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E. H. E. & P. M. E. BERTIN.

TRUNK.

No. 413,431. Patented Oct. 22, 1889.

Fig. 1

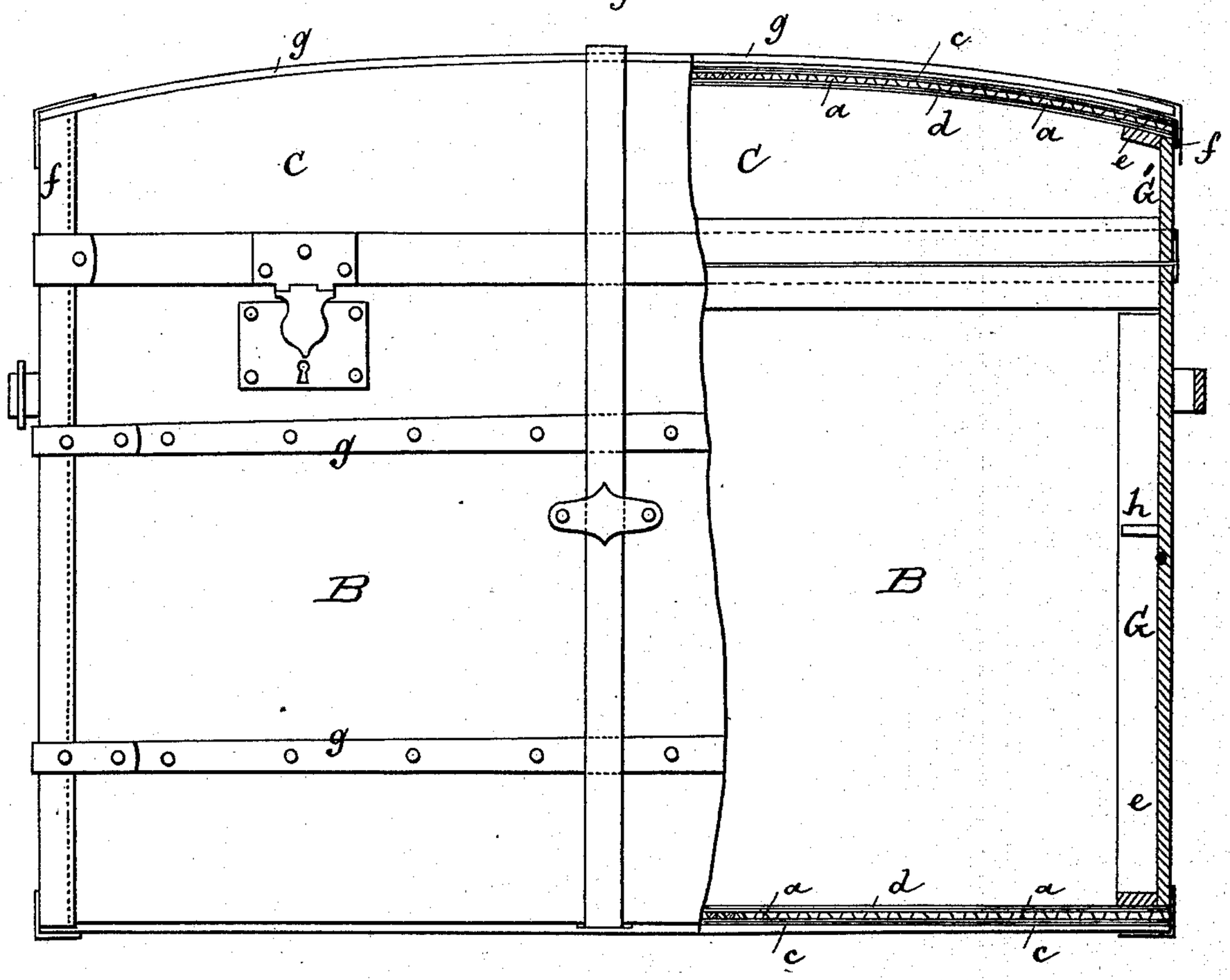


