

(No Model.)

2 Sheets—Sheet 1.

E. SKINNER.
COMBINED FOLDING BED AND CABINET.

No. 441,590.

Patented Nov. 25, 1890.

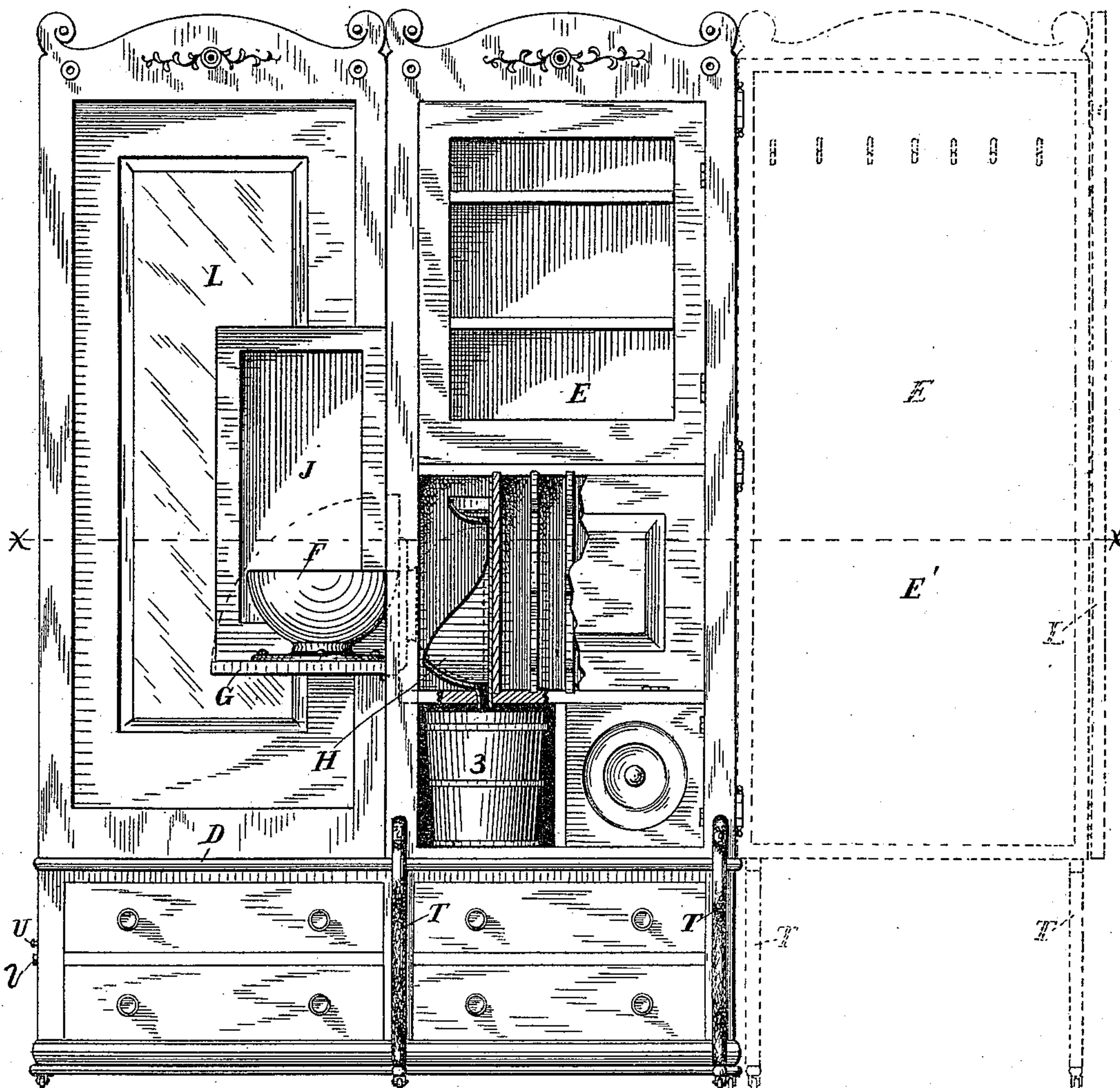


Fig. 1.

