A. G. SHARP & W. A. PEASE.

SOFA OR DAVENPORT BED.

APPLICATION FILED SEPT. 25, 1911.

1,009,444. **Patented Nov. 21, 1911.**

2 SHEETS—SHEET 1.

Fig. 1.

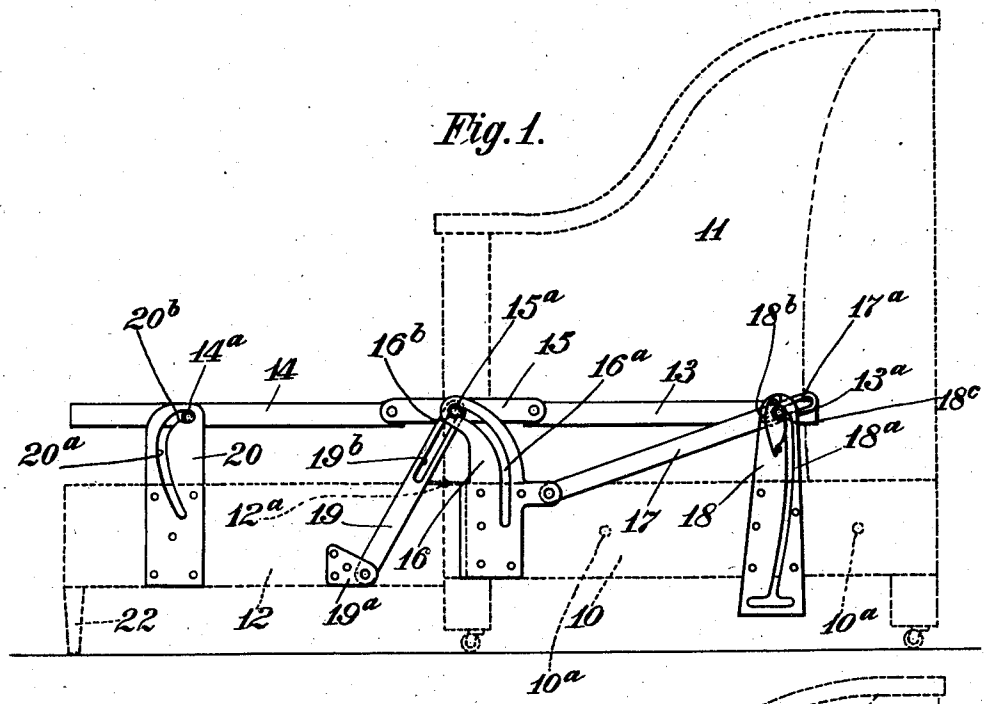
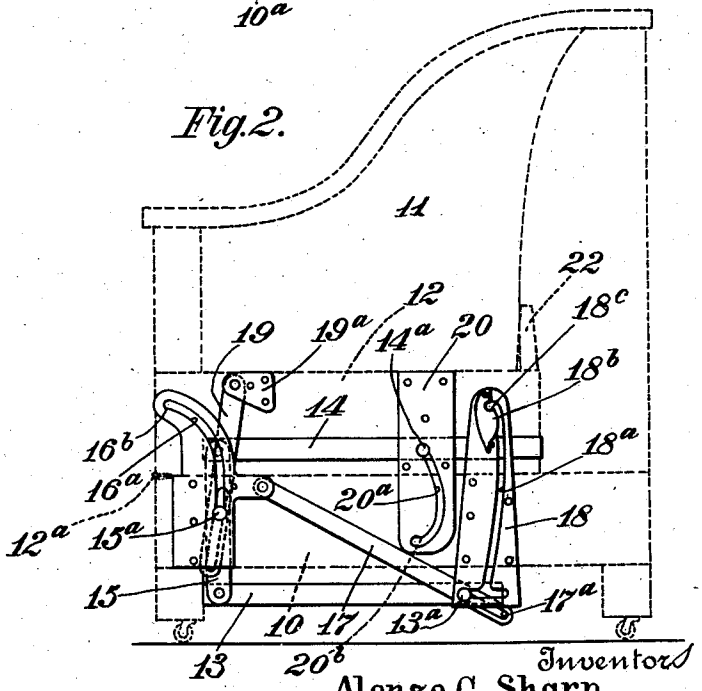


Fig. 2.