Fig. 7

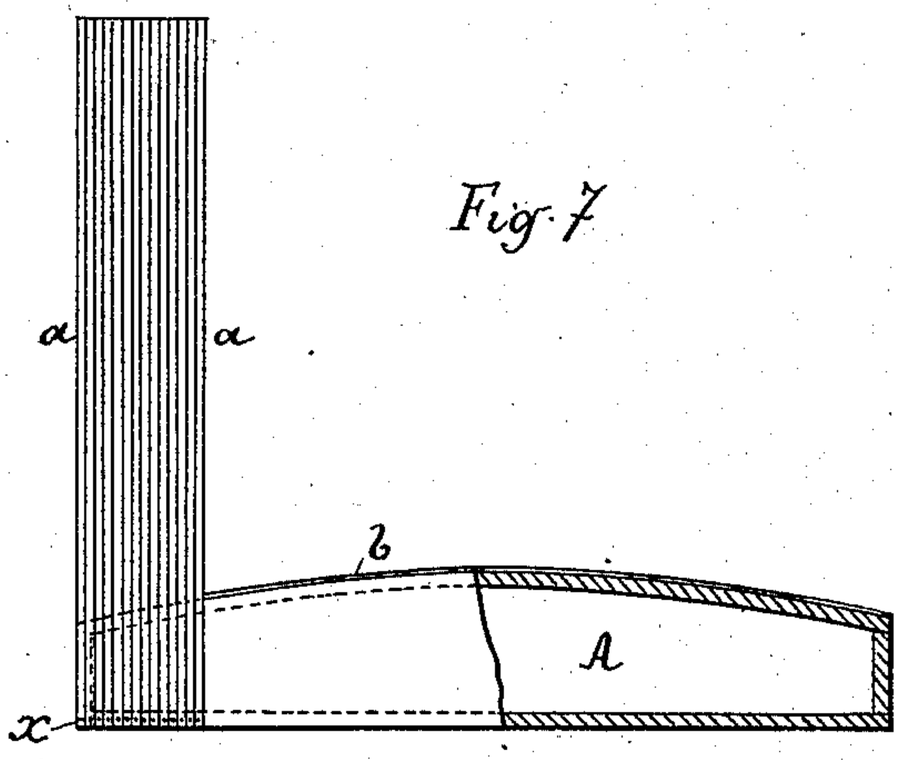
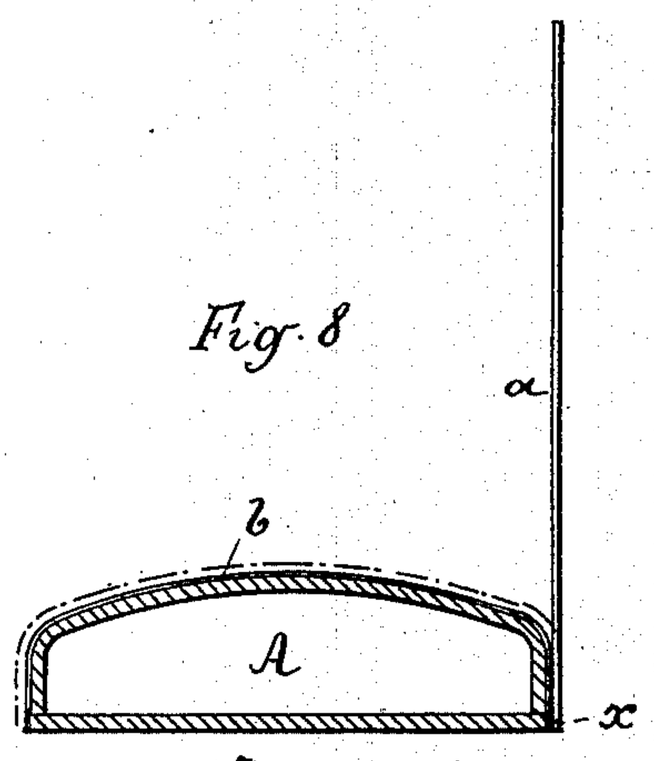


Fig. 8



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TRUNK.

