April 28, 1942. O. D. SMITH 2,281,209

COMBINATION BED AND CARRIAGE

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Fig. 1.

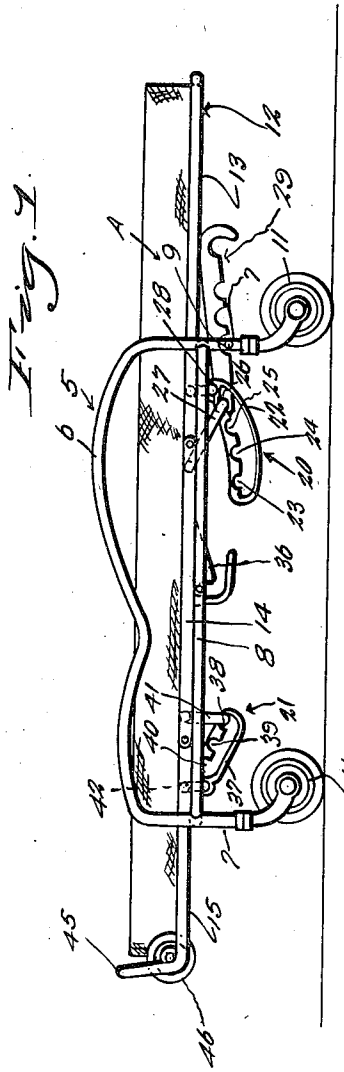


Fig. 2.

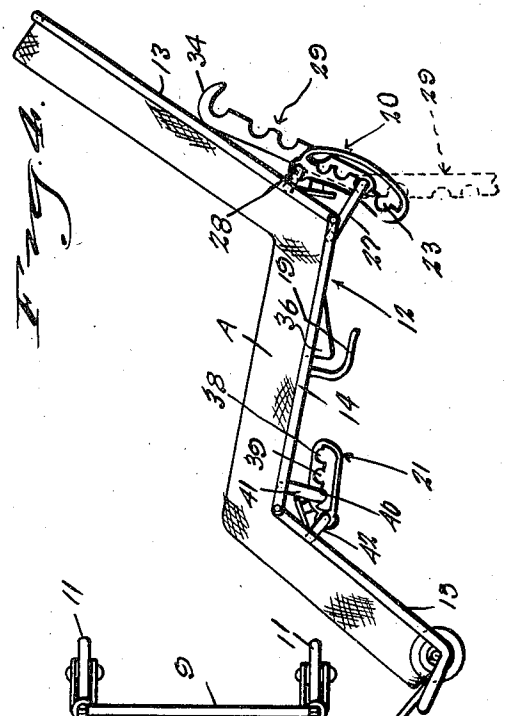
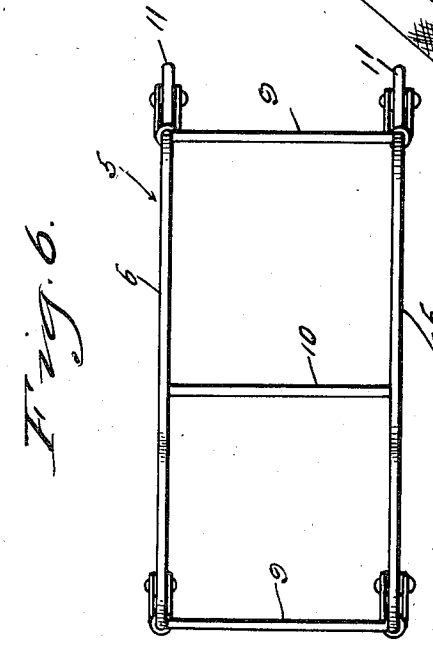


Fig. 3.



