Emma Stack

F. BENOIT. COMBINED CANE AND STOOL.

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COMBINED CANE AND STOOL.

SPECIFICATION forming part of Letters Patent No. 486,074, dated November 15, 1892.

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To all whom it may concern:

Be it known that I, FREDRICK BENOIT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Folding Camp-Stools, of which the following is a specification.

This invention relates to the construction

of folding camp-stools.

The device is adapted when folded to be used as a cane by combining therewith a suitable sheath giving proper length to the device and serving as a handle, thereby adapting the structure to this use.

The nature of the invention is fully described in the accompanying drawings, in

which—

Figure 1 is an elevation of the stool when folded and combined with a sheath, whereby 20 it is converted into a cane, this figure being partly in section. Fig. 2 shows the invention as unfolded and in condition for use as a camp-stool. Fig. 3 is a partial vertical section showing the parts spread as in Fig. 2. 25 Fig. 4 is a partial vertical section of the foot with the parts folded. Fig. 5 is a partial vertical section showing the means for attaching the cane-sheath to the stool. Fig. 6 is an enlarged section on the line 6 6 of Fig. 3. Fig. 30 7 is a section on the line 77 of Fig. 3. Fig. 8 is a plan of the joint between the body and the seat-braces. Fig. 9 is a vertical section of the body, showing the manner of securing the loops to which the seat-braces are 35 hinged. Fig. 10 is a bottom view of that portion of the body shown at Fig. 9, the outer sleeve not being shown. Fig. 11 is a bottom view in perspective of the central piece of the seat.

In said drawings, A represents the radial arms forming the seat, and B the braces thereof. The arms are hinged to the center piece C. This center piece is provided with a four-sided flange c, located below the button-like top of the center piece and slotted, as shown at d, to receive the loops D, whereby the arms A are hinged to said flange. These pivotal joints between the arm and the center piece are by the construction shown substantially covered, so that when extended the clothes of the user will not come in contact therewith. The arms A are preferably formed of metal

strips bent longitudinally to a semicircular form. The braces B are hinged to the outer ends of the seat-arms at a and may be formed 55 of flat metal bent to the same form as the arms. They are hinged at their lower or inner ends to wire loops b, secured in the central body of the stool, as hereinafter more fully explained, or to substitutes for said loops, 60 serving to pivotally join the arms to the body. The seat-arms fold upwardly and unfold downwardly. The center piece is detachable from the body, so that it may be carried above and both seat-arms and braces be extended 65 vertically their full length and brought together in line with the body and in very compact form, as illustrated at Fig. 1. The center piece is further provided with a downwardly-extending tube E, carrying a spring- 70 pawl F, working through the slot e of the tube. This cylindrical part of the center piece is adapted to enter the upper cylinder G, forming part of the body and provided with a slot g at one side, adapted to receive and en- 75 gage the pawl F. When the seat-arms are extended, the tube E is forced down into cylinder G until said pawl engages in the slot gand holds the center piece in the proper position to retain the arms extended. To fold 80 the seat, it is merely necessary to press upon the pawl F with the finger and release it from the slot g, when the center piece can be raised until the arms and braces are both brought to a vertical position and in line with each 85

other. In the lower end of tube G is secured a block H, having vertical grooves h, adapted to receive the loop b, and said loops are secured in the block H by a surrounding sleeve J. In 90 the sleeve J, below the block H and integral with the latter, if that construction is preferred, is a block K, serving as a means for the attachment of the legs L. The blocks H and K, together with the sleeve J, are all part 95 of the central body of the stool. The method of attaching the legs L to the body may be varied, and I have only shown one method—viz., by pivoting, as at k. I prefer also to employ springs M, which may be soldered to the body and the 100 legs and which are adapted to retain the legs in their spread or open condition, so that the legs will not collapse by gravity when the stool is lifted from the ground. The legs are

each formed of two metal strips N n, bent longitudinally into concavo-convex form and placed together with the longitudinal edges of one bent around the like edges of the other, 5 as illustrated at m of Fig. 6. The edges may be brazed together, and the lapping of one edge around the other may perhaps in that case be dispensed with. The legs are oval in crosssection and also hollow, and the first of these 10 features adapts them to be brought close together, so that their outer sides will form a continuous round surface and present the outward appearance of a cylinder, while the second feature enables them to give concealed 15 storage-room to the binding-wires O, hereinafter to be described.