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2 SHEETS—SHEET 2.

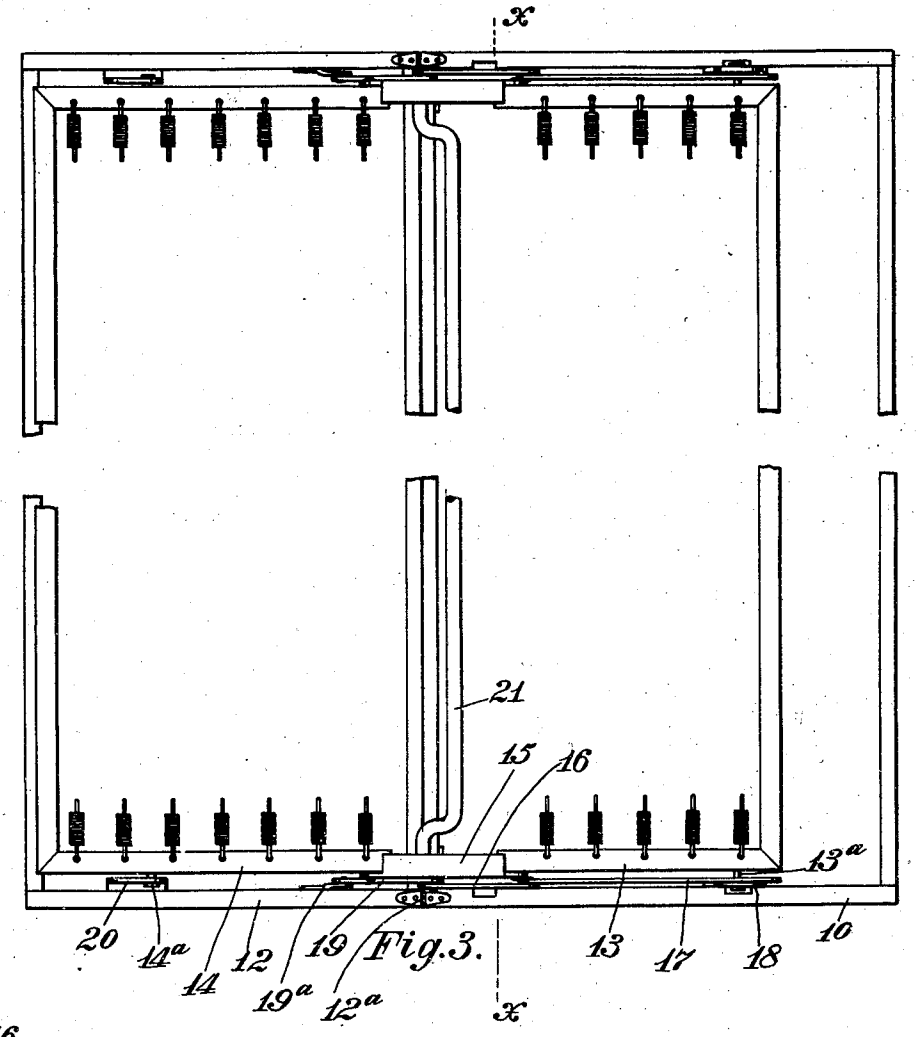

Fig. 3.

