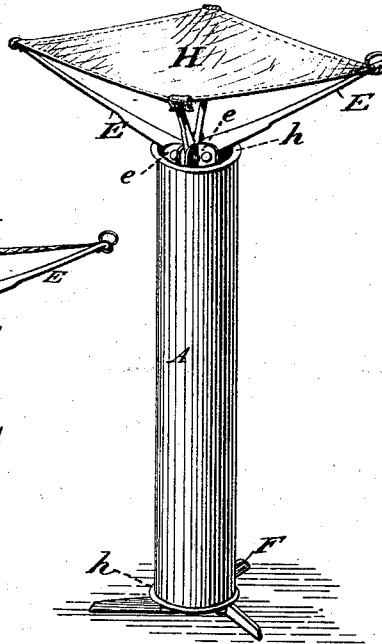


Fig. 2.

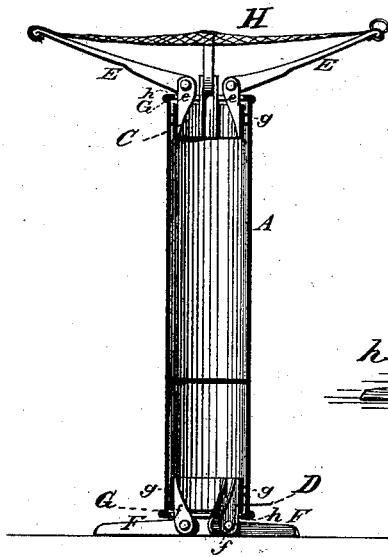


Fig. 3.

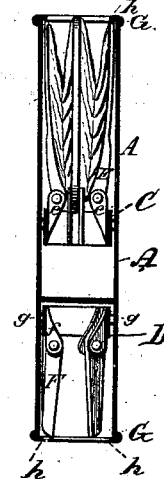
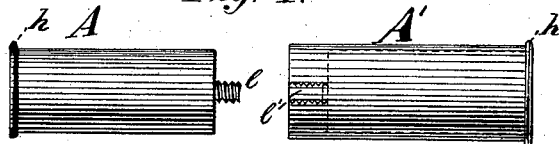


Fig. 4.



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Fig. 5.

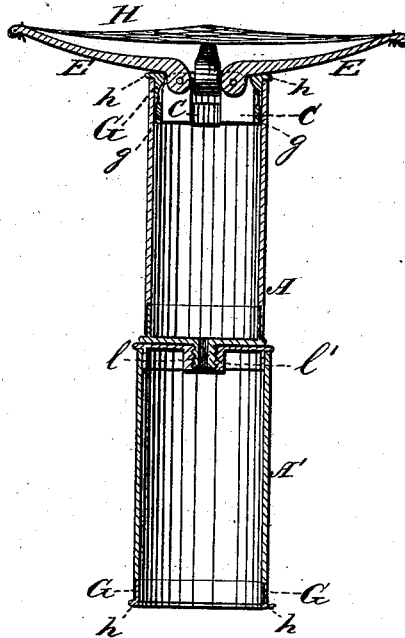
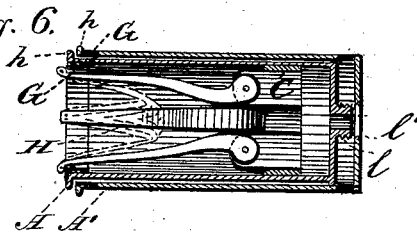


Fig. 6.



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UNITED STATES PATENT OFFICE.

ELISHA WATERS, OF TROY, NEW YORK.

IMPROVEMENT IN CAMP-STOOLS.

Specification forming part of Letters Patent No. **217,178**, dated July 1, 1879; application filed October 28, 1878.

To all whom it may concern:

Be it known that I, ELISHA WATERS, of Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Camp-Stools; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved camp-stool opened out and ready for use. Fig. 2 is an axial section of the same. Fig. 3 is an axial section of the stool folded. Fig. 4 is a side view, representing a modification in the construction of the tubular stem for holding and supporting the seat. Fig. 5 is an axial section of a stool constructed according to the modification represented in Fig. 4; and Fig. 6 is a similar section, showing the stool folded and one of the tubular stem-sections inserted into the other, ready for transportation in the satchel or pocket.

Similar letters of reference indicate corresponding parts in all the figures.

This improvement relates to camp-stools of that class in which the seat, made of flexible material, as well as the feet when such are used, may be folded together and inserted into a cylindrical tube, which, when the stool is in use, serves the purpose of a stem or central support to the seat; and it consists, essentially, in constructing the said tubular stem or receptacle of paper, provided with metallic flanged caps at each end, substantially as and for the purpose hereinafter more fully set forth.

