March 4, 1941. C. E. BUCKNELL 2,233,806

FOLDING STOOL

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Fig. 1.

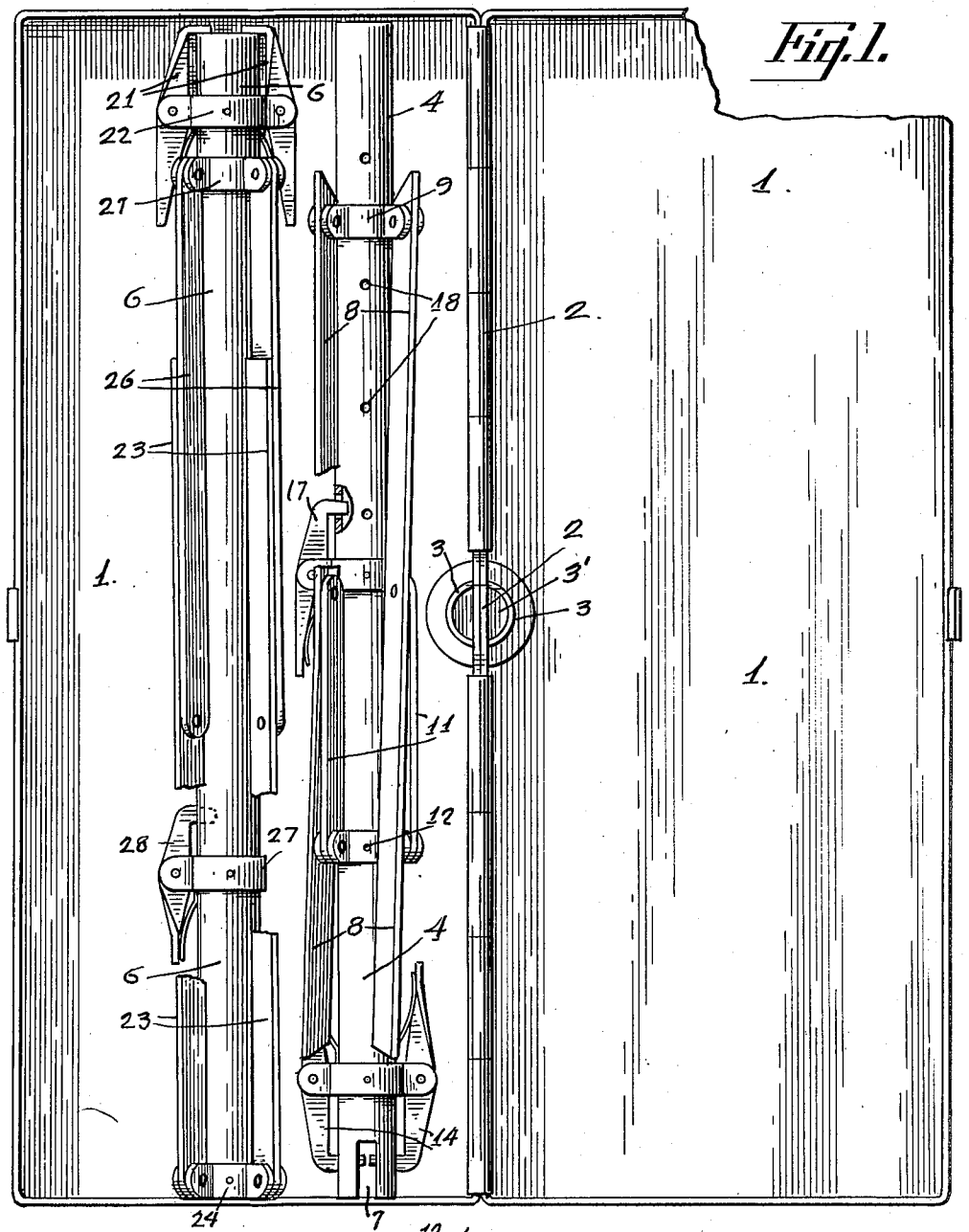

Fig. 2.

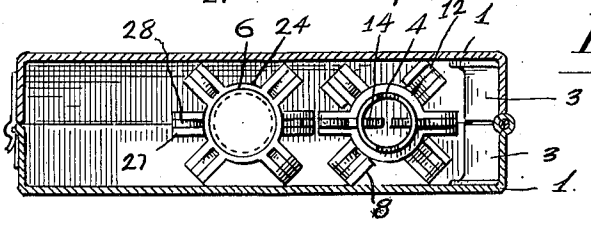

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Fig. 3.

