March 24, 1936. J. D. LILLEY 2,034,985

CONVERTIBLE BED AND CHAIR

Filed May 20, 1935 3 Sheets-Sheet 1

Fig. 1.

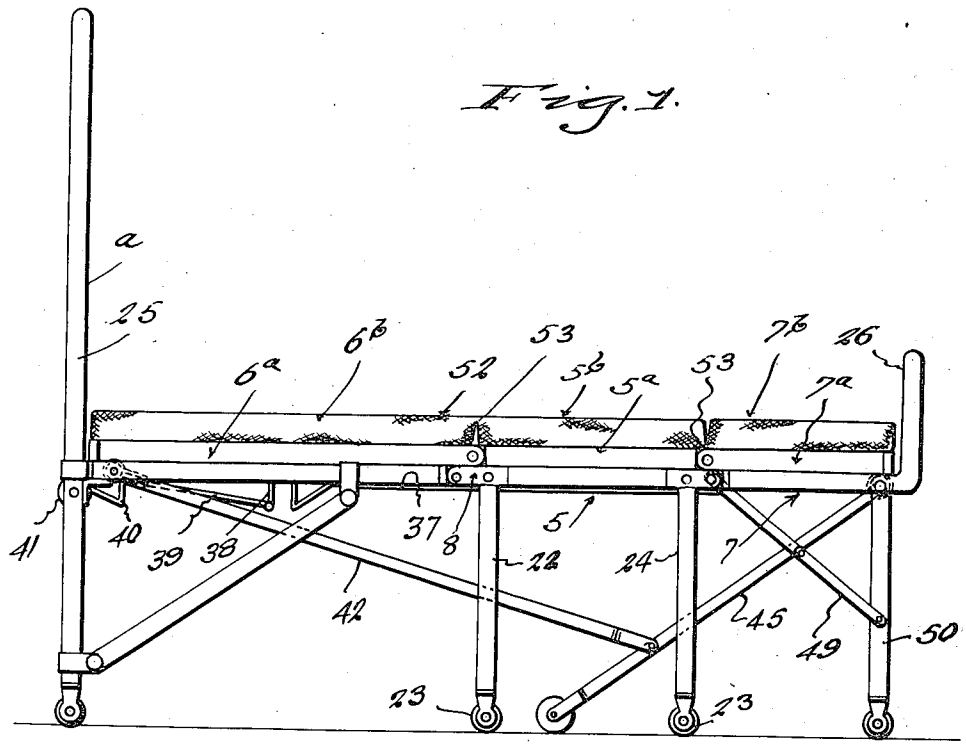
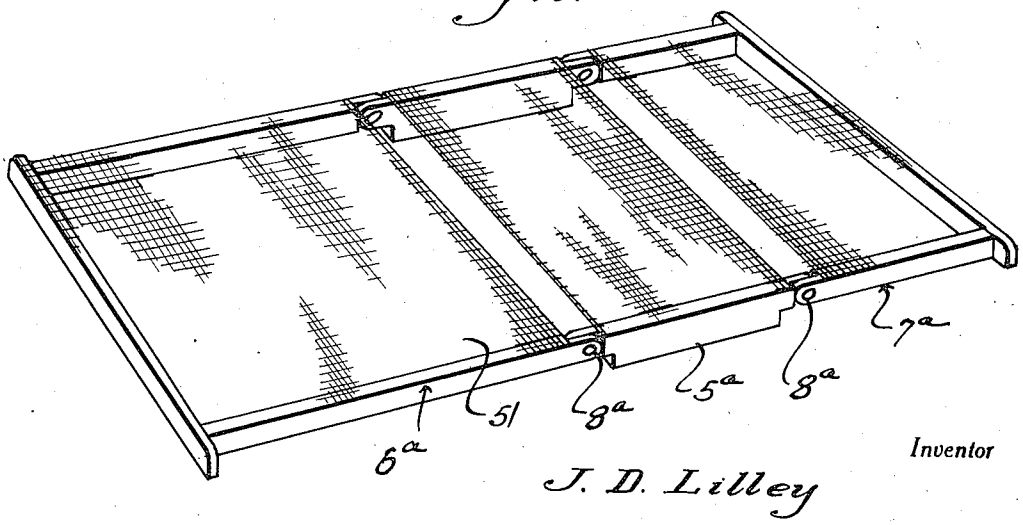


Fig. 2.



