J. BRAUER.

BAILING HORN.

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974,548.

Patented Nov. 1, 1910.

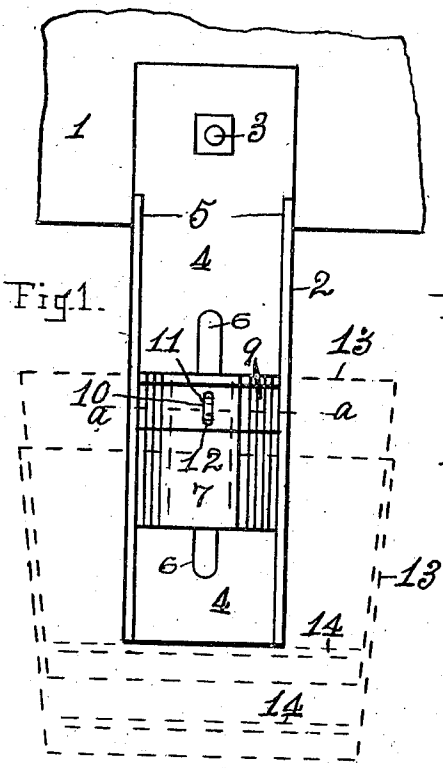

Fig. 1.

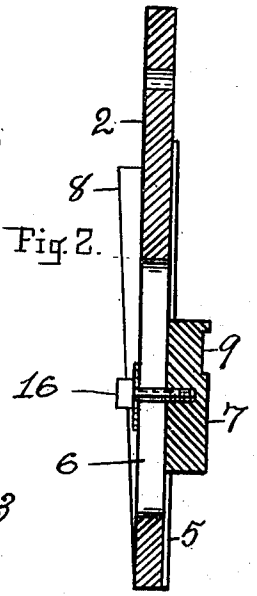

Fig. 2.

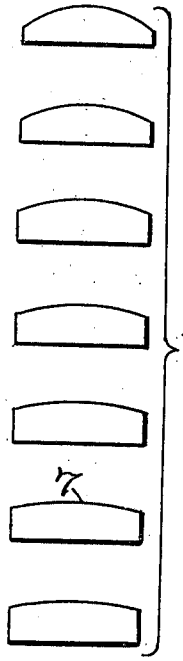

Fig. 6.

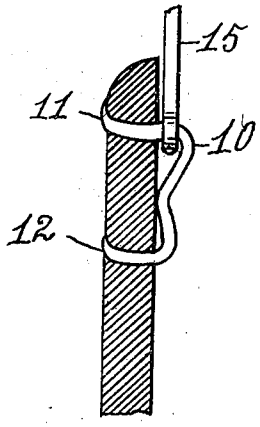

Fig. 4.

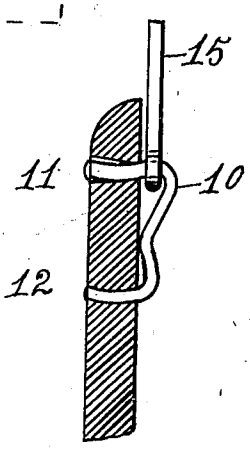

Fig. 5.

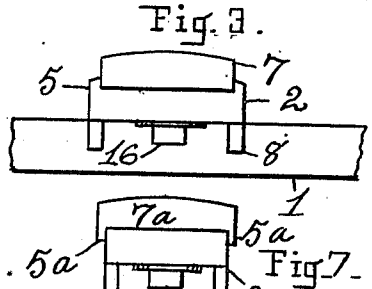

Fig. 3.

Fig. 7.

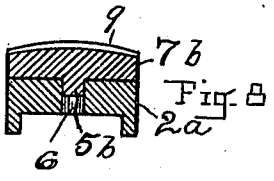

Fig. 8.

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BAILING-HORN.

974,548. Specification of Letters Patent. Patented Nov. 1, 1910.

Application filed August 22, 1910. Serial No. 578,338.

To all whom it may concern:

Be it known that I, JOHN BRAUER, a citizen of the United States, residing at Menasha, in the county of Winnebago and State of Wisconsin, have invented a new and useful Bailing-Horn, of which the following is a specification.

My invention relates to a horn, usually of cast metal and secured to the top of a convenient bench, upon which to secure the wire ears of pails, tubs, &c., thereto, and it consists of a long narrow arm to be secured to a suitable bench, and extending outward from its top as great a distance as the depth of the deepest article to be bailed, a smooth upper surface adapted for the sliding longitudinally thereon of a bailing block, a long narrow slot intermediate the ends of said arm and a bailing block having a curved upper surface, adapted to slide along said arm, and to be secured thereto at any point in the length of said slot by means of a bolt tapped into said block.

Horns for bailing purposes have always been used, they consisting of a single casting adapted to be secured to a bench, and extending outward from it any convenient distance, sometimes more and sometimes less than the depth of the article to be bailed thereon, with its upper surface curved transversely of the horn upon a circle of considerable less diameter than the diameter of the article to be bailed without much or any attention to the correspondence between the curve of the horn and that of the inside of the article to be bailed, and having a straight plain upper surface longitudinally, its entire length, with the result that its use often left the wire of the ear loose in the wood, instead of tight, as it should be.

