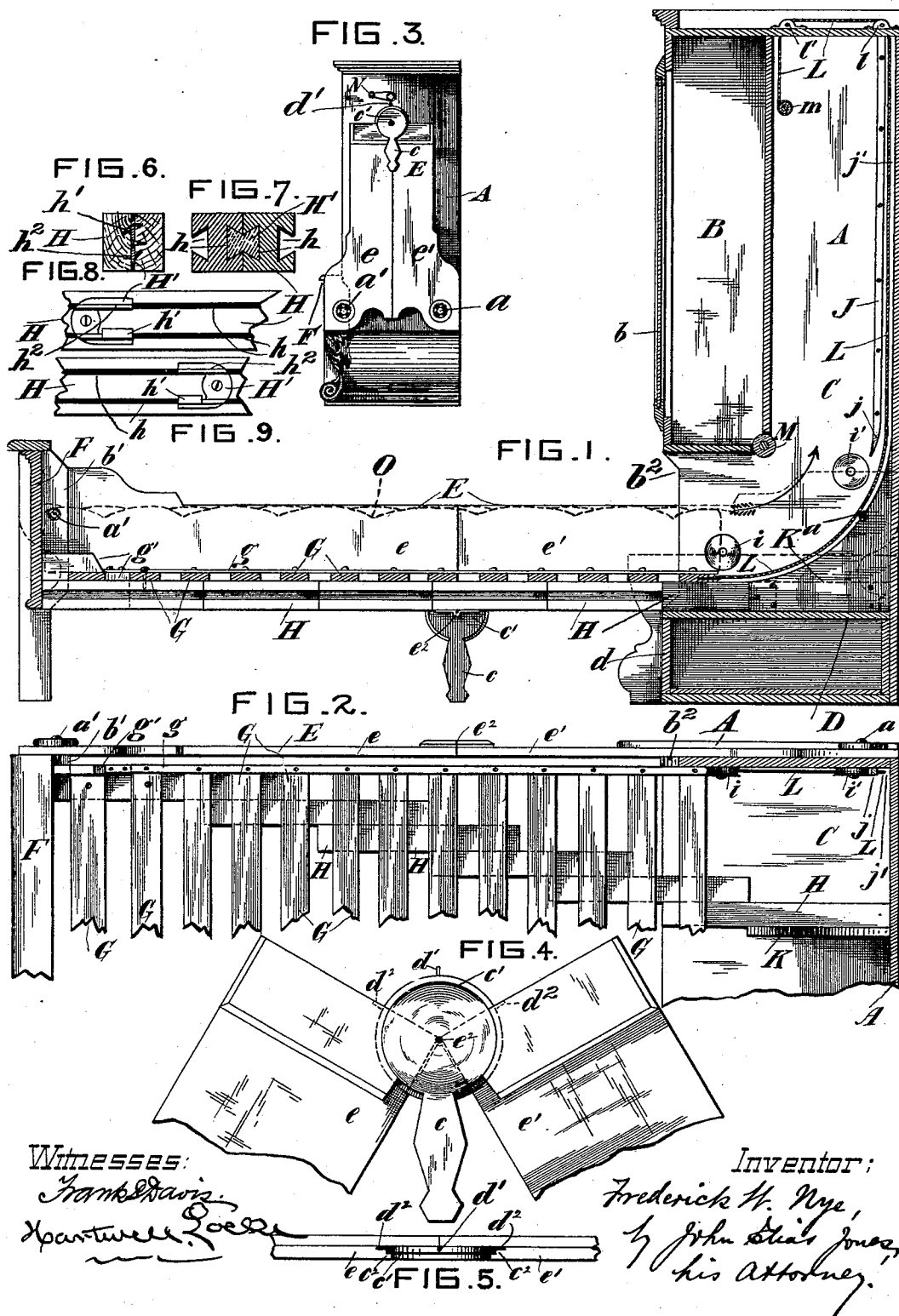


F. W. NYE.
CABINET OR WARDROBE BEDSTEAD.

Patented June 19, 1894.



UNITED STATES PATENT OFFICE.

FREDERICK W. NYE, OF CINCINNATI, OHIO.

CABINET OR WARDROBE BEDSTEAD.

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To all whom it may concern:

Be it known that I, FREDERICK W. NYE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Cabinet or Wardrobe Bedsteads, of which the following is a specification.

My invention relates to cabinet-bedsteads in which a permanently-upright or fixed frame or casing is provided to accommodate the bedstead and bed and effectually conceal them from view, and also thereby occupy, when closed and not in use, but limited space in an apartment; and my invention consists in certain novel features of construction, which will be fully hereinafter described and particularly pointed out in the claims.

