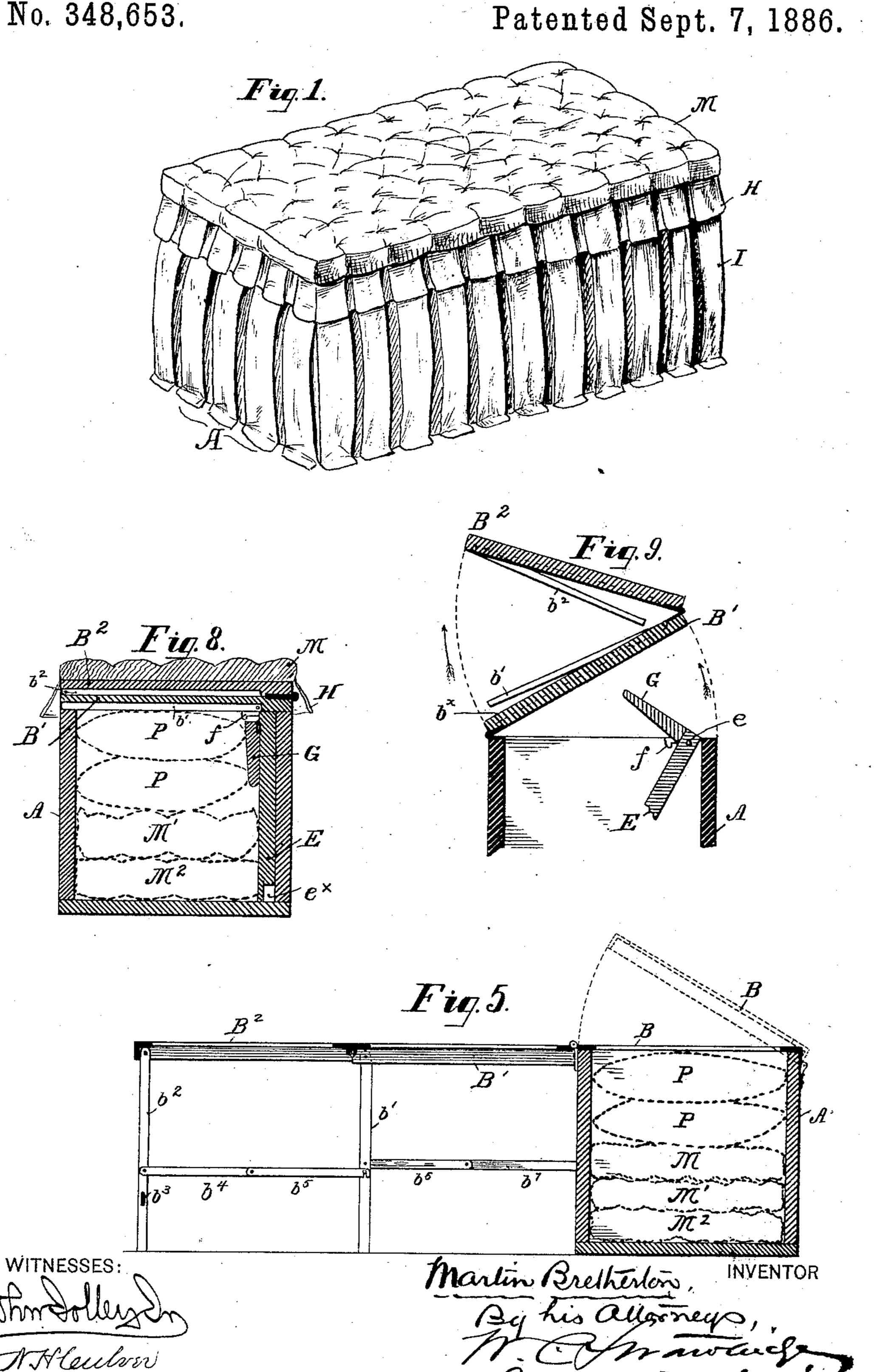
M. BRETHERTON.

