

R. F. BOYLE.  
 PORTABLE APPARATUS.  
 APPLICATION FILED MAY 14, 1912.

1,102,133.

Patented June 30, 1914.

3 SHEETS-SHEET 1.

Fig. 1.

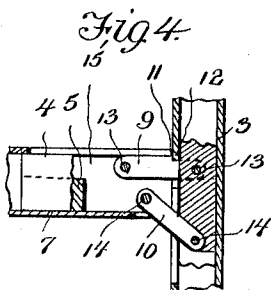
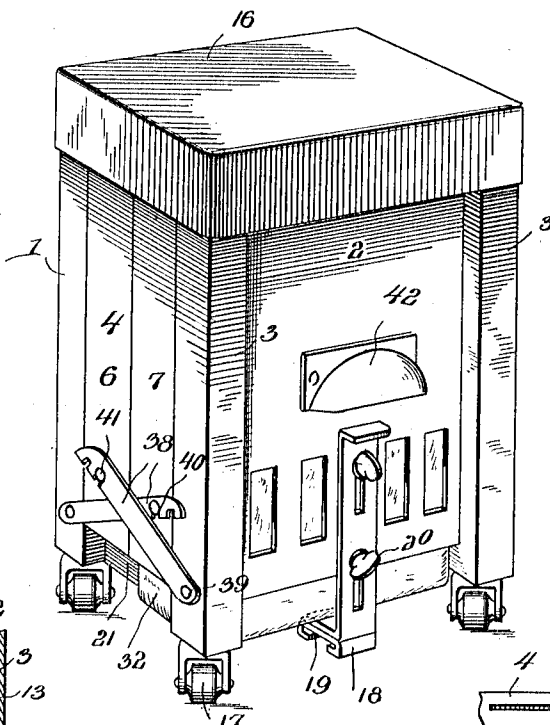


Fig. 5.

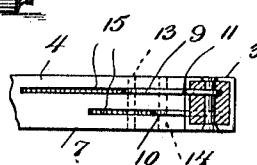
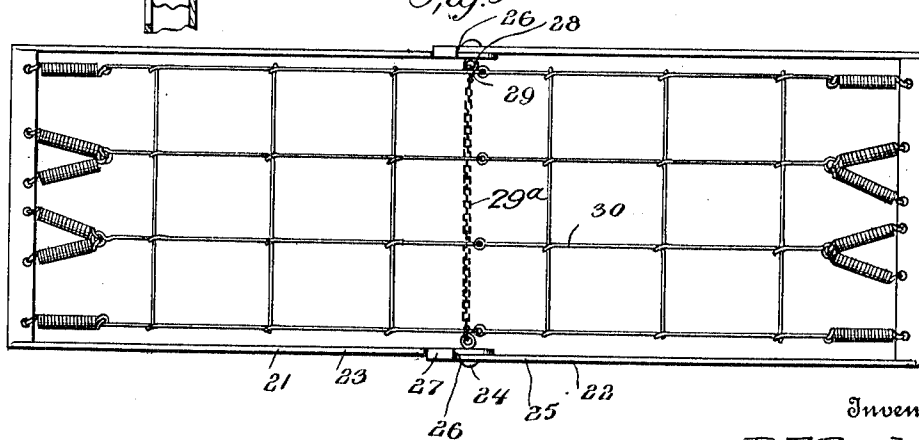


Fig. 3.



Inventor

R. F. Boyle

Witnesses

William R. Smith.