Inventor

J. D. Lilley

By Clarence A. O'Brien

Attorney

March 24, 1936. J. D. LILLEY 2,034,985

CONVERTIBLE BED AND CHAIR

Filed May 20, 1935 3 Sheets-Sheet 2

Fig. 3.

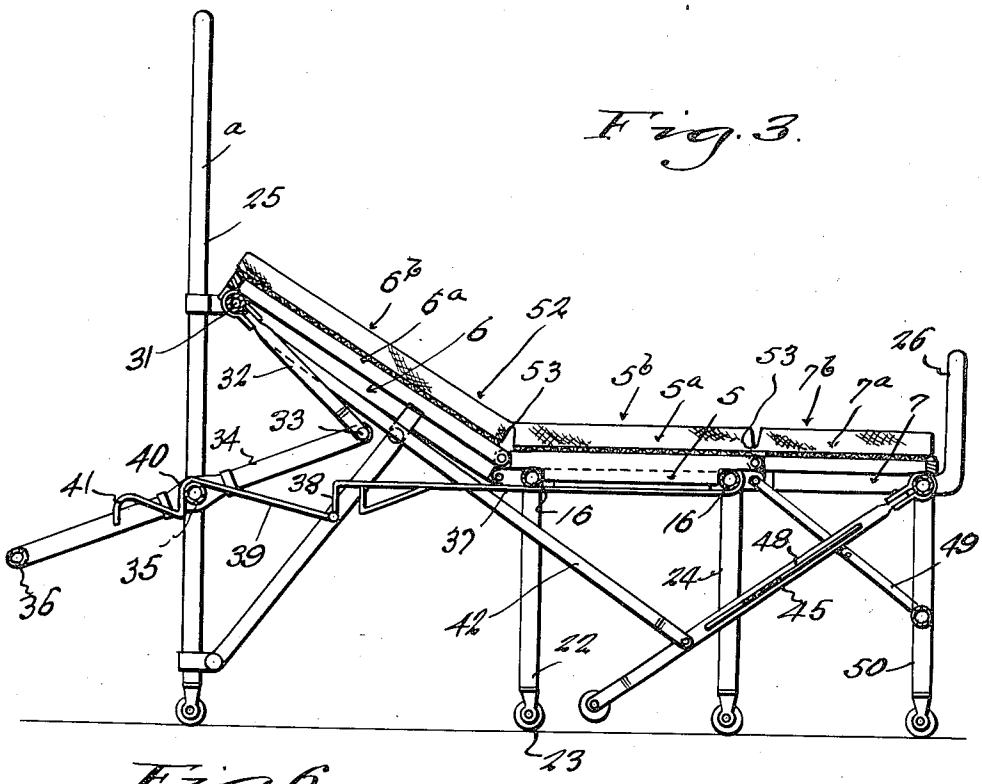


Fig. 6.

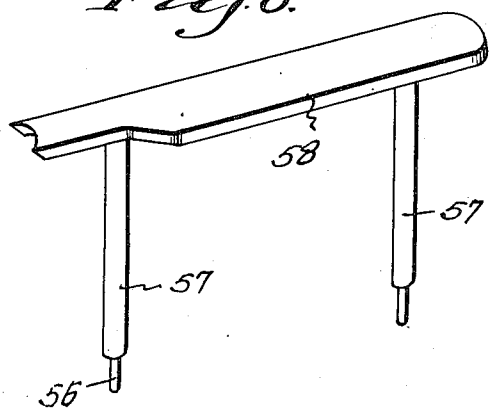


Fig. 8.

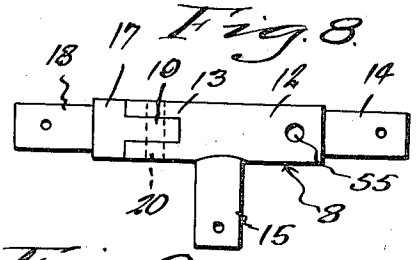


Fig. 9.

