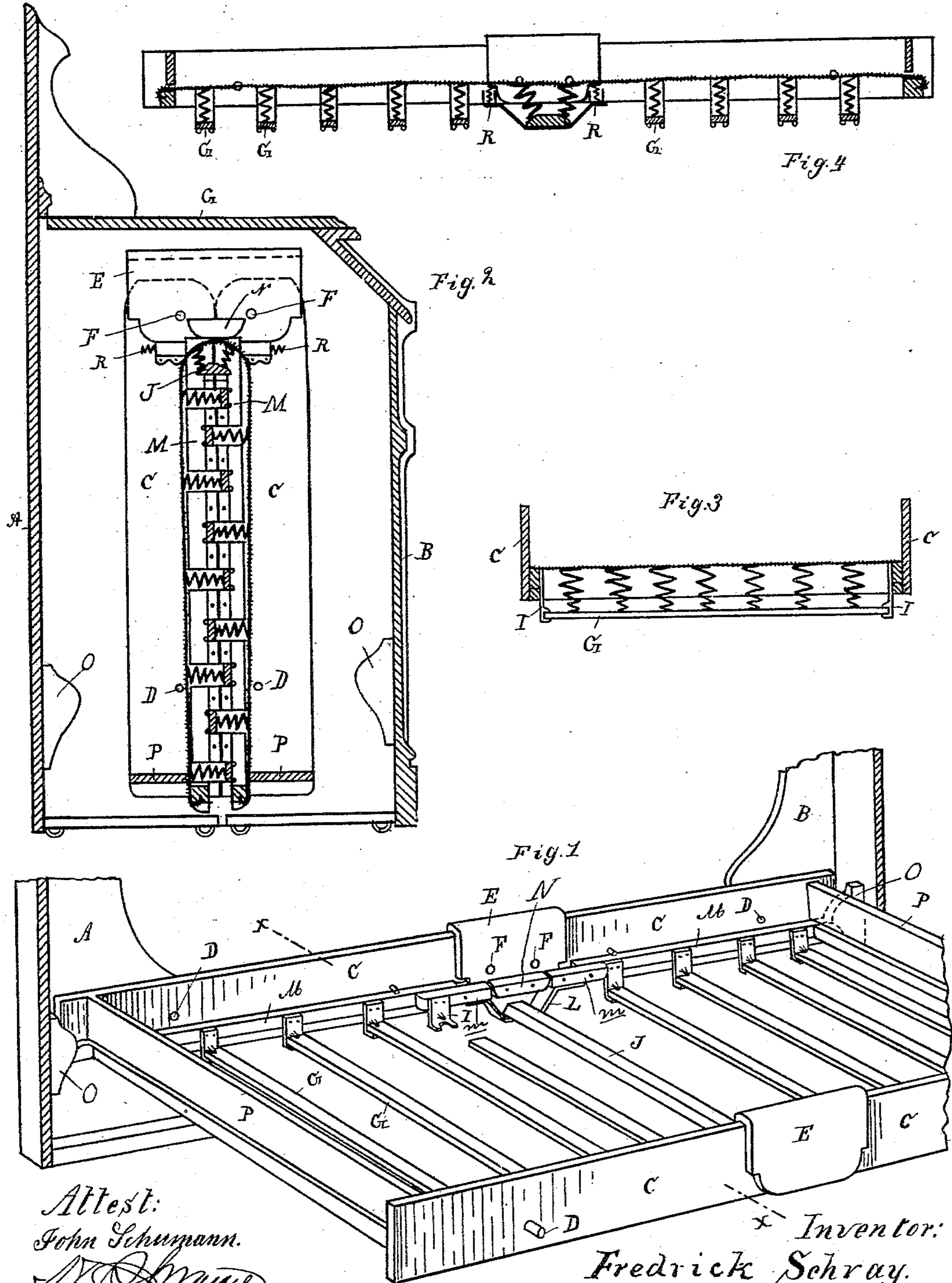


(No Model.)

F. SCHRAY.
FOLDING CABINET BED.

No. 319,135.

Patented June 2, 1885.



Attest:
John Schumann.
[Signature]

Inventor:
Fredrick Schray.
by his Atty,
[Signature]

UNITED STATES PATENT OFFICE.

FREDRICK SCHRAY, OF BUCHANAN, MICHIGAN, ASSIGNOR TO THE
BUCHANAN MANUFACTURING COMPANY, OF SAME PLACE.

FOLDING CABINET-BED.

SPECIFICATION forming part of Letters Patent No. 319,135, dated June 2, 1885.

Application filed November 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRED. SCHRAY, of Buchanan, in the county of Berrien and State of Michigan, have invented new and useful Improvements in Folding Cabinet-Beds; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

10 This invention relates to an improvement in cabinet folding bedsteads.

The invention consists in the peculiar construction and arrangement of the parts of the bedstead in connection with a coil-spring bed-
15 bottom, so that the same may be folded in a compact and easy manner, and as readily be unfolded again.

