

(No Model.)

2 Sheets—Sheet 1.

J. L. WARREN.
TRUNK.

No. 510,743.

Patented Dec. 12, 1893.

Fig. 1.

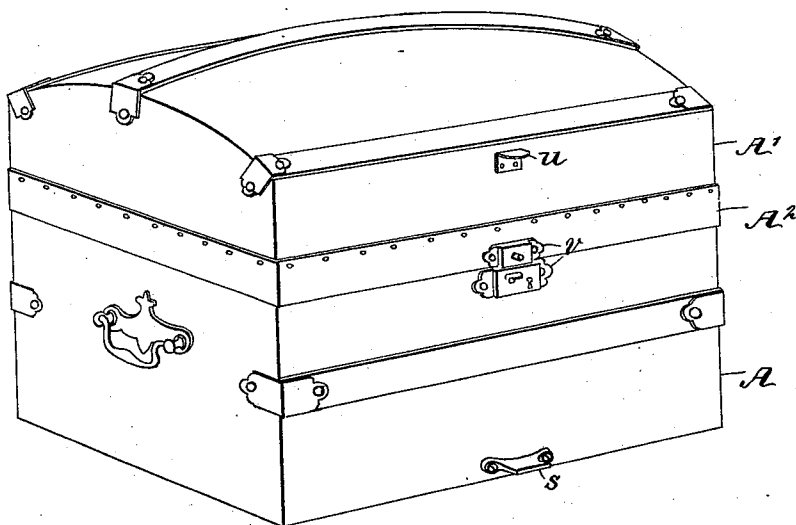


Fig. 2.

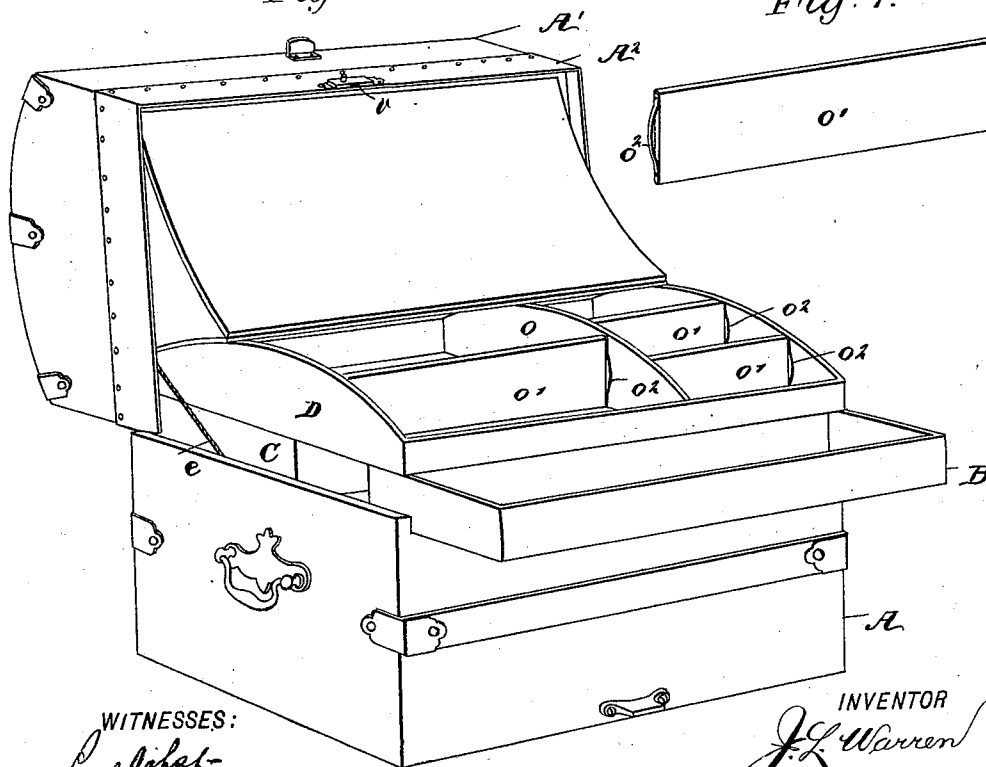
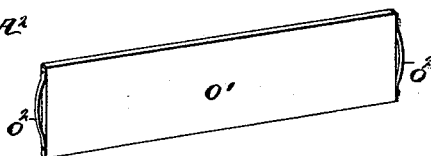


Fig. 3.