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Fig. 2

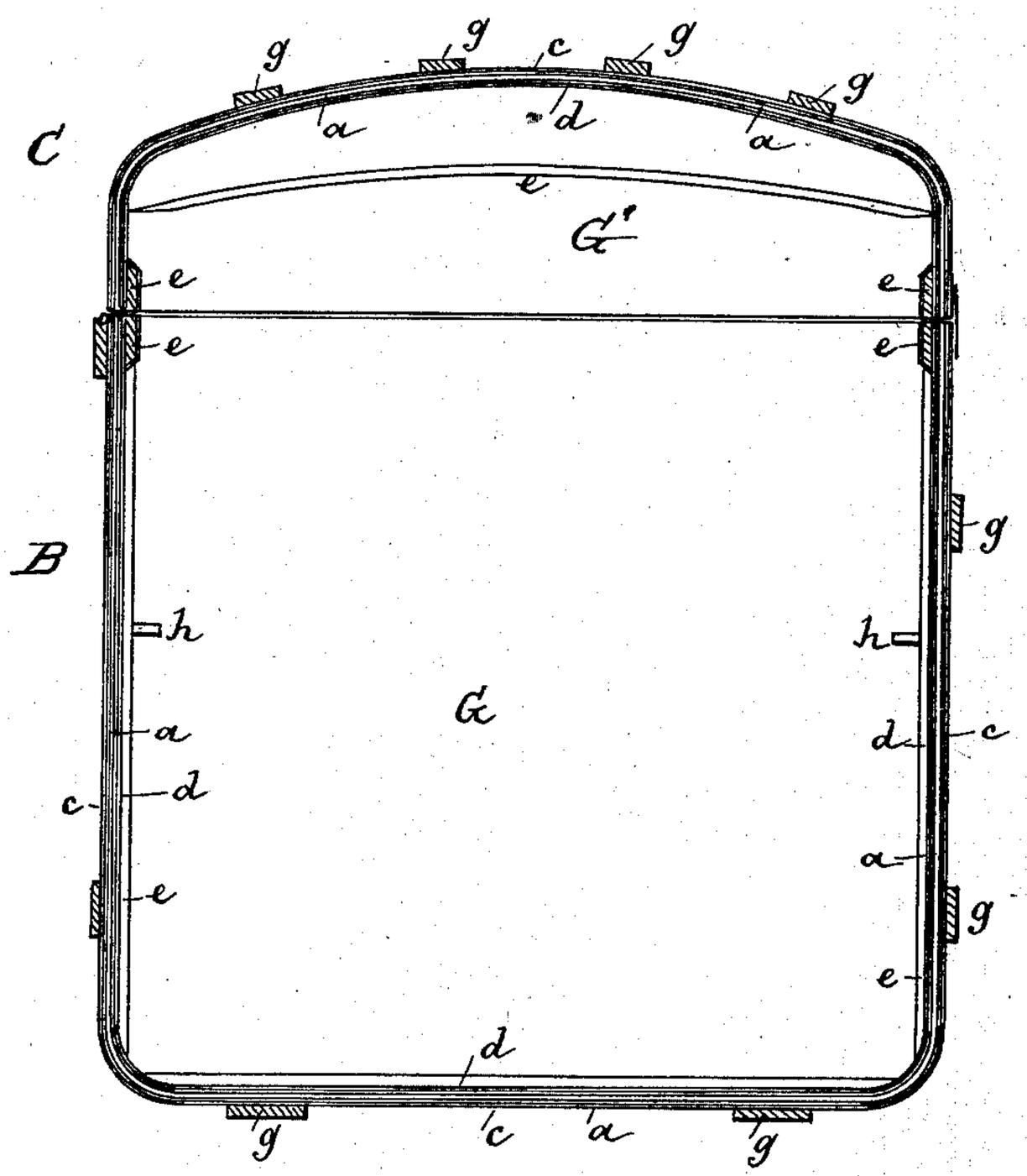


Fig. 3

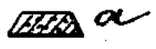


Fig. 4

Fig. 5

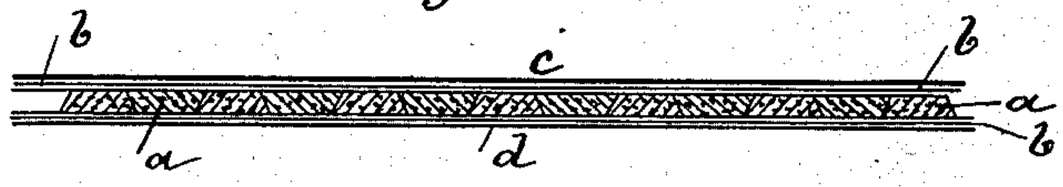
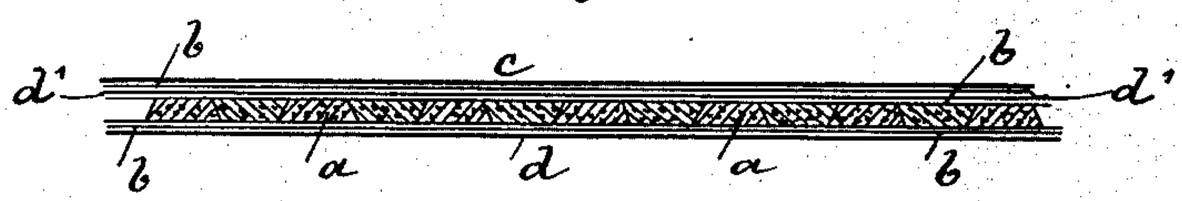


Fig. 6



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E. H. E. & P. M. E. BERTIN.

