

E. A. G. Roulstone

Trunk.

N^o 34,777.

Patented Mar. 25, 1862.

Fig. 2

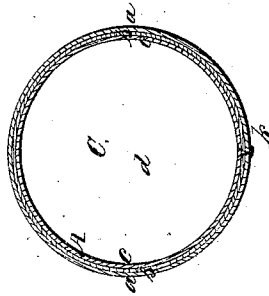


Fig. 4

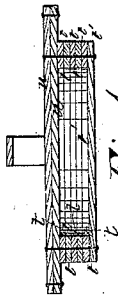


Fig. 1

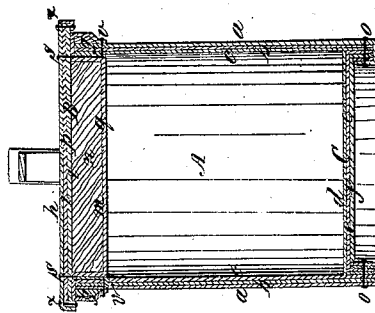
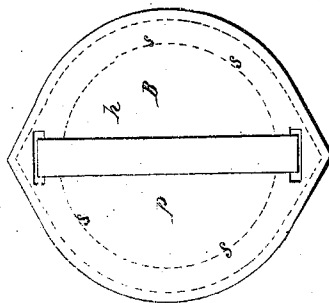


Fig. 3



Witnesses
Moses Sprague
Francis Gould.

Inventor
Edward A. G. Roulstone

UNITED STATES PATENT OFFICE.

EDWARD A. G. ROULSTONE, OF ROXBURY, MASSACHUSETTS.

IMPROVEMENT IN PASSING-BOXES.

Specification forming part of Letters Patent No. 34,777, dated March 25, 1862.

To all whom it may concern:

Be it known that I, EDWARD A. G. ROULSTONE, of Roxbury, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in the Manufacture of Passing-Boxes, said improvements being also applicable to fire-buckets and other leather bags, buckets, or boxes used for transportation, of which the following is a specification.

My invention consists, principally, in forming the sides of a passing-box of three sheets, layers, or thicknesses of material placed together, the center sheet being used to give stiffness and rigidity to the box, and the outer sheets to give the requisite body and durability, as will be set forth, also in a peculiar method of making the cover and in the manner of stitching together the edges which form the side seam of the box, all as will be fully understood from the following specification, taken in connection with the accompanying drawings, to which the specification and letters refer.

Figure 1 of the drawings represents a vertical cross-section of my passing-box; Fig. 2, a horizontal section of the same. Fig. 3 shows a top view of the cover.

A in the drawings denotes the body of the box; B, the top or cover, and C the bottom thereof.

a b c denote three sheets of material which compose the body or side of the box. The outer layer, *a*, and the inner one *c* are made of two sheets of thin leather, while the inner one *b* is made from a sheet of papier-maché, pasteboard, or other suitable stiffening material. The bottom C is similarly formed from two inner and outer sheets, *d f*, of leather, and a center sheet or stiffening, *e*. The outer side sheet, *a*, is carried down below the ends of the sheets *b c*, (which are made flush at bottom,) and thence under and up inside of them, as seen in Fig. 1; and the three bottom layers, *d e f*, are all bent over at their edges, and so as to press down between the inner side sheet, *c*, and that portion of the outer side sheet, *a*, bent up, as above stated, and as seen in said Fig. 1. The several side and bottom sheets being thus brought together and stitched through from side to side, each stitch being made to pass through the entire seven layers, as seen at *o*, form together a very strong and perfectly tight and rigid union and joint.