In the accompanying drawings,—Figure 1 is a central, longitudinal sectional-elevation of the bedstead embodying my invention in its preferred form, the same being shown open for use, and the mattress indicated by dotted lines; Fig. 2, a broken sectional plan of the same, taken on a line with the top of the foot-board and just below the wardrobe-receptacle; Fig. 3, an end-elevation showing the bed closed; Fig. 4, a broken, detail elevation showing the hinged center of one of the folding side-rails of the bedstead, the same being thrown part way open, and thereby presenting the auxiliary central supporting-leg into full, clear view; Fig. 5, a broken plan of Fig. 4; Fig. 6, an end-view of two adjoining extension-slides of the series used in my bedstead, shown in their preferred form; Fig. 7, a cross-section of a pair of a modified form of extension-slides adapted to my bedstead; Fig. 8, a broken, inside elevation of the left one of the slide-bars seen in Fig. 6; and Fig. 9, a view similar to Fig. 8, but of the companion bar seen in said view (Fig. 6).

A represents a permanently-upright casing or frame, (usually termed the fixed-frame in folding-beds of similar pattern to mine,) and B is a front-compartment having a suitable door *b*, and preferably used as a wardrobe, but obviously adapted for use as a book-case, cabinet, or similar household receptacle.

C represents the main compartment or receptacle provided in casing A to the rear of, and projecting or extending forwardly under

said front-compartment B, as best seen in Fig. 1.

D represents a lower-compartment provided under the receptacle C and adapted to receive one or more convenient drawers *d*.

E represents each of the two side-rails of the bedstead, or the movable part of my invention herein. These side-rails are each preferably made in two parts *e*, *e'*, which are hinged together at *e*² at their adjoining butt-ends, and swing at their opposite, outer ends on pivots or bolts *a*, *a'*, the latter projecting, respectively, from the side-walls of the casing A, and the vertical flanges *b'* at the opposite supporting-leg ends of the foot-board F, (see Figs. 1, 2 and 3.)

Each of the two-part folding side-rails E is provided with a central auxiliary leg *c* to support it at its middle hinged-joint *e*², the top *c'* of such leg being circular and shouldered to seat in the rabbeted circular-socket *c*² made in the several adjoining lower corners of the said hinged-ends *e*² of said side-rails, (best seen in Figs. 4 and 5.) An upright pin or stop *d'* is provided at the center of the circumference of said circular-top *c'* of the legs *c*, which pin seats in the shallow sockets *d*² made in the butting-edges of the two parts of each side-rail (see Figs. 4 and 5,) and thus effectually locks or prevents the leg turning in either direction, accidentally or otherwise, while the side-rails are down horizontally or in prostrate-position for use.

G represents each one of a longitudinal series of transversely-disposed slats, suitably spaced apart and attached at their opposite ends to the under-side of the longitudinal straps *g*.

H represents each one of a transverse series of longitudinally-disposed bars mounted at either side the center of the bedstead, and, adapted to be extended or projected forwardly from the bottom of main-compartment C in order to support the said slats and the bed I (shown in dotted lines Fig. 1,) thereon. Bars H are adjustably and extensibly connected together by means of slide-couplings H', which engage grooves *h* therein, and operate similar to the ordinary extension-slides for household-tables. The slide-couplings seen in Figs. 6, 8, and 9, are divisible and made in two corresponding parts each attached by means of

a countersunk-screw, one part being applied to one slide-bar and the other part to the contiguous slide-bar, and each having a flaring-wing h' and straight flange h^2 , which respectively engage a receding or inclined groove and a straight groove in the contiguous slide-bar, the said engagements being best seen in Fig. 6, but the two parts of said divisible-coupling and their wings being best seen in the two views, Figs. 8 and 9.

In Fig. 7 the coupling H' is shown as being in X or double dove-tail form and engaging dove-tail grooves h in the contiguous side-faces of the extension-bars H .

The connecting or binding straps g for the slats, are made of any suitable flexible material such as thin sheet-metal, leather, or the like, and are secured at their outer ends to the arms g' projecting inwardly at the lower opposite ends of the foot-board. The outer ends of the end ones of said extension-bars are also secured to the sides of said arms g' on the foot-board for extensible-operation therewith. The slats are of such length that their ends shall properly clear the inner faces of the side-walls of the casing A , (see Fig. 2,) and guide-rollers i, i' , are provided at each end, on the said inner faces of the casing-sides, (Figs. 1 and 2,) under which the connected-slats or apron may slide.

J represents a vertical strip having a lower flaring-end j , and secured in the rear part of the main-compartment C , on the inner face of either side-wall, leaving a suitable space j' to provide channels or guide-ways at either side said main-compartment for the reception of the ends of the said connected-slats, (see Fig. 1,) for the closing and opening operations.

K is a central curved-rib in the bottom of said main-compartment C , against which the innermost of said extension-slides is placed and secured, (see Figs. 1 and 2,) and adapted, more particularly, to provide a bottom surface or support over and upon which the central or intermediate portion (transversely speaking) of said slatted-bottom or apron may slide, in either direction, when opening or closing the bed.

