

F. J. CROUCH.
FOLDING BED.

APPLICATION FILED JUNE 23, 1908.

Patented July 27, 1909.

2 SHEETS—SHEET 1.

929,289.

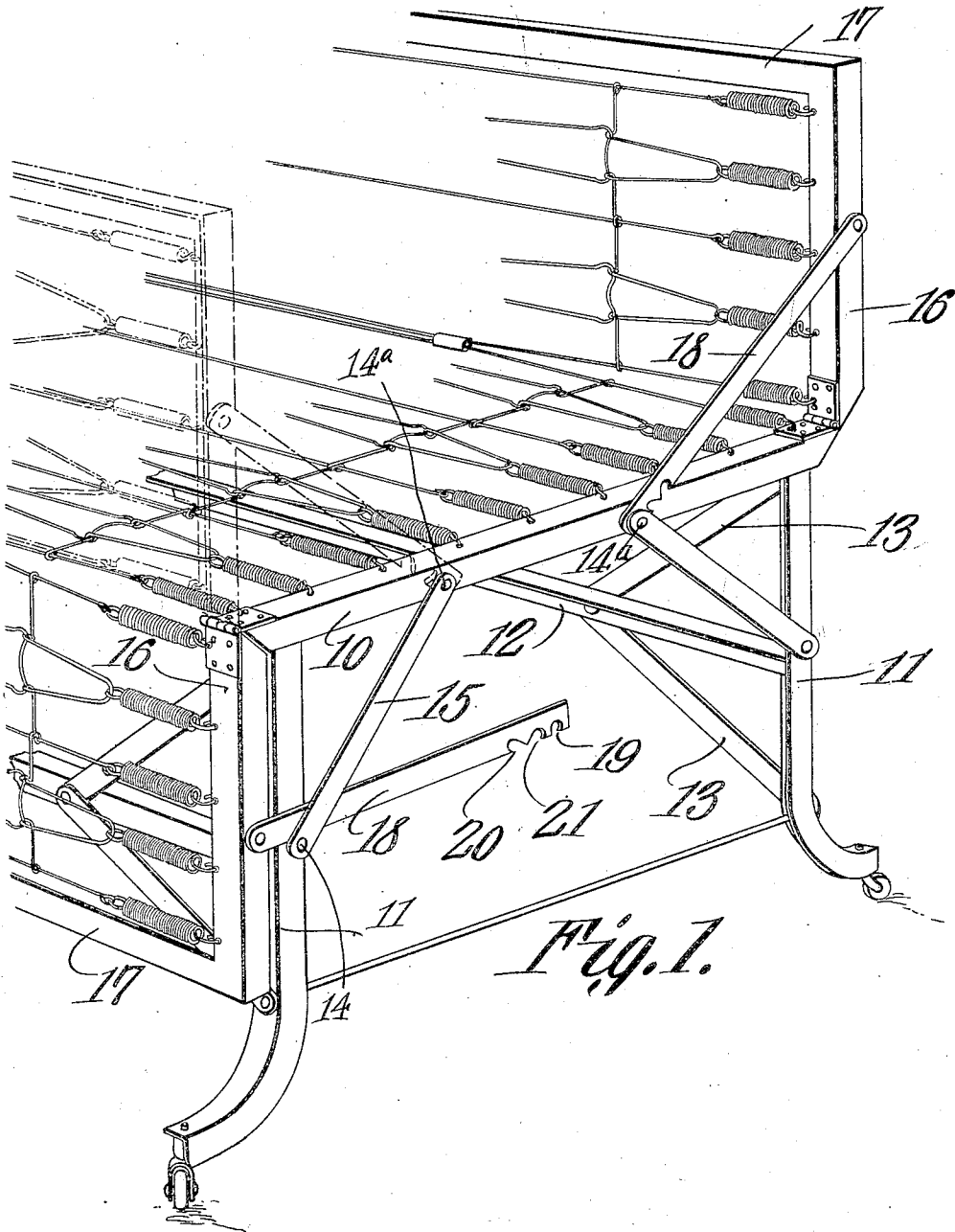


Fig. 1.

