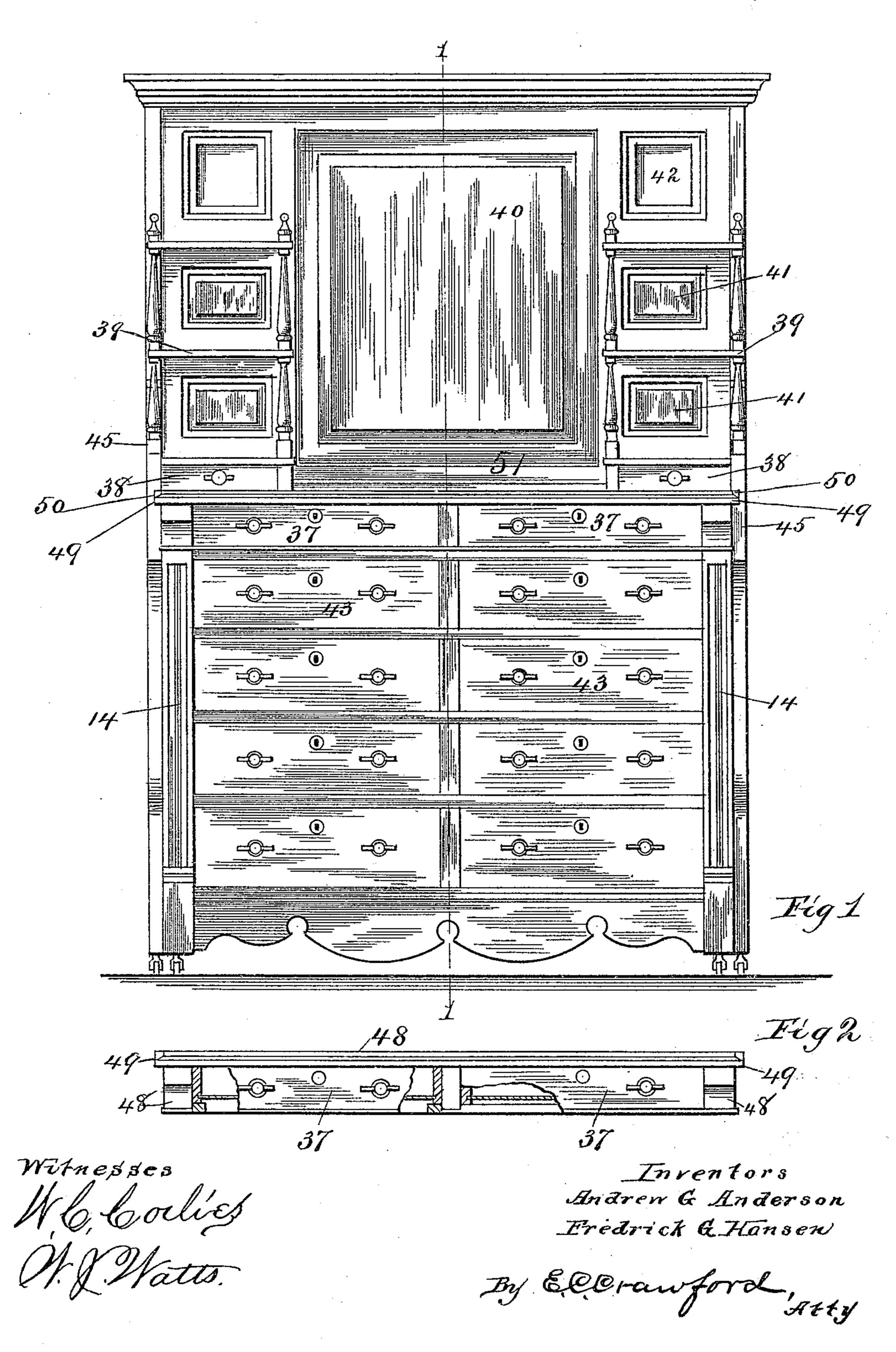
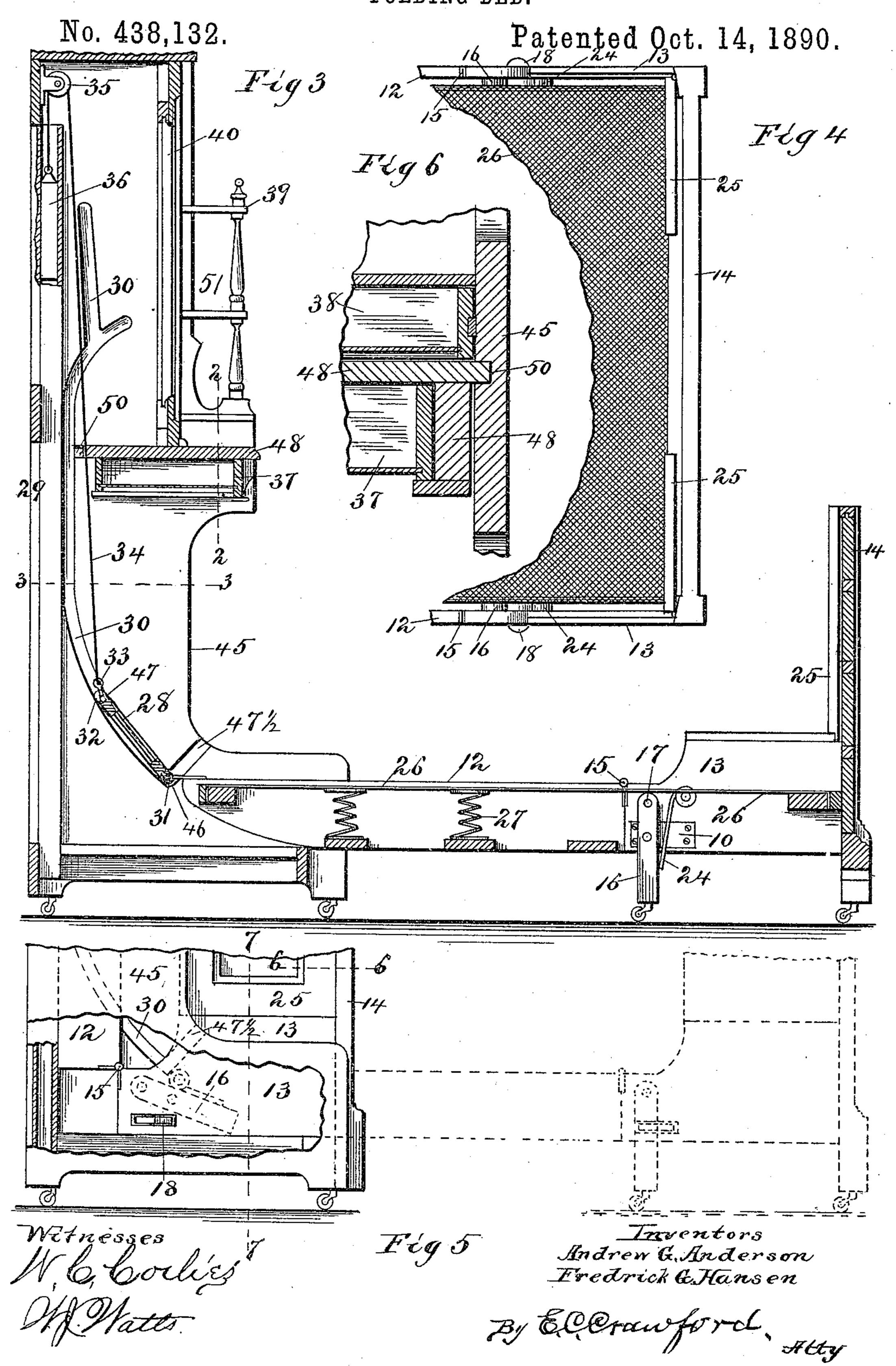
## A. G. ANDERSON & F. G. HANSEN. FOLDING BED.