TRUNK.

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Fig. 9

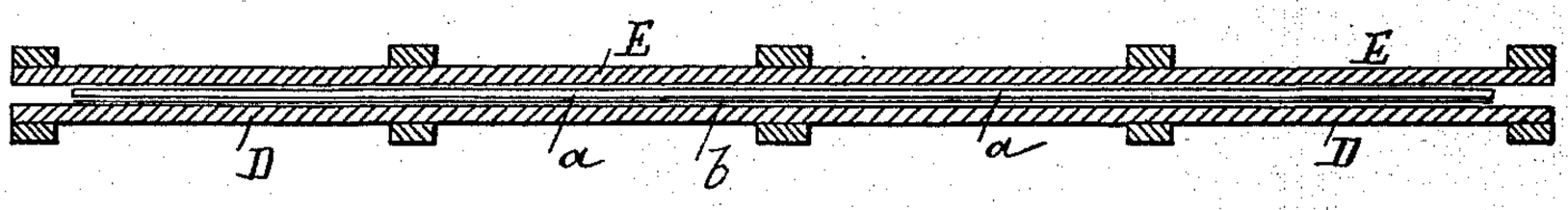


Fig. 10

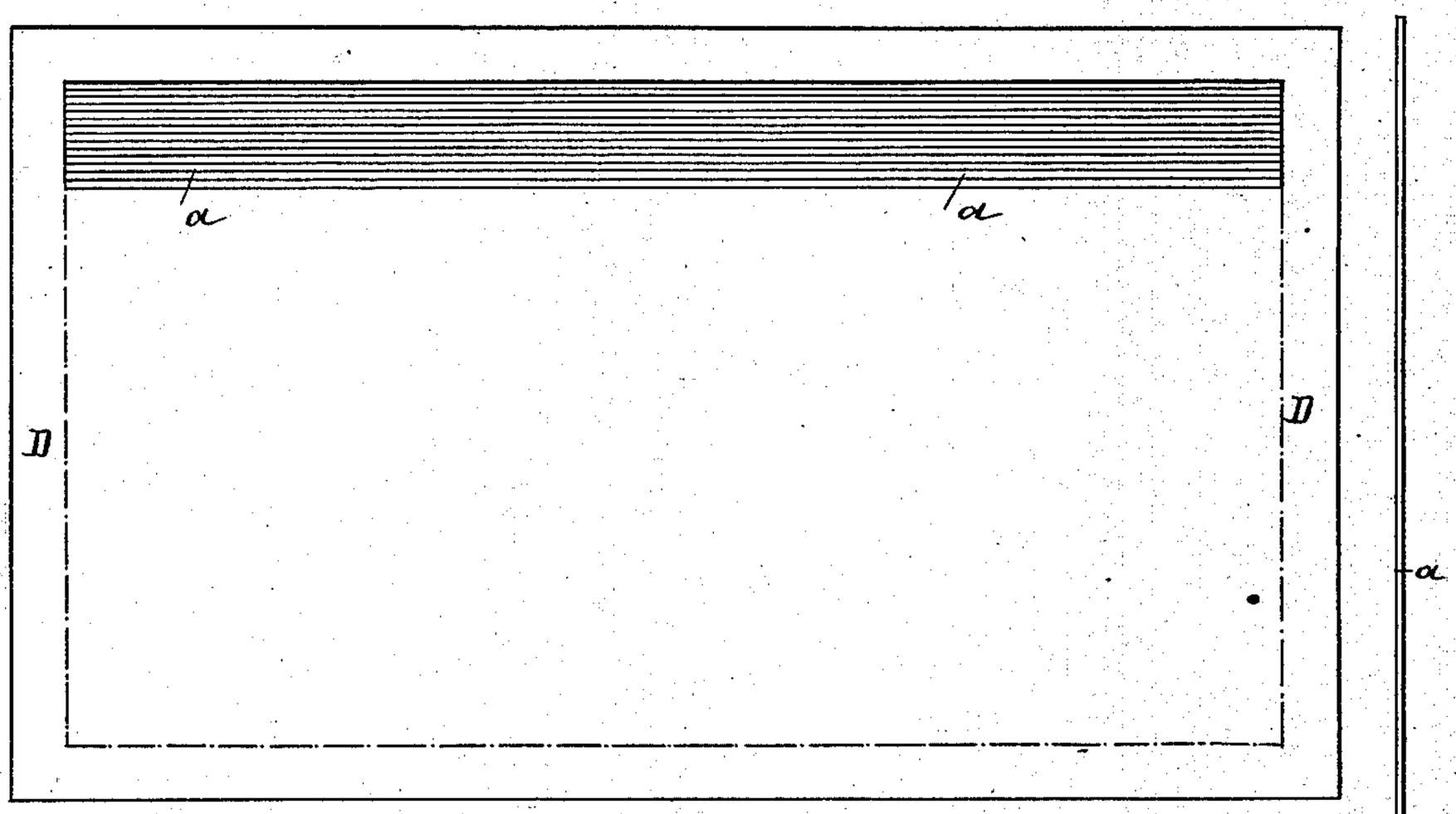
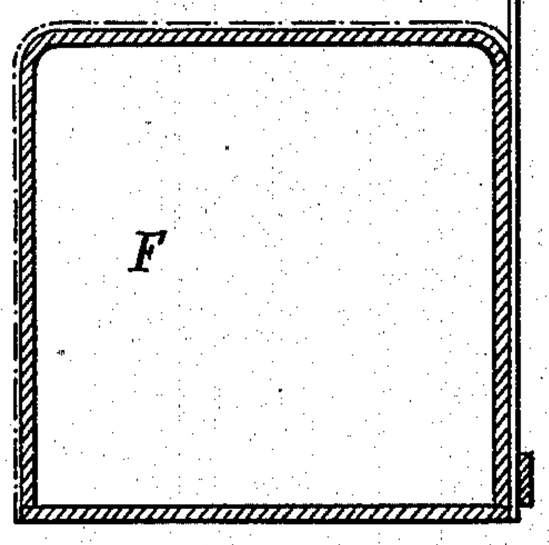