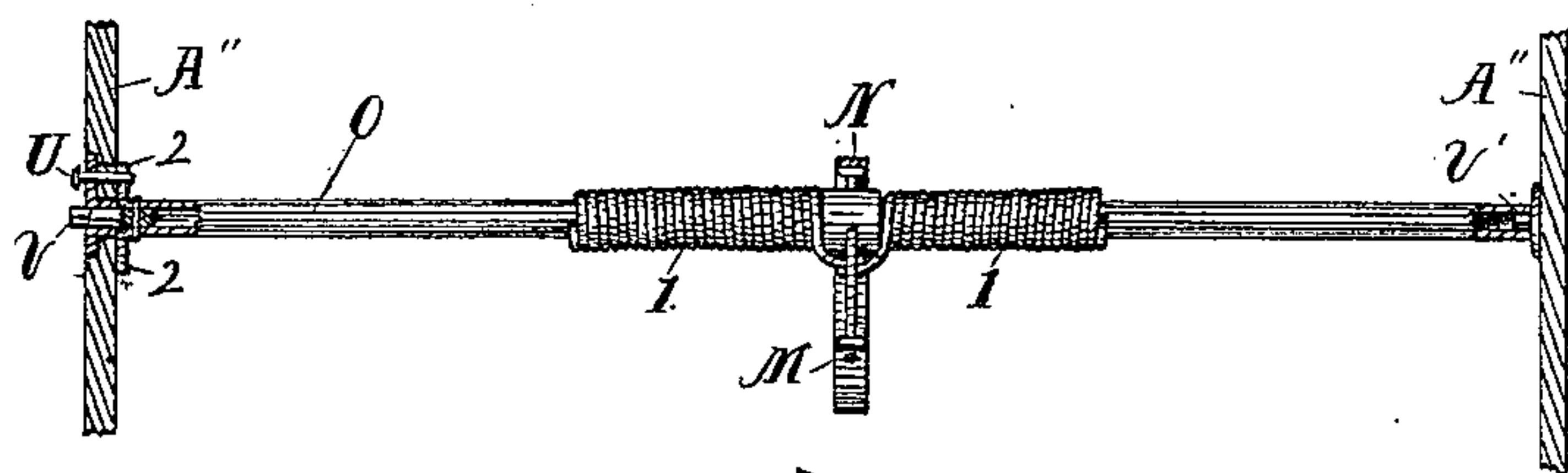


Fig. 7.

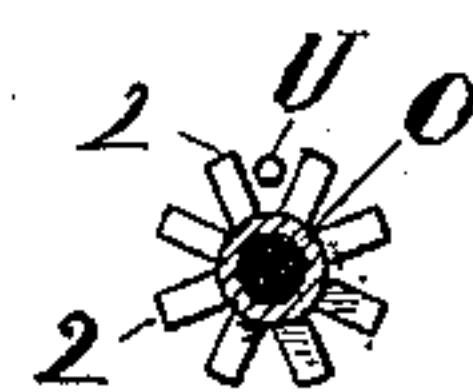


Fig. 5.

