

Sept. 4, 1928.

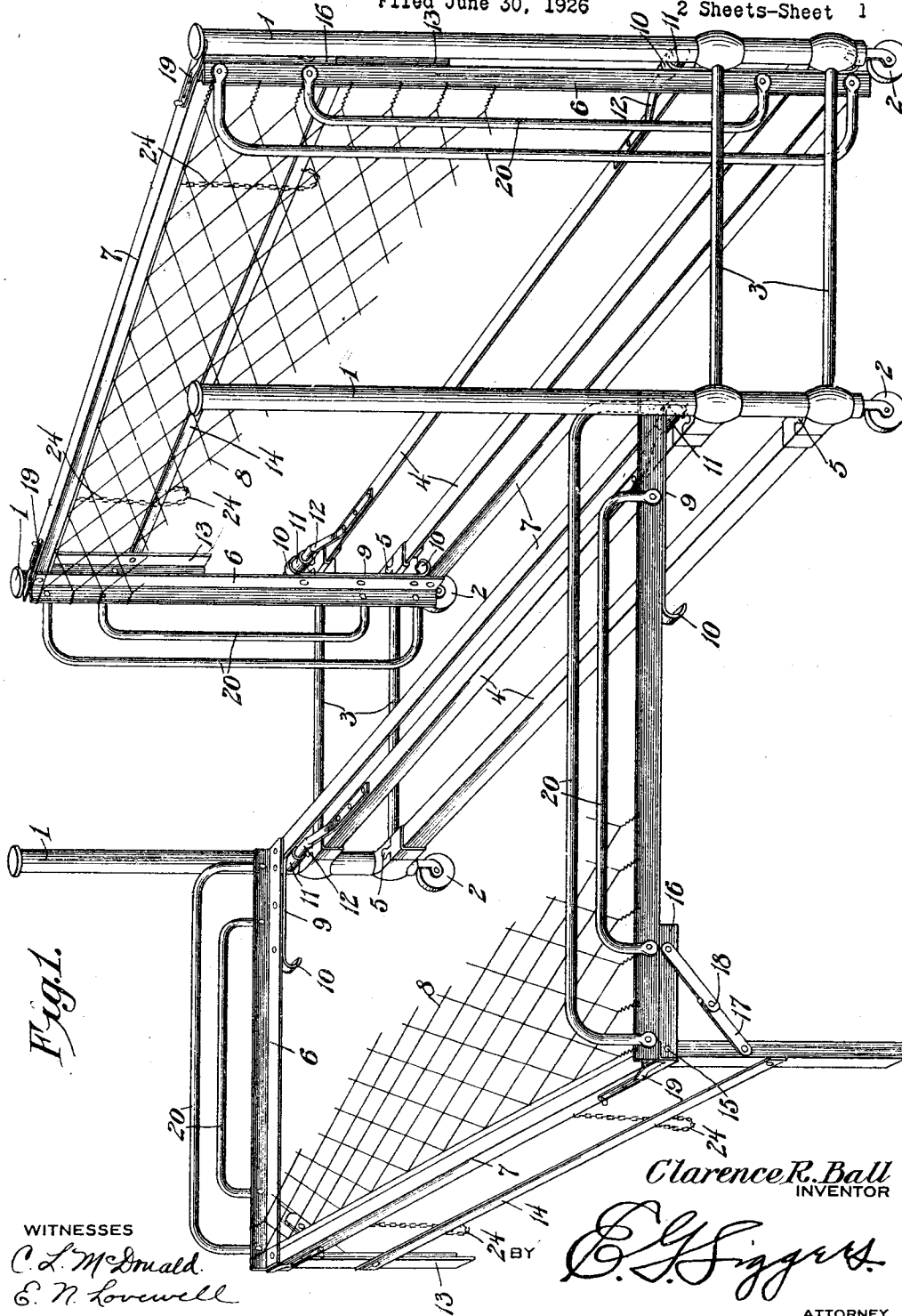
C. R. BALL

1,683,149

FOLDING TWIN BEDS

Filed June 30, 1926

2 Sheets-Sheet 1



Sept. 4, 1928.

