

C. A. Baldwin.
Barrel Chime.
No. 44,591. Fig. 4. Patented Octo. 11. 1864.

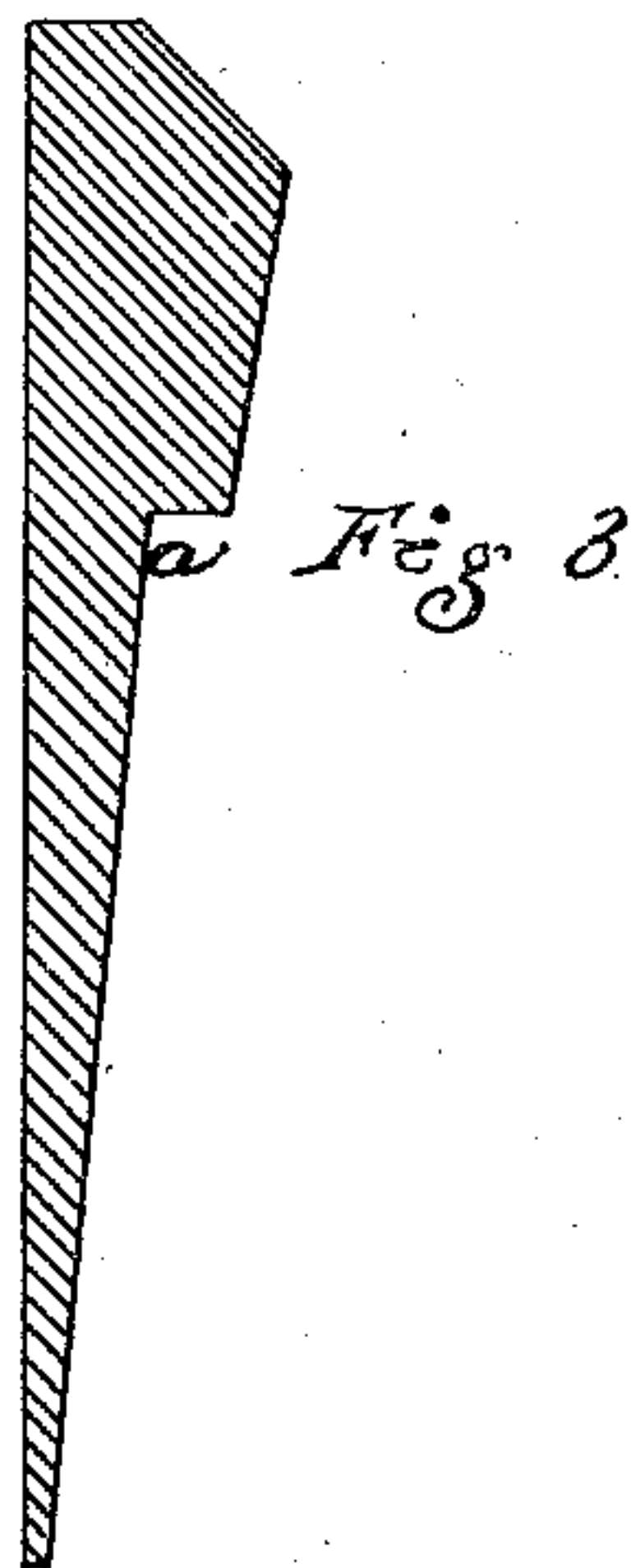