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COMBINATION BED AND CARRIAGE

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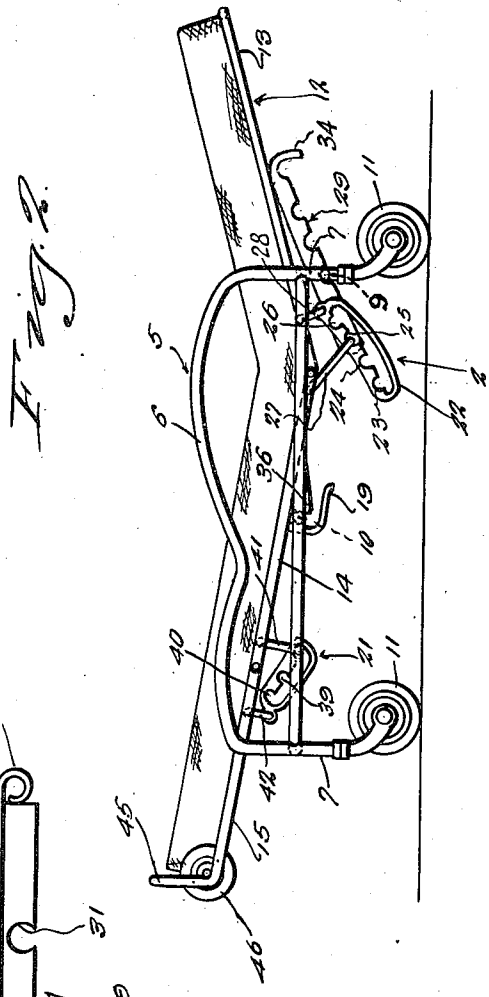


Fig. 2.

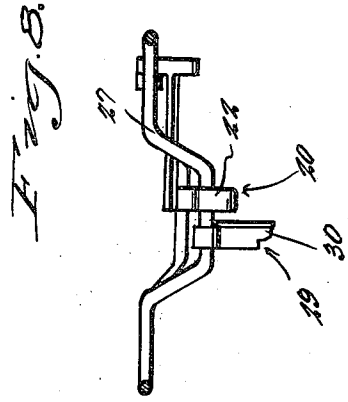


Fig. 3.

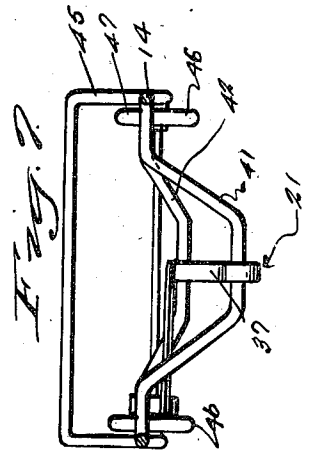


Fig. 4.

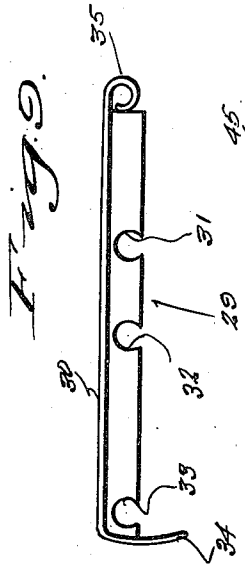


Fig. 5.

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Fig. 3.