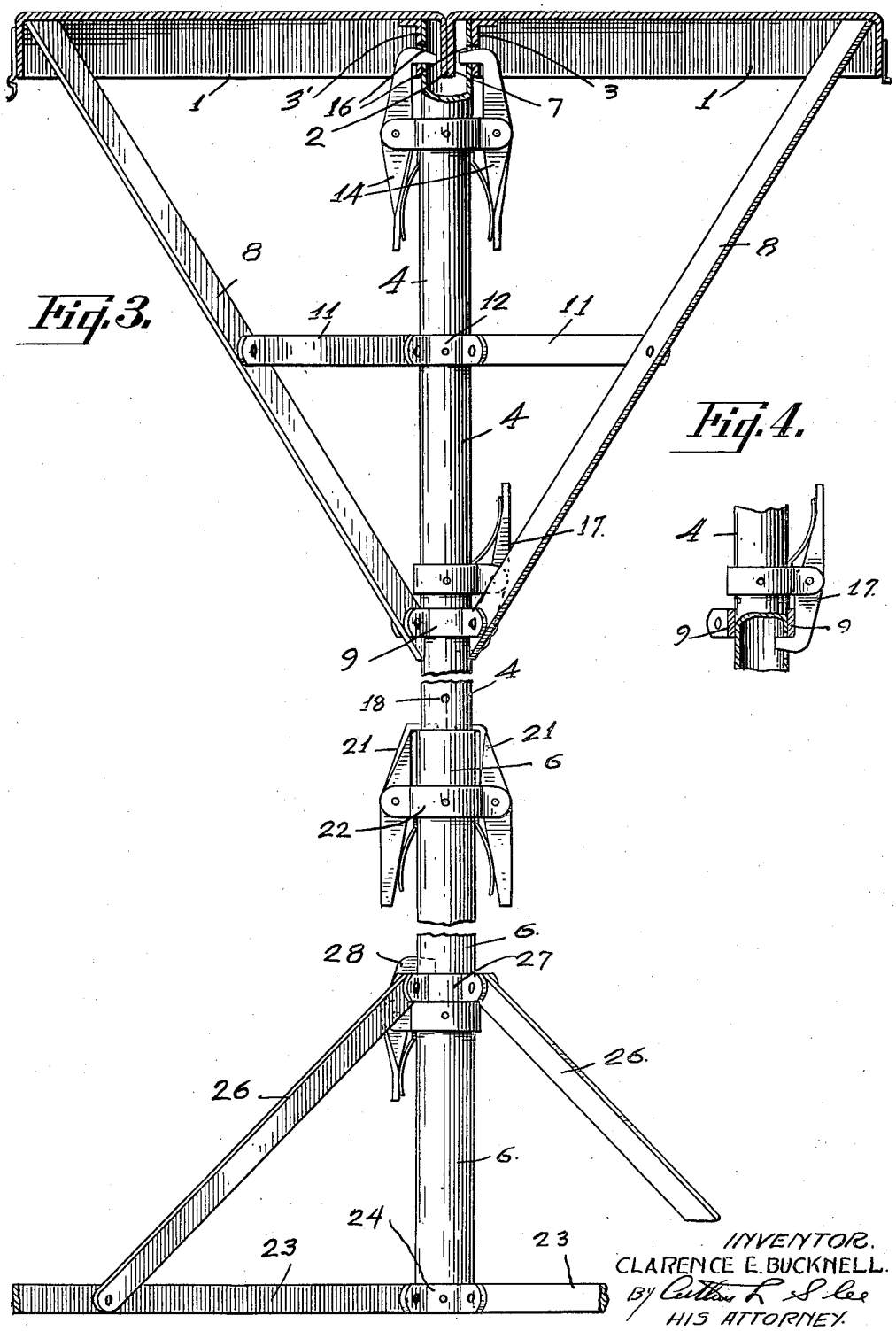

Fig. 4.

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UNITED STATES PATENT OFFICE

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FOLDING STOOL

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Application March 20, 1940, Serial No. 324,975

1 Claim. (Cl. 155—135)

My invention relates to improvements in a folding stool wherein a substantially shallow box comprising similar hingedly connected halves, arranged to form a flat seat when fully opened and inverted, operates in conjunction with a telescopic pedestal and foldable braces pivotally and slidably mounted thereon to form a stool, said box operating as a container for said pedestal and braces when the same are collapsed and folded.

The primary object of the present invention is to provide a new and improved folding stool.

Another object is to provide a new and improved device of the character set forth, wherein a seat is hingedly connected to form a container, when closed, for enclosing the supporting structure therefor.

Another object is to provide a new and improved folding stool of the type described, that is self-contained and may be easily and readily folded into a compact package and conveniently carried within a pocket or bag.

A still further object of the present invention is to provide a new and improved folding stool of simple construction that may be economically produced and easily operated.

