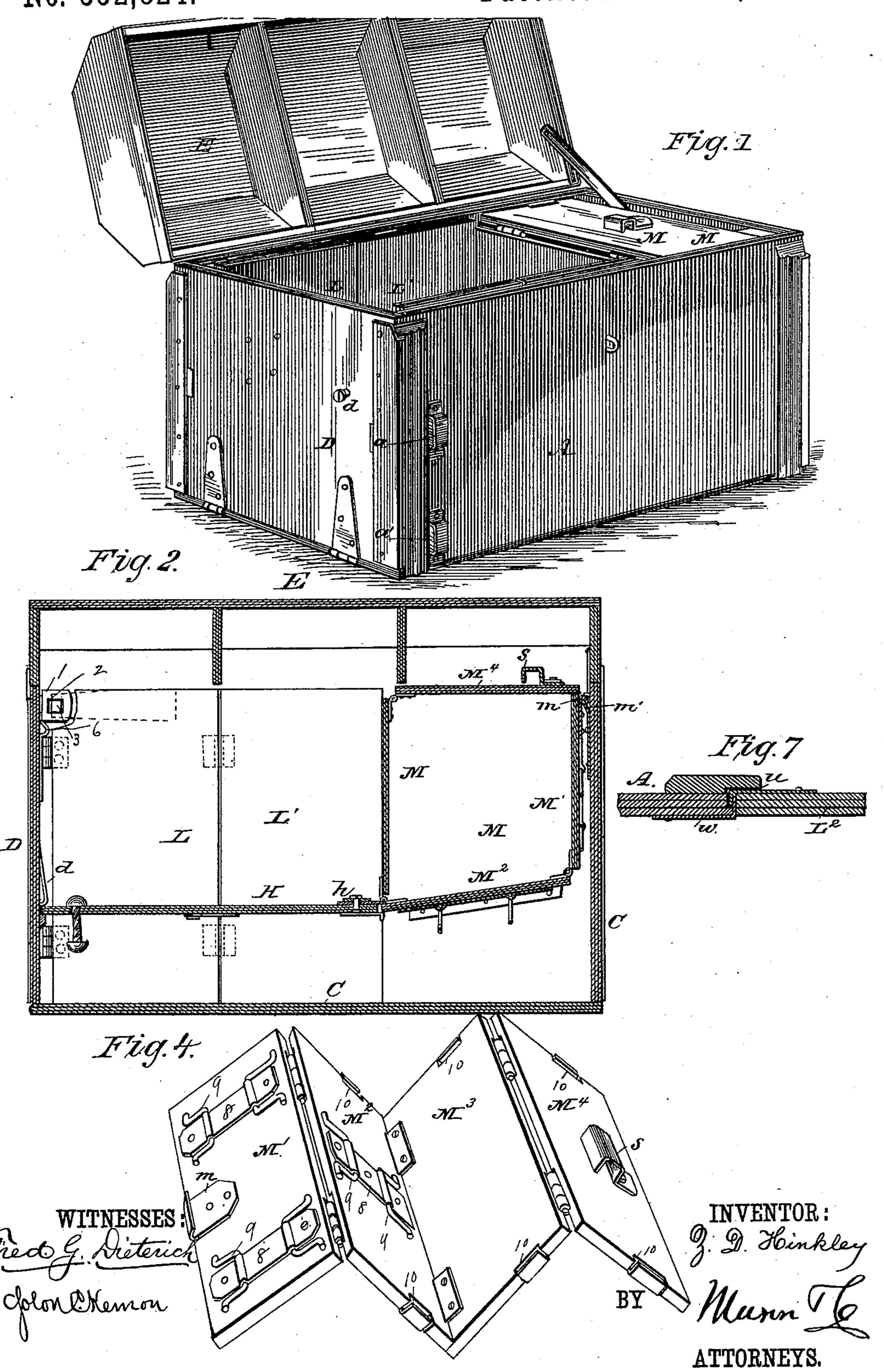
## Z. D. HINKLEY. WARDROBE TRUNK.

No. 352,824.