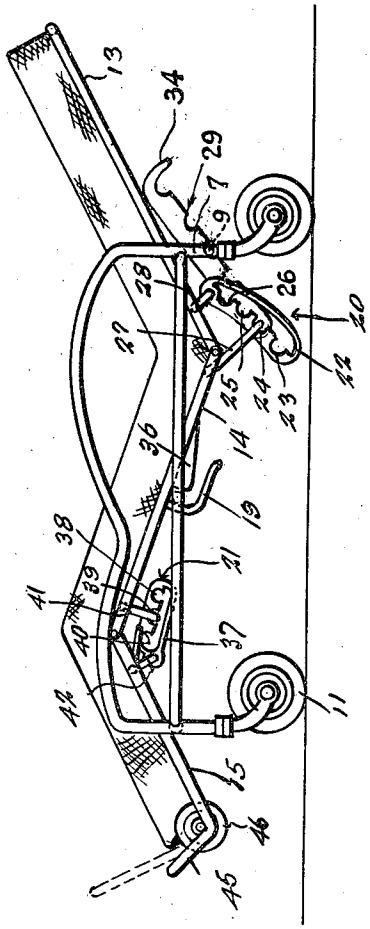
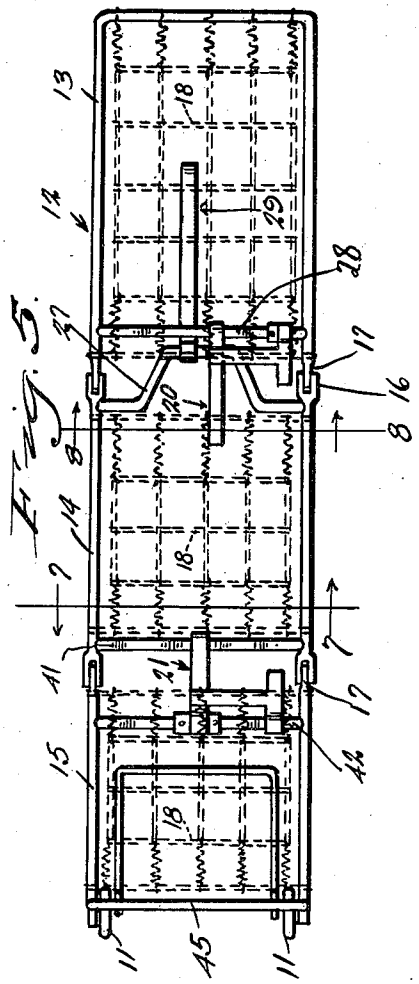


Fig. 5.



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Patented Apr. 28, 1942

2,281,209

UNITED STATES PATENT OFFICE

2,281,209

COMBINATION BED AND CARRIAGE

Orville Dale Smith, Grinnell, Iowa

Application July 29, 1938, Serial No. 222,049

2 Claims. (Cl. 5—66)

This invention appertains to new and useful improvements in apparatus adapted to be used for sick persons.

The principal object of the present invention is to provide a combination bed and carrier constructed in such a manner that the patient can be removed from his or her home using the present appliance as a stretcher or bed throughout the entire trip from the home to the hospital and to the bedside at the hospital.

Another important object of the invention is to provide a combination bed and carrier of the character stated which can be adjusted to various positions to ease the patient while in transit.

These and various other important objects and advantages 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 apparatus extended to form a bed.

Figure 2 is a side elevational view of the apparatus adjusted with sections thereof in adjusted relation.

Figure 3 is a side elevational view showing all three sections bent.

Figure 4 is a side elevational view showing the third adjustment of the bed to form a chair structure.

Figure 5 is a top plan view of the spring assembly.

Figure 6 is a top plan view of the wheeled assembly.

Figure 7 is a cross sectional view taken substantially on the line 7—7 of Figure 5.

Figure 8 is a cross sectional view on the line 8—8 of Figure 5.

Figure 9 is a side elevational view of a keeper.

Referring to the drawings wherein like numerals designate like parts, it can be seen that the wheeled assembly generally referred to by numeral 5 consists of the pair of side rails 6—6, the end portions of which are disposed downwardly as at 7 and to which the underlying side rails 8 are connected at their ends. The downwardly disposed posts 7 are connected transversely of the assembly by the bars 9 while the underlying rail 8 is connected by the cross bar 10. Caster carried wheels 11 are provided at the lower ends of the posts 7.

The bed proper consists of the elongated spring assembly generally referred to by numeral 12 (see Figure 5). This assembly consists of the rectangular-shaped frame sections 13, 14 and 15. The intermediate section 14 has bifurcated extensions at the ends of its side rails denoted by numeral 16 into which pivotally engage the leg extensions 17 on the sections 13 and 15.

Suitable spring fillers 18 are provided in each of the sections 13, 14 and 15. Hook-like structures 19 depend from the bottom of the section 14 and are engageable over the cross bar 10 as shown in Figure 2.