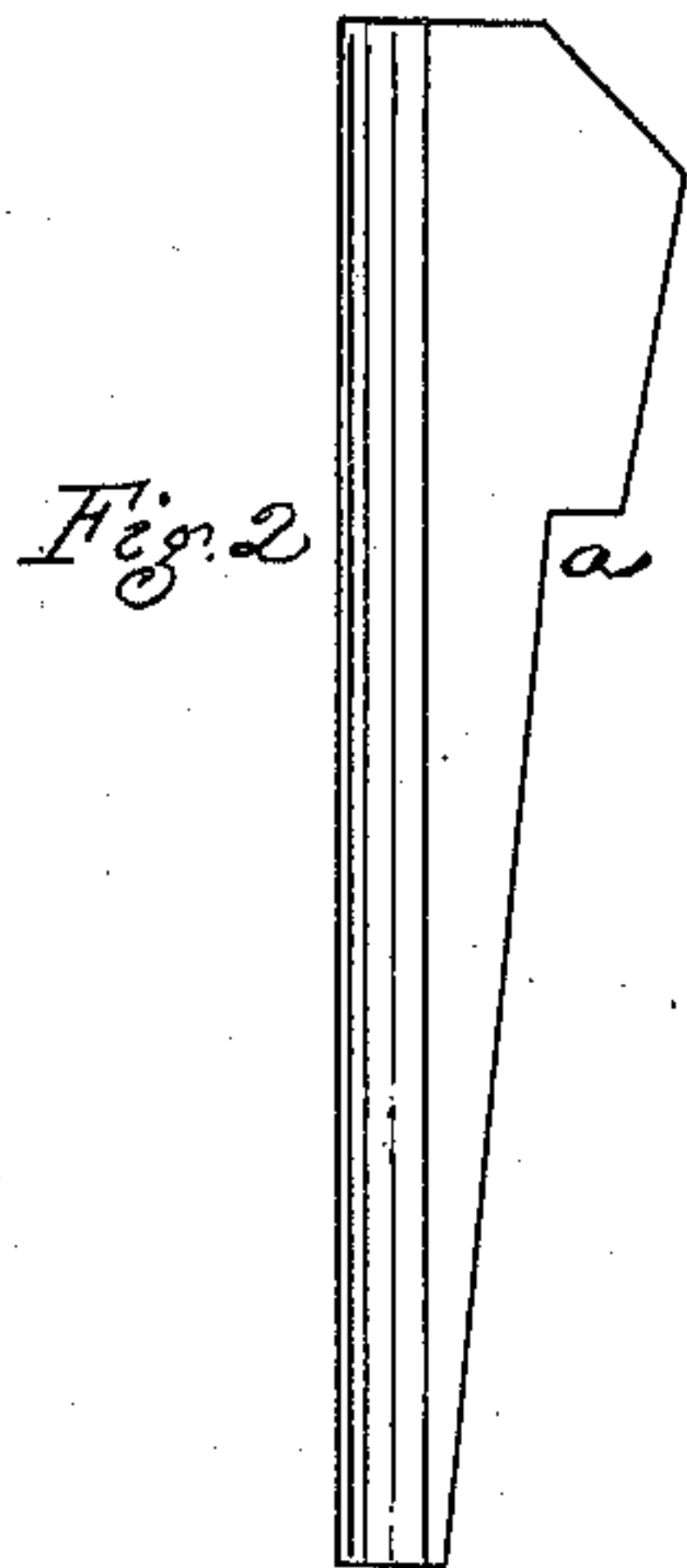
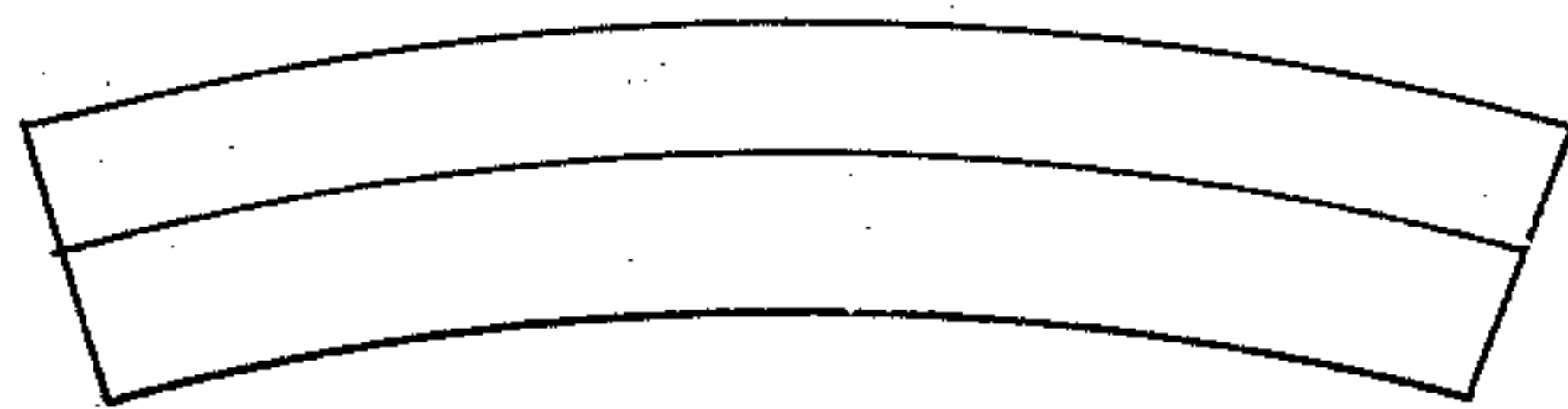


