F. HEYSER.

FOLDING BED.

APPLICATION FILED APR. 24, 1920.

1,369,173.

Patented Feb. 22, 1921.

2 SHEETS—SHEET 1.

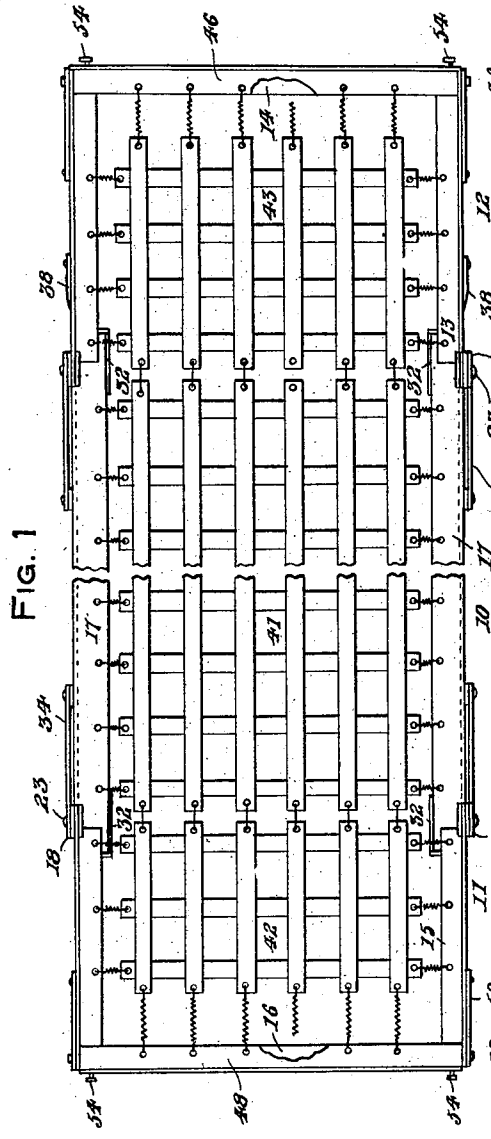


FIG. 1

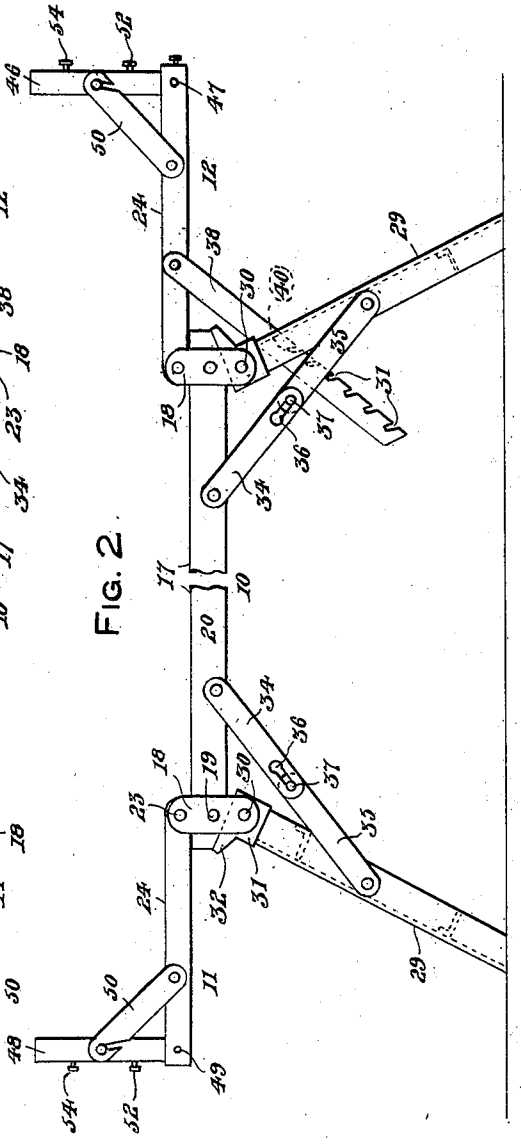


FIG. 2

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2 SHEETS—SHEET 2.