James Kelly

By Victor J. Evans

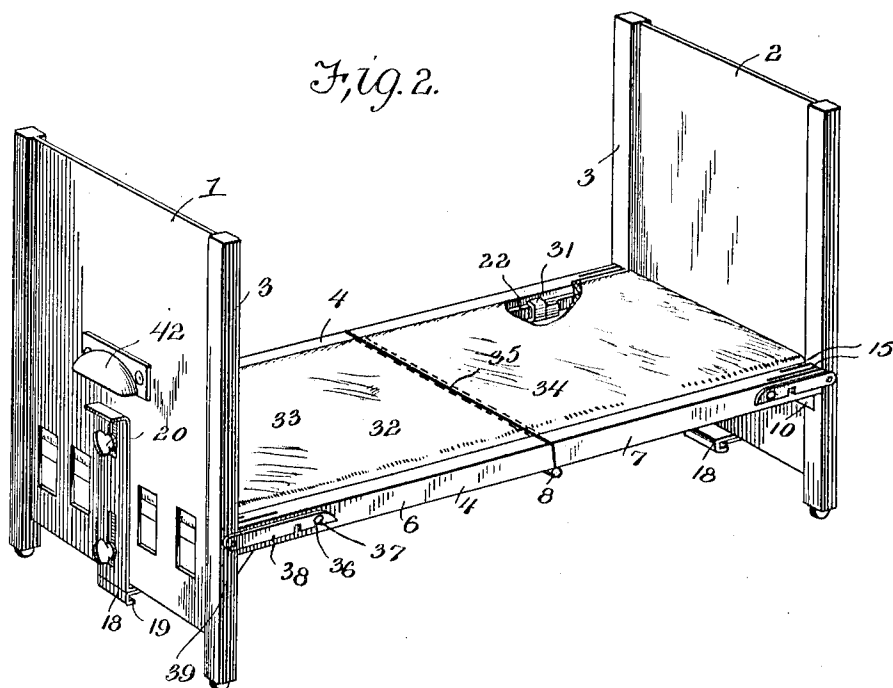
Attorney

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2 SHEETS—SHEET 2.



Witnesses

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# UNITED STATES PATENT OFFICE.

ROBERT FRANCIS BOYLE, OF CHARLESTON, WEST VIRGINIA.

PORTABLE APPARATUS.

1,102,133.

Specification of Letters Patent. Patented June 30, 1914.

Application filed May 14, 1912. Serial No. 697,230.

To all whom it may concern:

Be it known that I, ROBERT F. BOYLE, a citizen of the United States, residing at Charleston, in the county of Kanawha and State of West Virginia, have invented new and useful Improvements in Portable Apparatus, of which the following is a specification.

This invention relates to bedsteads; and it has for its primary object the provision of a structure of this character which may be readily folded to assume a relatively compact package when not in use.

In the drawings, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views: Figure 1 is a perspective view showing the bed folded and illustrating the position of the water and dust proof cap thereon. Fig. 2 is a perspective view showing the bed in a set-up position. Fig. 3 is a top plan view of the spring frame. Fig. 4 is a longitudinal section through one of the longitudinal bars of the frame showing the manner of connecting the same to the head and foot members. Fig. 5 is a section through the bed showing the same in its folded position.

The bed comprises the substantially identically constructed head and foot members 1 and 2 respectively, each of which being provided with the vertical corner posts 3. The head and foot members are adjustably connected together by the longitudinal bars 4. These bars are identically constructed, and as shown, they are of hollow rectangular form in cross section and in the outer ends of the bars are secured members 5. Each bar comprises the members 6 and 7 which are hingedly connected together, at 8, whereby the sections can be folded against each other, as shown in Fig. 1 of the drawings. The members 5 in the outer ends of the members 6 and 7 of the longitudinal bars of the bed are connected with the vertical corner posts of the head and foot members 1 and 2 by means of the companion hinge links 9 and 10. The links 9 are provided with notches 11 which are adapted to receive the shoulders 12 on the corner posts when the sections 6 and 7 of the longitudinal bars are adjusted to occupy the same general plane with each other. The pivots 13 which connect the hinge links 9 with the corner posts are disposed substantially on line with the upper surfaces of the

longitudinal bars so as to permit the sections 6 and 7 to be readily broken at their joints and folded against each other to be disposed between the head and foot members of the bed when the latter is folded, as shown in Fig. 1. The hinge links 10 have their pivot bolts 14 which are connected with the vertical posts of the head members 1 and 2 disposed below the plane of the lower edges of the members 6 and 7 when these sections occupy the same general plane. The opposite ends of these links are suitably pivoted between the walls of the kerfs 15 in the members 5 so that when the sections 6 and 7 are in the same general plane with each other the said links will serve as braces.