Fig. 1.

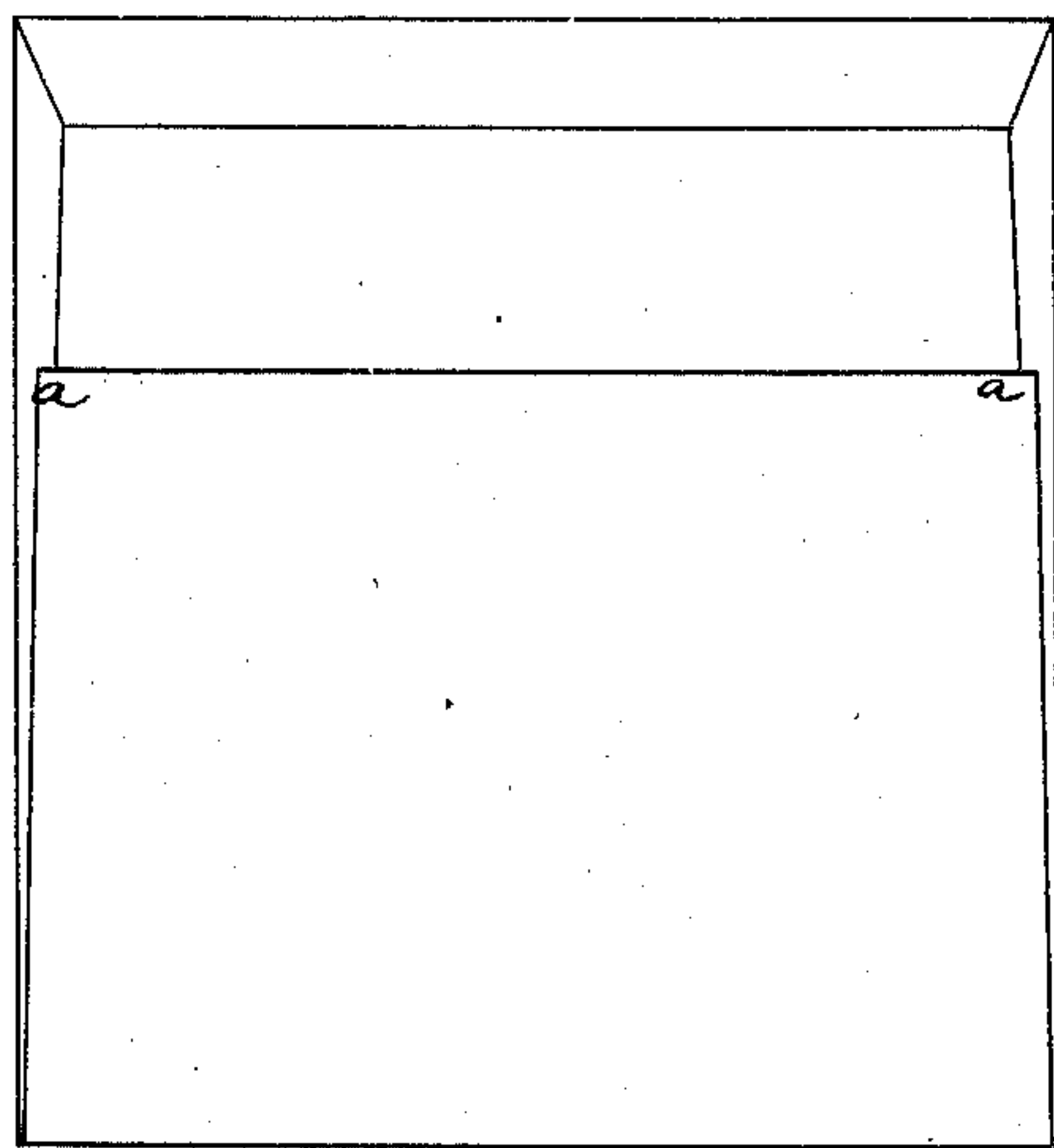
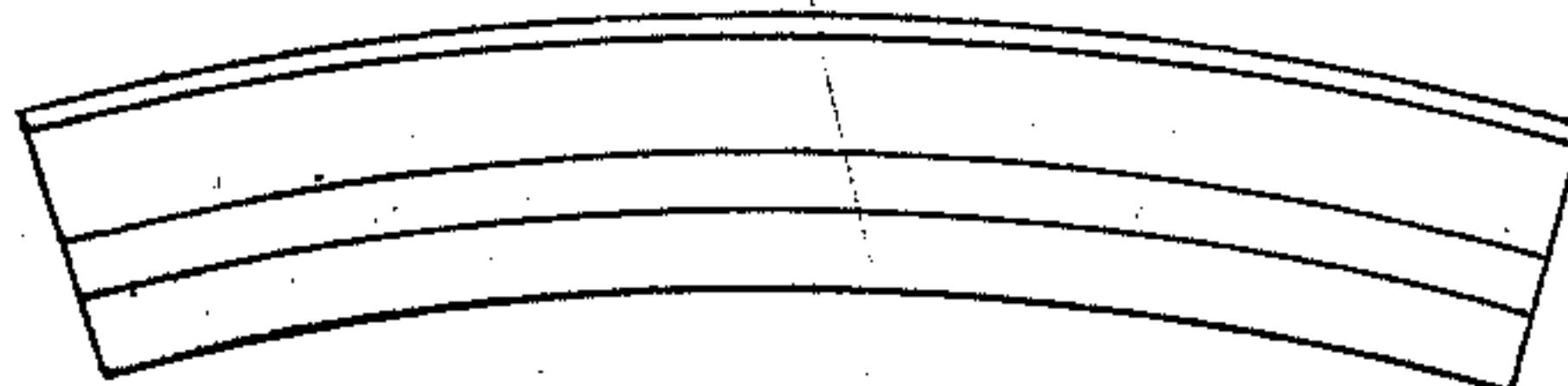