Fig. 11



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UNITED STATES PATENT OFFICE.

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OF PARIS, FRANCE.

TRUNK.

SPECIFICATION forming part of Letters Patent No. 413,431, dated October 22, 1889.

Application filed June 14, 1889. Serial No. 314,196. (No model.)

To all whom it may concern:

Be it known that we, ERNEST HIPPOLYTE EUGÈNE BERTIN and PAUL MARIE EUGÈNE BERTIN, both citizens of the French Republic, and residents of Paris, (Seine,) France, have invented certain Improvements in Trunks and Similar Receptacles, of which the following is a specification.

Our invention relates to trunks and similar receptacles for travelers; and the object is to produce a light and elastic structure.

Our invention will be fully described hereinafter, and its novel features carefully defined in the claims.

In the accompanying drawings, illustrative of our invention, Figure 1 is a front view of a trunk embodying our invention, the view showing a portion at the right in sectional elevation. Fig. 2 is a transverse section of the trunk on the same scale as Fig. 1. Figs. 3, 4, 5, and 6 are fragmentary detail views on a larger scale than the principal figures. These will be referred to hereinafter. Figs. 7, 8, 9, 10, and 11 are views explanatory of the mode of constructing our improved trunk. These views will be referred to and explained more particularly and in detail hereinafter.