L represents a stout cord or rope attached to and leading from the inner ends of both the slat-straps g, g , passing under the said grooved guide-rollers i, i' , thence upward along the side-channels or guide-ways j' to and over the guide-rollers l, l' , in the top of chamber C , and thence downward a short distance to a transverse roller or shaft m in the upper part of said chamber C , and wound thereon through the medium of a hand-crank N on the outside of the casing just above the hinged-joint of the folded side-rail (see Fig. 3).

M is a transverse roller in the chamber C , at the lower inner angle or corner of the wardrobe-chamber B , (see Fig. 1.)

The mattress O , (seen in dotted lines Fig. 1,) rests on the slatted-bottom or apron and rides inward and outward therewith in the closing and opening of the bed, its upper face

bearing against the roller M , the latter reducing any friction incident to such movements.

In the operation of my invention,—to open the bed for use,—the foot-board is taken hold of and drawn outward away from the upright casing A . This causes the side-rails to lower on their hinges until they have attained a horizontal or prostrate position, at which time the said foot-board has been drawn its full stroke. During this movement, the cord has unwound from off its roller, leaving the slatted-bottom and the mattress to freely accompany said foot-board outward, and, also, the supporting extension-bars to be drawn outward from the casing. When the side-rails assume horizontal position, their middle gravitating-legs, (which are always perpendicular,) properly support them at their hinged portions, where such support is somewhat requisite on account of the joint and to prevent strain on both the middle and end hinges or pivots. To close the bed, it is simply necessary to raise the side-rails slightly at their central joints and then turn the hand-crank at the side of the casing, thus winding the rope and drawing or pulling inwardly the slatted-bottom and the accompanying mattress and foot-board, and simultaneously causing the side-rails to fully rise and close upward on their hinges, carrying their middle auxiliary legs with them, and also causing the bed-supporting slide-bars to move inward and close up parallel to and alongside each other entirely within the bottom of the main-receptacle C , and finally the foot-board to close up flush with the face of the wardrobe-front, (see Fig. 1.) The side-flanges b' on the foot-board are each flared or inclined at top and bottom to snugly fit corresponding recesses or long notches b^2 in the front edges of the side-walls of the casing A just below the said wardrobe-front. The foot-board is of sufficient height above the floor, to leave space below for proper access to and the working of the drawers d .

It will be seen that my construction herein is presentable, practical and very simple, and, also, very easily operated, the bedstead proper and mattress, excepting, however, the side-rails only, being effectually concealed from view and occupying but little space in an apartment. It is obvious that, if desired, the front part containing the wardrobe and most of the lower fore part of the main-receptacle and drawer-chamber, could be dispensed with, and my bedstead-inclosure answer the purpose intended of folding and concealing in small compass, fully.

I claim—

1. In a cabinet or wardrobe bedstead, the combination with a permanently upright frame or casing having a suitable receptacle or chamber with a lower front opening or orifice leading thereto, of an extensible-bedstead composed of a flexible, slatted-bottom, a pair of hinged side-rails, a foot-board hinged to said side-rails, and the latter swung or hinged

to said casing, extension-bar supports H, having slide couplings H' for said slatted bottom, and suitable guides in said casing for said slatted-bottom, the said movable or extensible
5 bedstead being drawn into and from said casing, by means of any suitable power device, for closing and opening positions, substantially as herein set forth.

2. In a cabinet or wardrobe bedstead, the
10 combination of a casing having a front wardrobe-compartment and a rear main-compartment, the latter having a lower fore-orifice under said wardrobe-compartment, a drawer or locker compartment under said lower fore-
15 orifice, a flexible slatted-bottom or apron, a series of extension-slides or bars H having slide couplings H' and projecting forward from said casing under said slatted-bottom and thereby supporting the latter, suitable
20 guides in the casing for the movement or passage, in either direction, of said slatted-bottom with its bed thereon to or from said main-compartment, a suitable foot-board at the outer end of said slatted-bottom, and fold-
25 ing side-rails pivotally connected at their inner ends to the casing, and likewise connected at their outer ends to said foot-board, and

auxiliary legs or supports under the hinged folding-portions of both said side-rails, the whole being constructed and the bedstead 30 adapted to be drawn by means of any suitable mechanism into concealed confinement within the said main receptacle or rear chamber, and readily withdrawn therefrom for use, substantially as herein set forth. 35

3. In a cabinet or folding bedstead, the combination of a casing or permanently-upright receptacle having an open lower-orifice, a reciprocating foot-board, a pair of folding side-rails hinged at their opposite ends to the end 40 walls of said casing and the opposite ends of said foot-board, respectively, and a suitably supported slatted-bottom or apron for receiving the mattress or bed, said side-rails, foot-board, and slatted-bottom together with the 45 bed, being adapted to be closed within said casing, substantially as and for the purpose herein set forth.

In testimony of which invention I have hereunto set my hand.

FREDERICK W. NYE.

Witnesses:

JOHN E. JONES,
FRANK S. DAVIS.