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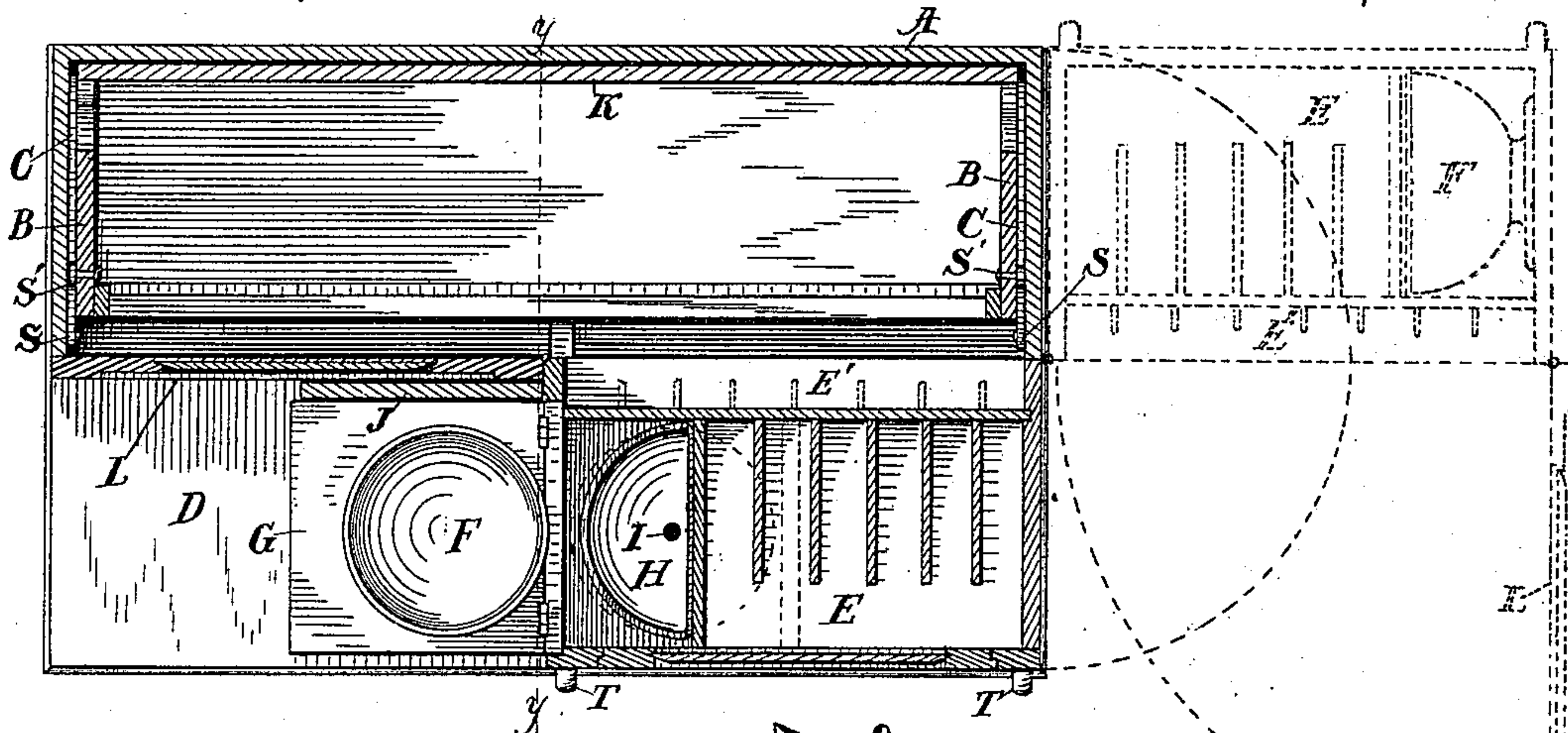


FIG. 2.