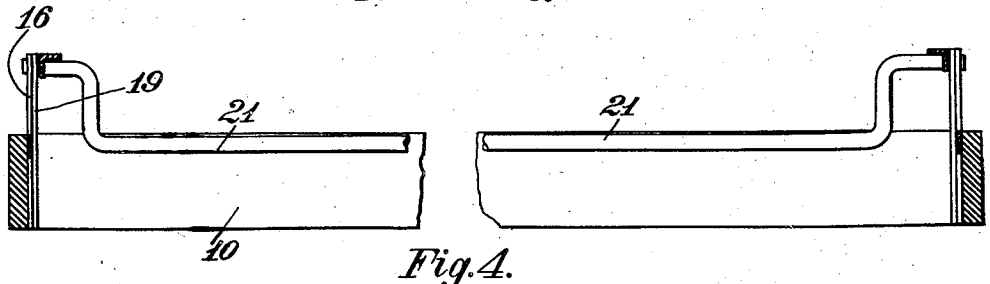

Fig. 4.

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UNITED STATES PATENT OFFICE.

ALONZO G. SHARP AND WILLIAM A. PRASE, OF COLUMBUS, OHIO, ASSIGNORS TO THE E. M. HULSE COMPANY, OF COLUMBUS, OHIO, A CORPORATION OF OHIO.

SOFA OR DAVENPORT BED.

1,009,444. Specification of Letters Patent. Patented Nov. 21, 1911.

Application filed September 25, 1911. Serial No. 651,019.

To all whom it may concern:

Be it known that we, ALONZO G. SHARP and WILLIAM A. PRASE, citizens of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Sofa or Davenport Beds, of which the following is a specification.

The object of this invention is to provide an improved construction of sofa or davenport bed in which the parts are of simple, economical and durable construction and easy operation.

The invention is embodied in the construction and combination of parts set forth in the following description and pointed out in the appended claims.

In the accompanying drawings forming part hereof Figure 1 is a view of the bed in elevation showing the mechanism at one end of the bed, the latter being in open or extended position. Fig. 2 is a similar view with the bed folded or closed. Fig. 3 is a top plan view broken out showing the mechanism and frame in which it is directly mounted. Fig. 4 is a detail partly in section and broken out showing the brace bar for the end members of the middle bed section said view being taken on the line x—x Fig. 3 looking to the left.

In the views 10 designates a rectangular box or frame that is bolted at 10^a to usual ornamental end pieces 11. The forward part of this box constitutes the front rail of the structure or the foundation for it.

The character 12 designates the seat frame which is also of rectangular form and suitably upholstered at one side. The seat frame 12 is hinged to the forward edge of the box 10 as indicated at 12^a.

The spring bed frame is foldable and comprises an inner section 13, an outer section 14 and a middle section 15 hinged to the sections 13 and 14. The spring bed frame is mounted or supported on the box frame 10, and on the under side of the seat frame 12, so that by manipulating the seat frame only the spring bed can be opened and closed, the bed being normally housed beneath the seat when the latter is closed. The mechanism for effecting the opening and closing of the spring bed frame is the same at each end of the structure so that a description of one will suffice for both. Said mechanism as it appears at one end of the structure will now be described.

16 designates a standard or support preferably of sheet steel firmly secured to the forward corner of the box 10. This standard is provided with an upwardly and outwardly curved slot 16^a having its upper terminal made with a seat 16^b. The slot 16^a receives a laterally projecting pin 15^a on the middle bed section 15 and said slot guides the pin in the movements of the middle section and said middle section is supported in the open position of the bed by said supports 16. The inner bed section is supported in its movements by a rod 17 hinged to an ear on the base of the standard 16 and having at its rear end a slot 17^a into which projects a lateral pin 13^a on the inner section. Secured on the rear portion of the end of box 10 is a stationary standard or support 18 provided with a guiding slot 18^a. On the upper end of the standard 18 adjacent the upper end of the slot is a swinging dog 18^b containing a seat 18^c for the lateral pin 13^a when the inner edge of the inner bed section is elevated to the proper open position of the bed. The seat frame is provided at the outer portion of its end with an arm 19 hinged on a small plate 19^a and provided at its free end with a slot 19^b through which projects the pin 15^a of the middle bed section 15. The seat frame has fixed to it at the outer portion of its end a sheet steel standard or plate 20 provided with a curved slot 20^a having at its upper end (as viewed in Fig. 1) a seat for a lateral pin 14^a on the end of the outer bed section 14. This seat is slightly recessed thereby forming a hump or projection at 20^b adapted to retain the pin in the seat during the earlier portion of the upward and inward movement or so as to throw the bed frame inward and the lateral pin 15^a of the inner section out of its seat in the swinging dog 18^b and therefore into position in the slot 18^a to permit the rear portion of the inner bed section to fall to its proper position. The lower end of the slot 18^a is extended horizontally to permit play of the lateral pin 13^a when the bed is turned into and out of housing position as indicated in Fig. 2.

