

(No Model.)

G. CROUCH.
TRUNK.

No. 571,152.

Patented Nov. 10, 1896.

Fig. 1.

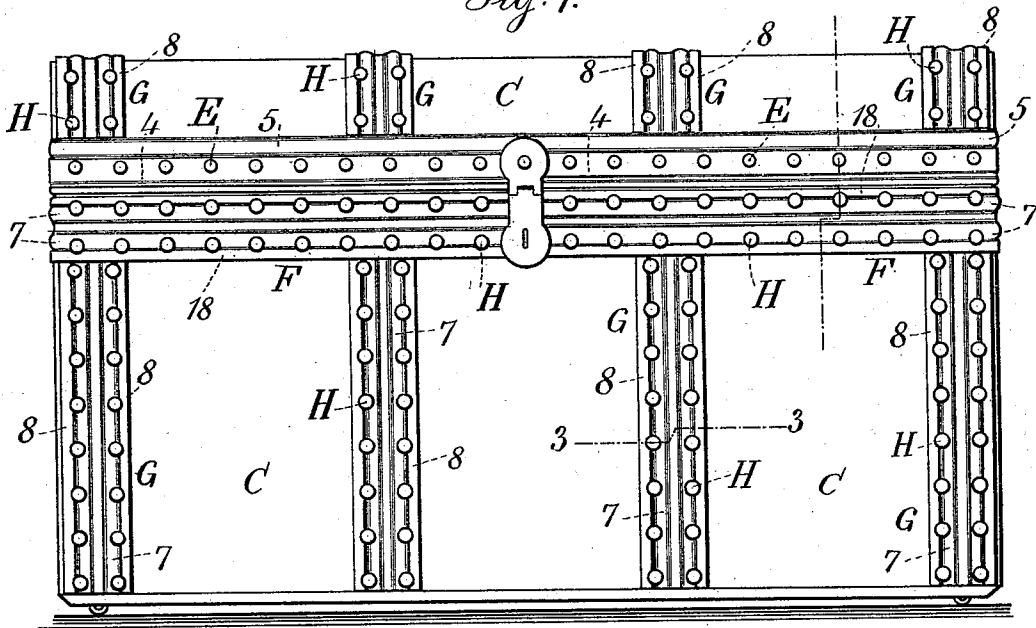


Fig. 2.

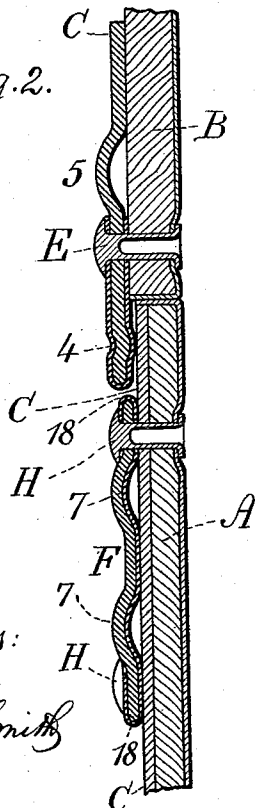
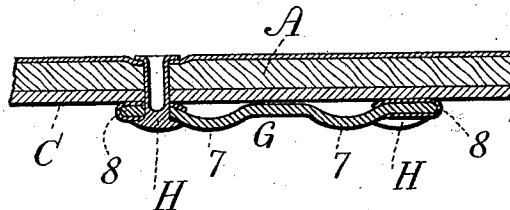


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE CROUCH, OF NEW YORK, N. Y.

TRUNK.

SPECIFICATION forming part of Letters Patent No. 571,152, dated November 10, 1896.

Application filed November 15, 1895. Serial No. 569,003. (No model.)

To all whom it may concern:

Be it known that I, GEORGE CROUCH, a citizen of the United States, residing at the city of New York, in the county and State of New York, have invented an Improvement in Trunks, of which the following is a specification.

In the manufacture of trunks I have heretofore employed a chemically-prepared fiber, known as "vulcanized" fiber, which possesses great strength and can be softened in hot water and can be glued upon the wooden body of the trunk. In some instances I have used the same as a valance projecting downwardly from the lower edge of the lid, so as to lap over the upper edge of the trunk-body; but usually this fiber is not sufficiently strong to withstand the concussion to which the trunk is exposed and the valance may become broken or otherwise injured in transportation.

The present invention is made with reference to obtaining great strength in the trunk and for firmly supporting the parts where the body of the trunk and the top set together, and also for stiffening and strengthening the body of the trunk to prevent the front or back or the ends being forced inwardly by pressure to which they are sometimes exposed, and the present invention relates to the novel devices hereinafter described and claimed.

In the drawings, Figure 1 is a front elevation illustrating a trunk. Fig. 2 is a section in larger size at the junction of the lid and body, and Fig. 3 is a section in larger size through one of the ribs at the line 3 3.

The trunk itself is to be of any desired size, shape, and strength, and usually such trunk is made with a body or foundation of wood suitably joined together at the corners. I have represented the thickness of wood A as forming the bottom or body of the trunk and the thickness of wood at B as forming the upper part or lid of the trunk.