Witnesses

E. J. Stewart
W. H. Miller

Inventor

Frank J. Crouch

By

C. A. Snow & Co.

Attorneys

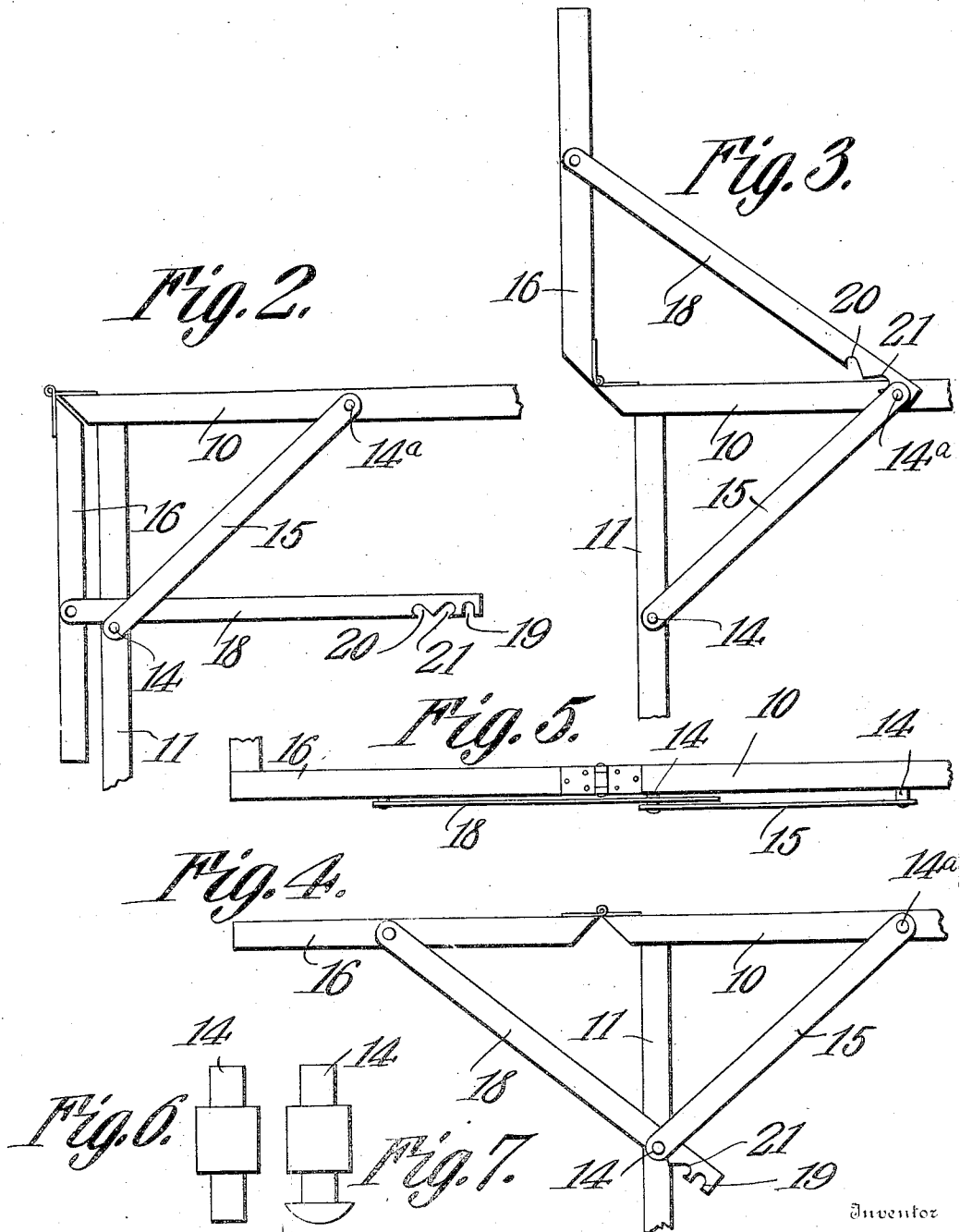
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Witnesses
E. J. Stewart
W. M. Mullen

Inventor
Frank J. Crouch.
By C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

FRANK J. CROUCH, OF SEATTLE, WASHINGTON.

FOLDING BED.

No. 929,289.

Specification of Letters Patent.

Patented July 27, 1909.

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To all whom it may concern:

Be it known that I, FRANK J. CROUCH, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented a new and useful Folding Bed, of which the following is a specification.

This invention relates to folding beds, and more especially of the metallic type.

The object of the invention is to provide an improved construction for a folding bed, whereby the same may be used as a single bed or couch, a three-quarter bed, a double bed, a davenport or crib.

A further object of the invention is to provide improved means whereby said bed may be readily changed from a three-quarter or double position to position for use as a couch.

A still further object of the invention is to provide improved means for bracing the frame of said bed together, and bracing the folding members thereof in desired position.

The invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and specifically claimed.

In the accompanying drawings:—Figure 1 is a perspective view of one end of a bed equipped in accordance with this device. Fig. 2 is a detail elevation of one corner showing the bed in closed position. Fig. 3 is a similar detail showing one of the parts of the bed raised to form a davenport back. Fig. 4 is a similar detail showing one of the parts raised in horizontal position. Fig. 5 is a plan view of one end of the bed in the position of Fig. 4. Figs. 6 and 7 show the collar pin hereinafter referred to.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The frame of the bed is composed of end rails 10, to which are attached legs 11 and side rails 12 for bracing the legs 11, as indicated at 13. Held on the legs 11 and the rails 10 are collar pins 14 and 14^a, respectively, which may be made with an integral center and ends, as indicated at Fig. 6, or may have a loose collar thereon, as indicated in Fig. 7. On the outer ends of these collar pins are carried braces 15, and it will be readily understood that these braces are thus spaced from the members 11 and 10 on the frame end.

Hinged to the member 10, preferably at

each end thereof, are auxiliary supports comprising end rails 16 and side rails 17. Pivotaly connected to the end rails 16 of this frame are brace bars 18. The brace bars 18 are each provided near the free end thereof with a slot 19, having parallel side walls, and a semi-circular end wall arranged to fit over the collar pin 14^a. The longer axis of the slot 19 is disposed at right angles to the length of the bar 18. Adjacent the slot 19, but nearer the pivot end of the bar 18, is a slot 20, similar to the slot 19 but with its longer axis arranged at an angle of substantially 45° to the length of the bar 18, the mouth of said slot opening away from the pivot point. Between the two slots 19 and 20, and substantially at right angles to the slot 20, is a third slot 21. The adjacent walls of the slots 20 and 21 are arranged to form a point between said slots. The various members are so proportioned that when one of the auxiliary frames is raised to a horizontal position, the slot 20 will be in engagement with pin 14, and when arranged as in Fig. 3, the slot 19 will be in engagement with the pin 14^a of the bar 10. When in this latter position, it will be observed that by reason of the longer axis of the slot being at right angles to the length of the bar 18, there will be no tendency for the auxiliary frame to fall either forward or backward. When in the position indicated in Fig. 4, and it is desired to drop the auxiliary frame, it is simply necessary to take hold of the same and draw it slowly upward. The pin 14 on the leg 11 will then slip out of the slot 20 and into the slot 21. If the frame be now quickly dropped, by reason of the angular disposition of the slots, the bar 18 will fly up at its free end and permit the pin 14 to pass the mouth of the slot 20, and the auxiliary frame will thus assume the position indicated in Fig. 2. It is to be observed that this construction is very simple, and at the same time adds greatly to the strength of the bed, and it is unnecessary to slot the member 11 as is customary in beds of this character to receive the bar 18.

It is to be observed that there is here shown a device, the frame of which is made of angle iron and this is the preferred material to use for the purpose, although should it be desired, it is possible to use other shape or material without interfering with the operation and practice of the invention.

What is claimed is:—

1. In an article of the class described, a frame comprising transverse and vertical members, a pin upon said transverse member, a second pin upon said vertical member, an auxiliary frame hinged to said frame, a brace bar pivotally attached to said auxiliary frame provided with a slot adapted to engage said first mentioned pin and hold the auxiliary frame in a vertical position, and a pair of slots angularly disposed with reference to each other, one of which is arranged to hold the auxiliary frame in a horizontal position, the other being arranged to limit upward movement thereof.

2. In an article of the class described, a frame comprising transverse and vertical members, a pin carried by said transverse member, a second pin carried on said vertical member, a brace extending between said pins, an auxiliary frame hinged to the first mentioned frame, a brace bar pivotally connected to the auxiliary frame arranged to lie between the first mentioned brace and the horizontal and vertical members of said

frame, and provided with a slot substantially at right angles to the length of said bar adapted to engage the first mentioned pin, and a pair of angularly disposed slots adjacent to the first mentioned slot arranged to engage the second pin.

3. In an article of the class described, a main frame, an auxiliary frame hinged thereto, pins on the main frame, a brace connecting the pins, and spaced from the main frame, and a pivoted brace bar carried by the auxiliary frame, and working between the main frame and the aforesaid brace, said brace bar having a series of slots engageable with the pins to hold the auxiliary frame in different positions.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

FRANK J. CROUCH.

Witnesses:

HARTLEY D. SMITH,
JAMES A. BECKER.