To protect the lining *b* from exposure, the side pieces, *a c*, where they are brought into contact on their side edges, are made to overlap or overlengthen the lining *b*, and the two contiguous edges of the inner sheet *c* are bent out so as to meet the corresponding edges of the sheet *a* and allow the four edges to be brought together and stitched or seamed by one seam, the relative position of the six contiguous edges and the manner of connecting the inner and outer edges being seen in Fig. 2 at *k*. The two outer layers, *a*, are carried up to the same height to form the top edge or rim of the box, and the inner sheet *c* is carried up over and down outside of them, (and so as to inclose a rim-hoop, *g*,) the three sheets being stitched through and upon the edge of the sheet *c*, as seen at *v* in Fig. 1. The cover of the box (seen at B) has its top composed of three sheets, *h i l*, the outer sheet, *h*, being lapped over the edges of the other two, and so as to allow the four thicknesses to be stitched together, as seen at *x*. The bottom piece, *m*, which fits into the mouth of the bucket or box, is made of a solid block of wood, *n*, or other material having the requisite stiffness and lightness, said block being fastened upon or connected to the upper part, *p*, of the cover by a leather covering, *q*, which extends under it and around its side, and is stitched upon the part *p* by a row of stitches, *s s*, which pass through said covering-piece and through the three pieces *h i l*, as seen in Fig. 1. The general construction heretofore of such covers is illustrated in Fig. 4, which shows the same in cross-section. Two heavy pieces of leather, *u u*, cut into the requisite shape, are first stitched together, and upon these are laid a series of heavy flat leather rings, *t t t*, and a flat disk, *t'*, through all of which the stitches have to be passed. The objections to such a constructed cover are that the cover does not possess the proper strength, as in drawing it off and on the leather soon becomes bent and cracked, and the cover so made is much more expensive than in my new construction of it, requiring more labor to stitch through all the thick rings and top and bottom pieces, whereas in my cover we merely have to stitch through the thin pieces forming the top and the cover into the wooden piece *n*.

By using the wooden piece *n* and the lining or stiffening-piece *i*, the cover is made not only light and stiff, but possesses great strength

and durability, and saves the expense arising from using thick stock, and the waste incurred from loss of material by cutting out the rings. It also gives us a flat cover, which always fits closely upon and into the mouth of the box.

The bodies of passing-boxes are generally made of well-selected and expensive thick sides of leather. But one thickness is used in the sides or in the bottom, and to get the proper pieces much of the leather has to be cut to waste, and in cutting the leather uniformly thick, soft places are unavoidably exposed, causing the box to wear unevenly and to rot in spots. Such boxes are consequently very expensive, and do not last a great while. They are also easily bent or crushed, and in the different degrees of climate to which they are exposed, they soon become cracked, and need a great deal of repairing. In my box I have sought to overcome these difficulties, having in view the so constructing a box that it shall be strong and light, not easily bent, crushed, or indented, and at the same time be capable of being made at much less expense than the old kind. The necessary body is afforded by having the three layers, as described, and the lining *b* gives to the sides such a rigidity as to enable me to use thin leather. Thin leather, being procurable in more uniform thickness than the heavy leather, enables me to give a smooth interior and exterior surface to the box. By having a box possessing the

rigidity of this, I am also enabled to fill my leather before using with water-proof and preservative composition, such composition not being liable to be pressed and worked out, as they are in the flexible boxes as usually made.

I am aware that it is not new to use paste-board and other similar materials in combination with leather, enameled cloth, or rubber to impart rigidity to the article made therefrom; but I am not aware of sheets of such material being used between two sheets or layers of leather, both of which sheets are exposed, as on the interior and exterior of a passing-box.

What, therefore, I claim is—

1. Making a passing or other similar box of the three separate layers of material, as described, and bringing the side edges together, so as to unite them by one seam, as above set forth.

2. Constructing the cover *C* with the piece *m*, composed of a block of wood, *n*, or its equivalent, covered by leather *q*, and its upper covering, *p*, they being connected to the top, as above described.

In testimony whereof I have hereto set my signature this 8th day of January, A. D. 1861.

EDWARD A. G. ROULSTONE.

Witnesses:

MOSES SPRAGUE,
FRANCIS GOULD.