No. 438,132.

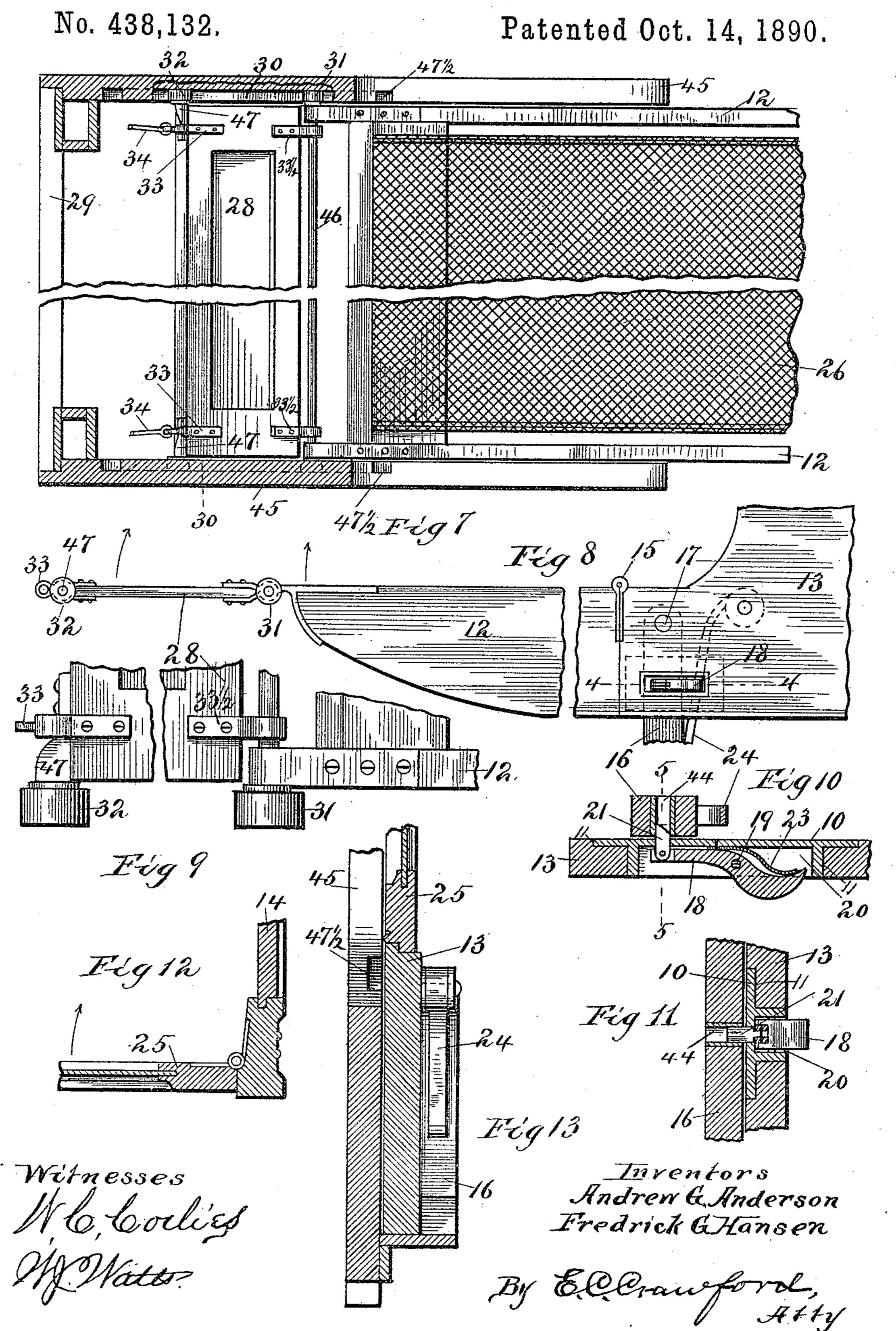
Patented Oct. 14, 1890.



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## United States Patent Office.

ANDREW G. ANDERSON AND FREDRICK G. HANSEN, OF CHICACO, ILLINOIS.

## FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 438,132, dated October 14, 1890.

Application filed April 11, 1890. Serial No. 347,486. (No model.)

To all whom it may concern:

Be it known that we, Andrew G. Anderson and Fredrick G. Hansen, citizens of the United States, residing in Chicago, Cook county, Illinois, have invented a certain new and useful Improvement in Folding Beds, of which the following is a specification.