Small fixed legs as shown at 22 can be secured to the inner corners of the seat. Said legs can be made ornamental so as to

appear to be a part of the main frame ends when the bed is housed.

In the operation of opening the bed the seat is raised and turned outward. The first portion of this movement brings the pin 14^a into the lower end of slot 20^a and causes the arm 19 to fetch up the middle bed section. The second portion of this movement (the downward portion) throws outward and alines horizontally the several bed sections.

The two portions of the middle section 15 of the bed are braced by a strong bent bar 21 secured between said portions as seen in Fig. 4 said bar accompanying said section in its movements.

The mattress and bed clothing can be left stored between the inner and outer bed sections when the seat is turned inward.

The forms of the parts can be changed without departing from the gist of the invention.

What we claim is:

1. In a sofa or davenport bed, the combination with a box or frame and a seat frame hinged to the forward portion thereof, of a folding spring bed including an inner, a middle and an outer section, stationary members on said box or frame having upwardly extending guides and seats or bearings at the terminals thereof, means on said middle section engaging said guides and adapted to rest in said bearings, and means connecting said outer and inner bed sections with said frames, whereby said bed sections can be operated to be opened and closed by manipulating the seat.

2. In a sofa or davenport bed, the combination with a box or frame and a seat frame hinged to the forward portion thereof, of a folding spring bed including an inner, a middle and an outer section, stationary members on said box or frame having upwardly and outwardly extending guides and bearings or seats at the terminals thereof, means on said middle section for engaging said guides and adapted to rest in said bearings, and means connecting said outer and inner bed sections with said frames whereby said bed sections can be operated to be opened and closed by manipulating the seat.

3. In a sofa or davenport bed, the combination with a box or frame and a seat frame hinged to the forward portion thereof, of a folding spring bed including an inner, a middle and an outer section, stationary members containing guides and seats for supporting said middle section, stationary members containing guides and bearings for supporting the inner section, means for supporting the outer section on said seat frame, and means on the seat frame for acting on the middle section to raise the same to supported position when the seat frame is turned outward.

4. In a sofa or davenport bed, the combination with a box or frame and a seat frame hinged to the forward portion thereof, of a folding spring bed including an inner, a middle and an outer bed section, stationary members containing guides and bearings for supporting said middle bed section, stationary members containing guides and swinging bearings for supporting the inner bed section, means for supporting the outer section on the seat frame and means on the seat frame for acting on the middle section to raise the same to supported position when the seat is turned outward.

5. In a sofa or davenport bed, the combination with a box or frame and a seat frame hinged to the forward portion thereof, of a folding spring bed including an inner, a middle and an outer section, stationary members containing guides and seats or bearings for supporting said middle section, stationary members secured to the seat frame and containing guides and seats or bearings for supporting the outer bed section, means for supporting the inner bed section, and means on the seat frame for acting on the middle section to raise the latter to supported position when the seat frame is turned outward.

6. In a sofa or davenport bed, the combination with a box or frame and a seat frame hinged to the forward portion thereof, of a folding spring bed including an inner, a middle and an outer section, stationary members containing upwardly and outwardly extending guides and seats or bearings for supporting said middle section, stationary members secured to the seat and containing guides and seats or bearings for supporting the outer bed section, means for supporting the inner bed section, and means on the seat for acting on the middle section to raise the same to supported position when the seat is turned outward, the bearings in the stationary members on the seat frame being adapted to retain said outer section in supported position during a portion of the upward and inward movement of the seat frame.

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