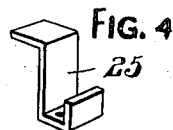
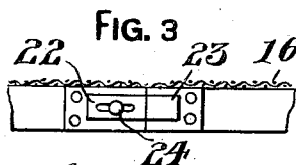
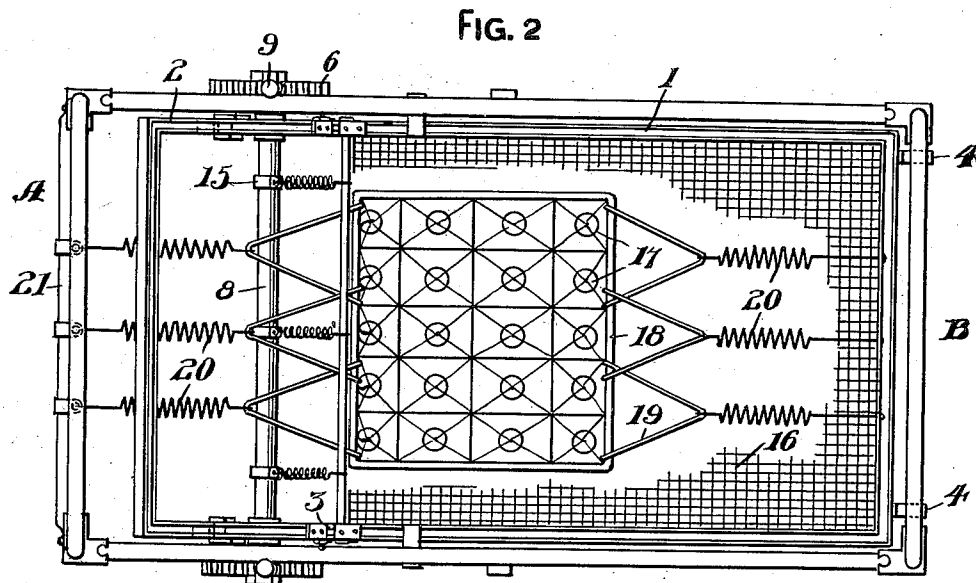
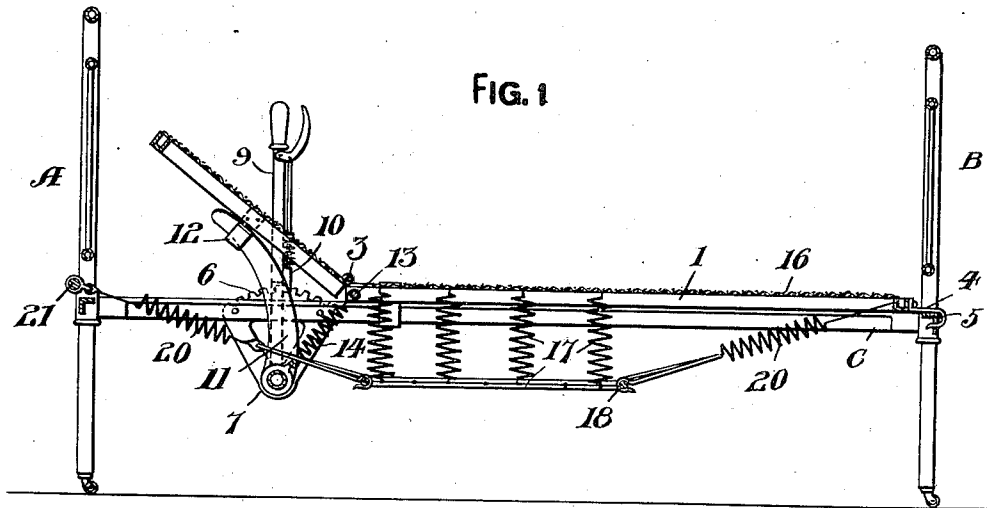


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INVALID BED.
APPLICATION FILED MAR. 13, 1912.

1,027,879.

Patented May 28, 1912.



WITNESSES

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UNITED STATES PATENT OFFICE.

FRANK MILLER, OF ST. JAMES, MICHIGAN.

INVALID-BED.

1,027,879.

Specification of Letters Patent.

Patented May 28, 1912.

Application filed March 13, 1912. Serial No. 683,612.

To all whom it may concern:

Be it known that I, FRANK MILLER, a citizen of the United States of America, residing at St. James, in the county of Charlevoix and State of Michigan, have invented certain new and useful Improvements in Invalid-Beds, of which the following is a specification, reference being had therein to the accompanying drawing:

10 This invention relates to invalid beds, and the primary object of my invention is to furnish a bed with a sectional spring frame, one of the sections of said frame being arranged, as will be hereinafter set forth, 15 whereby it can be placed at an inclination relatively to the other section of said spring frame, to comfortably support an invalid in a desired position, either for reading, resting or operating purposes.