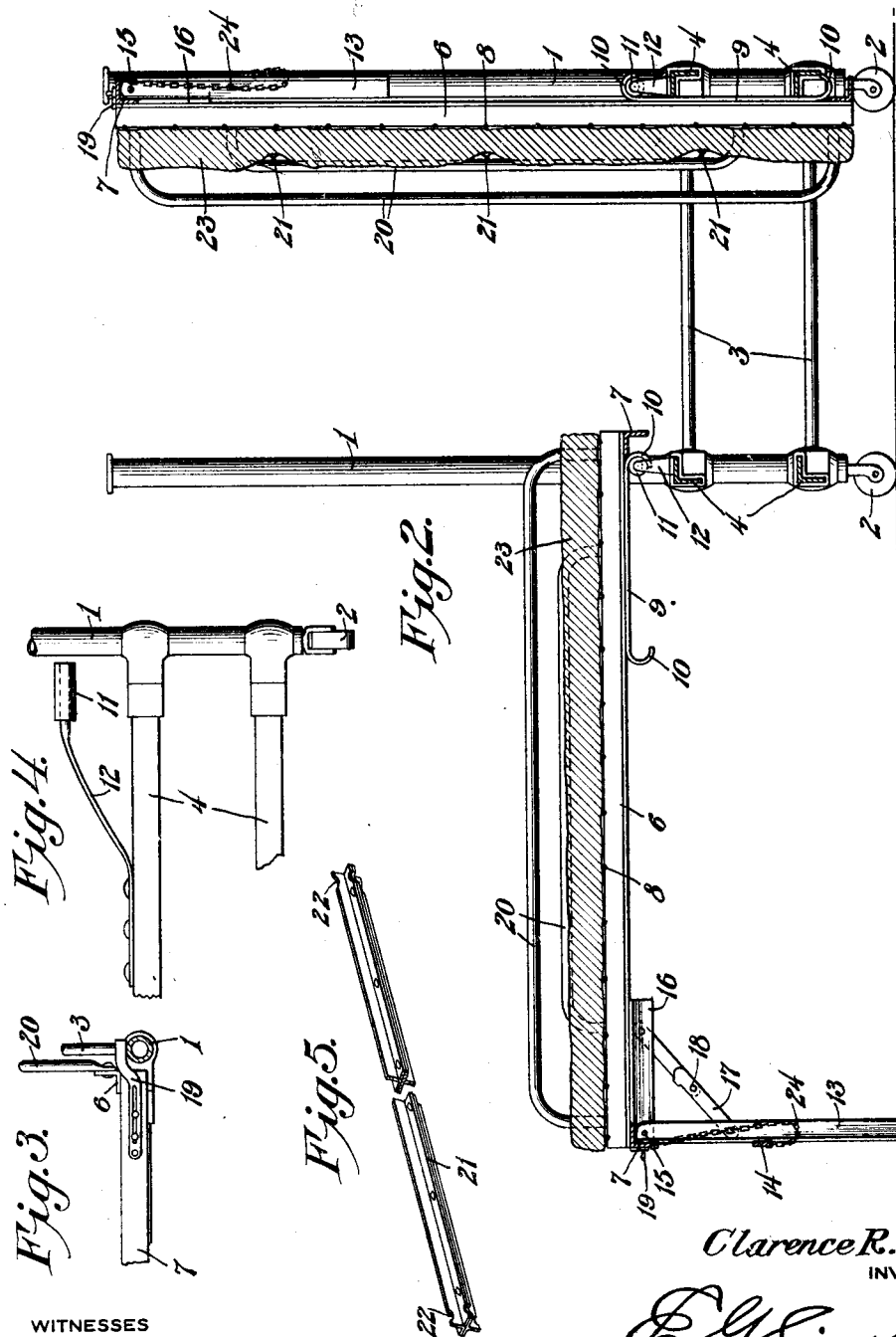
1,683,149

C. R. BALL

FOLDING TWIN BEDS

Filed June 30, 1926

2 Sheets-Sheet 2



WITNESSES

C. L. McDonald  
E. N. Lovell

Clarence R. Ball  
INVENTOR

BY

E. J. Sigg  
ATTORNEY

## UNITED STATES PATENT OFFICE.

CLARENCE R. BALL, OF WASHINGTON, DISTRICT OF COLUMBIA.

## FOLDING TWIN BEDS.

Application filed June 30, 1926. Serial No. 119,765.

This invention relates to folding twin beds, comprising two beds combined with a single main frame, which forms a part of the support for each bed at night, and into which they may be folded in the daytime.

The object of the invention is, primarily, to provide a simple, convenient and compact construction, which combines the most desirable features of the ordinary flat bed and of the ordinary folding bed, as well as other valuable features possessed by neither; a construction which is light, easily moved from one room to another, and assembled or disassembled without the use of tools, and which is at the same time strong and durable, sanitary and economical.

The specific construction of the invention and the advantages resulting therefrom will be more particularly explained in connection with the accompanying drawings, which illustrate the same in its preferred form.

In the drawings:

Figure 1 is a perspective view of the invention, showing one bed open and the other bed folded within the frame.

Figure 2 is a transverse section of the same.

Figure 3 is a detail view showing one of the latches for holding the beds in folded position.