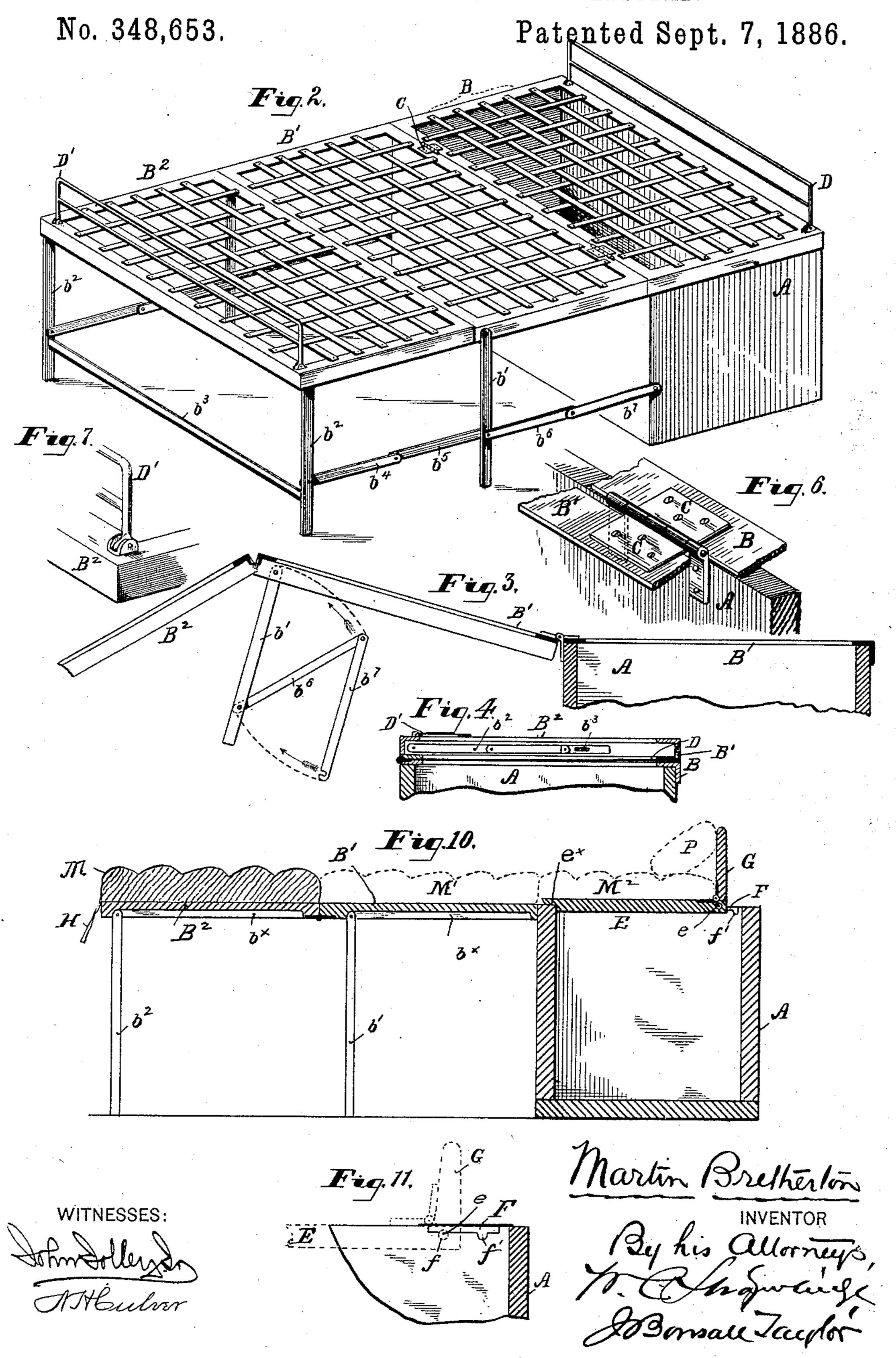
COMBINED WINDOW SEAT AND BEDSTEAD.

No. 348,653.



M. BRETHERTON.

COMBINED WINDOW SEAT AND BEDSTEAD.



United States Patent Office.

MARTIN BRETHERTON, OF ST. LOUIS, MISSOURI.

COMBINED WINDOW-SEAT AND BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 348,653, dated September 7, 1886.

Application filed November 10, 1884. Serial No. 147,463. (No model.)

To all whom it may concern:

Be it known that I, MARTIN BRETHERTON, a citizen of the United States, residing in St. Louis, in the State of Missouri, have invented 5 an Improved Combined Window-Seat and Bedstead, of which the following is a specification.

The object of my invention is to dispense with the permanent upholstery common in folding beds, and, as its title implies, to com-10 bine with the ordinary window box or seat a folding bedstead which is free from permanent upholstery, the especial purposes of the device being cleanliness and economy of space and of cost.