In the drawings which accompany this specification, Figure 1 is a perspective view of my improved bedstead, with the larger portions of the head and foot boards broken away so as to more readily disclose the construction of the other parts. Fig. 2 is a vertical central cross-section of the same as it appears when folded.
25 Fig. 3 is a cross-section of the same on line *xx* in Fig. 1. Fig. 4 is a vertical longitudinal section of a simplified form of the same.

A is the head-board. B is the foot-board. C C are the folding side-rail sections pivotally secured at D to the head and foot boards, respectively; and E are cap-rails or intermediate side-rail sections, to which the side rails, C C, are pivotally secured at F F. As these parts do not form any part of my invention,
35 but constitute a folding cabinet-bedstead frame of known construction, wherein the folding is accomplished by lifting the side rails up in the center and folding them rule-fashion, I will not describe them any further.

40 Within the side rails, C C, I secure a spring bed-bottom of that kind wherein the springs are supported by cross-slats, such as the slats G; but, instead of securing the latter in the usual manner, I secure them by means of hangers I, so that they are below the lower edge of the side rails, and so spaced that when the bedstead is folded the slats of one half enter into the interstices between the slats of the other half, as shown in Fig. 2. This arrangement
50 greatly economizes the space which the spring bed-bottom would otherwise occupy in folding.

In the center of the bed-bottom I preferably secure two inclined rows of springs upon one bed-slat. By this arrangement a larger amount of springs can be placed without crowding the
55 slats, as it will be observed that near the center the interstices between the slats have to be somewhat larger than nearer the ends, to enable the folding. The construction hereinbefore described is shown in Fig. 4, which shows
60 my improvement in its simplest form. Where the least possible height, however, is an object, as it generally is, I construct my folding bedstead in the form shown in Figs. 1, 2, and 3. The construction shows the bed-bottom constructed and secured within the side rails independently thereof.
65

The slats G are supported by the afore-described hangers I, which, however, are secured to sliding sub-rails M M, provided with extensions *m*. Between the inner ends of each of the extensions of these sliding sub-rails a short block, N, with rounding ends is secured to the cap-rail E, and cam-blocks O are secured to the head and foot boards, so as to operate against
75 the outer ends of the sliding sub-rails. The operation of these blocks N O is as follows: When the bedstead is in its unfolded state, the sub-rails M abut with their ends against these blocks, but when the bedstead is now folded,
80 the sub-rails, freed from contact with the blocks O and the blocks N, fall by their gravity so as to rest underneath the block N, as seen in Fig. 2. The object of this movement is to have the bed-bottom in its folded condition as low as
85 possible within the cabinet, so as to get space on top for the bed-cloth. When the bedstead is then unfolded again, the blocks O operate against the outer ends of the sliding sub-rails and push them back inwardly, so that when
90 the bed is completely unfolded the parts are again in their original position. As the center slat, J, must now be allowed to drop also when the bedstead is folded, I support it by means of flexible straps L, secured to the inner
95 ends of the sliding sub-rails. These flexible straps insure the free and proper movement of all the parts in the act of folding and unfolding. They allow of the easy removal of the bed-bottom, and they keep the cross-slats J in
100 the proper relative position to support, when the bedstead is folded, the top of the bed-bot-

tom with the bed-cloth. To relieve the springs upon this cross-slat from undue compression by the weight of these parts when folded, I secure end boards, P, within the ends of the side rails, which serve as supports for the mattress, and also prevent the sliding sub-rails from getting accidentally displaced.

In another application filed by me September 24, 1884, Serial No. 143,840, I have shown and claimed a saddle over the meeting ends of the side rails, hence no claim is made to such feature in this application.

What I claim as my invention is—

1. In a cabinet folding bedstead, the combination of main side rails adapted to be folded in the center, with folding sub-rails sliding on the main rails and carrying the mattress independent of the main side rails, substantially as and for the purpose described.

2. In a cabinet folding bedstead wherein the rails are folded upward in the center, a series of cross-slats carried by one half of the side rails, and a series of cross-slats carried by the other half of the side rails, both series being so arranged that when folded the slats of one series will enter into the interstices between the slats of the other series, substantially as described.

3. In a cabinet folding bedstead, the combination, with the side rails, of the sub-rails M, the hangers I, secured to said sub-rails, and

the slats G, supported by said hangers below the lower edge of said side rails, substantially as and for the purposes specified.

4. In a folding cabinet-bedstead, the combination, with the side rails, of a cap-rail, E, to which said rails are pivoted, a cam-block, N, secured to said cap-rail, sub-rails M, provided with extensions *m*, and the flexible strap L, connecting said extensions, substantially as described.

5. In a cabinet folding bedstead, the combination of the main side rails adapted to be folded upward in the center, of sub-rails divided in the center and adapted to slide on the main side rails, of center cams operating against the inner ends of the sub-rails when the bed is folded, and of end cams operating against the outer ends of the sub-rails when the bed is unfolded, substantially as described.

6. In a cabinet folding bedstead, the combination, with the side rails adapted to be folded in the center, of the sub-rails divided at the center and arranged to slide on the side rails, and the cams O, operating on the outer ends of said sub-rails, substantially as and for the purposes specified.

FREDRICK SCHRAY.

Witnesses:

H. S. SPRAGUE,
E. SCULLY.