Our invention relates to that form of folding beds which when closed presents the appearance of a bureau or dressing-case.

Our object is to so construct the bureau part and the bed part that the latter can be slid up into the former endwise, instead of being folded up against it, as is done with the folding beds now in common use. We also design to provide the bureau part with a mirror and several drawers and shelves, in order that it may serve as a dressing-case.

We accomplish our objects by means of the several combined parts illustrated in the ac-

companying drawings, in which—

Figure 1 is a front elevation of our improved folding bed closed up. Fig. 2 is an elevation of two drawers, together with the 25 frame which sustains them. Fig. 3 is a longitudinal section of the folding bed, taken on line 1 1 of Fig. 1, with the bed-frame drawn out. Fig. 4 is a detail plan view of the foot, section of the bed-frame. Fig. 5 is a detail 30 elevation, partly in section, of the upright frame and a side piece of the bed-frame, showing a leg and the spring-catch, the bed being closed. Fig. 6 is a detail section of a lower and an upper drawer, taken on line 22 of Fig. 35 3. Fig. 7 is a detail plan section of the upright frame and the head section of the bedframe, taken on line 3 3 of Fig. 3. Fig. 8 is a side elevation of the bed-frame. (Parts not shown.) Fig. 9 is a detail plan view of two 40 adjacent rollers with their bearings and part of the pillow-frame. Fig. 10 is a detail plan section of the spring-catch, taken on the line 4 4 of Fig. 8. Fig. 11 is a cross-section of the same, taken on the line 5 5 of Fig. 10. Fig. 45 12 is a detail plan section of one of the panels on the foot-board taken on line 6 6 of Fig. 5. Fig. 13 is a detail cross-section of the lower part of the folding bed when closed, taken on

Like numerals refer to like parts through-

out the several views.

line 7 7 of Fig. 5.

Referring to the drawings, 12 and 13 are sections of the bed-frame.

14 is the foot-board.

15 is a hinge which holds together the sec- 55 tions 12 and 13, and on which they may revolve. The leg 16 swings on the pivot 17, secured in the section 13.

18 is a bent lever, which turns on the pivot 19, secured to the casting 10. This casting is 60 formed with the recess 20, and is let into the aperture 11 in the section 13, so that the recess will be outward and the face of the casting will be flush with the face of section 13. The pin 21 is pivoted to the end of the lever 18, 65 and enters a socket 44, prepared for it in the leg 16. The spring 23 is secured in the recess between its inner face and the lever 18. The lever, pin, and spring together constitute a spring-catch. The spring 24 is secured to the 70 section 13 and presses against the leg 16.

25 is one of two similar panels hinged to the ends of the foot-board. Rabbeted edges on the panels and foot-board produce a perfect joint when the panels stand at right angles to the foot-board. The opposite edges of the panels are formed so as to fit snugly against the sides 45 when the bed is closed.

26 is the woven wire for the support of the mattress, and 27 springs to aid in supporting 80 the woven wire.

28 is a frame to support the pillows of the bed.

29 is the back of the upright frame of the bed. 45 45 are the sides of this frame and in 85 them the grooves 30 are formed, and 51 is the front of the frame. This extends downward such a distance that its lower edge will meet the upper edge of the foot-board when the bed is closed up.

The inner end of the section 12 is rounded or made sloping at its lower edge, and to its upper edge is rigidly secured rod 46, having on its ends the rollers 31, which travel in the grooves 30. The rollers 32 are secured on 95 axles 47, which are rigidly secured to frame 28 at its upper end, and these rollers also travel in the grooves 30. The staples 33 and 33½ are secured to the platform 28. The rod 46 passes loosely through the eyes of the 100 staples 33½, thus securing platform 28 to bedframe section 12 and permitting the staples

to revolve on the rod. To the staples 33 are fastened the cords 34, which pass over the pulleys 35, secured near the top of the upright frame and support the weights 36. The 5 object of these weights is to render it easier to raise and lower the bed-frame.

37 37 and 38 38 are drawers in the upright frame. The latter are supported in the frame

in the usual way.