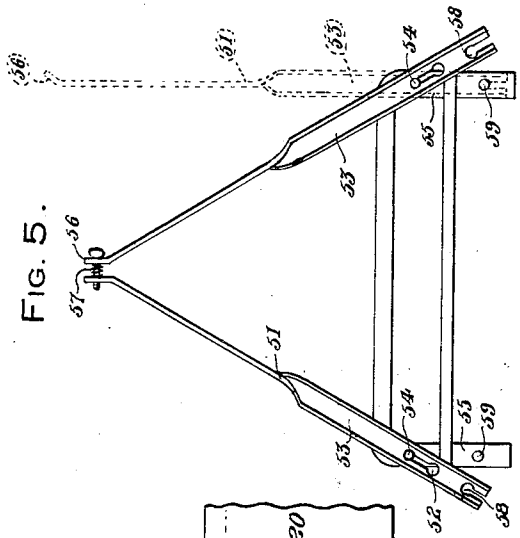


FIG. 5.

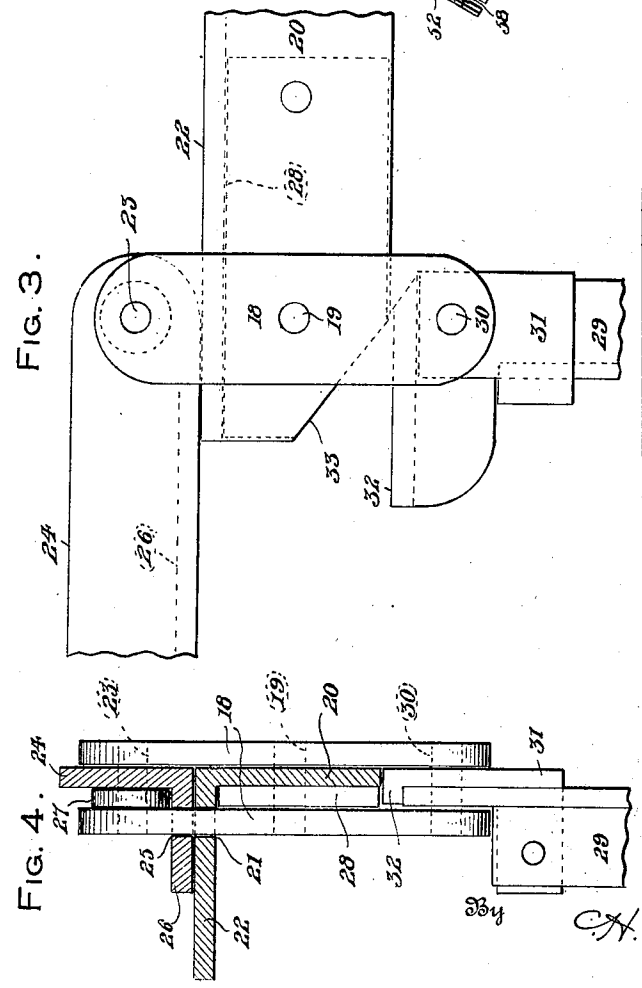


FIG. 3.

FIG. 4.

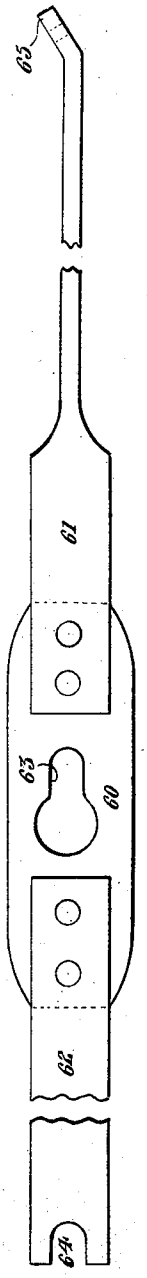


FIG. 6.

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UNITED STATES PATENT OFFICE.

FERNANDO HEYSER, OF MEXICO, MEXICO.

FOLDING BED.

1,369,173. Specification of Letters Patent. Patented Feb. 22, 1921.

Application filed April 24, 1920. Serial No. 376,358.

To all whom it may concern:

Be it known that I, FERNANDO HEYSER, a citizen of the United States of America, residing at city of Mexico, Mexico, have invented certain new and useful Improvements in Folding Beds, of which the following is a specification.