15 Generally stated, my invention consists in a box, chest, or inclosed casing forming the frame of the window-seat proper, and adapted to contain a removable sectional mattress and pillows of the bed when the latter is not in 20 use, which box is provided with a hinged and sectional extensible folding cover, top, or lid, free from permanent upholstery, which is adapted to be unfolded or extended to form a. slat or mattress bearing surface.

In the accompanying drawings I have represented two preferred forms of a convenient embodiment of my invention, respectively showing the sectional extensible cover, made

of wood and of metal.

In the drawings, Figure 1 is a view in perspective of my device when closed up and in use as a window-box. Fig. 2 is a similar view of the same when extended to form a bedstead, the mattress, for clearer illustration, being 35 omitted. Fig. 3 is a fragmentary side sectional detail illustrative of the movements of the various component parts in folding up after having been extended. Fig. 4 is a similar view of the parts represented in Fig. 3 40 when folded up. Fig. 5 is a side sectional elevation of the devices represented in Fig. 2, the sectional mattress and pillows, however, being represented in place within the box, and the box being shown as provided with an un-45 der section hinged to the rear side thereof. Fig. 6 is a perspective fragmentary detail of a good form of double hinge which I find it convenient to employ—as, for instance, in Fig. 2-in connecting the under and middle sec-50 tions of the cover with the same side of the box. Fig. 7 is a similar view of the tail-piece of the upper section. Fig. 8 is a transverse

sectional elevation of a slightly-modified construction of my device when the parts occupy the positions necessary to constitute the de- 55 vice a window-seat, one section of the mattress being shown on top of the folding and folded cover, and the other sections being shown within the box. Fig. 9 is a fragmentary side sectional detail illustrative of the 6c movement of the sections of the cover of the device when constructed as in Fig. 8 in the act of unfolding. Fig. 10 is a side sectional elevation of the device of Fig. 8 when the parts are in their unfolded or extended position. 65 Fig. 11 is a side sectional detailed view especially illustrative of the devices which permit of the movement of the infolding under section of the device of Fig. 8.

Similar letters of reference indicate corre- 70

sponding parts.

Referring now to Figs. 1, 2, 3, 4, 5, and 6 of the drawings, which represent my invention as provided with a sectional extensible top made of metal, A represents a box, chest, or 75 floored frame of any suitable material, preferably wood, and of such proportions and dimensions as are usual in window-seats, or as may be desired.

The box in the form of construction repre- 80 sented in Figs. 1, 2, 3, 4, and 6 is provided with a sectional extensible folding lid devoid of fixed or permanent upholstery and composed of three distinct parts, which are respectively designated B, B', and B². The first 85 or under section, B, of the lid is hinged to the box and forms, per se, a hinged top thereof. The second or middle section, B', is also hinged to the box in such manner that its hinged side is parallel and in immediate connection with 90 the hinged side of the first or under section, B. The third or upper section, B2, of the lid is hinged to the middle section, B'. The under section, B, serves, as stated, as a hinged cover proper for the box, and is adapted to be 95 raised to admit of access to the interior of the box. The sections B' and B2 of the lid are adapted to fold up after the manner represented in Fig. 3, and to lie flat upon the under

section, B, after the manner indicated in Fig. 100

4. In other words, these two sections are not

only adapted to fold upon each other and

down upon the box, but are also 'adapted to

unfold and extend after the manner repre-

sented in Fig. 2, in which case their support in a horizontal plane coincident with the plane of the section B is effected by means of folding legs b' b^2 , which latter, when not so em-5 ployed for support, are adapted to fold within the sections of the lid after the manner designated in Fig. 4. The two outer legs, b^2 , are conveniently connected by a tie-bar, b3, and the respective legs, when unfolded, are conro veniently retained in suitable relative positions by means of two sets of hinged links, b4 b5 b6 b7, which fold against the folding legs after the manner represented in Figs. 3 and 4, and unfold and are adapted to be as to their 15 outer extremities hooked upon pins or into suitable keepers after the manner represented in Fig. 2. The frames of the sections of the folding lid are conveniently made of angleiron, while the actual bearing-surface of each 20 section is conveniently composed of interlaced straps or bands of sheet metal, as will be readily understood by a reference to the drawings, and especially to Figs. 2, 3, and 4, thereof. The outer section, B2, of the lid is conven-25 iently made slightly less in length than the middle section, B', and is thereby adapted to be folded within said middle section. In Fig. 6 is represented a composite hinge, C, by means of which the under section, B, and mid-30 dle section, B', of the lid may be not only hinged together but hinged to the box. The under section, B, of the lid is of size sufficient to permit of the depending flange of its frame embracing the upper edges of the box.

