

No. 675,702.

Patented June 4, 1901.

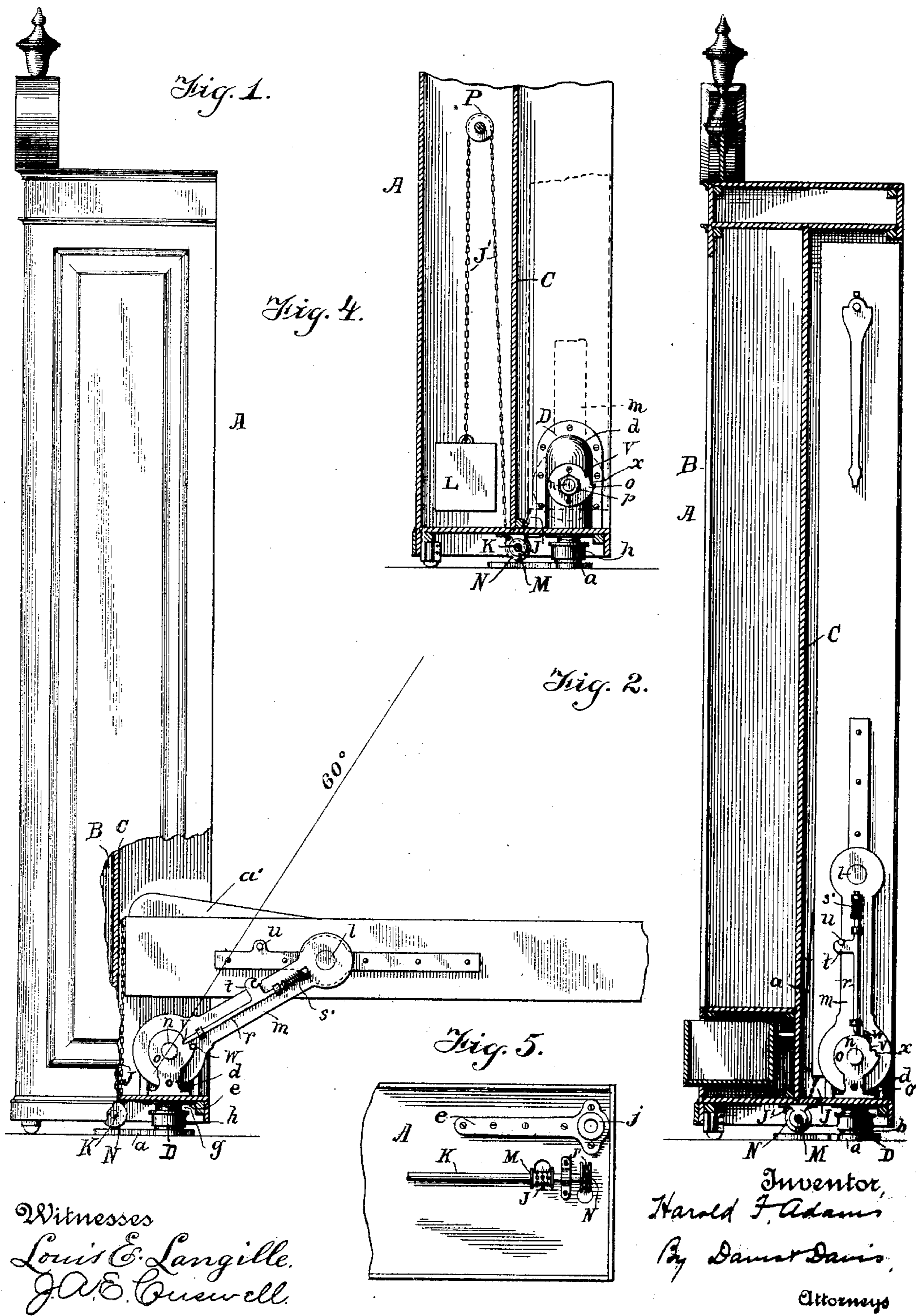
H. F. ADAMS.

