(No Model.)

H. ZIMMER.

TRUNK.

No. 461,145. Patented Oct. 13, 1891.

Fig. 1.

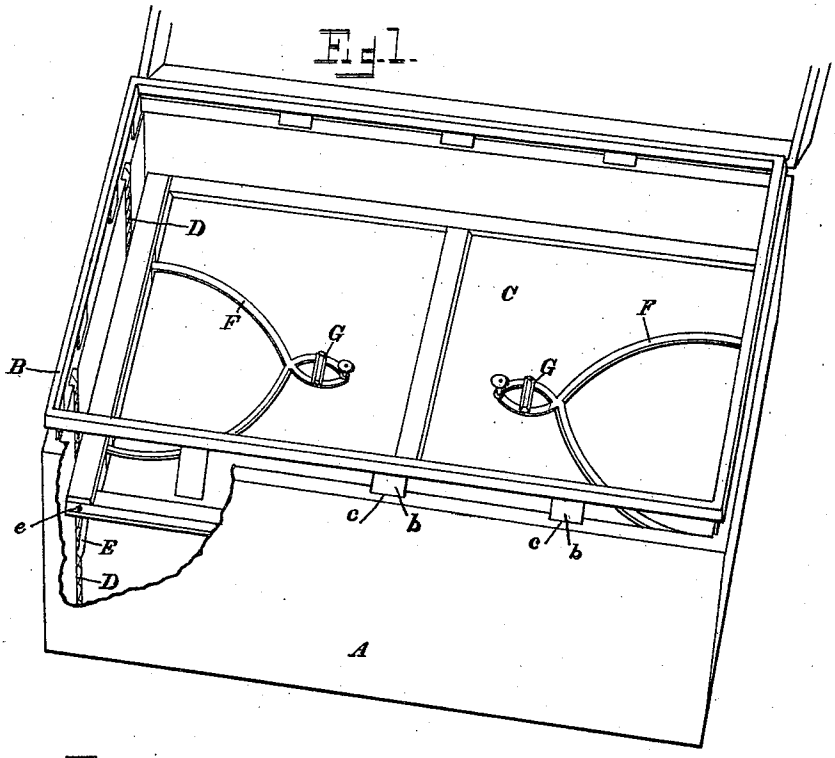


Fig. 2.

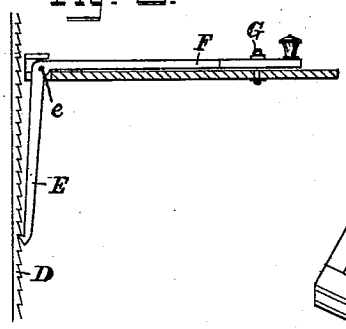
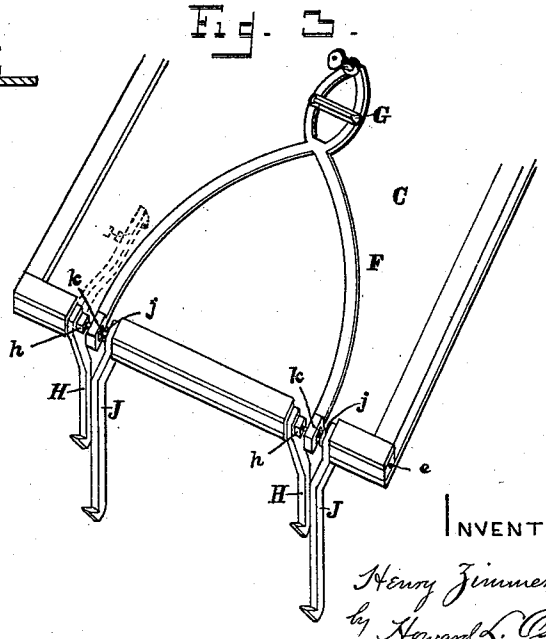


Fig. 3.



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UNITED STATES PATENT OFFICE.

HENRY ZIMMER, OF ROCHESTER, NEW YORK, ASSIGNOR OF ONE-HALF TO MARCUS DAVID, OF SAME PLACE.

TRUNK.

SPECIFICATION forming part of Letters Patent No. 461,145, dated October 13, 1891.

Application filed April 20, 1891. Serial No. 389,706. (No model.)

To all whom it may concern:

Be it known that I, HENRY ZIMMER, of the city of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Trunks, of which the following is a specification, reference being had to the accompanying drawings.

My invention consists in the devices and arrangements as hereinafter described and claimed.

The nature and objects of said invention are hereinafter set forth.

In the drawings, Figure 1 is a perspective view of my trunk, having a part broken away to show the inner construction. Fig. 2 is a cross-section of a part of the follower, showing the gravity-catch and rack at one end thereof. Fig. 3 is a perspective view of another form of follower, showing a different arrangement of the gravity-catches.

These devices are especially adapted to hold the contents of the trunk firmly in place and to avoid any strain upon the lock and hinges when the trunk is full.