All of the foregoing features—viz., the exact method of constructing the several sections of the lid, of hinging them together, and of applying and of retaining in place in extended position the folding legs of the sections—are 40 matters of mechanical construction, and while conveniently effectuated by that precise construction which is represented in the drawings, are not necessarily effectuated by such

construction only.

D D' are respectively a folding head-piece and folding end piece, respectively pivoted to the under and upper sections of the lid, and adapted, when the lid is extended, to assume an upright position, as indicated in Fig. 2, or 50 when it is folded to lie flat between the sections, as shown in Fig. 4, their office being to retain the sectional mattress, hereinafter described, in position upon the mattress-carrying surface. In Fig. 7 is represented a conven-55 ient means of hinging one of these head-pieces to the lid. I have said that the precise construction and arrangement above described is not an essential of my invention, and to make myself clear on this point I have represented 60 in Fig. 5 a convenient means for hinging the first or under section of the lid B to the rear instead of to the front side side of the box, so

a direction the reverse of that in which the 65 same section in the form of device represented in Fig. 2 moves.

that when said section is lifted it will move in

I have also represented in Figs. 8, 9, 10, and 11 a slightly-modified construction, in which the sections of the lid are formed of wood, and in which one of the sections is adapted to swing 70 down within the box. Each of the two outer sections, B' and B2, is provided with folding legs b' b^2 , which are pivoted to those sides or faces of the sections which in the act of unfolding become the under sides. These legs, 75 when folded up, are adapted to lie within recesses b^{\times} , suitably formed in the lids. The wooden frames of which the lids are in this construction formed may contain slats, springs, or their equivalent, or may be made solid, as 80 convenience of manufacture may dictate.

In the form represented the two outer sections, B' and B2, constitute two-thirds of the mattress-carrying surface of the bed. The other third portion is made up of a separate 85 frame, E, adapted, ordinarily, to fold, swing, or turn down within the box parallel with one of its longer sides, in the manner represented in Figs. 8 and 9, and likewise adapted to be moved about its pivot, so as to be secured or 90 rested upon the opposite or front side of the box, after the manner represented in Figs. 10 and 11. This resting of the infolding section or pivoted frame is conveniently effectuated by forming a rabbet, e^{\times} , along its front side, 95 which rabbet shall rest upon the side of the box, or rest by means of ears, lugs, or kindred projections formed either upon the frame or upon the box, and respectively operating to secure the support of the frame 100 with respect to the side of the box and in a horizontal position. The movement of this pivoted frame, which permits of its being either rested in a horizontal position upon the front side of the box, after the manner repre- 105 sented in Figs. 10 and 11, or being folded into the box after the manner represented in Figs. 8 and 9, is rendered possible by providing the frame with laterally-projecting pivot-pins e, which rest and travel in a long slot, F, 110 formed in the ends of the box or frame, and provided with two notches or pivot-seats, ff', spaced sufficiently far apart to permit of the necessary movement of the frame backward or forward with respect to said slot.

When the pivot-pins are engaged in the forward notch, f, as represented in Figs. 10 and 11, the rabbet e^{\times} of the frame is in position to rest upon the front side of the box. When, on the contrary, the pivot-pins are engaged with 12c the rear notch, f', the rabbeted edge of the frame will clear the front side of the box, and the frame can be folded into the box after the manner represented in Figs. 9 and 8. The pivoted frame is also shown provided with a 125 hinged head-board, G, which can either be turned up or folded out, as indicated in Figs. 10 and 11, or be folded flat or turned in after the manner indicated in Fig. 8. This headboard being grasped can be conveniently 130 used for the manipulation of the pivoted frame with respect to the position of its pivot-pins in

348,653

the notches of their slot. The mattress is sectional and removable, or not connected with or attached to any part or section of the top, and it and the pillows are adapted to be contained within the box, as represented in Figs. 8 and 5, and are to be introduced therein after either the pivoted frame has been folded in in the manner represented in Fig. 8, or the section B raised, as indicated in dotted lines in Fig. 5.