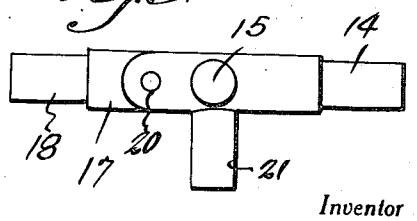
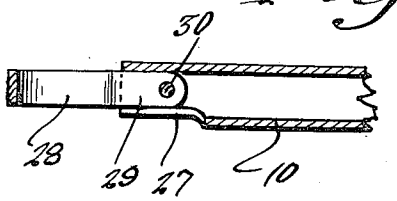


Fig. 7.



Inventor

J. D. Lilley

By Clarence A. O'Brien

Attorney

March 24, 1936. J. D. LILLEY 2,034,985

CONVERTIBLE BED AND CHAIR

Filed May 20, 1935 3 Sheets-Sheet 3

Fig. 4.

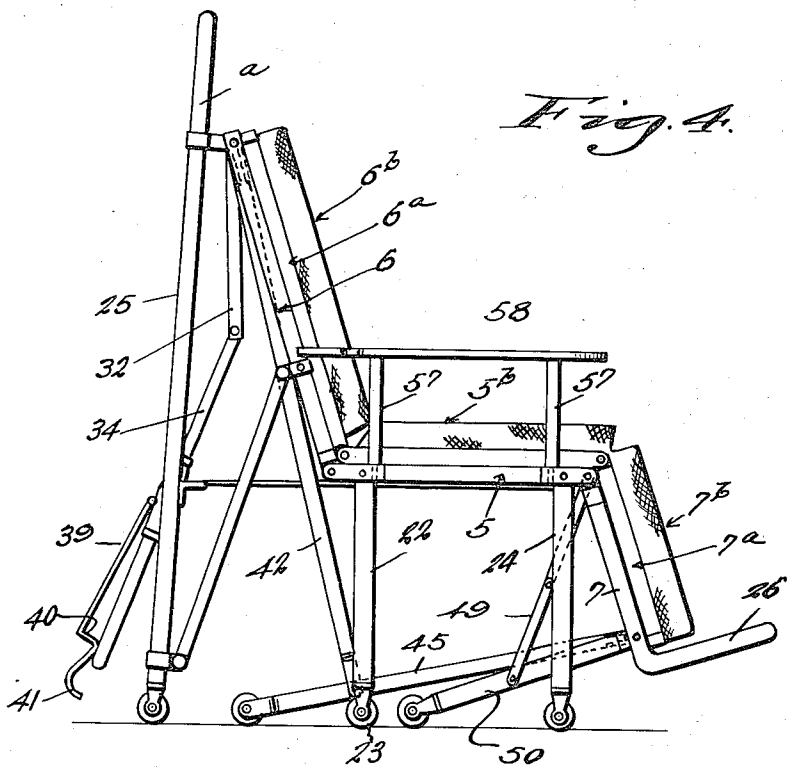
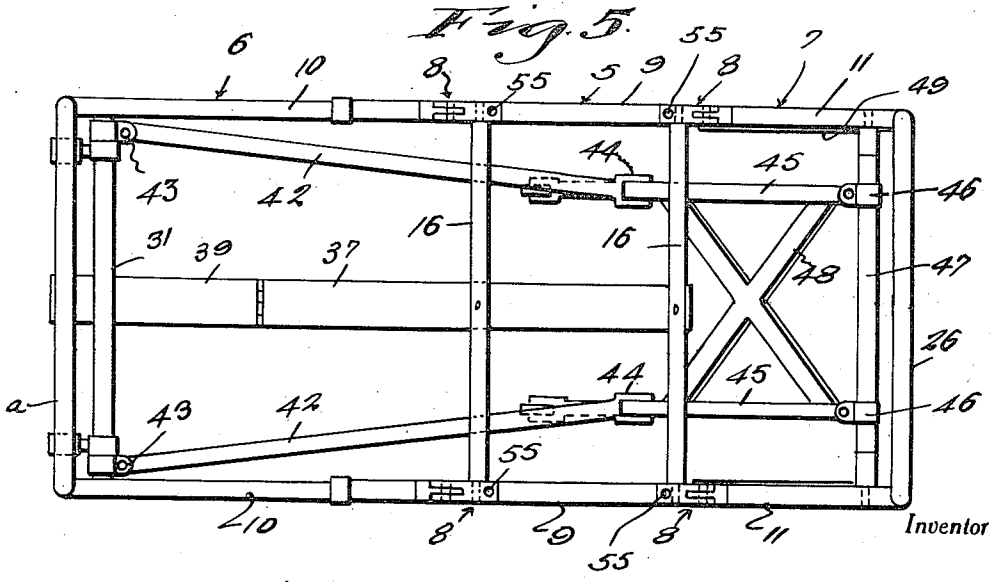


Fig. 5.