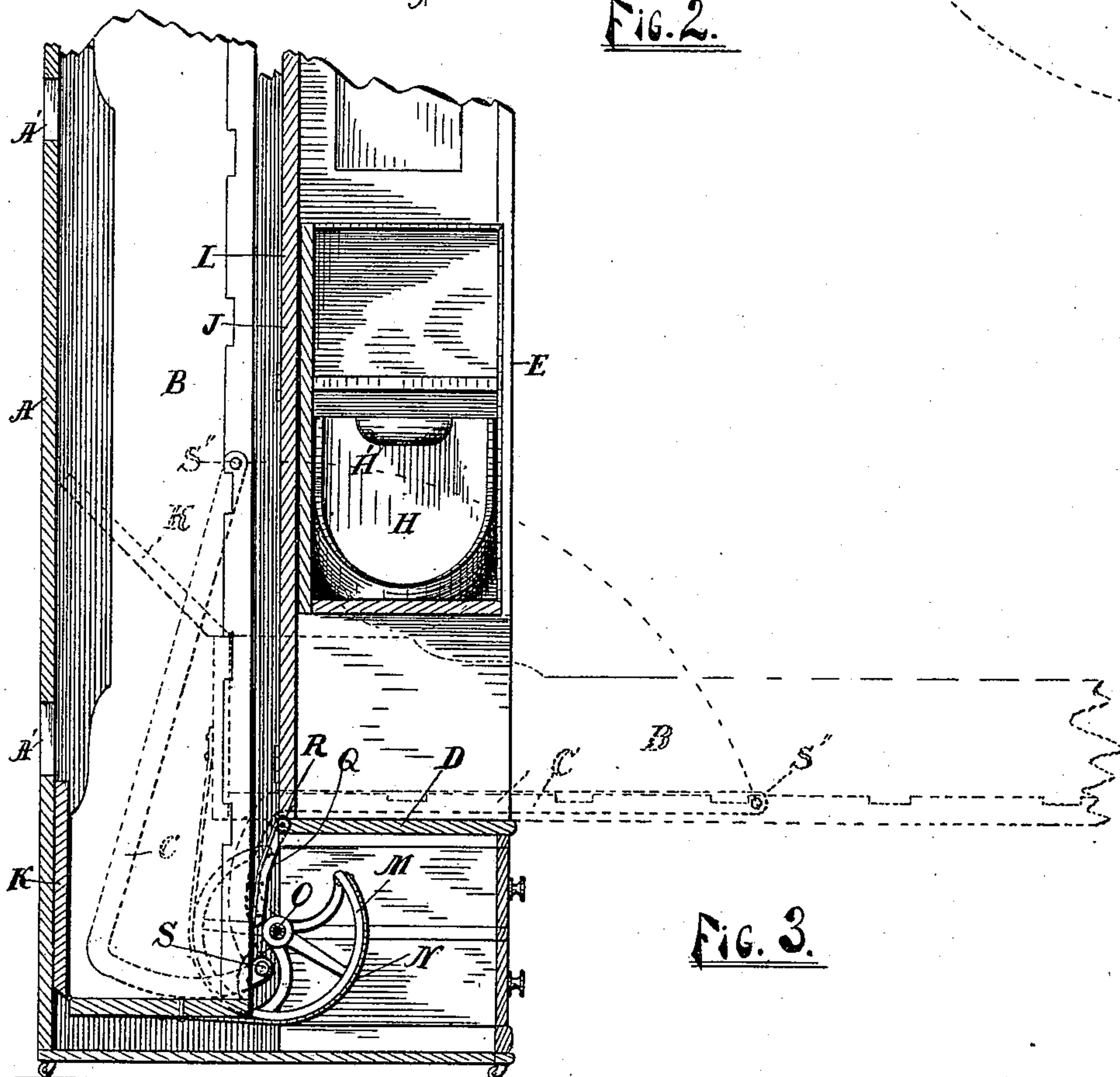


FIG. 3.

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UNITED STATES PATENT OFFICE.

ELIAS SKINNER, OF GRAND RAPIDS, MICHIGAN.

COMBINED FOLDING BED AND CABINET.

SPECIFICATION forming part of Letters Patent No. 441,590, dated November 25, 1890.

Application filed June 21, 1890. Serial No. 356,251. (No model.)

To all whom it may concern:

Be it known that I, ELIAS SKINNER, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in a Combined Folding Bed and Cabinet; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a combined folding bed and cabinet; and it consists in the construction, combination, and arrangement of parts hereinafter described, and pointed out in the claims, reference being had to the accompanying drawings, wherein—

Figure 1 is a front elevation of a device embodying my invention with parts broken away to show details of construction. Fig. 2 is a horizontal section on the line X X of Fig. 1; Fig. 3, a vertical section on the line y y of Fig. 2; Fig. 4, a detail of the balancing mechanism; Fig. 5, a detail of end of shaft, showing means of locking same.

Like letters and numerals of reference indicate like parts throughout the several figures.

A represents the upright or stationary case, and B the folding section pivoted to fold vertically therein when the bed is closed and to open out horizontally when the bed is open for use. The stationary section is provided with a projecting base D, provided with drawers for containing various articles. Hinged to the side of the stationary case is arranged a cabinet E, which occupies one half only of the front of the case, the other half being occupied by a mirror L, which is hinged to the side of the cabinet and swings with it away from the front of the case, and when open, so as to allow the folding section to be opened, said mirror and cabinet remain at rest in the positions relatively shown in Figs. 1 and 2 in dotted line, the curves described by the opening of the same being also indicated in Fig. 2.

The cabinet is furnished with a lavatory and provided with shelves and recesses for various articles and doors for closing the same, arranged in any convenient or desired form, as shown in Fig. 1. On the inner side of the cabinet is arranged a vertically-hinged

door J for covering the lavatory, and which when open permits the horizontally-hinged shelf G, on which is secured the bowl F, to open horizontally for use. Back of the bowl, in a suitable chamber, is arranged the sink H, (with a soap-dish H' integral,) having a rim curved to correspond with the side of the bowl F, which empties into it when the shelf G is in its vertical position, as shown in Fig. 2 in dotted line, and discharges through the hole I into the slop-jar 3 in a chamber arranged underneath the sink, as shown in Fig. 1.

Upon the back side of the cabinet (which is the front side when open) is arranged a space or chamber E', furnished with wardrobe-hooks, and which forms a wardrobe.