My improvement is shown in the accompanying drawing, in which,—

Figure 1 is a plan showing a portion of a bench top with my improved horn thereon, and in dotted lines, a pail in the two positions it occupies during the bailing process. Fig. 2 is a longitudinal section of the horn. Fig. 3 is an end view of the outer end of the horn, and a portion of the bench top upon which it is supported. Fig. 4 is a section through the upper end of a stave of a wooden vessel, with a wire ear driven into it for securing its bail, the ear being as it is left after being driven into it upon my improved horn. Fig. 5 is a like section through a stave with an ear as it is often left when driven upon the usual horn. Fig. 6 represents a group of bailing blocks of different curvature for different diameters of wooden-ware, which are interchangeable with the horn. Fig. 7 is an end view of the horn and its bailing block showing a modification in the manner of retaining the block in position upon the horn when it is moved lengthwise of the horn. Fig. 8 is a transverse section of the horn and bailing block upon the line *a*, *a*, of Fig. 1 and showing another modification in the manner of retaining the block's side edges parallel with the horn when sliding it. Figs. 4 and 5 are upon a larger scale than the others.

Similar numerals and letters indicate like parts in the several views.

1, indicates a bench top to which the horn 2 is secured by means of the bolt 3. The horn is provided with a flat upper surface 4, a slot 6, a removable bailing block 7, and in Figs. 1 and 2, with ribs 5, along the outer side edges of the horn. There are also strengthening ribs 8 upon the lower side of the horn. The horn may be formed of common cast iron as may the bailing blocks also, but if so, their upper surfaces should be case-hardened, or else they should be formed of steel, cast. These bailing blocks are provided with convex upper surfaces, both ends substantially of the same curvature, and are provided with a depression or channel 9 of a slightly less curvature than that of the upper surface. This depression is $\frac{1}{8}$ of an inch, more or less in depth and is for permitting the wire ears 10 to have their points 11 and 12, driven through the wood of the article bailed before said points encounter the metal of the block.

In practice a pail or other article to be bailed, 13, is placed upon the horn with its bottom 14, against the outer end of the horn, as shown by the outline of a pail in Fig. 1, the block 7, being secured to the horn at the proper distance from the outer end of the horn. This brings the depression 9, under the points of the ear prongs 11 and 12, so that they can be driven through the stave without being bent. The ear is then inserted through an eye of the bail 15, and into the stave by striking it with a hammer, first upon the long prong and then upon the short one until sufficiently driven. The article being bailed is then pulled backward so that both prongs are upon the upper surface of the block, as is shown by the outer

dotted lines of the pail. This pulling backward will turn the points of the prongs 11 and 12, so that upon their being again struck with the hammer, they will be clenched as is shown in Fig. 4. When the ears are driven directly upon the solid surface of the horn they will often be blunted as in Fig. 5, but not clenched, and if then struck with the hammer, will enlarge the aperture through which the prongs are driven, as is shown in Fig. 5 instead of clenching the prongs as in Fig. 4. The series of blocks shown in Fig. 6, are intended to represent the curvatures of the different sizes of wooden-ware in a manufactory, although many more may be required in some cases. They are each intended to fit closely to the upper surface of the horn and will often need no fastening, their weight and friction of the engaging parts holding them in position, and a single horn only is required for all sizes. Should a fastening be required, the bolt 16, tapped into the block and inserted through the slot 6, will serve to retain the block in position.

In Fig. 7, the rib 5 instead of being upon the horn as in Fig. 1, is transferred to the block 7^a, and is represented by 5^a, and in Fig. 8, instead of ribs at the side edges of the horn or block, it is provided with a central rib, 5^b, integral with the block 7^b, which is fitted to the channel of the slot 6, of the horn. The channel 9, need not necessarily extend entirely across the blocks, as the only part used is a small space at the highest point of the blocks.

Having described my invention, what I claim and desire to secure by Letters Patent, is,—

1. A bailing horn consisting of an arm, one end of which is adapted to be secured to a suitable bench top and its other end to extend outward from said bench a distance equal to the depth of the deepest article to be bailed, a bailing block convex transversely of said arm with a curvature approximately corresponding with the curve of the inside diameter of the article to be bailed mounted upon the upper surface of said arm, with its inner end spaced a distance from the outer end of said arm substantially equal to the depth of the article to be bailed, a channel across the longitudinal central line of said block near the inner end thereof and transversely of said arm of a width in excess of the distance apart of the entering points of the bail ears to be used, and means for retaining the block in the desired position upon the arm.

2. A bailing horn consisting of an arm, one end of which is adapted to be secured to a suitable bench top and the other end to extend outward from the bench a distance equal to the depth of the article to be bailed, a slot through the arm along its longitudinal central line for a portion of its length, a bailing block mounted upon the upper surface of said arm with its inner end spaced a distance from the outer end of said arm substantially equal to the depth of the article to be bailed, a convex upper surface upon said block transversely of said arm with a curature approximately corresponding with the curve of the inside of the article to be bailed, a channel across the longitudinal central line of said block near the inner end thereof and transversely of said arm of a width in excess of the distance apart of the entering points of the bail ears to be used, ribs arranged for preserving the parallelism between said arm and bailing block, and a bolt tapped into said block for retaining the same upon the arm at any desired point in the length of the slot.

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Witnesses:
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