W. M. BROOKS.

BOX SEAL.

APPLICATION FILED APR. 13, 1909.

928,176. Patented July 13, 1909.

Fig. 1.

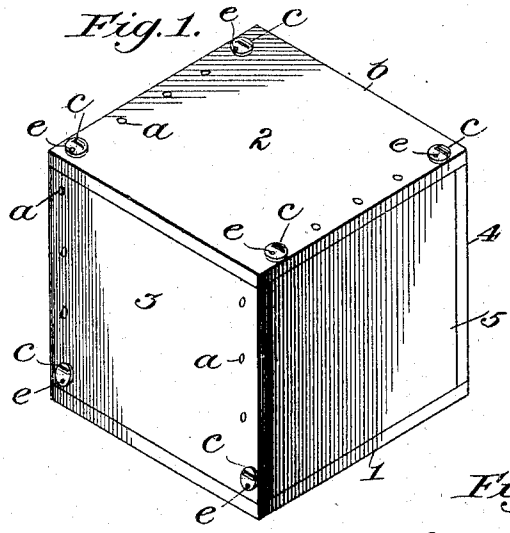


Fig. 2.

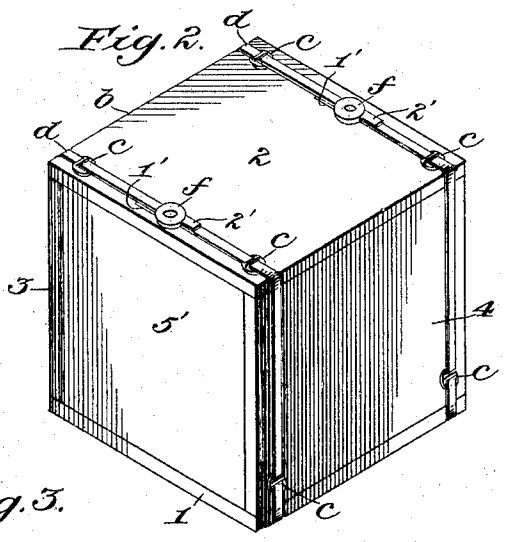


Fig. 3.

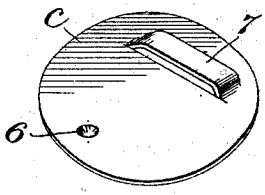


Fig. 4.

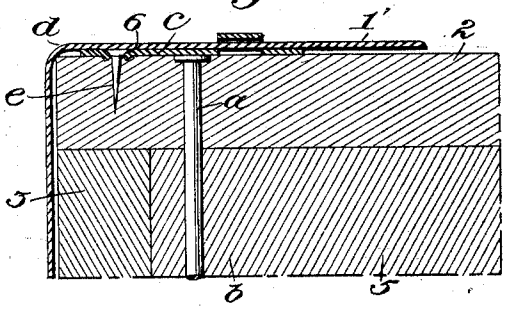


Fig. 5.

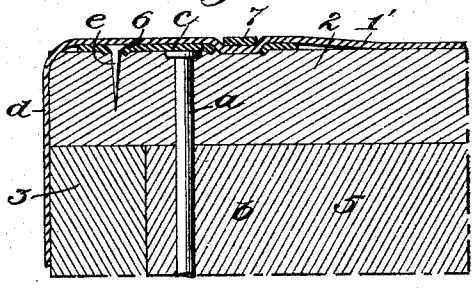


Fig. 6.

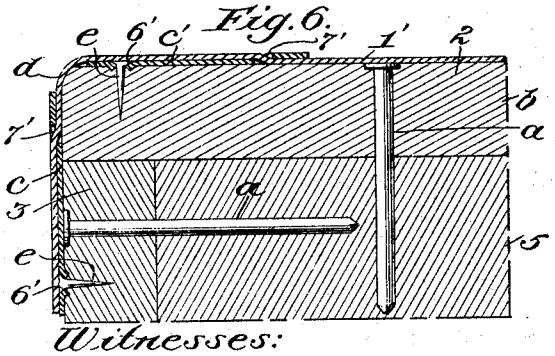
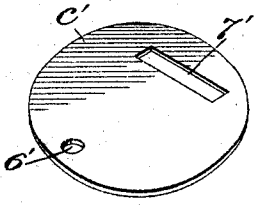


Fig. 7.



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UNITED STATES PATENT OFFICE.

WINFRED MUDGE BROOKS, OF EAST ORANGE, NEW JERSEY, ASSIGNOR TO E. J. BROOKS & CO., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

BOX-SEAL.

No. 928,176. Specification of Letters Patent. Patented July 13, 1909.

Application filed April 13, 1909. Serial No. 489,661.

To all whom it may concern:

Be it known that I, WINFRED MUDGE BROOKS, a citizen of the United States of America, and a resident of East Orange, in the State of New Jersey, have invented a new and useful Improvement in Box-Seals, of which the following is a specification.

This invention relates to means for securing the fastenings of wooden packing cases or boxes by means of box straps of strap iron or like flat metal and metallic seals, with reference to insuring the detection of abstractions or attempted abstractions of the contents of such boxes during storage or transportation.

The present invention consists in an accessory of the box straps and seals heretofore employed, and in its combination with the box straps before and after sealing as hereinafter described and claimed.