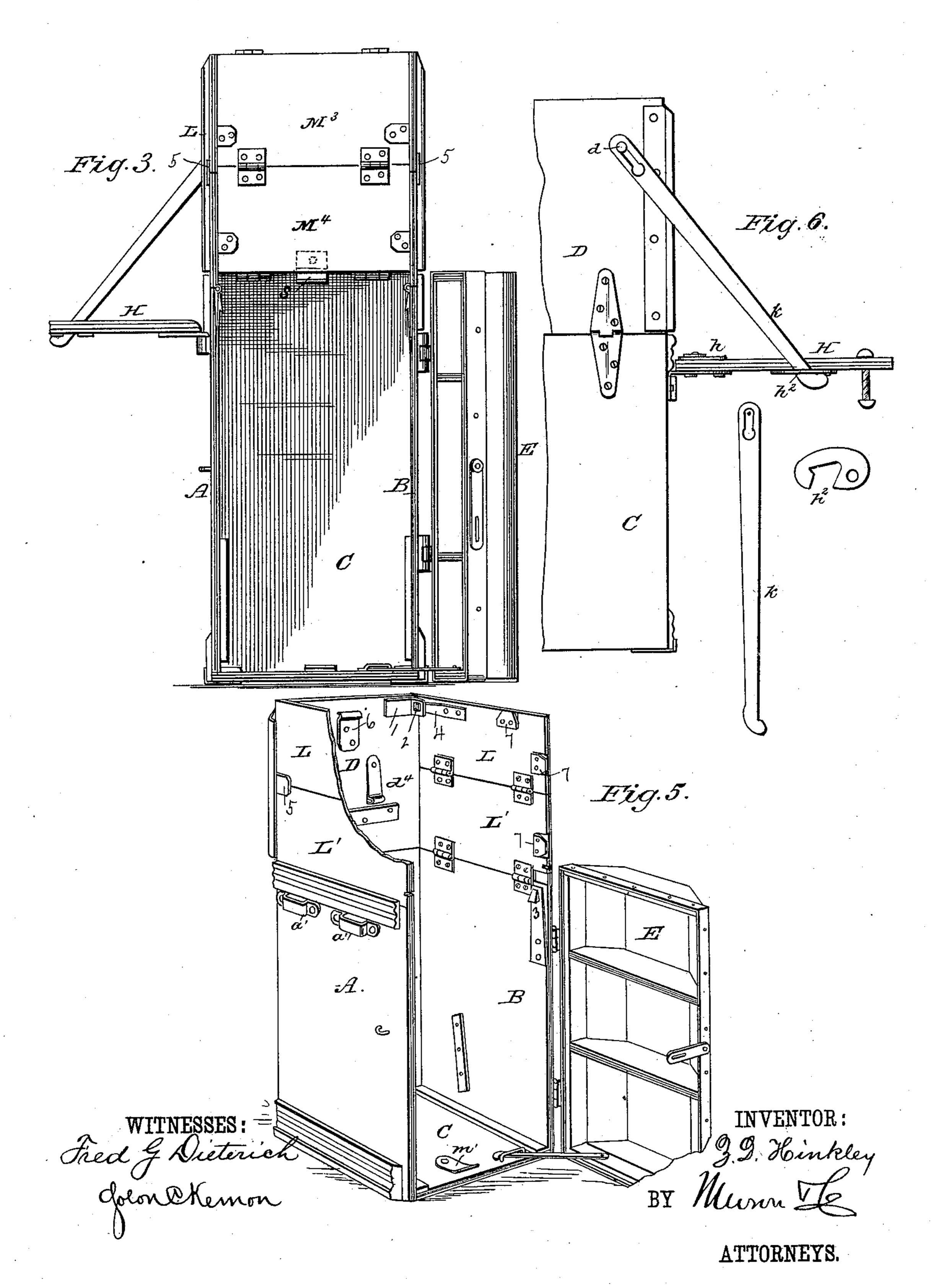
Patented Nov. 16, 1886.



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## United States Patent Office.

ZALMON D. HINKLEY, OF GRAND RAPIDS, MICHIGAN.

## WARDROBE-TRUNK.

SPECIFICATION forming part of Letters Patent No. 352,824, dated November 16, 1886.

Application filed March 25, 1886. Serial No. 196,576. (No model.)

To all whom it may concern:

Be it known that I, Zalmon D. Hinkley, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented a new and useful Improvement in Convertible Trunks and Wardrobes, of which the following is a full, clear,

and exact specification.

trunk capable at pleasure of being readily converted into a wardrobe, and which may with ease and in a few minutes be restored to its original form; and to this end it consists in providing a traveling - trunk with suitable folding and separate parts, which, when in position in the trunk in its customary form, shall constitute such partitions and tills as are convenient, and which, by the employment of suitable hinges, locks, and fastenings, may be held readily in place, both in the trunk proper and when disposed in such relations to the fixed parts as to constitute the wardrobe.