The peculiar qualities possessed by paper adapt it for a variety of purposes for which wood or metal have heretofore been used, the substitution of paper being productive of advantageous results. Hence patents have been granted for the manufacture of barrels, oil-tanks, oil-cans, boats, and even car-wheels, of paper.

My present improvement consists in an article of manufacture—namely, a camp-stool—of the class described, in which the hollow cylindrical stem which supports the seat, and

contains and protects this when folded, is made of paper, strengthened at each end by a metallic flanged cap, to prevent abrasion of the paper tube. This tube is made, preferably, by winding layers of paper, pasted or coated with glue upon one or both sides, around a cylindrical core or mandrel until a tube of the requisite thickness has been obtained; and it may be made either in one or two sections, according to the style of stool it is desired to produce.

In Figs. 1, 2, and 3 I have shown the paper tube, denoted by the letter A, made in one piece or section; but in Figs. 4, 5, and 6 it is shown as made in two cylindrical sections, one of which, A, may be inserted into the other, A'. In either case the folding seat-arms E are pivoted upon a sliding ring, C, which is fitted into the upper end of tube A, and which may be provided with a band, g, made of paper, wire, or any other suitable material, to cause sufficient friction between ring C and the inner sides of the tube to retain the said ring in any given position.

The seat-arms E, which support the flexible seat H, may be hinged or pivoted upon ring C in any suitable manner which will not interfere with the sliding in and out, in folding or opening out the seat of the ring. One convenient method is to affix lugs or brackets to the inner side of the ring, as shown at *e* in Figs. 1, 2, and 3, upon which the inner ends of seat-arms E are pivoted.

In some cases it may be desirable (to reduce the weight of the stool, as well as cost of manufacture) to dispense with legs; but when such are used they are constructed and arranged precisely like the seat-arms, viz., pivoted upon a sliding ring, as shown upon Sheet 1 of the drawings, where F represents the folding feet, *f* the lugs upon which they are pivoted, and D is the sliding and adjustable ring, provided, if desired, with a friction-band, *g*, in like manner as the upper ring, C.

When the tube A is made in one cylindrical part or section, I insert at each end an annular cap, G, made of metal, preferably iron, which will fit tightly in the tube, and is provided with a flange, *h*, which forms a shoulder both upon the inside and outside of the tube, as shown more clearly in Figs. 2 and 3 of the

drawings. These caps serve the twofold purpose of preventing, by their inwardly-projecting shoulder *h*, the sliding rings C and D from sliding too far and slipping out of the tube, and of preventing abrasion to the respective ends or rims of the paper tube. When the tube is made in two sections, as represented in Figs. 4, 5, and 6 of the drawings, this cap G, with its annular head or flange *h*, may be used only upon respectively the upper and lower ends of the two sections A A', because in using the stool the ends which will form the middle section of the stem or support are united by means of a screw-threaded tenon, *l*, which fits into a screw-threaded socket, *l'*, in the closed head of the opposite section, in which position the meeting ends or heads of sections A A' are not subjected to wear. But it is obvious that, if desired, both sections may be provided with a shouldered cap at each end, in like manner as the single tube represented on the first three figures of Sheet 1 of the drawings.

The advantages of a paper tube for the herein-described purpose are many. It is lighter than a similar tube made of wood or metal, and less expensive—two important items in an article in the nature of a camp-stool. The paper tube is unaffected by heat or cold, and will not, like a wooden tube, warp or crack when exposed successively to wet and to the heat of the sun. A metal tube, to be as light as my paper tube, would be very thin, and liable to be flattened or bent out of shape,

which would prevent the easy folding or unfolding of the seat-arms and legs. The only vulnerable parts in this tubular paper support are its two ends or rims, and these are effectually protected by the headed or flanged caps G G, which are combined with the tube, as herein specified.

Having thus described my improvement, I claim and desire to secure by Letters Patent of the United States—

1. As an improvement in camp-stools, the combination, with the folding seat-arms E and slide C, of the hollow cylindrical stem or support A, made of paper in one or more sections, and provided at each end with an annular metallic cap, G, having a double-shouldered flange, *h*, substantially as and for the purpose shown and described.

2. A folding camp-stool, the hollow stem or barrel of which is made in two sections, A A', the smaller section, A, containing the seat-arms and seat when folded, and the larger section, A', forming a hollow cylinder or tube of an internal diameter equal to the external diameter of section A, so that section A may be slid into and contained in section A' when the stool is not in use, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ELISHA WATERS.

Witnesses:

F. P. LANG,

T. J. WHITEHEAD.