COMBINATION WARDROBE AND BED OR COUCH.

(Application filed Jan. 30, 1901.)

(No Model.)

2 Sheets—Sheet 1.



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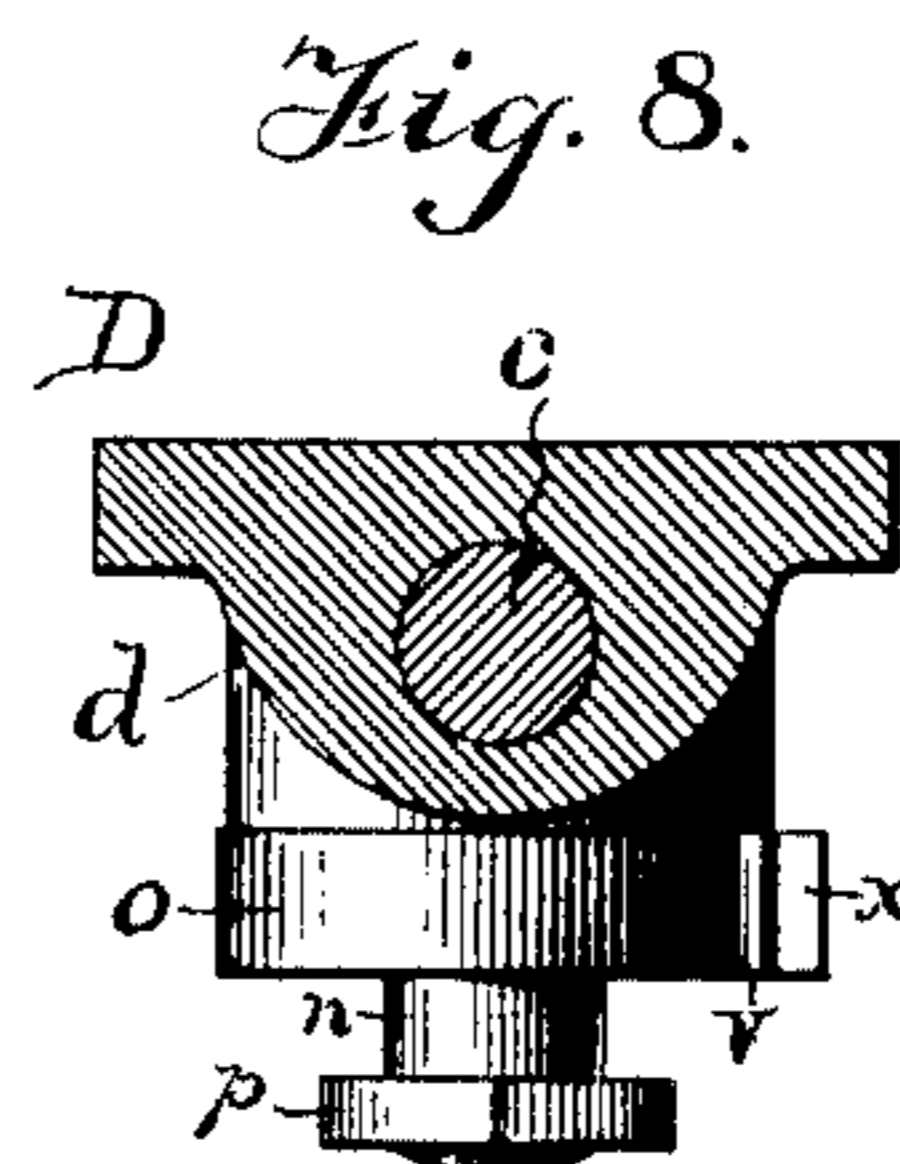
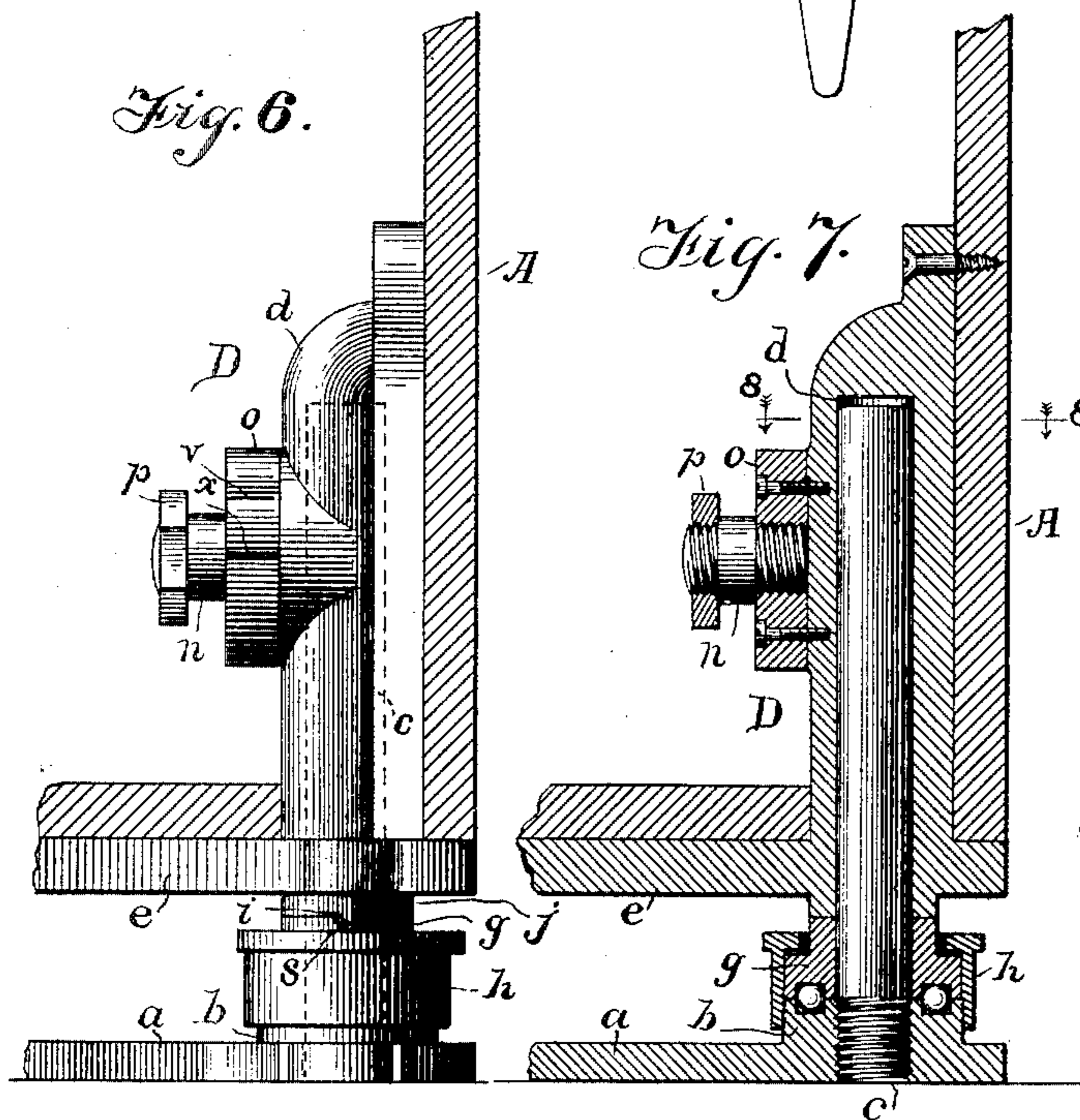