In the manufacture of trunks which are destined to suffer hard usage it is essential that the structure shall be light, strong, and elastic, and it is the purpose of our invention to embody these three qualities in our improved trunk. To this end we make the body and lid of the trunk, except as to the ends thereof, of thin flexible strips of wood united together edge to edge and overlaid, both interiorly and exteriorly, with thin flexible material united firmly to the wood, all as will be hereinafter described. We employ thin strips of wood *a*, of the form shown in Figs. 3 and 4, the former of which is a transverse section and the latter an elevation of such a strip. The edges of the strips are beveled, as shown, and they are preferably about one centimeter in width. These strips are placed together edge to edge in such a manner that their beveled edges fit, each to each, as seen in Figs. 5 and 6, and united by strong glue. Figs. 5 and 6 are sectional views taken transversely to the strips *a*, and show the completed body structure or material of the trunk. The united strips *a* are overlaid and covered on both sides with paper *b*, pasted or glued thereon, and over this paper is laid and pasted or glued fast on the outside a sheet of some strong finishing material *c*—such as thin leather, canvas, &c.—and on the inside with a sheet of similar material, as muslin *d*. It is not necessary that this covering material *c* and *d* shall differ in character; but it is customary, for the sake of appearance, to finish the trunk on the outside differently from the inside finish. The construction seen in Fig. 6 is the same as that seen in Fig. 5, except that in the first-named view there is an extra layer of material *d'* between the exterior sheet of paper and the outside sheet *c*. In constructing the trunk body and cover of this material we construct a wooden form both for the body and cover, which, when put together, has the exact size and shape of the interior of the trunk to be made, and over this form we bend the material, the fiber of the wood extending around the trunk. This mode of construction will be understood by reference to the explanatory views, Figs. 7 and 8, wherein is shown the form A, on which the cover C of the trunk is shaped and made. Fig. 7 is a partially-sectional side elevation of the form A, and Fig. 8 is a transverse section thereof.

We proceed as follows to form the trunk-cover: First we cover the form A with a sheet of paper *b*. Then we cut the wooden strips *a* of the proper length and place them side by side, as seen in Fig. 7, securing their ends to the form with small nails or brads, as seen at *x* in Figs. 7 and 8. The glue is spread over the paper *b*, part of the surface at a time, and the strips *a* bent down over and upon the paper one by one, and their other ends secured to the form by nails. The broken or dotted line in Fig. 8 shows the form that will be assumed by the bent strips *a*. Glue is applied to the edges of the strips as they are bent, so as to unite them, and when all are bent and secured the whole is left until the glue sets and hardens. After the structure is dry it is smoothed off and one or more sheets of paper glued on the exterior faces of the strips.

In constructing the body of the trunk we follow, by preference, the method which we will describe hereinafter with reference to

Figs. 9, 10, and 11, the first of which is a longitudinal section and the second a plan of the press or clamp we employ.

D and E are two flat stiff boards which form the press. On the lower board D we place a sheet of paper *b*, on which is marked the size of the sheet of material required to form the body of the trunk. On this sheet we glue the strips *a*, arranged in the same manner as before described, and glued together edge to edge. After the strips *a* are placed and glued the board E is placed thereon and weighted, if necessary. After the sheet of material thus formed is dry we smooth it, as before described, bend it over the trunk-form F, (seen in Fig. 11,) and while it is held in this bent position the ends G of the trunk-body (seen in Fig. 1) are fitted in and secured to the integral sides and bottom thereof. These ends may be of solid wood, or they may be of the same material as the sides, but re-enforced with battens. The ends G′ of the cover of the trunk may be made in the same manner as the ends G of the body, and secured while the material of the cover is fast on the form A.

The body and cover of the trunk being thus formed, they are covered exteriorly with the material *c* and provided interiorly at the angles with strips or battens *e*, which impart strength and form a receptacle for the nails by which the corner-bindings *f* are secured. These bindings will be of leather, by preference.

The trunk is provided exteriorly with strips *g* and the usual trimmings, and is lined interiorly with the material or fabric *d*. It may also have supports *h* inside for the usual trays.

As will be understood from the preceding description, the strips *a* may be united and glued or cemented to the sheet of paper or other material either during the bending process or afterward.

Our invention is not limited, of course, to the construction of "traveling-trunks," so called, but may be employed in constructing chests, packing-trunks, and similar receptacles.

Having thus described our invention, we claim—

1. As an improved article of manufacture, a trunk or similar receptacle having its sides and bottom formed in one piece from material consisting of narrow strips of wood united at their edges and covered with paper or the like, said strips being bent to form the bottom and sides of the trunk, as set forth.

2. As an improved article of manufacture, a trunk or similar receptacle having its sides, top, and bottom formed of a material consisting of narrow strips of wood with beveled edges united edge to edge and covered on both faces with paper, and strong sheet material cemented or glued to the wood, the fiber of the wood extending around the trunk, as set forth.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

ERNEST HIPPOLYTE EUGÈNE BERTIN.
PAUL MARIE EUGÈNE BERTIN.

Witnesses:
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