Inventor

J. D. Lilley

By Clarence O'Brien

Attorney

Patented Mar. 24, 1936 2,034,985

UNITED STATES PATENT OFFICE

2,034,985

CONVERTIBLE BED AND CHAIR

James David Lilley, Baltimore, Md.

Application May 20, 1935, Serial No. 22,453

5 Claims. (Cl. 155—49)

This invention appertains to new and useful improvements in furniture and more particularly to furniture for hospital use.

The principal object of the present invention is to provide a convertible bed and invalid chair wherein the structure can be converted from a bed to a chair without requiring the lifting of the patient from the structure.

Another important object of the invention is to provide a convertible bed and chair wherein the structure can be adjusted as a bed to a patient-reclining position, or conveniently from this position to the full bed position, or to an invalid chair position.

These and various other important objects of the invention will become apparent to the reader of the following specification.

In the drawings:

Figure 1 represents a side elevational view of the structure in bed form.

Figure 2 is a perspective view of the spring used in the structure.

Figure 3 is a vertical sectional view.

Figure 4 is a side elevational view of the structure in chair form.

Figure 5 is a top plan view of the structure with the spring and mattress removed.

Figure 6 is a perspective view of one of the arm rests.

Figure 7 is a fragmentary detailed sectional view showing one of the joints.

Figure 8 is a top plan view of one of the joints of the frame structure.

Figure 9 is a side elevational view of the joint shown in Figure 8.

Referring to the drawings wherein like numerals designate like parts, it can be seen in Figure 5 that the framework of the structure consists of the intermediate section **5**, the head section **6** and the foot section generally referred to by numeral **7**. Pivotal joints such as are generally referred to by numeral **8** are employed for connecting the side tubes **9—9** of the intermediate section **5** to the side tubes or rails **10—10** of the head section **6** and the tubular side members **11—11** of the foot section **7**. As is clearly shown in Figure 8, these hinged joints each consists of a T-shaped member **12** having a bifurcated end portion **13** and a reduced extension **14** at its opposite end. The leg portion **15** engages into the corresponding end of the tubular cross member **16**, there being a cross member **16** for each pair of hinged joints **8**.

The hinge section **17** for each of the joints is provided with a reduced extension **18** for engagement into the corresponding side member **10** or **11** and this section **17** is provided with a reduced extension **19** for engagement into the bifurcated end portion **13** of the corresponding joint member **12** where it is pivotally secured in place by suitable pins or like members **20**. Each of these joint members **12** is provided with a depending member **21** which engages into and is suitably secured to a corresponding leg member **22** provided with a roller or caster **23** at its lower end. It can thus be seen in Figure 1 and also in other figures of the drawings, that this intermediate section **5** is provided with four legs which are fixed.

Numeral **25** represents the inverted U-shaped head member of the bed, while numeral **26** represents the foot member which extends upwardly in a general U-formation, the same being a continuation of the section **7**.

The head end of the side members **10—10** are slotted as at **27** and as is shown in Figure 7, collar members **28** having extensions **29** are secured to the said side members **10** by disposing the extensions **29** into the slotted portion **27** of the side members **10** and pivotally securing the same in place as at **30**. The collars **28** are loosely slidable on the vertical rails *a* of the head member **25**.

A cross member **31** at the head ends of the side members **10—10** has the link members **32** connected thereto. These link members are also pivotally connected as at **33** to the bars **34**, which are rockable on the cross member **35** between the vertical rails *a* of the head frame **25**. The remaining ends of these bars **34** are bridged as at **36**. Obviously, these bars **34** operate as a unit, and when the connecting member **36** is forced downwardly, the section **6** is tilted upwardly to the position shown in Figure 3 or further to the position shown in Figure 4. A metallic strap member **37** is connected at one end to one of the cross members **16** and this extends headwardly and is provided with a shoulder **38**.