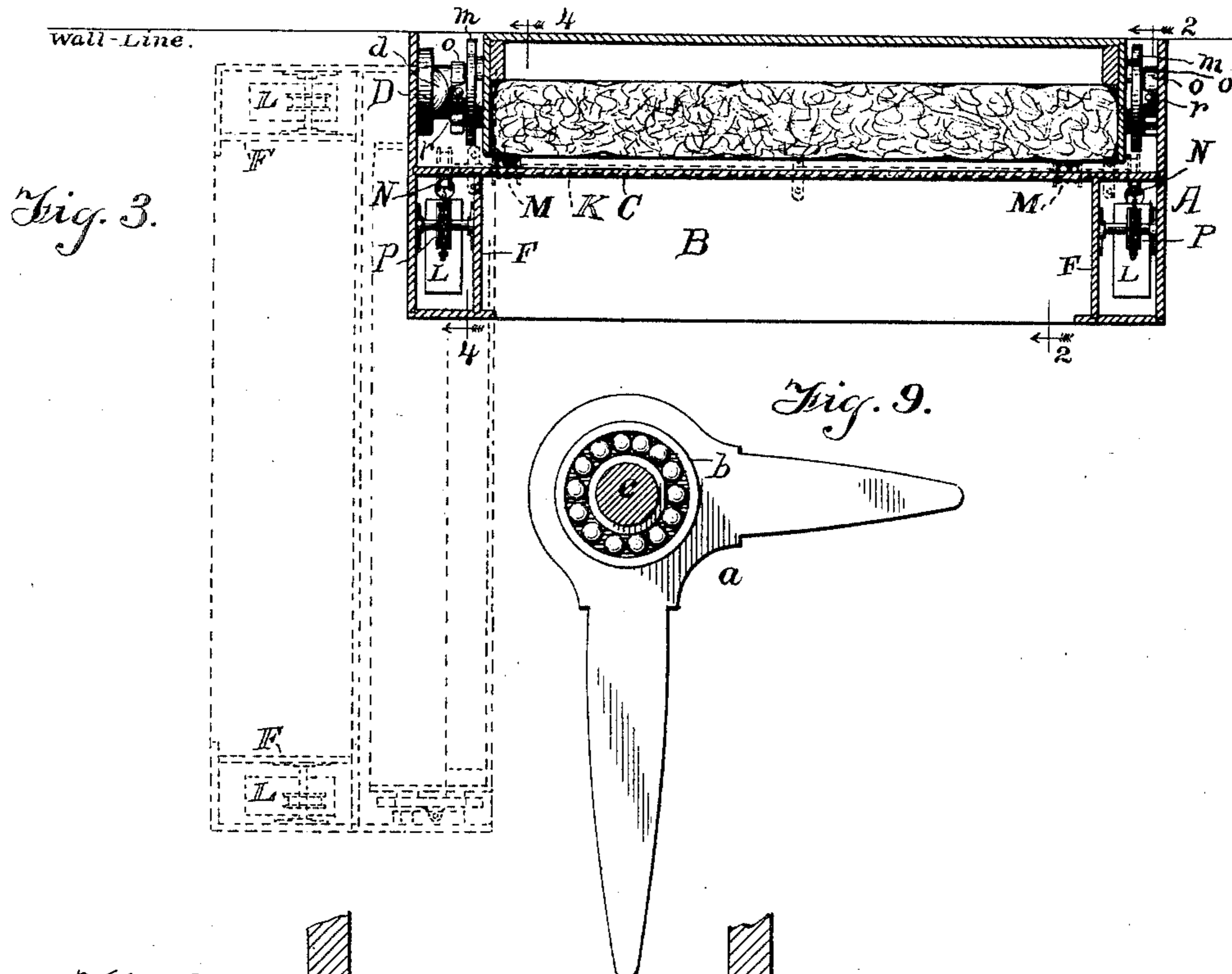
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**COMBINATION WARDROBE AND BED OR COUCH.**