In the accompanying drawings, in which corresponding parts are represented by similar letters, Figure 1 is a perspective of the trunk, showing it open. Fig. 2 is a vertical longitudinal section of the trunk, showing the various parts in their normal position. Fig. 3 represents a front elevation of the trunk when used as a wardrobe; Fig. 4, a view of the hatbox unfolded, showing its outside; Fig. 5, perspective view of wardrobe with top removed; Fig. 6, back view of wardrobe, showing shelf attached in hooked position and details of stay and hook; and Fig. 7 shows a different form of connection for the side pieces of the ward-

robe. The trunk is in the usual form, having its front A, back B, bottom, and one end, C, se-40 curely fastened together, and having a top, E, secured by hinges to the back in the customary manner. All these parts, as well as all other parts of the trunk, are made of compound lumber of three sheets of tough timber, glued 45 up with the grain running in opposite directions. These compound boards can be made of any size, and are made stronger and more durable than ordinary boards. Upon both the front and back, at their ends, are secured cleats 50 extending their whole height and firmly secured by riveting. On the two ends, at their edges, are also secured by riveting straps of

iron or steel, which are bent at their edges in the form of angle-iron, so as to embrace the cleats on the front and back, as clearly shown 55 in Fig. 1. The lid is semi-octagonal in section, and is divided on its interior by two or more partitions, which stiffen it and make spaces for boxes of various kinds, or which may be left open at pleasure. The entire lid 60 is bound by an iron strap at the part which joins the top of the trunk proper, this strap projecting, as usual in trunks, so as to overlap and protect the upper edges. The hinges

are of the ordinary kind.

On the inside of the right-hand end piece of the lid is secured, so as to turn freely on its pivot, a strip or catch metal plate, which, when the lid is raised, projects forward and downward, passing through a flat staple in the in- 70 side and near the rear of the right-hand or fixed end of the trunk. This strip of iron is fashioned into a kind of hook, as shown in the drawings, on its upper edge, so that as the lid is raised it catches in the forward side of the 75 staple and holds the lid from falling backward. When the lid is closed, it passes downward into the trunk, guided by the staple and swinging on its pivot. A space between the hatbox and the end of the trunk allows it to play 80 without danger to the contents. The other end, D, of the trunk is not fixed, but is secured by hinges to the bottom and closes against the ends of the front and back, where it is held in place by spring-catches, to be hereinafter de- 85 scribed. The hinges are strap hinges reversed, for a purpose hereinafter explained. Adjacent to the fixed end of the trunk is the hatbox M, resting on cleats upon the front and back, and secured to the end by interlocking 90 hooks m m' on either part, as shown in Fig. 2. This hat-box consists of four sides, M' M<sup>2</sup> M<sup>3</sup> M4, without ends, all hinged together, and one of them, M4, forming the lid, as clearly shown in the section, Fig. 2. Further uses of these 95 parts will be hereinafter set forth. Across the inside of the trunk, at the level with the bottom of the hat-box, is a board, H, which forms a partition in the till, and serves as a brace or support to stiffen the trunk-body. It is held 100 in place by a button, h, which engages with a suitable slit in the hat-box side, and at the other end rests upon a cleat on the hinged end D of the trunk-body, being held downward by

352,824

a spring-catch,  $d^4$ . This partition abuts directly against the edge of the hat-box bottom, and the two together form a strut between the

two ends of the trunk-body.

5 On the inside of the trunk, and secured by hinges to the ends of its front and back adjacent to the hinged end D, are two folding leaves, L L', which, when the article is used for a trunk, lie close against its front and back, c being held rigidly by the partition-board H, the edges of which press firmly against them. These have no function in connection with the trunk proper, except to hold the hat box in place and strengthen the thin sides of the 5 trunk, but are an important element in its conversion into a wardrobe, as is now to be described. These boards LL, when the hinged trunk end D is opened out, can also be opened outward, (being jointed at their middle to alto low this,) and, the trunk being now set upon its fixed end, are of the same height as the hinged end, so that the three parts form an elongation of the trunk-body.

On the inside of the hinged end, at its top, 3 are two angle-irons, 1, having square holes 2 in their projecting arms, which, while the trunk end was in its normal position, were caught by spring-catches 3, before referred to, on the front and back of the trunk. These catches o consist of simple strips of spring metal riveted to the wood, which is slightly recessed to allow play for their ends. They have hooks on their faces to engage the holes above described, and these hooks have inclined faces, so that 5 when the parts are forced together they shall yield and snap into their holding position. Precisely similar snaps, as 4, are secured to the interior faces of the swinging leaves LL, and they engage the holes in the angle-irons of the o trunk end in the same way. On the trunk end, midway of its height and opposite the joints in the swinging leaves, are two projecting lugs, 5, of iron, which embrace these leaves, and in connection with the snap-hooks combine to 5 hold rigidly together the various parts now be-

ing described.