From the shoulderpoint **38** an extension **39** is disposed further headwardly to form a primary hook **40** and a secondary hook **41**. When the primary hook **40** is engaged with the cross member **35** as shown in Figure 3, the sections of the bed are held with the head section **6** in the inclined position shown in Figure 3, and furthermore, the strap member and extension **39** will not collapse at the hinged shoulder **38** when the hook is so engaged. When the bed is in bed-forming position as shown in Figure 1, the secondary hook **41** is engaged in the cross member **35**.

When the bed is entirely converted into the

chair form shown in Figure 4, the shoulder **38** is engaged over the cross member **35**, as suggested in Figure 4.

Elongated rods **42—42** (see Figure 5) extend from clamp **43** on the cross member **31** to pivotally connect as at **44** to the caster carrying bars **45—45**, which are pivotally clamped as at **46** to the cross member **47** bridging the foot members **11—11**, which are cross braced as at **48**. A collapsible brace **49** is provided between the swingable legs **50** at the section **7** of the bed and the side members **9—9** of the intermediate section **5**, so that when the bars **34** are swung downwardly to the position shown in Figure 4, the action of the rising section **6** pulling on the rods **42** will exert pull on the caster carrying members **45** so as to pull the section **7** downwardly to the position shown in Figure 4.

Figure 2 shows a spring for the bed made up of the sections **5***a*, **6***a*, and **7***a* hingedly connected together as at **8***a*. Numeral **51** represents a suitable mesh filler for the sections having the requisite amount of flexibility.

Numeral **52** represents a mattress which is made up of the sections **5***b*, **6***b*, and **7***b*, the sections being connected together by the webs **53** so that they will readily hinge.

As can be seen in Figures 5 and 8, the joints **8** are provided with sockets **55** for the reception of the pintles **56** which extend from the props **57—57** of each arm rest **58** (see Figure 6).

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size, and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is:

1. A convertible bed and chair comprising a bed frame divided into an intermediate section, a foot section, and a head section, pivotal connections between the said sections, means supporting said pivotally connected sections including a head piece provided with vertical rails, slidable connections between the vertical rails and the head section, a rockable member on the head piece, and a pivotal link member between the said rockable member and the head section whereby the head section can be tilted to reclining position when the rockable member is actuated.

2. A convertible bed and chair comprising a bed frame divided into an intermediate section, a foot section, and a head section, pivotal connections between the said sections, means supporting said pivotally connected sections including a head piece provided with vertical rails, slidable connections between the vertical rails and the head section, a rockable member on the head piece, and a pivotal link member between the said rockable member and the head section whereby the head section can be tilted to reclining position when the rockable member is actuated, and latch means for retaining the said head section in reclining position.

3. A convertible bed and chair comprising a bed frame divided into an intermediate section, a foot section, and a head section, pivotal connections between the said sections, means supporting said pivotally connected sections including a head piece provided with vertical rails, slidable connections between the vertical rails and the head section, a rockable member on the head piece, and a pivotal link member between the said rockable member and the head section whereby the head section can be tilted to reclining position when the rockable member is actuated, and a connection between the head section and the foot section, whereby the foot section will be disposed to a lower position upon elevation of the head section to a substantially upright position.

4. A convertible bed and chair comprising a bed frame divided into an intermediate section, a foot section, and a head section, pivotal connections between the said sections, means supporting said pivotally connected sections including a head piece provided with vertical rails, slidable connections between the vertical rails and the head section, a rockable member on the head piece, and a pivotal link member between the said rockable member and the head section whereby the head section can be tilted to reclining position when the rockable member is actuated, and a connection between the head section and the foot section, whereby the foot section will be disposed to a lower position upon elevation of the head section to a substantially upright position, and latch means for retaining the foot section in lower position than the head section in substantially upright position simultaneously.

5. A convertible bed and chair comprising a bed frame divided into an intermediate section, a foot section, and a head section, pivotal connections between the said sections, means supporting said pivotally connected sections including a head piece provided with vertical rails, slidable connections between the vertical rails and the head section, a rockable member on the head piece, and a pivotal link member between the said rockable member and the head section whereby the head section can be tilted to reclining position when the rockable member is actuated, and removable arm rests for the said intermediate section.

JAMES DAVID LILLEY.