(Application filed Jan. 30, 1901.)

(No Model.)

**2 Sheets—Sheet 2.**



Witnesses  
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# UNITED STATES PATENT OFFICE.

HAROLD F. ADAMS, OF ATLANTIC CITY, NEW JERSEY.

## COMBINATION WARDROBE AND BED OR COUCH.

SPECIFICATION forming part of Letters Patent No. 675,702, dated June 4, 1901.

Application filed January 30, 1901. Serial No. 45,321. (No model.)

*To all whom it may concern:*

Be it known that I, HAROLD F. ADAMS, a citizen of the United States of America, and a resident of Atlantic City, Atlantic county, State of New Jersey, have invented certain new and useful Improvements in a Combined Wardrobe and Bed or Couch, of which the following is a full and clear description, reference being had to the annexed drawings, in which—

Figure 1 is a side elevation with the bed or couch let down and the cabinet partly broken away; Fig. 2, a similar view showing the bed closed and the cabinet in vertical section; Fig. 3, a horizontal sectional view with the bed closed and the apparatus shown in dotted lines swung out from the wall in position for the bed to be let down; Fig. 4, a vertical sectional view of the lower part of the apparatus; Fig. 5, a bottom view; Fig. 6, a detail side elevation of the anchoring device, and Figs. 7 and 8, respectively, a vertical and a horizontal section of the same; Fig. 9, a detail plan view of the floor-plate.

The object of this invention is to provide a piece of furniture combining in one article, preferably, a wardrobe and a folding bed or couch and made very compact and simple in construction, so as to adapt it for use in bedrooms of restricted area, offices, &c., as more fully hereinafter set forth.

Referring to the drawings annexed by reference-letters, A designates the main case or cabinet, in the front side or which is formed the wardrobe proper, B, which is separated from the folding-bed or couch compartment in the rear by a vertical partition C. The main case is supported at three of its corners by ordinary roller or ball casters and at its remaining corner—that is, at one of its inner or rear corners—by a suitable pivotal anchor-bearing D, whereby it may be readily swung quarter around, with said anchor-bearing acting as the pivotal point to bring it to a position at a right angle to the wall, so that the bed or couch may be let down for use.

The anchor-bearing D consists, essentially, of a floor-plate *a*, adapted to rest movably or to be fastened to the floor and formed with a cylindrical enlargement *b*, which is externally threaded and provided with an annular ball-race in its upper side. Screwed into

a central opening in the enlargement *b* is a vertical post *c*, which fits and works in a long socket *d*, carried by a plate *e*, fastened to the bottom of the cabinet, said socket extending up into the cabinet and being formed integral with a vertical plate which bears against and is fastened to the inner face of the end wall of the cabinet. Resting on a series of balls confined in the ball-race in part *b* is a rotatable cylinder or sleeve *g*, which surrounds the post *c* and is provided with an annular ball-race in its under side coincident with the ball-race in part *b*. The part *g* is secured removably in place by cap *h*, threaded internally to engage the external threads on part *b*, and is detachably locked to the plate on the cabinet, so as to rotate therewith, by lugs *i*, carried by a boss *j*, depending from said plate, said lugs fitting in corresponding recesses *s* in part *g*. By thus detachably locking the socket and cabinet-plate to part *g* it will be noted that the cabinet may be lifted off the post, so as to permit the removal of the cap *h* and part *g* for access to the ball-races.

The floor-plate *a* may be any suitable shape, but I prefer the shape shown in Fig. 9, in which it is illustrated as being approximately L-shaped, so that the respective arms may lie on the floor approximately parallel, respectively, with the rear and side edges of the cabinet when the same is against the wall, whereby a broad and firm bearing will be provided that will assist in preventing tilting. The cabinet-plate *e* is preferably comparatively narrow and extends longitudinally of the bottom of the cabinet, as shown most clearly in Fig. 5. With this construction of anchoring device I do not deem it essential that the floor-plate be fastened to the floor, as the friction of the plate against the floor or carpet will suffice to hold the plate non-movably while the cabinet is being turned, while at the same time the position of the cabinet in the room may be readily changed at will, although of course a little more effort will be required than if the cabinet were mounted entirely on casters. It is evident, however, that I may fasten the floor-plate to the floor by screws or nails if it be found desirable in some instances to do so. This anchoring device is advantageous in that it is simple and strong

in construction and will enable the article of furniture to be swung around in either direction with a minimum effort. A special feature is the provision of a rigid post having a comparatively long socket to guide and steady the cabinet and prevent undue binding and tilting.

