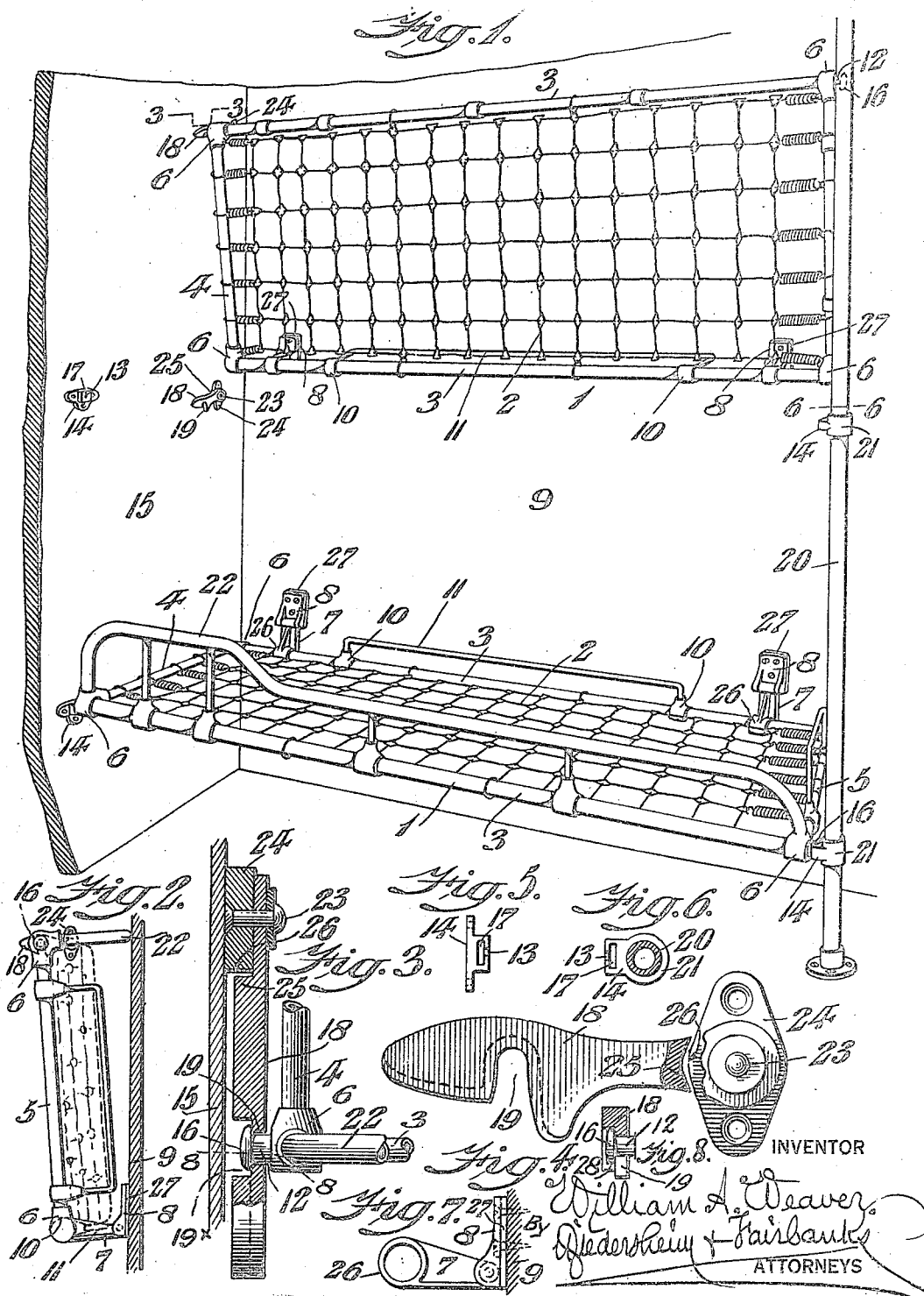


W. A. WEAVER.
FOLDING BEDSTEAD.
APPLICATION FILED DEC. 23, 1916.

1,253,549.

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UNITED STATES PATENT OFFICE.

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To all whom it may concern:

Be it known that I, WILLIAM A. WEAVER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Folding Bedstead, of which the following is a specification.

My invention consists of a folding bedstead whose frame is constructed of metal, preferably steel, side and end rails, and means for connecting the same comparatively integral as one, the bedstead being adapted for berths, ship-board, sleeping cars, etc., providing a light, strong and easily folding device for the purpose intended.

It consists also in so hinging the bedstead to its support that when it is in folded condition it is thrown out from said support allowing ample space for the reception of a mattress between the bed bottom and said support.

It consists also of means on the inner side of the bedstead for preventing the mattress from dropping therefrom, especially when the bedstead is in folded condition comparatively in upright position.

It consists also of novel means for sustaining the bedstead in operative position.

It consists also of novel means for supporting the bedstead in folded position.

It consists also of other details of construction as will be hereinafter described.

The invention is satisfactorily illustrated in the accompanying drawing, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific details shown and described.