The leading object of this invention is to prevent the displacement of sealed box straps edgewise, and thus to render a single seal to each box strap sufficient when the box straps are arranged as is preferable over the rows of nails or screws which attach the bottom, top and sides of the box to its ends, and consequently near the end edges of the box.

Other objects will be set forth in the general description which follows.

A sheet of drawings accompanies this specification as part thereof.

Figures 1 and 2 are perspective views of one and the same box provided with improved box-seal accessories as they appear before and after their combination with the box straps and seals; Fig. 3 is a perspective view of one of the box-seal accessories detached on a larger scale; Figs. 4 and 5 represent vertical sections through one and the same corner of the box and through a box strap in the plane of section, showing one of the accessories as it appears before and after preliminarily fastening one of the box-strap ends; Fig. 6 is a like sectional view illustrating certain modifications, and Fig. 7 is a perspective view of a box-strap accessory of the form shown in Fig. 6.

Like reference characters refer to like parts in all the figures.

In line with each row of nails or like fastenings, *a*, driven through the bottom, top and sides 1, 2, 3, 4, of a wooden box, *b*, into its ends, 5 and 5′, a sufficient number of box-seal accessories, *c*, or *c*′, of any suitable sheet metal are attached, as illustrated by Fig. 1, before stretching a box strap, *d*, of flat metal around the box so as to cover the heads or outer ends of the fastenings. Such accessories, *c* or *c*′, are preferably disk-shaped as shown, and each is constructed with a hole, 6, or 6′, for an attaching tack, *e*, or the like, near its edge at one point, and a slot, 7 or 7′, near the opposite edge, cut at right angles to a line drawn through said hole, and fitted to the box strap *d*. After so attaching the accessories *c* or *c*′, as illustrated by Fig. 1, each box strap *d* is interlocked with the accessories by means of their said slots 7 or 7′ in the act of passing it around the box, after which the box strap *d* is stretched or tightened as set forth, for example, in the specification forming part of Edward J. Brooks's specification forming part of his application for patent for "Improvement in devices for sealing boxes," filed March 3, 1909, Serial No. 481201. Meanwhile the overlapped ends 1′ and 2′ of the box strap *d* have been threaded through a seal, *f*, which may be of any of the constructions set forth in the specification forming part of Patent No. 847276, dated March 12, 1907, for said Edward J. Brooks's "Improvement in box seals," or preferably of the nailless type of such seals set forth in the specifications forming part of said Edward J. Brooks's applications for patents filed March 19, 1909, Serial No. 484347, and March 20, 1909, Serial No. 484662. For the purposes of the present invention the seal may be of any suitable known or improved construction.

In the species represented by Figs. 1 to 5 inclusive the hole 6 is simply punctured without removing any metal, and the metal from within the slot 7 in each seal accessory *c* is detached only at its longer sides and struck up to form a passage for the box strap *d*. The box strap is threaded beneath the displaced metal and the latter may then be driven back, by a blow of a hammer or the like, as represented in Fig. 5, so as to preliminarily fasten one end (1′) of the box strap *d*, in the tightening operation, and to inseparably and immovably unite the seal accessories with the box strap. This may be for the purpose first stated alone, in which case only one of the seal accessories *c* is flattened, as in Fig. 5. As represented in said Figs. 1 to 5 inclusive, one of the seal accessories (*c* or *c*′) at each of the four corners of the box may

suffice for each box strap; two of them being preferably arranged on the cover, bottom or side where the seal *f* is to be located as in Fig. 2.

In the species represented by Figs. 6 and 7, the holes 6′ and slot 7′ in each seal accessory *c′* may be of the ordinary forms represented in these figures; the box strap *d* being in this case threaded through the slot 7′ to interlock it with the seal accessory *c′*. As further illustrated by Fig. 6, either form of the seal accessory (*c* or *c′*) may be attached in pairs at each corner of the box instead of singly, to increase its efficiency.

The outline of the seal accessories is obviously immaterial; and other like modifications will suggest themselves to those skilled in the art.

Having thus described said improvement, I claim as my invention and desire to patent under this specification:

1. A box-seal accessory consisting of a substantially flat sheet-metal part having a hole for an attaching tack or the like near its edge at one point and near the opposite edge a slot cut at right angles to a line drawn through said hole and fitted to a flat-metal box strap.

2. A box-seal accessory consisting of a substantially flat sheet-metal part having a hole for an attaching tack or the like near its edge at one point and near the opposite edge a closable slot cut at right angles to a line drawn through said hole and fitted to a flat-metal box strap, the metal from within said slot being detached only at its longer edges and normally raised to form a passage for the box strap.

3. The combination with a wooden box having its bottom, top and sides attached by fastenings driven therethrough into the ends of the box, of a pair of flat-metal box straps under tension covering the outer ends of such fastenings near the end edges of the box, seals inseparably uniting the ends of said box straps, and seal accessories attached to the outer surface of the box near its corners and having passages through which the box straps are threaded, said passages being formed by closable slots the metal from within them being detached only at their longer sides and normally raised to form such passages; whereby the box straps may be preliminarily fastened at one end for the tightening operation and the box straps and seal accessories may be inseparably and immovably united with each other by flattening the accessories, substantially as hereinbefore specified.

WINFRED MUDGE BROOKS.

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