To support the cabinet when opened it is provided with legs T, which move with the cabinet upon suitable casters, and when so opened the bottom of the folding section is disclosed. The folding section is pivoted on each side to angle-arms C C, arranged between the sides of the folding section and the sides of the stationary section, as shown in Fig. 2. The lower ends of arms C are pivoted to the stationary section by pivots S, and the upper ends to folding section by pivots S', the lower portion of the arms forward of the angle being curved, as shown in Fig. 3, to avoid engagement with the frame-work of D as the section swings over. It will now be seen that when the folding section is opened outward the action of the bent arm C will be such that the head of the folding section is at the same time lifted vertically and thrown forward horizontally, thereby traversing the arc of a circle. Across the front of the stationary section is arranged a hollow shaft O, one end of which engages with a stud V' to journal that end, and the opposite end is provided with a plug V, which is journaled in suitable bearings and provided with a squared end projecting beyond the side of A, which may be fitted with a suitable key or wrench for regulating the tension of springs 11. The end of the shaft O back of the plug is split, forming radial arms 2, (see Fig. 5,) which engage with a removable pin U projecting through the side for locking the shaft. Loosely journaled upon the shaft O is the

sector-wheel M. Reverse curved coiled springs 1 1 are arranged upon each side of this wheel, one end of each secured to the shaft O and the opposite end to one of the radial arms of the wheel. A steel band N has one end secured to the wheel engaging the rim and has the opposite end attached to the end of the folding section, as shown in Fig. 3. Guide-plates Q are secured to the sides of the stationary section, having flanges at right angles, which engage the bottom of the side rails of the folding section when in operation, and have rolls R journaled in the upper ends, upon which the side rails of the folding section ride in operation and rest when the same is in its horizontal position.

K is the usual movable head-board, which is hinged to the end of the folding section and moves with it, and A are ventilating-apertures through the back of the stationary casing.

It is evident that when the parts are adjusted as described and when the folding section is in its vertical position there will be little if any strain upon the coiled springs, and that when opened outward the strap N will cause the sector-wheel to make a partial revolution, thereby winding up the springs, which will tighten as the folding section approaches its horizontal position and have a tendency to close the bed, which may be regulated by turning shaft O more or less, as desired, to obtain the proper tension.

What I claim, and wish to secure by Letters Patent, is—

1. In a device of the class described, the combination of the stationary section, the folding section pivoted to fold therein, and the cabinet E, covering one half, approximately, of the stationary casing, having the mirror L hinged to the side thereof covering the other half, and forming the front of the structure when the folding section is vertical, substantially as set forth.

2. In a device of the class described, the combination, with the upright casing and the folding section pivoted to fold therein, as set forth, of a cabinet hinged to the stationary casing, adapted to swing horizontally, as set forth, a hinged shelf G, a bowl F, secured thereto, and a catch-basin or sink H, arranged underneath the edge of F when shelf G is

vertical, substantially as and for the purposes set forth.

3. The combination, with the stationary casing and the folding casing pivoted therein, of a cabinet containing a wash-bowl secured to a hinged shelf and a sink and slop-jar adapted to receive slops from the bowl when the shelf is vertical, substantially as set forth, and having a mirror hinged to the side thereof and moving therewith and hinged to the stationary casing and adapted to swing horizontally away from the front thereof for disclosing the folding section, substantially as set forth.

4. In a device of the class described, the combination, with the stationary or upright section and the folding section, of L-shaped arms C, arranged upon each side of the folding section between the sides of said section and the sides of the stationary casing, having their upper ends pivoted to the stationary casing and the L portions curved forward of the angle and the outer end pivoted to the folding section, whereby the folding section is both lifted vertically and moved horizontally, traversing the arc of a circle, substantially as set forth.

5. In a device of the class described, the combination, with the stationary or upright section and the folding section, of L-shaped arms C, having their lower ends pivoted to the stationary casing and their upper ends to the folding section and arranged between the sides of the sections, as set forth, and guide-plates Q, provided with rollers R at their upper ends for the folding section arranged substantially as described.

6. In a device of the class described, the stationary section, the folding section, arms C, arranged between the sides of the respective sections and pivoted thereto, respectively, as described, shaft O, journaled across the front of the stationary section, provided with the radial arms 2 and pin U, sector-wheel M, springs 1 1, secured to the shaft and wheel, as described, and band N, connecting the sector-wheel and folding section, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ELIAS SKINNER.

Witnesses:

DENNIS L. ROGERS,
LUTHER V. MOULTON.