On the interior of the hinged end D, which may now be called the "upper back" of the wardrobe, is a kind of hook, 6, the shape of o which is clearly shown in sectional Fig. 2. Also, on the inner sides of each of the folding leaves, which constitute what may be called the "upper sides" of the wardrobe, are three iron locking-pieces, 7, arranged at the top and 5 at the front above and below the joint. These pieces are of the form shown most clearly in Fig. 5, being broader at their inner part and narrower at their outer. They are secured by rivets to the wood, and at their outer ends are o sprung away, so as to stand a little off from the wood and form tongues.

Referring now to Fig. 4, m is a flat piece of strap-iron or similar material rigidly secured to that part of the hat-box which, when in 5 place in the trunk, was adjacent to the fixed end C. This piece of metal is bent forward with a downward inclination, forming a hook,

and was used to engage a somewhat similar hook, m', upon the fixed end of the trunk, whereby the parts were held together. On the 70 same part of the hat-box, and also on the part M<sup>2</sup> adjacent thereto, are iron straps 8, securely riveted to the wood, and having offsets which embrace metal U-shaped pieces 9, having outwardly - projecting ends, as shown. These 75 pieces swing freely in the offsets, and may lie flat against the wood. Their purpose in the wardrobe is to serve as hooks for clothing, the parts to which they are attached forming the top of the wardrobe, as will presently appear. 80 These pieces fall by gravity, and the outward projecting ends form hooks. They may be used in greater or less number, as desired. Instead of offsets on the iron plates by which they are secured, straight plates may be used and the 85 wood recessed to receive the U-shaped pieces.

In the parts of the hat-box M<sup>2</sup> M<sup>3</sup> M<sup>4</sup> recesses 10 will be observed in their edges. These recesses are covered by the bent ends of flat pieces of iron secured to the opposite 90 side of the wood, (the inside when constituting the hat-box,) thus forming sockets which correspond in number with the lugs or tongues 7, heretofore described, on the upper sides of the wardrobe. On the piece M<sup>4</sup>, and in a posi- 95 tion to be used as a handle when the piece is in position forming a lid to the hat-box, is a piece of metal, S, bent to the form shown in section in Fig. 2, and secured to the wood by a single rivet, on which it may be turned. Its rec position is such that when turned forward its outward end projects beyond the edge of the wood.

To put the parts just described in position to form the top and upper front of the ward- 105 robe, the hook m on the piece M' is made to engage the corresponding hook,  $m^2$ , on the inside of the upper back. All the pieces M' M<sup>2</sup>, &c., are of a width to be inserted and fit closely between the upper sides. When these 110 hooks are engaged, the pieces M' M2 are pressed into place between the upper sides, when the tongue or lugs before described enter the recesses in the piece M<sup>2</sup>, and the parts M<sup>3</sup> M<sup>4</sup> being now bent downward, the tongues at the 115 front of the upper sides enter the recesses in these parts, and by this means the sides are held from spreading and all the parts are held firmly in place. If the lid (now serving as a door) be now closed, the strap on its edge 120 will enter the groove or square recess in the piece S on the part M<sup>4</sup>, and thereby secure it against opening, unless the door is first opened.

On the left side of the wardrobe and on the 125 part A are two metal straps, a', so bent as to form sockets, and on the upper back, D, on its outside, is a projecting headed lug, d. These are for the attachment of a shelf or table, as will now be described. For this I use the 130 partition H, which has attachments for this purpose, as follows: At the same end as the button h, but on the opposite side, (the bottom when in the trunk,) I place two pieces of

352,824

3

strap-iron, the ends of which are bent downward at a right angle, forming hooks adapted to enter the above-named sockets. On the same side of the board H, and at its edge near 5 its other end, is a hook,  $h^2$ , of the form shown in the drawings, being generally of an oval form, but having a dovetail recess in one side, the bottom of which, when in holding position, is parallel to the edge of the board. I provide a 10 piece of iron, K, of suitable length, in one end of which I place a key-hole-shaped slot adapted to pass over and be held upon the lug d on the back D. The other end of this piece K is formed into a kind of hook, as shown. The 15 hooked ends of the pieces h' being inserted in the sockets a', and the rod k being placed in the lug d, its hooked end uppermost, this hooked end is clasped in the dovetail notch of the hook  $h^2$ , and the parts are thus locked togeth-20 er, and the board H is securely held in horizontal position. It will be observed that by this structure I form a trunk securely braced inside in all directions, and in which all parts adapted for use in the wardrobe are either 25 useful or are so disposed as to occupy a minimum of space. When connected into a wardrobe, the entire interior is clear of all obstructions and the structure is completely closed against interference by a single lock.