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ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

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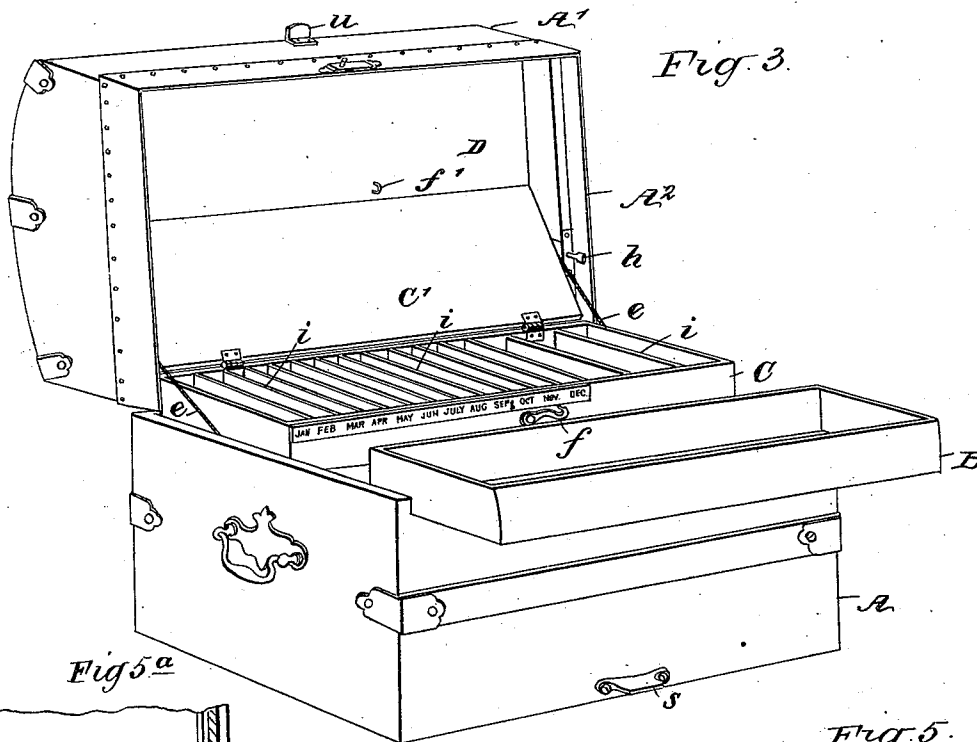


Fig. 3.

Fig. 5a

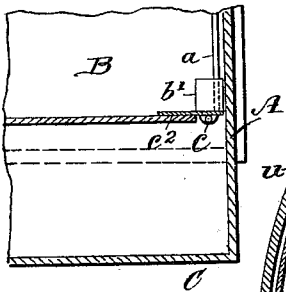
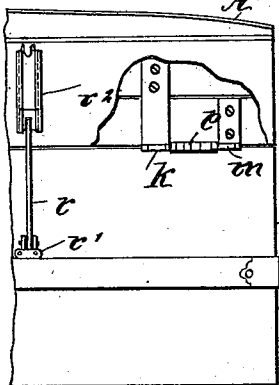


Fig. 6.