The invention consists in the arrangement of the several parts as disclosed in the drawings forming a part of the present application, and in which—

Fig. 1 is a partly broken plan view of the collapsed or folded supporting structure stored within the open box;

Fig. 2 is an end view of the box closed, with the near end removed to disclose the compactly folded supporting structure stored therein;

Fig. 3 is a broken elevation, partly in section, of the several parts set up to form the stool; and

Fig. 4 is a broken detail.

Referring to the drawings:

The numeral 1 is used to designate similar hingedly connected halves of a substantially shallow rectangular box, said box being split and hinged along a median longitudinally disposed line along the back thereof, the said halves abutting along the line or plane of said backs, when said box is fully opened and inverted to form a seat, to provide a longitudinally disposed strengthening rib 2, as fully disclosed in the upper portion of Fig. 3 of the drawings. Each half 1 is provided with a substantially semi-circular sleeve 3 on the inner side and against the central back portion thereof to form a half socket, both half sockets combining to form a substantially circular socket 3' when said box or halves 1 are fully opened, as disclosed in Fig. 1 of the drawings.

A separable supporting pedestal is formed of upper and lower telescoping tubes 4 and 6, respectively, the top tube 4 being provided with a longitudinally disposed slot 7 in the top thereof to engage the rib 2 when the top of said tube 4 is inserted into the circular socket 3'.

Folding braces 8 are pivotally mounted upon a collar 9 slidably mounted on the upper tube 4, said braces being further foldably connected to said upper tube 4 by means of links 11, pivotally connected to said braces 8 and a collar 12 permanently fixed on said tube 4.

The upper end of said tube 4 is further provided with spring controlled latches 14 engaging apertures 16 within the semi-circular sleeves 3 to effectively retain said top of said tube 4 in engaging relation with the top or seat as formed by the fully opened and inverted halves 1.

The lower end of said upper tube 4 is also provided with a spring controlled latch 17 for engaging the slidable collar 9 to hold the braces 8 in extended position for supporting the seat, as disclosed in Figs. 3 and 4 of the drawings. The upper tube 4 is also provided with several apertures 18, as disclosed in Fig. 1 of the drawings, to be engaged by the ends of spring controlled latches 21 pivotally mounted upon a fixed collar 22 adjacent the upper end of the lower tube 6 to prevent said upper tube 4 from sliding downward into said tube 6 when the stool is set up for use.

The lower tube 6 is also provided with braces 23 pivotally connected to a collar 24 fixed to the closed lower end of said lower tube 6, and further foldably connected to said lower tube 6 by means of links 26 pivotally connected to said braces 23 and also to a collar 27 slidably mounted upon said lower tube 6, which collar 27 is held against movement by a spring controlled latch 28, to prevent said links 26 and braces 23 from folding when said stool is set up for use.

In operation:

When the two halves 1 are closed upon each other, a box or container is formed, within which is stored the separated tubes 4 and 6 with their respective braces and links folded or collapsed upon them, as disclosed in Fig. 2 of the drawings.

To set up the stool, the halves 1 are fully opened, the upper and lower tubes 4 and 6, respectively, are removed therefrom, and said halves 1 are then inverted or turned upside down so that the outer flat bottom surfaces of said box

form extensions on each other to provide a horizontal seat portion. The lower tube 6 is then held upright and the sliding collar 27 is lowered on said tube 6 to extend, by means of the links 26, the feet or braces 23 to supporting position, at which time the collar 27 will be engaged and held by the latch 28.

The lower end of the tube 4 is then inserted telescopically within the upper end of the lower tube 6 to form a pedestal, until the latches 21 engage one of the apertures 18 of said upper tube 4 to prevent further relative movement and hold said upper tube at the required height; the slidable collar 9 on the lower end of said upper tube 4 having been previously moved upward to unfold or expand, through the medium of the links 11, the seat supports or braces 8, until said collar 9 is engaged and retained by the latch 17, to prevent folding of said braces 8.

The fully opened and inverted halves 1, forming the seat portion, is next placed on top of the upper tube 4 with the slot 7 thereof engaging the rib 2 and the said top engaging the substantially circular socket 3'. The upper ends of the expanded braces 8 engage and support the under sides of the opened halves or seat portion. The stool is then ready for use.

To fold the stool, the above described operation is reversed, the separated tubes 4 and 6, with their collapsed braces, are placed within one of the halves and the other halve is closed thereon, thus forming a self-contained and compact device which may be easily and economically produced and readily transported.

Having described my invention, I claim:

A folding seat comprising a substantially shallow box having similarly hingedly connected halves abutting and forming a rib when said box is fully opened and inverted to form a seat, each half being provided with a substantially semi-circular socket matching with the other socket to form a substantially circular socket when said box is opened; a separable telescoping tubular pedestal slotted at one end to seat within said circular socket and engage said rib; and collapsible braces pivotally and slidably mounted on said telescoping pedestal to hold the same vertically and said seat horizontally on said pedestal.

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