Figure 4 is a detail view illustrating one of the bed supporting elements.

Figure 5 is a detail perspective view of one of the bars for retaining the mattress and bed clothing on the bed when the latter is folded.

The main frame, which constitutes a part of the invention, is of standard length but comparatively narrow, and comprises corner posts 1, provided with castors 2 at their lower ends, and rigidly connected by end rails 3, which are comparatively low down, so that there is a clear space between the posts above the beds. The posts are connected at each side of the frame by two side rails 4, having at their ends the usual lugs 5, which are detachably connected to the posts.

Each of the twin bed frames comprises end rails 6, rigidly connected by side rails 7, and has woven wire springs 8 stretched from one end rail to the other. Each end rail 6 has a suspension bearing or retaining bar 9 secured to its under side near the end which is adjacent the main frame, and this suspension bearing or retaining bar is formed at each end with a hook 10, adapted to limit the lateral movement of the bed with respect to the main frame by its engagement with a sleeve or

roller 11, mounted on a supporting stub 12, which is secured to the adjacent side rail 4.

The stubs 12 may be either rigid or resilient, and serve as supports for the inner side of the bed when it is unfolded, as shown in the left hand portions of Figures 1 and 2, or they may serve to retain the lower portion of the bed when it is folded into the main frame, as shown in the right hand portions of Figures 1 and 2.

The outer portion of each twin bed frame is provided with legs 13, which are connected to each other by a rail 14, and which are pivoted at their upper ends, as shown at 15, so as to fold into angle bars 16 secured to the end rails 6. The legs 13 are provided with the usual braces 17, having elbow joints 18.

The outer rail 7 of each twin bed frame has slidable latches 19 mounted at its ends, and adapted to be projected beyond the respective corner posts 1, as shown in Figure 3, to retain the upper side of the bed frame within the main frame when it is folded. Each twin bed frame is also provided with suitable head and foot rails 20.

A number of detached rails 21 are provided for each bed, and are formed with notches 22 at the ends, adapted to engage underneath the respective rails 20 to retain the mattress on the bed, and whatever bed clothing may be used, so that the bed may be folded without disarranging the same. The detached rails 21 are preferably made in the shape shown in Figure 5, so as to secure the greatest rigidity with minimum weight. The rails 20 are U-shaped, and it is preferred to provide a plurality of such rails for each end, so as to allow for the use of mattresses of different thicknesses. Slings 24 are provided in the form of slack chains, connected at their ends to the rails 7 and 14 respectively, and adapted to serve as holders for the rails 21 when the latter are not in use.

When the twin beds are unfolded, they may be adjusted into juxtaposition to each other, so that the same covers may be used for both beds, or they may be adjusted outwardly, so as to form two separate beds with an aisle between them. In this latter position, the beds are adapted for a parent and child, or for a nurse and patient. The passage between them is clear for persons to step from one bed to the other, or for convenience in making up the beds. The separation between the two beds secures the same sanitary conditions as the use of two separate beds, and

when the beds are not in use, they may be folded into the main frame, so as to occupy less space than one ordinary bed. In fact, the main frame may be made narrow enough, so that it may be moved through door ways without taking the same apart, and at the same time the two beds, when folded, will be spaced from each other, so that there is a free circulation of air between them. In case the supporting stubs 12 are made of spring steel, a similar spring suspension devices may also be provided at the outer sides of the bed frames. It is also to be noted that the provision of two rails 3 and 4 at each end and each side of the main frame, secures greater rigidity than the usual bedstead structure, while leaving the space at each end between the corner posts and above the beds entirely unobstructed.

While I have shown and described in considerable detail, the specific construction of the invention in its present form, it is to be understood that various modifications may be made therein without any material departure from the salient features of the invention as expressed in the claims.

What is claimed is:

1. In a twin bed structure, the combination with an open main frame including corner

posts and side and end rails connecting the same only at the lower portions of the posts, of a bed frame at each side of the main frame, means on the main frame and bed frames whereby the latter have a combined laterally folding and sliding movement on the former to permit the bed frames to abut each other or to provide a passageway therebetween when open, legs for supporting the outer sides of the bed frames when they are in horizontal position, and means for retaining said bed frames in vertical position within the main frame and in spaced relation to each other.

2. In a twin bed structure, the combination of a main frame having a side rail with resilient supporting stubs secured to its upper side, a bed frame including side and end rails, the latter having bars secured to their under sides and resting on said stubs, each of said bars being formed with a hook at each end to limit the relative lateral movement of the bed frame, means for supporting the outer side of the bed frame when it is opened to horizontal position, and means for retaining it in vertical position when it is folded upwardly about the stubs as an axis.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature.

CLARENCE R. BALL.