The bed or couch is pivotally supported by two trunnions *l*, carried by plates secured on the respective sides of the bed and journaled in the respective upper ends of a pair of vertically-swinging links *m*, which are respectively supported at their lower ends upon pivots *n*, rigidly secured, respectively, to cams *o*. One of the cams *o* is rigidly secured by screws to a boss formed on the socket *d*, and the other one is rigidly carried by a bracket *o'*, secured in the angle formed by the bottom and one side of the cabinet. The trunnions *l* are located a distance from the head of the bed about equal to the distance between the pivotal points of one of the links. Each pivot *n* consists of a threaded pin screwed into its cam *o*, and its outer end is threaded for the reception of the nut *p*, which serves to retain the link on the pin and close to said cam. Slidingly mounted on the outer side of each link is a latch-rod *r*, which is kept pressed downward or inward by a spring *s'*, so that its inner beveled end normally bears upon the face of the adjacent cam. Each of these rods carries a hook *t*, which is adapted to automatically engage a pin *u*, projecting outward from and carried by the adjacent one of the trunnion-plates.

When the bed is folded into the cabinet, the links and their rods stand in a vertical position within the cabinet, the bed and the links being locked together by the engagement of the hooks *t* with pins *u*, this engagement of the hooks with the pins being caused by the cams *o* keeping the latch-rod pressed upward against the action of their springs. When the bed is let down, the links remain locked to it until it reaches an angle of sixty degrees, whereupon the latch-rods drop into notches *v*, formed in the cam-faces, and thereby release the hooks from the pins *u*. Then the links are arrested in their downward movement by means of lugs *w*, carried by them and adapted to strike against lugs *x*, formed on the cams, while the bed completes the remainder of its downward movement on its trunnions until the folding legs hung at its sides strike the floor. In closing or folding up the bed it will first swing on its trunnions until pins *u* strike the upper edges of links *m*, whereupon the links will swing up with the bed and be locked thereto by the passage of the nose of the latch-rod up out of notches *v*, which will force hooks *t* into locking engagement with pins *u*.

To counterbalance the bed or couch, so that it may be raised and lowered with the utmost ease, I connect to its lower end, by means of chains or cords *J J'* and a counter-shaft *K*, a pair of weights *L*, which are respectively

housed in vertical compartments formed between partitions *F* and the respective sides of the cabinet. The chains *J* are connected to the respective corners of the bed and pass down through openings in the bottom of the cabinet and wind around drums or pulleys *M*, to which their ends are respectively secured, said drums or pulleys being secured to shaft *K*, which latter is journaled in hangers depending from the bottom of the cabinet. The chains *J'* have their respective lower ends secured to larger pulleys *N* on shaft *K* and wound around them in a direction opposite to the windings on pulleys *M*. These chains extend up through holes in the bottom of the cabinet into the respective weight-chambers, where they respectively pass over pulleys *P* and are connected to the respective weights. The number of chains and pulleys and weights may be increased if the weight of the bed or couch be such as to require it, as is evident.

It is evident that by fulcruming the bed at a point a suitable distance from its lower end upon a pair of vertically-swinging links, pivoted at their inner ends and connecting the lower end of the bed at a point below its pivotal point to a counterbalancing device, the utmost ease of movement, both in opening and closing, is secured. It will be further observed that with this arrangement the counterbalances may be of minimum weight, and, further, that the support of the bed will be firm and reliable. The bed or couch will be held in its closed position not only by the counterbalance devices, but also by the locating of the trunnions *l* a little nearer to the back or bottom edge of the bed or couch.