The pillows are designated by the letter P, and the sections of the mattress by M M' M². The mattress is made either in connected or in separate folding sections; but that section M of the mattress which is designed to cover the top of the window-box when closed, should be detached or separate from the other sections, as it is represented as being in Fig. 8.

In the form of my device represented in Figs. 20, 3, and 4, the mattresses and pillows are also to be stored in the box, there being even more room for them than in the arrangement of my device with the infolding section E.

The best construction of which I now have knowledge is to make the mattress-sections independent sections, corresponding in area to the area of each section of the lid, and to place them side by side on said sections when extended. The head and end pieces serve, as stated, to retain the then composite mattress in position.

One section of the mattress—viz., M—is conveniently upholstered as the cushion or seat proper for the window-box, and is provided with a depending lambrequin or pleating, H, of a depth sufficient to completely cover and conceal all of the edges and joints of the folded sectional lid, all as represented in Fig. 1. The box is itself conveniently provided with a skirt, I; or, if desired, is simply covered, or otherwise upholstered or finished, as convenience of manufacture may dictate.

at will. I however find it convenient to make the box four feet six inches long, so that the bed may be four feet six inches wide. In the drawings I have represented the sectional extensible top as composed of three sections. It is obvious that if the box be made narrower more than three sections of lid may be employed.

Having now very fully described two convenient constructions of an article embodying my invention, it is proper for me to state 55 that various features of detail hereinbefore described may be varied at will, the gist of the idea residing in the construction of a window box or seat, which is provided with a sectional mattress, and with a sectional extensi-60 ble folding top, lid, or cover devoid of permanent upholstery, and adapted either to fold down upon the box to form the seat of the box proper or to unfold to form a bed or mattress carrying surface, the box, when the 65 lid is folded up, serving the purpose of a receptacle to contain the mattress and other bedfurniture.

The advantages of the device are its compactness and simplicity, and the fact that it is free from permanent upholstery, whereby 70 a greater degree of cleanliness than has heretofore been possible in the various so-called "folding" bedsteads is insured.

Heretofore a sofa-bed has been made having a sectional frame hinged to one of the 75 edges of the box, and a separate section hinged to the opposite side. My invention differs from this in the fact that the separate section is connected with the ends of the box by studs or pins, which have both a sliding 80 as well as a pivotal motion, thereby allowing the section to be retracted and drop into the box when the bed is stowed or to be raised and slid forward to form part of the extended bed. I thereby not only simplify the construction, but am able to mount a head-piece on the separate section, which is wholly contained in the box when folded.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. In a combined window-seat and couch, the combination, with a box, of a sectional frame hinged to one edge, and a separate section connected to the box upon or near the opposite side by pins or studs, which have a 95 sliding and a pivotal connection upon the ends of the box, whereby the section may be raised and slid forward to form part of the extended bed and retracted and dropped into the box when folded, substantially as 100 specified.

2. In a combined window-seat and lounge, the combination, with a box, of a sectional bed-frame hinged to one edge, a separate section connected with the ends of the box near 105 the opposite side by pins which slide and turn upon said ends, and a head-piece hinged to said section, substantially as specified.

3. In a combined window-seat and lounge, the combination, with a box, of a frame composed of sections and hinged to each other and to one edge of the box, legs pivoted upon said sections and supported by pivoted braces folding upon the parts of the frame, a separate section connected to the ends of the box near the side opposite that to which the sectional frame is hinged, study or pins projecting from the ends of said section and moving and turning in guideways in the ends of the box, and a head-piece hinged upon said section, the latter having a width less than the width of the box, substantially as specified.

4. The combination, with a box, of a couchframe composed of sections hinged together
and to one side of the box at its top, and a
125
separate section having one edge rabbeted,
and provided with studs projecting from its
ends near the other edge, said studs being received by grooves formed in the ends of the
box near the side opposite that to which the
130
hinged frame is attrached, substantially as
specified.

5. The combination, with an open box having grooves formed in its end edges near one

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side, and provided with pockets or notches at each end of said grooves, of a single couch-section having pins projecting from each end near one of its longer edges, an end piece hinged upon said section, and couch-sections hinged together and to the opposite side of the box, one of said sections having a cushioned or upholstered surface, serving as a cover for the box-seat when folded and as part

of the mattress of the couch when extended, 10 substantially as specified.

In testimony whereof I have hereunto signed my name this 3d day of November, A. D. 1884.

MARTIN BRETHERTON.

In presence of— CLEMENT CRESSON, THEODORE D. JONES.