WITNESSES

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C. Sedgwick

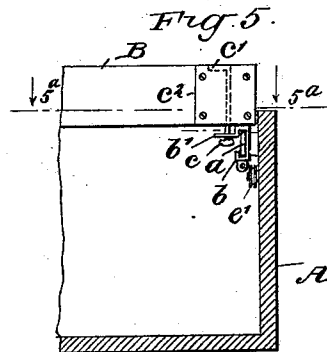
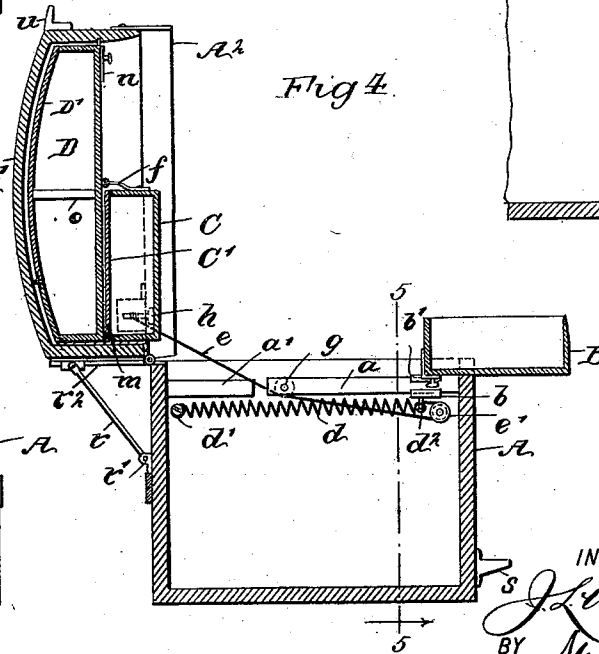


Fig. 4.



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UNITED STATES PATENT OFFICE.

JAMES L. WARREN, OF GOSHEN, TEXAS.

TRUNK.

SPECIFICATION forming part of Letters Patent No. 510,743, dated December 12, 1893.

Application filed May 19, 1893. Serial No. 474,792. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. WARREN, of Goshen, in the county of Henderson and State of Texas, have invented a new and useful Improvement in Trunks, of which the following is a full, clear, and exact description.

This invention relates to improvements in trunks and like portable receptacles, for clothing and small articles needed by travelers and other persons, and has for its object to provide a trunk with novel adjunctive features, which will render it more convenient, and better adapted for the stowage and removal of various articles of wear and use.

To this end, my invention consists in the construction and combination of parts, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the trunk closed, showing an external feature of improvement on it. Fig. 2 is a perspective view of a trunk having the improvements, the lid being raised and interior novel features exposed. Fig. 3 is a perspective view of a trunk containing the improvements, the trunk lid being raised and novel parts within adjusted for convenient access thereto. Fig. 4 is a transverse sectional view of the trunk and contained novel parts, some features of improvement being located in the raised trunk lid, and others in the trunk body. Fig. 5 is a longitudinal sectional view of parts on the line 5-5 in Fig. 4. Fig. 5^a is a partly sectional plan view of details on the line 5^a-5^a in Fig. 5. Fig. 6 is a partial rear view of the trunk in closed adjustment, and a feature of the improvement on it; and Fig. 7 is a detached enlarged perspective view, of a detail that is of improved construction.

The rectangular trunk body A may have a flat lid, but the latter is preferably constructed as shown, having its top wall arched a proper degree, to afford strength, and increase vertical space within this deep cover or lid A'.

At each end, and within the body A, a tray supporting guide strip a, is secured, said similar strips one of which is represented, being located near the top edge of the trunk body, and properly spaced therefrom, to afford room

between the strips and end walls of the trunk, or stiffening ledges a' therein, for the free reciprocation of other parts that will presently be described.