To limit the spread of the legs, I provide each of them with a binding or bracing wire O, preferably doubled upon itself, so as to 20 form a loop, as shown more particularly at Fig. 7, said wire being pivotally joined to a central socket-piece or foot P at p. Each leg is provided with a retaining-wire o, which passes through the loop of the retaining-wire O and 25 prevents its becoming detached from the leg. Being pivotally joined to the socket-piece the binding-wires are easily slid into the interior of the leg by simply lifting the stool and bringing the binding-wire and leg into line. When thus 30 positioned, the legs are brought closely together, as already described, and the bindingwires are entirely concealed, as illustrated at Fig. 4. The socket-piece P carries a slotted exterior sleeve Q, extending a short distance 35 above the pivots p, thereby forming at the upper end of the socket-piece a receptacle or socket for the lower extremities of the legs. This feature enables the feet of the legs to enter sufficiently far in the socket-piece to cover 40 the pivots p when the stool is collapsed. The socket-piece preferably carries, also, a rubber block q, and its construction in this respect, as well as others already mentioned, adapts it to serve as a foot for the stool when

To further adapt the collapsed stool to be carried as a cane, I provide a sheath R, having an appropriate handle r, the sheath being adapted to be slipped over the seat por-50 tion of the stool and also, preferably, over the upper portion of the legs, as shown at Fig. 1. The sheath is thus made to cover all the joints of the seat portions and also the joint between the legs and the body. Any simple 55 lock may be employed to hold the sheath upon the stool, such as the spring-pawl S, secured to the inside of one of the legs and projecting through a slot therein into a recess in the sheath and also provided with a boss s, 60 also projecting through an opening in the leg for use in releasing the pawl.

45 collapsed into the form of a cane.

The seat-arms may, if desired, be provided with a canvas cover; but I have not shown that feature, as it constitutes no part of the invention sought to be protected in this application. The binder or brace wires and socket-piece are very serviceable in prevent-

ing the sinking of the legs into soft ground, so that the stool is capable of use under all usual conditions. The socket-piece and the 70 binding-wires can be drawn from the legs without touching the socket-piece with the hands by placing the socket-piece between the feet and pulling upon the upper part of the device. This is a feature of benefit, as 75 the socket-piece is apt to be covered with dirt after using the stool as a cane. The joints between the socket-arms and braces may be formed by slotting the ends of one and hooking the end of the other through the 80 slot, as will be readily understood.

I claim—

1. In a camp-stool, the combination of hollow folding legs, a foot-piece, and bracing-wires flexibly joined to the foot-piece and 85 adapted to telescope into said legs, substantially as set forth.

2. In a camp-stool, the combination of hollow folding legs, a foot-piece, and bracingwires flexibly joined to the foot-piece and 90 adapted to telescope into said legs, said wires being locked to the legs, so that they cannot be detached therefrom, substantially as set forth.

3. In a camp-stool, the combination, with 95 the hollow folding legs, of the bracing-wires sliding in the legs and made in the form of loops and fastened to the legs by retaining-wires o, substantially as set forth.

4. In a camp-stool, the combination of hollow folding legs, bracing-wires adapted to telescope into and be concealed by said legs and also adapted to swing upon the legs when drawn out of the same, and a socket-piece to which the bracing-wires are hinged and which serves as a means of union for said wires, substantially as set forth.

5. The combination, with the folding legs and bracing-wires, of the socket or foot piece to which the bracing-wires are pivoted and the which is also adapted to receive the lower ends of the legs when folded, substantially as set forth.

6. In a folding stool, a movable center piece resting upon the body and supported both 115 vertically and laterally thereby while being used as a seat, hinged seat-arms radiating from said center piece, and braces for said arms hinged to the arms and to the body, in combination with the body, the latter being 120 extended upwardly to support the seat, substantially as specified.

7. In a folding stool, a movable center piece, hinged seat-arms radiating from said center piece, and braces for said seat-arms, in 125 combination with the body of the stool, adapted to support and sustain said center piece when the seat is unfolded and also to support said braces, and a releasable lock for securing the center piece to the body, substan-130 tially as set forth.

8. In a folding stool, a series of upwardly-folding seat arms and braces, the former being united to a movable center piece, in com-

bination with a central body or support upon which the center piece of the seat may rest and to which it may be locked against upward movement while the seat is being used, 5 substantially as set forth.

9. In a folding stool, the combination of a series of hollow legs and a series of bracingwires for limiting their spread, the latter be-

ing capable of telescoping into the legs and being also hinged to them, so that they may ro be brought into line therewith, substantially as set forth.

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Witnesses:

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