10 48 is a frame having tongues 49 formed along its ends. Grooves 50 to receive these tongues are made in the sides 45 of the upright casing. The drawers 37 37 are secured in the frame 48 in any suitable way, so as to be movable therein. It is evident that these drawers, together with their frame, can be pushed in and drawn out as the contrivance is used as a bed or a dressing-case.

To the upright frame the shelves 39 are se-20 cured for the support of toilet articles and the mirrors 40 and 41 for use in dressing. Panels 42 and mock drawers 43 may be added

at pleasure as ornaments.

47½ 47½ are short grooves in the upright frame starting from the bottom of the grooves 30 and extending to the edge of the frame. They are made so that the bed-frame may be lifted out of the grooves 30 and separated from the upright frame. To do this the cords 30 34 must of course be detached from their

fastenings. The bed is operated as follows: Suppose it to be drawn out ready for use. First turn the panels 25 about at right angles with the 35 foot-board 14. Now push the bed-frame toward the upright frame. The rollers 31 and 32 will ascend the grooves 30, the section 12 will turn on its hinge 15 as it ascends, and the section 13 will pass in over the base 40 of 40 the upright frame-work. As it does this the bent parts of the levers 18 are pressed against the legs 41, forced inward, and thus draw the pins 21 out of sockets in the legs 16. The legs 16 coming against the base 40 are turned 45 up on it, and the foot-board is brought up against the upright frame. The panels 25 being in the position above named and the drawers 37 and their frame 48 being drawn out to their normal position, the bed is ready for

out, the spring 24 will force the leg 16 down to a vertical position, and the spring 23 will cause the lever to force the pin into its socket in the leg to hold it in such position. Folding the panels 25 toward each other against

the foot-board and pushing in the drawers 37 and their frame, the bed is again ready for

use as a bed.

Having fully explained our invention, what 60 we claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a folding bed, the combination of an up-

right frame consisting of the back 29, the sides 45 45, having the upwardly-curved grooves 30 formed on their inner faces, and the front 65 51, extending downward only far enough to meet the upper part of the foot-board when the bed is closed up, a bed-frame having its head lower edge rounded off and formed in two sections hinged together, the rod 46, se- 70 cured to the head-section of said frame, rollers secured on the ends of the rod, so as to travel in grooves 30, a leg pivoted on each side of the foot-section next to its hinged end, the foot-board 14, designed to fit under the 75 front 51, and the panels 25, formed to fit against the sides 45 when the bed is closed, substantially as and for the purposes specified.

2. In a folding bed, the combination of a 80 bed-frame rounded at its lower front edge and formed in two sections hinged together, the rollers 31, secured to the front end of the frame, the frame 28, pivoted by its staples 33½ upon rod 46 to support the pillows, the rollers 32, secured to the upper end of said frame, and the sides 45 of the upright frame having in them the upwardly-curving grooves 30, substantially as and for the purpose specified.

3. In a folding bed, substantially as de- 90 scribed, the combination of the section 12 of the bed-frame, the upright frame 29, having its horizontally-grooved sides 45, the section 13 of the bed-frame formed with the apertures 11, the legs 16, pivoted near their upper ends 95 to the sides of the section 13 and having the socket 44 in each for the pins 21, the castings 10, formed with the recess 20 in each and secured in said apertures, the bent levers 18, pivoted in said castings, and the pins 21, as 100 and for the purpose stated.

4. In a folding bed, substantially as described, the combination of the section 13 of the bed-frame, the recessed casting 10, secured in a slot in said section, the bent lever 18, 105 pivoted in the casting and having the pin 21, the leg 16, having the socket 44, designed to receive the pipe 21, and the springs 23 and 24, secured, respectively, to casting 10 and section 13 and actuating, respectively, lever 18 110 and leg 16, as used for the purposes stated.

5. In a folding bed, substantially as described, the combination of the sides 45 of the upright frame having a horizontal groove on the inner face of each, the frame 48, having 115 tongues to act in said grooves, the drawers 37, placed in said frame, the foot-board 14, and the panels 25, hinged vertically to its ends, as and for the purpose stated.

ANDREW G. ANDERSON. FREDRICK G. HANSEN.

Witnesses:

W. C. CORLIES, E. C. CRAWFORD.