Two rectangular trays B and C, are provided, which together fill the space or area bounded by the four walls of the trunk body A, when the trays are imposed upon the strips a. The tray B, that is located nearest the front wall of the trunk body when in place therein, is adapted to reciprocate above and be supported on the guide strips a, by its detachably secured engagement with the carrier clip plates b, which plates loosely embrace the guide strips, and project a flange portion b', of each toward the longitudinal center of the trunk body. The flanges b', are slotted to receive the T-heads of the locking bolts c, one of which is provided for each end of the tray B, and is loosely secured in place upon its rear wall, by the similar keeper plates c², and a short arm c' formed on each bolt at its upper end, and which projects at a right angle thereto in the same vertical plane with the heads of the bolts, affords convenient means to partly rotate the bolts c, and lock or release the tray B, as may be desired. The insertion of the T-heads of the bolts c in the slots of the flanges b' and the folding of the arms c' serves to secure the tray in position on the clip plates, while the rotatable movement of said arms a sufficient degree to project them at a right angle to the keeper plates causes the T-heads of the bolts to align with the slots they lie below, so that the tray may be lifted from the guide strips a, and removed from the trunk body.

Duplicate spiral springs d, are attached by one end of each to an end wall of the trunk, as shown at d', in Fig. 4, the front end of each spring being connected to the depending stud d² on the adjacent carrier clip plate b, and on the same stud of each plate b, one end of a strong cord e, is secured, each cord passing around an appropriate grooved pulley e' that is pivoted on the end wall of the trunk body below a guide strip a and near the front wall of said trunk body. The similar cords e (one shown) that are respectively located at opposite ends of the trunk, are each extended below the pulley e' toward the rear wall of the body A, and below another loose grooved pul-

ley *g*, these last mentioned similar pulleys being pivoted between and upon the guide strips *a*, as indicated in Fig. 4. From the pulleys *g*, the cords *e*, are projected upwardly and rearwardly of a sufficient length to permit their rear end portions each to be connected with a rotatable key plug *h*, one being shown by dotted lines in Fig. 4, said similar key plugs each having a frictional engagement with a hole in an end wall of the lid *A'*, so that the rotation of the key plugs will adjust the cords *e*, for length, as may be necessary to secure an effective action of the device they are portions of.

It will be seen that when the parts which are connected to the tray *B*, as hereinbefore explained, are properly adjusted, and the tray seated upon and secured to the carrier clip plates *b*, the act of lifting the lid *A'*, into a vertical position will cause the tray *B*, to slide outwardly, and remain forwardly projected above the front wall of the trunk body, thereby exposing the space in the latter that is covered by the tray *B* when the lid *A'* is closed. The downward movement of said lid releases draft strain on the cords *e*, and permits the springs *d*, which were extended by the lifting movement of the lid, to resume their normal retracted condition, and draw the tray *B* into place between the vertical walls of the trunk body *A*.

The tray *C*, is hinged at its lower rear edge, upon the inner side and lower edge of the rear wall of the trunk lid *A'*, said hinges *k* being properly shaped to allow the tray they are secured upon, to be seated on the horizontal edges and guide strips *a'a*, or be upwardly folded so as to enter the opened lid *A'*, and occupy part of the space in said lid, as shown in Fig. 4, a hook *f*, on the tray front wall being made to hook fast to the staple *f'*, on the lower side of another tray *D*, when this is required.

The interior of the tray *C*, is sub-divided by a number of transverse partitions *i*, into a series of compartments that may be labeled to indicate their contents, or if correspondence is kept in these receptacles, the abbreviations of month names may be placed opposite the several compartments or a part of them, so that the date of letters or papers within each compartment will be approximately indicated by the label opposite the same.

A hinged lid *C'*, is provided for the tray *C*, and a lock also if this is desired, or any other securing device for the lid of the tray may be utilized to hold it closed.

Above the trays *B* and *C*, the tray *D*, is located within the trunk lid and jointed thereto by duplicate right angle bent strap hinges *m*, one being shown in Fig. 4, which hinges are secured to the rear side wall of the tray, and also to the rear wall of the trunk body at its upper edge, the form of the hinges adapting them to retain the tray *D*, in the upper part of the lid *A'*, and permit its out-

ward folding movement so as to rest upon the tops of the trays *B*, and *C*, as represented in Fig. 2.