Ratchet-racks D D are inserted in and secured to the inner sides of the trunk-body A. These racks are set in opposite sides of the trunk and preferably in suitable depressions therein. The follower C is made of a size to fit the inside of the trunk and is provided with dependent catches E E, which have attached to them suitable handles F F. These handles lie upon the top of the follower C. To each end of the follower C the catches E E and the connected handles F F are suitably hinged, as by the pin or pins *e*, so that by lifting the handle F the catches E E are withdrawn from engagement with the racks D D. The weight of the handles F F, when free to fall toward the follower, will cause the catches E E to engage with the racks D D, and thus the catches act by gravity. A button G or other suitable locking device is provided, so that the gravity-catches E E may be locked in engagement with the racks D D. These dependent catches assist in the packing of a trunk when the uncompressed contents more than fill it. The follower is placed upon these contents, with the dependent catches outside thereof and in position to register with and enter the depressions containing the racks. The catches act to guide these contents into the trunk and to prevent their being moved out of place by the pressure which is then put upon the follower. As soon as the catches engage the first teeth of the racks it becomes easy to compress the contents into the trunk, so that the lid may be closed when the compression is sufficient. Unless dependent catches are employed this result will not be attained. When pulling the follower out of the trunk, the harder the handles F F are pulled the more easily the follower will be removed from its position.

The second form of follower is shown in Fig. 3, and has a pin or pins *e*, on which are loosely journaled a pair of short catches H H and a pair of long catches J J. Upon the bearings of the catches H H J J are suitable square projections *h h j j*. The handle F, on either side of its bearings upon the pin *e*, has square sockets *k k*, suitable to engage with the square bearings *h j* of the catches, and this handle is adapted to be moved sidewise at will on the pin or pins *e*, so that on moving the handle to one side it engages with the pair of long catches J J, or on moving it to the other side it engages with the pair of short catches H H. When a trunk is filled very full, the contents, being uncompressed, will extend above the top of the trunk, and therefore the catches must be long enough to reach from the top of the goods to the first notch of the rack D. The longer catches J J are then inserted between the goods and the sides of the trunk, so as to engage with the racks D D. The short catches, under these circumstances being loose on the pin *e*, may be turned back upon the top of the follower C. If now the trunk has little in it and it is desired to hold that in place, the longer catches will not be suitable for obvious reasons, but the short ones may then be used. The long catches will then be turned back upon the top of the follower C, and the handle will be brought into engagement with the short catches H H.

The form of the follower first described is very simple, and is therefore not liable to get

out of order or to be injured. No springs are used in it, and it is easy and cheap to manufacture.

The racks D D, being set into the sides of the trunk, strengthen and stiffen it, and for the same reason they are not liable to catch or tear the contents of the trunk. A considerable degree of compression may be secured by fastening the catches in the racks at one end of the trunk and then pressing upon the other end of the follower, whereby a leverage is obtained to compress the contents of the trunk, and if such contents are clothes they will be kept smooth and in good order. If it is desired to divide the contents of the trunk into several layers, a corresponding number of these followers may be used.

My dependent gravity-catches are more advantageous in use than spring-catches in that the more the contents of the trunk are compressed the more the contents will press against the dependent catches and hold them firmly in engagement with the racks D D, and the handles F F, acting as levers to operate the dependent catches, will enable the follower C to be removed with greater ease and will make a more practical device than where such handles are not used. On merely lifting the handles F F the catches are disengaged, and the follower may be lifted out of the trunk.

In the upper edge of the body of the trunk are formed a series of slots or sockets *c c*. Into these slots fit thin slats *b b*, which are connected to the rim of the gage B. This rim extends all around the edge of the trunk-body. This gage or guard is retained in place by the slats *b b*, sliding in the slots *c c*, and is capable of being raised high enough to indicate the amount of material which may be placed in the trunk before the follower is inserted and the contents are compressed—that is to say, the material may be placed in the trunk and may be piled to the height of the top of the gage or guard B when the same is lifted to its full extent. In addition the materials which may be placed in the trunk are by the gage and slats prevented from extending over the edge of the trunk, and thus cannot interfere with the introduction of the follower C or with the closing of the trunk. When the materials are placed in the trunk and the follower C is introduced and the materials are compressed, the gage or guard may be pushed down, so that the rim will rest directly upon the top edge of the trunk-body, and the cover may then easily be closed.

What I claim is—

1. In a trunk, the combination of vertical racks secured to the inner opposite sides of the body, an adjustable follower fitting inside the trunk, automatic catches on the under side of the follower for engaging the racks, and handles or levers on the upper side of the follower for releasing the catches, substantially as described.

2. In a trunk, the combination of vertical racks secured to the inner opposite sides of the body, an adjustable follower fitting inside the trunk, automatic catches on the under side of the follower for engaging the racks, handles or levers on the upper side of the follower for releasing the catches, and locks for fastening the handles, substantially as described.

3. In a trunk, the combination of racks secured to the inner sides thereof, a follower, dependent catches of different lengths attached thereto, adapted to engage with said racks and to be placed out of engagement therewith, and levers or handles adapted to engage at will the catches of similar lengths.

4. In a trunk, the combination of racks secured to the inner sides thereof, a follower, pairs of dependent catches of different lengths attached thereto, adapted to engage with said racks, and levers or handles adapted to engage and operate either pair of catches.

5. The combination, with a trunk having a series of internal vertical grooves in the sides of its body, of an extensible guard fitting within the body of the trunk and composed of a frame or railing having depending legs seated in the grooves in the sides of the trunk-body, whereby when the trunk is to be packed the guard may be raised above the edge of the same and when the trunk is filled may be pushed down within the body, permitting the lid to be closed in the usual manner, substantially as described.

6. In a trunk, the combination of an extensible guard composed of a frame or railing having depending legs adapted to fit within grooves in the sides of the trunk-body, and an adjustable follower fitting inside the trunk and having catches adapted to take into vertical racks on the inner sides of the trunk-body, substantially as described.

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Witnesses:
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