The structure 12 is provided with a pair of latch structures generally referred to by numerals 20 and 21. The latch structure 20 consists of an ovate-shaped frame 22 having notches 23, 24, 25 and 26 formed in one side thereof and these notches are designed to receive selectively the fixed obliquely disposed keeper 27. The ovate latch member 22 is connected to the rigid bar 28 on section 13 while the fixed keeper 27 is rigidly connected to the section 14. Also swingably mounted on the fixed keeper 27 is the keeper generally referred to by numeral 29 and this consists of the angle bar 30 having in one flange thereof the semi-circular-shaped notches 31, 32 and 33. This member 29 has the foot 34 at one end thereof adjacent the notch 33 and a loop or eye 35 formed at its opposite end for embracing the fixed keeper 27 as shown in Figure 5.

The semi-circular notches 31, 32 and 33 are engageable with the bar 9 when the assembly 12 is disposed to the various bed formed positions as shown in Figures 1, 2 and 3.

The other latch means 21 is interposed between the sections 14 and 15 and consists of the ovate-shaped frame 37 having notches 38, 39 and 40 in one side thereof for receiving selectively the keeper 41 on the section 14. The keeper 41 is fixed, that is, rigid, while one end of the latch frame 37 is connected by the fixed bar 42 to the section 15. Blocks 36 are provided on the side members of the intermediate section 14 to cooperate with the hooks 19 to retain the stretcher frame on the bar 10 of the carriage.

Thus it can be seen, that by unfastening the latch members 22 or 37, or both, and adjusting the same with respect to their keepers 27 or 41, the sections 13, 14 can be adjusted to the desired extent to put the patient in a restful position.

Obviously by slipping the assembly 12 in one direction so as to disengage the hook 19 from the cross bar 10, and properly engaging the keepers with the latches 22 and 37, the bed can be used as a stretcher.

The latch means 29 as shown in Figure 9 is used as a temporary supporting leg while the

bed is in a chair-forming position in the manner shown in Figure 4. The latch structure 20 is used to hold the bed in a chair-forming position.

One end of the frame of the section 15 is bent upwardly to form the foot portion 45 and rollers 46 are provided at this end of the section 15.

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 combination structure of the character described, a carriage consisting of side frames, end members connecting the end portions of the side frames, an intermediate cross member connecting the side frames, a bed bottom consisting of an intermediate section, a foot section and a head section hingedly connected together, a hook provided on the intermediate section for disposition under the intermediate cross member, adjusting means between the sections for adjusting the angularity of the sections with respect to each other, said intermediate section being adapted to rest on the intermediate cross member, a downwardly disposed member on the head section end of the intermediate section, an elongated adjusting member having one end provided with a handle and its other end swingably connected to the downwardly disposed member, said elongated adjusting member being disposed under the head section and against which the head section is adapted to rest, said elongated adjusting member having notches therein to receive the adjacent end connecting member between the side frames.

2. A combination structure of the character described, a carriage consisting of side frames, end members connecting the end portions of the side frames, an intermediate cross member connecting the side frames, a bed bottom consisting of an intermediate section, a foot section and a head section hingedly connected together, a hook provided on the intermediate section for disposition under the intermediate cross member, adjusting means between the sections for adjusting the angularity of the sections with respect to each other, said intermediate section being adapted to rest on the intermediate cross member, a downwardly disposed member on the head section end of the intermediate section, an elongated adjusting member having one end provided with a handle and its other end swingably connected to the downwardly disposed member, said elongated adjusting member being disposed under the head section and against which the head section is adapted to rest, said elongated adjusting member having notches therein to receive the adjacent end connecting member between the side frames, said downwardly disposed member being in the form of a U having a horizontal portion on which the said other end of the elongated adjusting member is swingably connected, said adjusting means between the head section and intermediate section being adjustably engageable with the said horizontal portion of the downwardly disposed member.

ORVILLE DALE SMITH.