The upper edges of the tray *D*, are shaped to fit them for the reception of a curved lid *D'*, that conforms with the inner surface of the arched top of the trunk lid *A'*, when the tray *D* is folded within the latter as shown in Fig. 4, a spring catch *n*, affording means to secure the tray in such a position.

The tray *D*, is divided into two main compartments, by the transverse partition *o*, and each of these divisions of the tray is subdivided by the movable partitions *o'*, these latter mentioned pieces being furnished with a plate spring *o''* at each end, and as the length of the partitions is less than the distance between the parallel walls they extend between, of a degree that will adapt the bow springs *o''* to bear on said tray walls, it will be seen that the partitions *o'*, may be moved to increase or diminish the distance between them and the walls of the tray, so as to arrange a number of smaller compartments in the tray, convenient in dimensions for the introduction of articles that may require more or less space therein.

The lid *A'* of the trunk is furnished with a pair of strong hinges *p*, one being shown in Fig. 6, and as a support for said lid there is a sliding brace rod *r*, provided, which is hinged at its lower end to a bracket plate *r'*, that is secured on the rear wall of the trunk body at a proper point between the pair of hinges *p*.

The upper end of the brace rod *r*, is flattened out and has said flattened end loosely engaged with a guide plate *r''*, that has parallel grooves formed in it along its side edges, wherein the flattened upper portion of the rod *r*, is introduced and held in a manner which will permit the brace rod end to slide in the guide plate when the trunk lid is raised, and when the latter is in a vertical position serve to retain it thus, and sustain a part of the weight of the lid and parts within it.

On the front wall of the trunk body *A*, near its longitudinal center and lower edge, a projecting toe plate *s*, is secured, which together with a grip plate *u*, that is affixed on the front wall of the lid *A'*, above the toe plate, affords convenient means for the lifting of the lid *A'*, the operator placing one foot on the plate *s*, and grasping the piece *u*, with one hand, which will enable a lifting movement to be applied to the heavy lid *A'*, and avoid the rearward tilting of the trunk body in case there should be but little weight in the latter.

The trunk is exteriorly furnished with the usual skirt plate *A''*, together with the stiffening corner bands and handles, that are required to render it strong and convenient to handle, a lock *v*, of approved construction being affixed to the lid and body of the trunk, for the proper retention of the lid in closed adjustment when this is desired.

It is claimed that by the provision of the novel features hereinbefore described, a very

convenient trunk or portable receptacle for clothing and many other articles of personal use is afforded at a moderate expense for construction.

5 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a trunk, a tray supported to slide on two horizontal guides secured oppositely on
10 end walls of the trunk body near their upper edges, two spiral springs connected by one end of each to the trunk end walls near the rear wall, cords secured to front ends of the springs and passing over loose pulleys rear-
15 wardly, and means to adjustably connect the rear ends of the cords to the end walls of the trunk lid, substantially as described.

2. In a trunk, a tray which is removably secured on carrier plates, guides affixed to the
20 trunk end walls whereon the carrier plates slide, two spiral springs connecting the car-

rier plates with the rear of the trunk body and retracting the carrier plates, and cords engaged with loose pulleys and connected at their ends to the trunk lid and to the carrier
25 plates, and arranged to stretch the springs and project the tray over the front of the trunk body when the trunk lid is elevated, substantially as described.

3. In a trunk the combination with a rect-
angular trunk body, and a deep lid hinged to
30 one side of said body, of a tray jointed to the same side of the trunk body as the lid by bent hinges, and folding against the top of the lid within, a lower tray hinged to the rear
35 side of the trunk body and arranged to fold up against the other tray, and hinged lids for both trays, substantially as described.

JAMES L. WARREN.

Witnesses:

JOSEPH A. McDONALD,
BENJAMIN F. WARREN.