After the body of the trunk has been made of the proper size and shape and of wood boards nailed or otherwise fastened together, and of the proper thickness and strength, I take sheets of the said prepared fiber and soften the same in hot water, and spread such sheets over the outside of the trunk and secure them firmly by glue, and pass such sheets around the corners and lap the edges of the

sheets one on the other to obtain the proper strength at the corners, and it is advantageous to apply sufficient pressure to hold the sheets of fiber in position until the glue has hardened or set. I have represented the sheets of fibrous material at C as forming a covering to the woodwork of the trunk.

In preparing the sheets of fibrous material for the lid of the trunk such sheets of fibrous material are cut of the proper size for the edges of the sheets or strips to project from the lid portion of the trunk downwardly and over the upper part of the body portion of the trunk, and the projecting portions of the sheets of fibrous material are reinforced or strengthened by sheet metal, preferably sheet-iron, in strips or bands of a sufficient width to be folded in the middle, or substantially in the middle, to inclose the edges of the sheets of fiber, and such folded sheet-metal reinforce extends up upon the woodwork a sufficient distance for receiving through the sheet metal and through the fibrous material and through the woodwork the rivets E, which are of a length to be riveted up at the inside surface of the wooden body of the trunk. I find it advantageous to employ hollow-ended rivets, which are clenched by spreading the tubular ends of the rivets similar to eyelets, as shown in the drawings.

Before applying the sheet-metal reinforce of the valance to the lid it is advantageous to corrugate such sheet metal and the inclosed sheet or strip of fibrous material, as shown at 4, and also to corrugate the sheet of fibrous material, as at 5, adjacent to the line of rivets, so that such corrugation forms a protection and lessens the risk of injury to the rivets or to the edge of the sheet metal forming the reinforce, and at the same time the trunk is strengthened by such corrugations at 5.

The back portions of the valance at the ends of the trunk are advantageously beveled, so that there will not be any corners to catch and become injured in handling the trunk.

The front and back and ends of the trunk are liable to become injured by pressure or concussion, especially in the parts that are adjacent to the valance, and to stiffen and strengthen the trunk at these parts and also to guard the lower edge of the valance from

becoming caught or injured I employ stiffening-bands F, that run around the trunk and closely adjacent to the lower edges of the valance, and upon the trunk I also employ vertical stiffening-bands G. These bands F and G are made of strips of such fiber corrugated longitudinally for the twofold purpose of obtaining stiffness in the sheets of fibrous material and for protecting the rivets H, that are made use of in attaching the stiffening-bands to the trunk. These rivets H are similar to the rivets E, that is to say, their inner ends are tubular and are spread like an eyelet after passing through the woodwork of the trunk, and the rows of these rivets H are between the corrugations and the edges of the stiffening-bands.

In order to still more strengthen the trunk and prevent injury to the stiffening-bands, I employ the sheet-metal reinforce-strips 8, that are folded over the edges of the stiffening-bands tightly and are secured by the rivets H, passing through such sheet-metal reinforce-strips and through the stiffening-bands and the woodwork of the trunk. In some instances the strips 8 are comparatively narrow and folded substantially in the middle, so that there is a separate strip at each edge of the stiffening-bands; but I find it generally advantageous to employ a strip of sheet metal sufficiently wide to receive upon its surface the stiffening-band of such prepared fiber and fold the edges of such sheet-metal reinforce over the edges of the stiffening-band, as shown at 18, and the stiffening-band of fiber is advantageously softened and glued to the sheet-metal strip, and then the edges of the sheet metal are folded over and the stiffening-band passed through between suitable rolls, so as to corrugate the stiffening-band, as shown at 7, which adds materially to the strength and stiffness of such band, after which the same is fastened to the surface of the trunk by the rivets H; and I remark that the stiffening-band F which is adjacent to the edge of the valance, and also the stiffening-bands G, may be made in either of the forms before described, and it will be apparent that the edges of the valance coming near to or resting against the edges of

the stiffening-band F are protected in such a manner that the risk of the valance becoming injured is reduced to a minimum, and the respective parts of the trunk firmly support each other, and the trunk as a whole is very strong and at the same time is as light as possible.

The prepared fiber, having considerable resiliency, is less liable to become indented than sheet metal, and by inclosing the edges of the corrugated strip with folded metal such edges are protected from becoming torn or otherwise injured.

I claim as my invention—

1. The trunk-valance formed of folded sheet metal inclosing a strip of prepared fiber and corrugated longitudinally and rivets passing through the trunk-body and through both thicknesses of sheet metal and the fiber strip, substantially as specified.

2. The trunk-valance formed of folded sheet metal inclosing a strip of prepared fiber and corrugated longitudinally and rivets passing through the trunk-body and through both thicknesses of sheet metal and the fiber strip, in combination with a contiguous reinforcing-band of prepared fiber having a strip of sheet metal between the fiber and the trunk-body with its edge folded over to inclose the edge of the prepared fiber, substantially as specified.

3. The combination with the trunk, of a valance formed of a strip of sheet metal folded and having within the fold a sheet or strip of prepared fiber, the parts being corrugated longitudinally near the edge of the valance for stiffening the same, there being also a corrugation in the sheet or strip of prepared fiber adjacent to the edges of the sheet metal and rivets passing through the sheet metal and the inclosed material for securing the valance to the body of the trunk, substantially as set forth.

Signed by me this 13th day of November, 1895.

GEO. CROUCH.

Witnesses:

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