I sometimes prefer to use a different form of upper sides, as follows: In place of hinging these leaves to the front and back of the trunk, I form the front and back at their ends as shown in Fig. 7, in which A represents the end of the front, rabbeted as shown at u. On

the inside of the board A, I secure a strap or plate of iron, w, bent at an angle, as shown, and the edge of the bent part passing partly over the rabbet. The cleat is the same as in the other construction. L'represents the part used in place of the folding leaf. It is a plain board, since the other attachments do not differ from those in my other form, and has on it a plate similar to that on the board A, but op-

positely arranged so that the two angle edges may hook together. As the cleat prevents them being thus hooked, they must be put together by sliding one into the other, when they are rigidly held together, as shown. These pieces L² should be of the same size as the hinged pieces L L', and may occupy the same portion of the trunk.

The partition-board H should have some means for removing it. The drawings show it perforated at the end adjacent to the hinged end of the trunk and a knotted cord passed through it. It is removed by compressing the spring-latch  $d^4$  and lifting it by the cord.

The strap-hinges by which the end D is second to the bottom are not put on in the usual way, in which the joint projects beyond the surface of the parts to which the parts of the hinge are attached, but are reversed, and the wood recessed to receive the joint. By this means the joint is protected and the appearance of the trunk is much improved, and in

addition the abutting edges of the hinged parts are brought closely together, so that the space which would be left were the hinges 70 placed in the ordinary way is done away with and the joint rendered dust proof.

Having thus described my invention, what I

claim is—

1. In a combined trunk and wardrobe, the 75 combination of the trunk-body having one of its ends hinged at its lower edge and adapted to be turned outward to serve as the back of the upper portion of the wardrobe, and the leaves whereby to form the sides of the upper 80 portion of the wardrobe, and adjustable into and out of the trunk, and devices, substantially as described, for adjustably connecting said leaves to the trunk, substantially as set forth.

2. The combination, in a combined trunk 85 and wardrobe, and with the trunk-body, of the hat-box, formed of hinged sections and adapted to be folded and incased within the trunk-body and be adjusted by means substantially as described, for use in connection with the 90 extension constituting a part of the wardrobe,

substantially as set forth.

3. In a combined trunk and wardrobe, the combination, with the trunk provided with hook m', of the hat-box, formed in sections and 95 adapted to be adjusted for use in connection with the extension constituting a part of the wardrobe, and a hook, m, secured to said box and arranged to engage hook m' when the box is incased within the trunk, substantially as 100 set forth.

4. The combination, with the trunk-body, the leaves adapted to form the sides of the upper part of the wardrobe, and the sectional hat-box, of the partition-piece H, whereby to hold the side pieces in place in the trunk and to form a brace for the whole structure, and a button pivoted to the partition and arranged to engage the box, substantially as set forth.

5. The combination of the main body or 110 framing, having sockets a', the piece H, having hooks arranged to enter the sockets a', a hook,  $h^2$ , connected with the piece H, and a rod connected at one end with the body or framing, and having its other end detachably 115 connected with hook  $h^2$ , substantially as set forth.

6. The combination of the trunk-body having sections or portions adapted to form the top and portions of the sides and front of the 120 wardrobe, and the trunk-lid, and latch devices, substantially as described, whereby said lid will secure the wardrobe-extension, substantially as set forth.

7. A trunk having a box at one end, and 125 provided between said box and its opposite end with side pieces or leaves, and having suitable fastenings for connecting the latter to the trunk-sides, whereby the trunk may be converted into a wardrobe, and a horizontal 130 partition, H, substantially as set forth.

8. The combination of the parts M' M<sup>2</sup> M<sup>3</sup> M<sup>4</sup>, having the hooks, recesses, and the swing-

ing latch to form the top and upper front of a wardrobe and to be locked by the closing of the door.

9. In a combined trunk and wardrobe, the combination, with the side pieces of the trunk and the hinged end thereof, of the leaves adapted to serve as the upper side pieces of the wardrobe, and adjustably connected with the trunk, and latch devices, whereby to secure

said end piece to the sides of the trunk or to 10 the leaves, which form the upper side pieces of the wardrobe, in the different positions of said end piece and leaves, substantially as set forth.

ZALMON D. HINKLEY. [L. s.] Witnesses:

H. F. McCormick, Anna E. Cox.