Fig. 5.



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CHARLES A. BALDWIN, OF BOSTON, MASSACHUSETTS.

IMPROVED METHOD OF REPAIRING CASKS AND BARRELS.

Specification forming part of Letters Patent No. 44,591, dated October 11, 1864.

To all whom it may concern:

Be it known that I, C. A. BALDWIN, of Boston, in the county of Suffolk and State of Massachusetts, have invented a Chine-Blank for Barrels; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

This invention has for its object a provision for the easy and ready repair of the ends of barrel-staves, or the part known as the "chine" or "chime" of a barrel.

In all kinds of casks employed for packing and transportation, the chines are liable to become more or less injured or destroyed by tipping and rolling the barrels, and such injury often extending to the croze or groove in the staves which fastens the heads of the barrel in position soon loosens the head-pieces or makes a breach into the barrel. Such breakages are more or less imperfectly repaired, as circumstances and means at hand will allow.

My invention consists in a blank, or supplemental or auxiliary chine-piece, corresponding in lateral curvature to the curve of a cross-section of a stave and shaped at top to correspond with the end of a stave, and having otherwise a regular and even formation, as I will proceed to describe, the entire shape of the piece being determined by the movement of the piece of wood from which the blank is to be cut in conjunction with the movement of reducing-cutters of the machine employed for manufacturing the blanks.

Figure 1 of the drawings shows an inside view of the blank; Fig. 2, an edge view, Fig. 3 a vertical section, and Figs. 4 and 5 end and bottom views, of it.

The curvature given to the piece, as seen in Figs. 4 and 5, corresponds to the curve of the size of cask for which the blank is intended, as does also the thickness of the upper end of the blank. At the distance from the upper end corresponding to the position of the croze in the stave, the blank is cut away, as seen at *a*, leaving a projecting lip to form the upper side of the croze-groove, while, as the

stave generally breaks in the croze, or for repair is cut down to it, the lower side of the croze-groove remains on the stave. From this lip the blank is chamfered down to the lower edge, leaving there a sufficient thickness of material to prevent splintering and to allow the edge to abut properly against the outer surface of the stave.

To use the blank the upper end of the broken stave is trimmed down to a sufficient extent below the breakage or to the groove or croze in the stave, and so as to leave a smooth outer surface thereon for the inner surface of the chine-blank to abut against, and then the blank is driven into the place previously occupied by the broken stave end or between the next adjacent staves and the hoops and barrel-head, the lower edge of the chine being on the outer surface of the broken stave and the chine driven down so that the lip or projection on its inner surface shall abut against the barrel-head. The top of the chine is then uniform in position with respect to the ends of the unbroken staves, and its outer surface only projects beyond the outer surface of the adjacent staves at its lower edge, which is so thin as not to project to an extent that is practically injurious.

It is necessary for the blank to have the formation shown—that is to say, with the lip or projection, and a plane surface (vertically) from this lip to the lower edge of the blank, instead of constructing it with a groove or croze like the croze in the inner surface of a barrel-stave, because such a groove (or the lip forming the bottom side of it) would not admit of the blank being driven past the edge of the barrel-head, whereas the thinness of the blank below the lip allows the blank to be driven between the edge of the barrel-head and the hoop, until the lip comes against the head, when it is in position to hold the head; and it is also necessary to chamfer or taper the blank down to the lower edge in order to permit the blank to set flush, or practically flush, against the outer surface of the stave.

With this invention barrel-chines may be very easily and perfectly repaired, requiring no skill to cut out the piece and but very lit-

tle skill to drive and fasten the blank in position. They are to be made, as are staves, of varying widths and with curvatures corresponding to the sizes of the different kinds of barrels employed commercially and by manufacturers.

I claim—

As a new article of manufacture, the chine-blank, having a formation substantially as described.

CHARLES A. BALDWIN.

Witnesses.

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