20 Another object of this invention is the provision of positive and reliable means for safely adjusting a portion of the spring frame to insure comfort of the occupant of an invalid bed, the adjusting being accomplished with little exertion and in a manner that is not injurious to the occupant of the bed.

30 A further object of this invention is to accomplish the above results by an invalid bed that can be advantageously used in hospitals, sanatoriums and private residences, the bed being inexpensive to manufacture, durable and highly efficient for the purposes for which it is intended.

35 With the above and other objects in view, the invention resides in the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

40 Reference will now be had to the drawing, wherein:—

45 Figure 1 is a longitudinal sectional view of a bed in accordance with this invention, Fig. 2 is a plan of the same, partly broken away, Fig. 3 is a side elevation of a portion of a spring frame illustrating a lock, and Fig. 4 is a perspective view of a detached retaining member.

50 A bed in accordance with this invention comprises four parts, a head piece A, a foot piece B, and side rails C that are all of the ordinary and well known type forming parts of a metallic bed.

55 The reference numeral 1 denotes a stationary spring frame section and 2 an ad-

justable spring frame section, the latter being hinged to the former, as at 3. The spring frame section 1 is of a greater area than the adjustable section 2, the section 1 forming the foot or lower part of the spring frame. The spring frame section 1 has hook-shaped supporting members 4 that engage in the transverse angle bar 5 of the foot piece B.

The outer sides of the rails C, adjacent to the head piece A of the bed, are provided with sector racks 6, the lower ends of said racks providing bearings 7 for a transverse shaft 8. The ends of the shaft 8 are provided with operating levers 9 having spring actuated locking pawls 10 adapted to engage the racks 6, said levers and pawls being of a conventional form, similar to ordinary toggles. The shaft 8, adjacent to the bearings 7, is provided with curved cam arms 11 that extend upwardly through straps 12 provided therefor upon the under side of the spring frame section 2, said arms engaging said section whereby the section can be raised and lowered by rocking the shaft 8.

The hinged end of the spring frame section 1 has a transverse rod 13 and this rod is connected by a plurality of coiled springs 14 to the shaft 8, through the medium of bands 15.

The spring frame sections 1 and 2 support a woven wire spring 16 and the central portion of this woven wire spring is reinforced by a plurality of coiled compression springs 17, carried by a wire frame 18 located beneath the spring frame section 1. The wire frame 18 has angle-shaped hangers 19 that are connected to coiled retractile springs 20, said springs being connected to the end of the frame section 1 and to a transverse rod 21, carried by the head piece A of the bedstead.

The sides of the frames 1 and 2, at the hinged ends thereof, are provided with locking devices, comprising a casing 22 and a keeper 23, said casing housing a latch 24 that can be shifted into the keeper 23, whereby the section thereof can be locked in a horizontal plane relatively to the section 1.

To prevent the hinged end of the section 1 from being elevated when the movable section 2 is adjusted, I resort to the use of Z-shaped retaining members 25 in the form of bars that engage under the rails C and

over the sides of the frame 1, thereby preventing vertical displacement of the frame when the adjustable section 2 is adjusted.

From the foregoing it will be observed that I have devised an invalid bed for comfortably supporting an invalid or patient, the bed having a movable head section that can be easily adjusted without causing any pain to the occupant of the bed.

While in the drawing there is illustrated a preferred embodiment of the invention, it is to be understood that the structural elements thereof are susceptible to such variations and modifications as fall within the scope of the appended claim.

What I claim is:—

In an invalid bed, the combination with a bed having head and foot pieces, and side rails connecting said head and foot pieces, of a stationary spring frame section having one end thereof supported by the foot piece of said bed, an adjustable spring frame sec-

tion hinged to said stationary section, sector racks carried by the rails of said bed, a shaft journaled in the lower ends of said racks, operating levers mounted upon the ends of said shaft and adapted to be locked relatively to said racks, curved cam arms carried by said shaft and engaging said adjustable spring frame section whereby said section can be adjusted by moving said levers, springs connecting the hinged end of said spring frame section and said shaft, a wire frame suspended beneath said stationary spring frame section, and coiled compression springs interposed between said stationary spring frame section and said wire frame.

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

FRANK MILLER.

Witnesses:

PETER O'DONNELL,
DENIS GEOFFREY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."