Figure 1 represents a perspective view of bedsteads embodying my invention.

Fig. 2 represents an end elevation of one of the bedsteads in folded position.

Fig. 3 represents a horizontal section of a portion of the device on line 3—3 Fig. 1, on an enlarged scale.

Fig. 4 represents a side elvation of one of the latches employed.

Fig. 5 represents a top view of one of the sockets employed.

Fig. 6 represents a horizontal section of a portion on line 6—6 Fig. 1, showing another one of said sockets and its manner of connection with a standard employed.

Fig. 7 represents a side elevation of the hinge employed.

Fig. 8 represents a section of a portion on line 8—8 Fig. 3 on a reduced scale.

Similar numerals of reference indicate corresponding parts in the figures. Referring to the drawings,

1 designates a bedstead, and 2 designates the spring bottom thereof. The frame of the bedstead is formed of metal composed of the side rails 3—3, the head rail 4, and the foot rail 5, the several rails being connected by the couplings 6, thus forming the frame comparatively integral.

On the inner side rail 3 are secured the leaves 7 which are pivotally connected by knuckles with the leaves 8 forming hinges, the leaves 8 being secured to the wall partition or bulkhead 9, it being noticed that the bedstead when not in use may be folded upwardly against the partition or bulkhead, and owing to the leaves 7, the bedstead is set out from the partition or bulkhead, so as to provide ample space for occupation of the mattress of the bedstead, as most plainly shown in Fig. 2.

In order to prevent the mattress from dropping from the bedstead when the latter is in folded position, the inner side rail 3 has secured to it by the collars 10, the guard rail 11 which when the bedstead is in use rises therefrom, or is upright thereon as in Fig. 1, and when the bedstead is in folded condition, as in Figs. 1 and 2, said rail forms a laterally projecting member on which the inner side of the mattress rests, and so the mattress is supported on said rail and prevented from dropping.

In order to support the outer side of the bedstead in horizontal position, there are secured to the couplings of the outer rail 3, at the front corners of the bedstead, the longitudinally projecting headed pins or studs 12, the shanks thereof being of reduced thickness and so adapted to be seated in the slots 13 of sockets 14 which latter are secured to the side portions 15 of the partition or bulkhead 9 at an angle to the latter, and so located that when the bedstead is lowered, the shanks of said pins 12 will enter said slots 13, and the heads 16 of said pins will enter the openings or spaces 17 of said sockets 14, said shanks then resting on the bases of said slots which close the bottom

of the latter, thus supporting said pins and consequently the outer side of the bedstead. Said studs are thus interlocked in the sockets by their heads occupying the spaces 17 in the sockets, and their shanks occupying the slots 13 as shoulders whereby the studs cannot be wrenched laterally from their sockets during jerking motions that may be imparted to the bedsteads when in operative position by the ship on its passage, or the car when running etc.

The heads 16 of the pins remain snugly in the sockets and serve to prevent longitudinal motions of the bedstead. When the bedstead is raised for folding purposes against the partition or bulkhead 9, the pins emerge from the sockets as is evident, and follow the outer side of the bedstead in the folding motion thereof.

In order now to hold the bedstead in its folding position, there are secured to the side partition or bulkhead 15, the pivotal latches 18, the same having in their under edges the slots 19 which are open from below so that when the bedstead is nearly at its uppermost position, the shanks of the pins 12 ride against the under edge of said latches, thus lifting the latter until the shanks of the pins register with the slots 19 of the latches, when the latter drop and hook over said shanks, thus retaining the bedstead in its comparatively upright folded position while the heads of the studs occupy the spaces 19* in the inner sides of the latches back of said slots 19, said heads and the shanks being of reduced thickness as previously stated, forming shoulders which cause an interlocking of the studs with the latches whereby the former cannot be wrenched from the latches during jerking motions that may be imparted to the bedsteads when in folded position by the ship in its passage, or the car when running etc., see Fig. 3.

When the bedsteads are employed end to end, as on shipboard, sleeping cars, etc., I place between the same the column or standard 20 which is held firmly in position on a floor. On said standard are secured the collars 21 to which are attached the sockets 14 for the reception of the pins or studs 12 on the adjacent ends of the bedsteads, so as to sustain said ends when the bedsteads are lowered into operative position.

On the outer side rail 3 of the frame of the bedstead is the lee rail 22 which rises therefrom and serves with the rail 11 on the inner side rail 3 to prevent lateral shifting of the mattress and guard the occupant of the bedstead from rolling from the same, as well known.

In order to set out the latches 18 from the adjacent partition 15 and so prevent the heads of the studs or pins 12 from contacting with said partition, the pivots 23 of said

latches are mounted on the cars 24, which are secured to said partitions and are of such thickness that the latches and consequently the heads 16 are removed considerably from said partition, while the heads of the studs occupy the recesses 19* in the latches back of the slots 19 and so will not grind or rub the partition 15, as also shown in Fig. 3, the effect of which is evident.