Having thus fully described my invention, what I claim is—

1. In combination, a combination-cabinet having one article of furniture in one side and another article in its other side, casters supporting its two outer and one of the rear corners of the cabinet, and a movable pivotal anchoring device at one of its rear corners, pivotally anchoring that corner so that the cabinet may be swung around thereon, said anchoring device being provided with a part adapted for frictional engagement with the floor so that the cabinet may be moved about bodily from place to place on the floor.

2. In combination, a combination-cabinet having one article of furniture in one side and another article in its other side, and means for pivotally anchoring the cabinet at one of its rear corners, whereby it may be swung quarter around on said corner as a pivotal point, for the purpose set forth, said means being provided with a plate adapted for frictional engagement with the floor, whereby the cabinet may be moved bodily from place to place upon the floor.

3. In combination, a combination-cabinet having one article of furniture in one side and another article in its opposite side, and means for pivotally anchoring the cabinet at one cor-

ner, consisting essentially of a plate adapted for frictional engagement with the floor and provided with a bearing and a vertical post, and a socket fitting said post and carried by the cabinet and provided with a corresponding bearing.

4. An anchoring device for combination-cabinets consisting of a plate adapted for engagement with a floor and provided with a vertical post and a ball-race around the base of the post, a socket attached to the cabinet and receiving the post, a rotatable part detachably locked to the socket and surrounding the post and provided with a ball-race, and antifriction-balls in said races.

5. An anchoring device for a combination-cabinet, consisting of a plate adapted to rest upon the floor and provided with a vertical post and a threaded enlargement surrounding said post and provided with a ball-race, a socket adapted to extend upward into the cabinet and provided with plates adapted for engagement with the bottom and one of the vertical walls of the cabinet, a rotatable part connected to the socket so as to rotate therewith and provided with a ball-race, antifriction-balls, and a removable cap threaded upon the enlargement carried by the floor-plate and engaging the part connected to the socket.

6. In combination, a support, a pair of links pivoted at their lower ends thereto, a bed pivotally hung between the upper ends of the links, and means for automatically latching the links to the bed when the same is closed.

7. An anchoring device for articles of furniture, consisting of a plate adapted to rest upon the floor and carrying a vertical cylindrical post and an annular bearing around the base of said post, and a socket adapted to receive the upper part of said post and to extend up into the article of furniture and provided with a plate adapted for engagement with one of the vertical walls thereof and another plate adapted for engagement with the bottom of the article of furniture, and a part carried by the socket and surrounding the post and provided with an annular bearing

coincident with the bearing on the floor-plate.

8. In combination, a support, a pair of links pivoted thereto at their lower ends, a bed pivoted between the upper ends of said links, a latch-pin at one side of the bed, a latch on the adjacent link and means for automatically engaging said latch with said pin when the bed is swung up to its vertical or folded position.

9. In combination, a support, a pair of pivotal links, a bed pivoted to the upper ends of the links, a pin projecting from the side of the bed, a spring-actuated latch-rod on the one of the links adjacent to said pin, and a cam attached to the support and adapted to force said latch-rod into engagement with said pin when the bed is closed.

10. In combination, a support, a pair of pivotal links, a bed pivoted to the upper ends of the links, a pin projecting from each side of the bed at a point below the pivotal point thereof, a latch-rod on each link and a spring for pressing it normally downward, each latch-rod carrying a hook, and a stationary recessed cam for actuating each latch-rod, for the purposes set forth.

11. In combination, a support, a pair of pivots supported thereon, a stationary cam adjacent to each pivot provided with a recess and a stop *x*, a link pivoted on each pivot and carrying a lug *w*, adapted to come into contact with one of said stops *x* when the bed is lowered, a bed pivoted between the upper ends of the links and carrying a pair of latch-pins whose lower ends contact with said cams, and a spring-actuated latch on each link carrying a hook adapted to engage one of said latch-pins when the bed is raised, substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 19th day of January, 1901.

HAROLD F. ADAMS.

Witnesses:

IDA M. STEPHANY,  
ROBT. E. STEPHANY.