The sections 6 and 7 of the longitudinal bars of the bed are of a size whereby their upper ends are disposed substantially flush with the top portions of the head and foot members of the bed when the latter is folded in the position shown in Fig. 1. When the bed is folded in this position for shipment or storage, I provide a water proof cap member 16 which is adapted to fit over the head and foot members of the bed and over the sections 6 and 7 of the longitudinal bars 4. The corner posts of the head and foot members of the bed are provided with supporting rollers 17. Plates 18 are adjustably mounted on the head and foot members of the bed and the portions 19 thereof may be brought to bear against the ground or supporting surface upon which the rollers 17 rest so as to hold the bed against rolling accidentally. The feet 18 can be held in their adjusted position through the provision of the clamping devices 20 which are carried by the head and foot members.

The spring frame comprises the sections 21 and 22. The section 21 is provided with the side bars 23 which are pivoted by the bolts 24 to the side bars 25 of the section 22. The side bars 23 are provided with notches 26 in which the stop lugs 27 on the bars 25 are adapted to fit, whereby the spring frame when adjusted to its horizontal position will be held against breaking at the center. A chain 29<sup>a</sup> is connected by hooks 29 in the eyes 28 of the pivot bolts 24, and as will be seen, said chain serves to hold the fabric bottom of the spring frame against undue sagging at its center.

The spring frame is constructed so that it can be folded with the longitudinal side bars

of the bed and to be wholly disposed between the head and foot members 1 and 2, it, of course, being understood that before attempting to fold the spring frame the hooks on the fabric bottom are disconnected from the eyes 28. The longitudinal side bars are provided with clips 31 in which the bars 23 and 25 of the spring frame are adapted to engage, whereby the spring frame can be operatively sustained in a horizontal position.

The mattress 32 which I employ includes the sections 33 and 34 which are connected together, at 35, so that they can be folded on each other and whereby they can also be folded with the spring frame. The sections 6 and 7 of the longitudinal bars of the bed are provided with studs 36 which are adapted to fit in the notches 37 in the keepers or latch plates 38. These plates are pivoted, at 39, to the corner posts of the head and foot members 1 and 2 and when they are adjusted to cause the studs 36 to fit in the notches 37 the head and foot members 1 and 2 will be positively held against pivotal movements on the said longitudinal bars. The latch plates 38 are also provided with notches 40 which are adapted to receive the studs 36 when the bed is folded to the position shown in Fig. 1.

When it is desired to use the structure as a stretcher the head members 1 and 2 are folded against the longitudinal side bars of the frame so that the head members form a support on which the mattress can be placed. When the structure is adjusted to this position the roller ends of the corner posts will

be extended sufficiently beyond the head and foot members whereby they can be used as handles. To facilitate adjusting the various parts of the structure, I preferably provide the head and foot members 1 and 2 with handles 42.

I claim:

In a combined bed or stretcher, head and foot members each having vertical corner posts provided with shoulders, sectional side bars arranged to extend between and also arranged so that their ends may abut against and move to a slight extent vertically on the corner post of said foot and head members, upper links each having one end pivotally connected to one of the side bars and the other end pivotally connected to one of the posts, said upper links having notches for engagement by the centers of the posts, lower links arranged at an angle to the upper links and each having one end pivotally connected to one of the side bars and the other end pivotally connected to one of the posts, said upper and lower links forming pivot connections between said side bars and corner posts and keeper links each arranged on the outer side of and pivotally connected at one end to one of the posts and each provided with a plurality of notches, the said side bars also having notches to engage the said keeper links.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT FRANCIS BOYLE.

Witnesses:

T. G. NUTTER,  
SARAH A. PURNELL.