On the pivotal portion of the latches are the shoulders 25 which are adapted to engage the adjacent edges of the ears 24 in such manner that the latches are permitted to rise and lower to sufficient extent in order to permit of their engagement with and removal from the studs or pins 12, but prevent improper dropping of said latches when the bedsteads are in folded condition.

In order to connect the leaves 7 with the inner rail 3 of the bedstead frame, the ends of said leaves opposite the knuckle or joints with the leaves 8, I form on said leaves 7 the collars 26 which tightly embrace said rail, the effect of which is evident.

The knuckles of the hinge-like leaves 7 and 8 are detachable from each other, and in order to be retained in place, I employ the plate 27 which is secured to one of said leaves and freely covers said knuckles without interfering with the freedom of motion of the knuckle-like joint of the leaves, said plate also removing the knuckles from contact with the partition or bulkhead 9. As the knuckles are separable, as above stated, the frame can be removed from the wall, in which case one of the leaves may remain a fixture of said wall, and the other leaf may remain connected with the side rail of the frame ready to reapply the frame to the wall when the knuckles are fitted together and the securing plate 27 replaced, thus again preventing the separation of the knuckles, while allowing the articulations of the hinges.

Portions of the backs of the latches about the walls of the throats or slots 19 are cut-away forming the recesses 28, see Fig. 8, to receive the head 16, of the pins 12 as a place of location therefor. This permits the latches to be made heavy so as to drop with considerable gravity on the pins 12, in the folded condition of the bedstead, and remain engaged properly therewith until again raised by hand to allow the bedstead to drop into operative position.

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

1. A folding bedstead frame, a support therefor back of the same on which the frame is pivotally mounted, a stud extending longitudinally from the outer portion of said frame, said stud being composed of a head and a reduced shank, a socket, a latch, a support for both said latch and socket at

an angle to said back support, said socket and latch being disposed in relation to each other as to be engaged respectively by said stud in operative and folded conditions of the bedstead frame, said socket having in its side wall a slot which is in communication with the interior space of the socket, the reduced shank of the stud being adapted to occupy said slot, and the head of said stud being adapted to occupy said space back of said slot interlocking said frame with said socket against longitudinal disconnection while supporting the same in operative position, said latch having in its underside a slot, and back of the same a recess which is in communication with said slot, the reduced shank of said stud being adapted to occupy said slot, and the head of the same being adapted to occupy said recess and overlap the walls of said slot.

2. A folding bedstead frame, a support therefor back of the same on which the frame is pivotally mounted, a stud extending longitudinally from the outer portion of said frame, said stud being composed of a head and a reduced shank, a socket, a latch, a support for both said latch and socket at an angle to said back support, said socket and latch being disposed in relation to each other as to be engaged respectively by said stud in both the operative and folded conditions of the bedstead frame, said socket having in its side a slot which is in communication with the interior space of the socket, the reduced shank of the stud being adapted to occupy said slot, and the head of said stud being adapted to occupy the space back of said slot overlapping the walls of the latter, said latch having in its under side a slot and back of the same a recess in communication with said slot, the reduced shank of the stud being adapted to occupy said slot, and the head of said stud being adapted to occupy said recess interlocking said frame with said socket against longitudinal disconnection while supporting the same in folded position.

3. A folding bedstead frame, a support on which the same is pivotally mounted, a stud connected with the outer portion of said frame composed of a head and a reduced shank, a latch mounted on a support at an

angle to that of said frame, said latch having in its under side a slot adapted to receive the shank of said stud, and the head of the latter to engage the latch, the latch overlapping the inner walls of said slot, said latch having thereon on its inner face near its pivot a shoulder, and an ear on said support adjacent to said shoulder adapted to be engaged by the latter whereby said latch is retained in horizontal position or approximately so as to be automatically raised by said stud on the ascent of the bedstead to its folded position so as to retain the bedstead in said position and prevent said stud from longitudinal connection from said latch.

4. A folding bedstead frame, a hinge having its outer leaf provided with a collar which is adapted to embrace the inner side rail of said frame, a support to which the inner leaf is secured, said leaves having knuckles detachably connected, a separate plate on the inner leaf adapted to cover freely said knuckles, means for attaching said plate to the inner leaf, and a collar on the outer leaf, said collar being adapted to embrace firmly the inner rail of the bedstead frame.

5. In a folding bed, a foldable bedstead frame, a support on which the same is pivotally mounted, a support at an angle to the first-named support, a latch pivotally mounted on the last-named support, an ear on which the pivot of said latch is mounted, the pivotal portion of the latch having a shoulder adapted to engage the adjacent edge of such ear to permit raising and lowering of the latch, and a stud on the foldable frame, said stud being formed of a head and a reduced shank, the latter being connected with the foldable frame, said latch having in its underside a slot and back of the same a recess which is in communication with said slot, the reduced shank of said stud being adapted first to raise said latch and next to occupy said slot, and the head of the stud then adapted to occupy said recess and overlap the rear walls of said slot.

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Witnesses:

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