The primary object of the invention is the provision of a bed or cot possessing great strength, readily foldable in compact relations, the structure being sanitary and easily cleansed as well as readily set up for use and folded at will without the aid of tools.

A further object of the invention is the provision of a folding bed or cot constructed entirely of metal adapted for flatly folding together in a compact body when not in use, taking up but little room when stored away, as well as being in a convenient form for shipment and moving about.

A still further object of the invention is the provision of a compactly foldable metal bed having a mattress or spring bed bottom portion substantially coextensive therewith when the device is set up for use and providing for comfortable sleeping with foldable head and foot members, braced supporting means being provided positioning the bed bottom at the desired elevation above the floor.

With these general objects in view the invention consists of the novel combination and arrangement of parts hereinafter more fully described in connection with the accompanying drawings, and in which like reference characters designate corresponding parts throughout the several views.

In the drawings:—

Figure 1 is a top plan view of the bed set up for use partially broken away,

Fig. 2 is a side elevation,

Fig. 3 is an enlarged elevational view of a corner portion of the main frame with one of the legs partially adjusted and parts shown in section,

Fig. 4 is a sectional view thereof,

Fig. 5 is an elevational view of one of the end members of the bed showing a canopy holder positioned thereon with one of the parts thereof illustrated by dotted lines in its adjusted position, and

Fig. 6 illustrates a modified form of strut for the canopy holder.

Referring more in detail to the drawings, my invention broadly consists of a bed frame comprising a main central section 10 and end sections 11 and 12, of desirable dimensions having supporting legs and head and foot members as herein fully described.

The end section 12 is substantially U-shaped in form composed of angle iron sides 13 and end 14 while the opposite end section 11 is similarly formed of angle iron with sides or rails 15 and transverse end 16. The channels forming the end sections 11 and 12 open upwardly while similar channel bars 17 forming sides of the central section 10 open downwardly as indicated in Fig. 1.

Hinge connections are provided between the side rails 17 and the end sections 11 and 12, comprising pairs of plates 18 secured by bolts 19 adjacent the ends of the depending flanges 20 of the side rails 17. One plate 18 of each pair is positioned exteriorly of its carrying flange 20 while the companion plate 18 parallel therewith is inwardly of the adjacent flange 20 extending through a slot 21 in the horizontal flange 22 of the rail 17. The upper ends of two pairs of plates 18 are pivoted as at 23 to the upwardly projecting flange 24 of the end section 11 with the inner plate 18 of each pair accommodated through a slot 25 in the horizontal flange 26 of the adjacent rail 15. In this manner it will be seen that the end section 11 is hingedly mounted upon the adjacent end of the central section 10.

In a similar manner, the opposite end section 12 is pivoted to the adjacent ends of the side rail 17 of the central section 10 by pairs of similar plates 18, the details of said hinge connections being identical to those heretofore described in connection with the end section 11, so that corresponding reference characters are employed upon the drawings and no further description is necessary.

A filler plate 27 is provided between the inner plate 18 of each hinge connection and the adjacent flange 24 of the side rails of the end sections while similar filler plates 28 are provided between the flanges 20 and the inner plates 18 with the bolts 19 passing through said plates 28. Four supporting legs 29 are provided for the bed, one leg being positioned adjacent each end of the side rail 17, pivoted between the lower ends of each pair of hinge plates 18 by journal pins 30. A head 31 upon the upper end of each leg 29 as the pin 30 for such leg extending therethrough, a projection or finger 32 of the head 31 being adapted to bear upon an

inclined face 33 of the adjacent end of the rail 20 and filler plate 28 to which such leg and head are pivoted by the hinge plates 18.

Braces 34 and 35 are pivoted to the side rails 17 and legs 29 respectively, formed of resilient material one of said braces having a key-hole slot 36 adapted for receiving a headed stud 37 upon the other brace whereby the braces 34 and 35 are adapted for detachable connection in their operative positions as best illustrated in Fig. 2 of the drawings. The legs 29 are inclined toward the opposite ends of the bed when the device is set up for use with the fingers 32 engaging the inclined edges 33 as before noted and it will be understood that the legs 29 are adapted for folding inwardly and by reason of the slight flexibility of the hinge joint connections for the legs. The legs may be positioned alongside of one another when folded adjacent the lower edge of the side rails 20. The adjacent ends of the braces 34 and 35 are released readily when desired by reason of the resiliency of said braces and are again connected together when the legs are opened. Struts 38 are pivoted to the sides of the end section 12 having inclined teeth 39 for engaging over stop members or lugs 40 upon the inner faces of the legs 29, the struts 38 being also resilient for readily detaching the same from the stops 40 to fold the struts adjacent the side flanges 24 of the rails 13.

A bed bottom or mattress holder is provided in three parts 41, 42, and 43, mounted within the sections 10, 11, and 12, respectively, the same being in the form of grids or crossed slats connected by helical springs 44 with the adjacent inwardly projecting flanges of said frame sections. The adjacent ends of the grid portions are connected together by elongated loops 45, permitting the frame sections to fold upon the hinge connections thereof.

A U-shaped head member 46 is pivoted as at 47, within the channel of the frame section 12, adjacent the free end thereof, adapted for folding inwardly of said section when not in use, while a similar foot member 48 is pivoted as at 49, at the opposite end of the bed within the channel of the frame section 11. Pivoted stays 50 are carried by the end sections 11 and 12, for detachable connection with the foot and head members 48 and 46 respectively. A net or canopy holder is provided for the head and foot members consisting of side bars 51 having key-hole slots 52 in flattened portions 53 thereof for detachably mounting upon headed pins 54, outwardly projecting from the opposite sides 55 of the foot and head members. The bent upper ends 56 of the bars 51 are connected together by a bolt 57, and it being understood that such an arrangement of the bars 51 is provided for each end of the bed, a canopy or netting may be thrown thereover covering the bed. Upon removing the bolts 57, the bars 51 may be shifted to vertical positions upon the pins 54, and upon slightly elevating the bars 51 the notches 58 in the lower ends thereof may be seated upon headed pins 59 as best illustrated by dotted lines in Fig. 5 of the drawings.

The complete operation of the invention will be understood from this detailed description thereof, the head and foot members 46 and 48 being foldable inwardly of the sections 12 and 11 respectively when the stays 50 are released while upon releasing the strut 38, the frame section 12 and the frame section 11 are foldable upon the middle section 10. The legs 29 are foldable beneath the frame section 10 as heretofore noted so that the bed is readily folded in compact arrangement having only slightly greater dimensions than the central section 10. The canopy bars 51 are removable at will and instead of forming said bars as shown in Fig. 5, they may be constructed as illustrated in Fig. 6 and consisting of a plate 60 having end members 61 and 62, attached thereon, a key-hole slot 63 being provided in the plate 60, a receiving notch 64 in the other end of the end member 62 and an angular perforated end 65 at the free end of the member 61.

While the form of the invention herein set forth is believed preferable, it will nevertheless be understood that minor changes may be made therein without departing from the spirit and scope of my invention as claimed.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A bed comprising a central section and end sections hinged thereto, legs pivoted beneath the corners of the central section, bracingly positioned inclined toward the opposite ends of the bed when the device is set up for use, foldable head and foot members at the free ends of said end sections, the central section having side rails provided with inclined faces at the ends thereof, heads upon the pivoted ends of the legs having projecting fingers adapted for engaging said faces when the legs are operatively positioned.

2. A bed comprising a central section having side rails, a mattress supporting grid connected between said side rails, U-shaped end sections pivoted to the side rails, mattress supporting grids in said end sections connected thereto, link connections between the grid of the central section and the grids of the end sections, foldable legs pivoted beneath the central section, the central section and legs having angular coöperative surfaces for supporting the legs inclined toward the ends when the bed is set up for

use, head and foot members pivoted adjacent the ends of the end sections, a pair of separable braces connecting the central section to each of said legs, adjustable struts between one end section and the adjacent legs and retaining stays for the head and foot members pivoted to the sides of the end sections.

3. A bed comprising side rails of channel bar formation, U-shaped end sections formed of channel bars, pairs of plates secured adjacent the ends of said side rails outwardly and inwardly thereof, pivotally connected to the sides of the end sections, a supporting leg pivoted between each pair of plates, the side rails having oblique end portions and heads upon the pivoted ends of the legs having fingers engaging said oblique end portions when the bar is set up for use.

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

FERNANDO HEYSER.

Witnesses:
MERWIN L. BOHEMN,
F. E. HOLLENBACK.