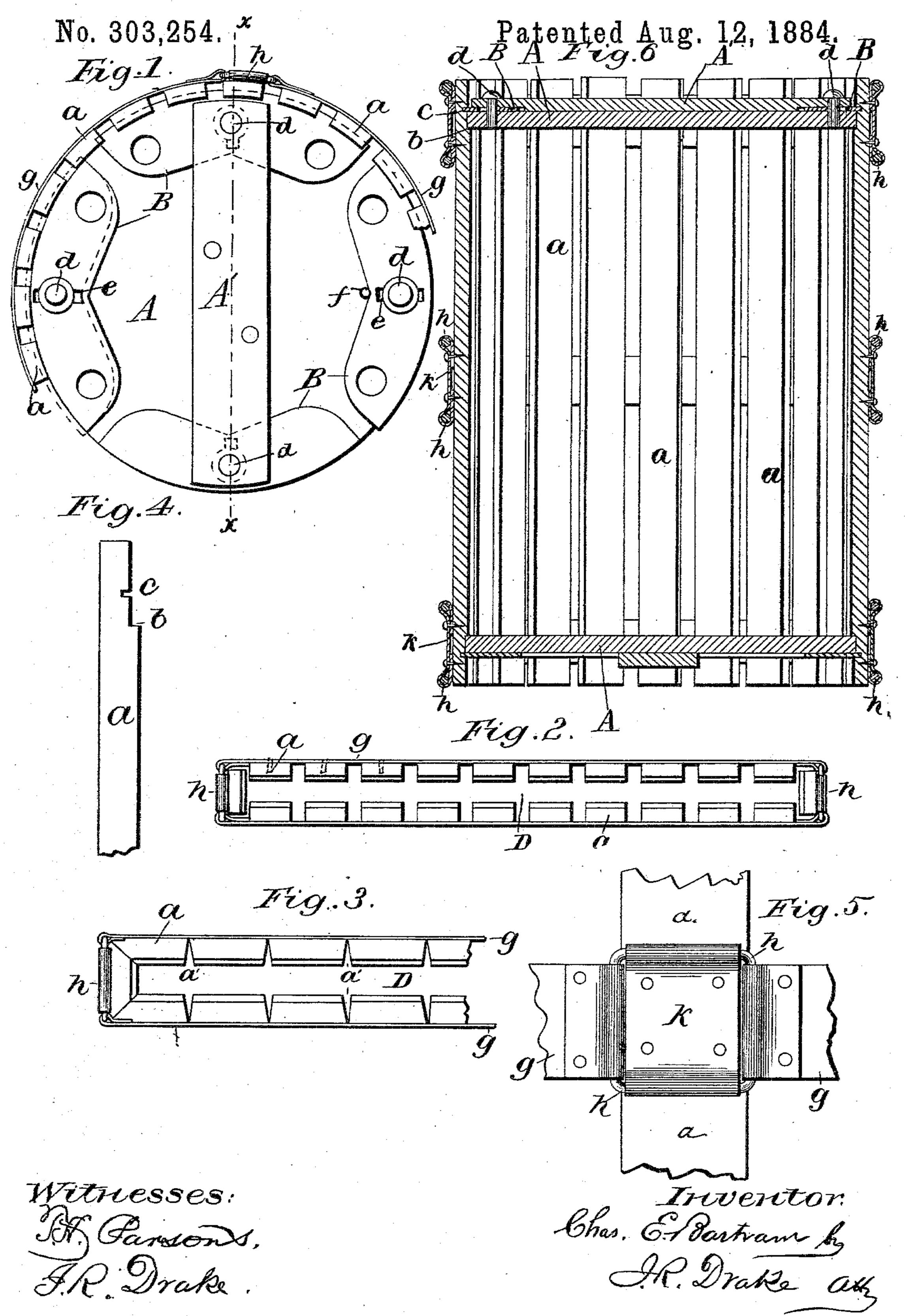
C. E. BARTRAM.

KNOCKDOWN FRUIT BARREL.



United States Patent Office.

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KNOCKDOWN FRUIT-BARREL.

SPECIFICATION forming part of Letters Patent No. 303,254, dated August 12, 1884.

Application filed March 10, 1884. (Model.)

To all whom it may concern:

Be it known that I, CHARLES E. BARTRAM, a citizen of the United States, residing at Fredonia, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Knockdown Fruit-Barrels, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a knockdown return fruit and vegetable barrel having either open or closed staves; and the invention consists in the construction of the same, as herein

fully explained and claimed.

of my barrel, showing the head and its fastenings, the barrel being partly broken away. Fig. 2 shows the open-stave barrel when collapsed. Fig. 3 is a view of a modification with staves beveled to make a closed barrel, and showing the staves which carry the link, said staves being beveled off at a greater angle than the other staves of same barrel. Fig. 4 is a detail view of part of one stave, and Fig. 5 enlarged detail showing the jointing of the metal bands. Fig. 6 is a vertical section of the barrel, taken on the lines x x, Fig. 1.

a a a designate the staves, made flat, having a shoulder, b, near both ends of each stave, on which the heads A A rest. This head is provided with a cross-piece, A', nailed across the separate pieces of the head, keeping them together, and also to receive the pressure of the barrel header when the head is put in, so as not to interfere with my fasteners. These consist of two, three, or more flat metal pieces, B B B. These pieces work flat on the heads A, and are provided with slots e e, in which are headed pins d. These pins and

which are headed pins d. These pins and slots allow the pieces to be pushed back and forward, but prevent them from being removed from the head. The outer edges are sharp, and are rounded to conform to the inner circle of the ends of the staves. The ends

of the staves have a slot, c, cut therein to receive the edge of each metal piece, the distance between the shoulder b and the cut c being the thickness of the head A. When these metal fasteners are pushed in place, en-

gaging the slot c, a tack, f, or its equivalent is driven in at the edge, as in Fig. 1, and is easily removed when necessary to take off the head.

gg represent the metal bands or hoops, l

which hold the staves in place by being nailed thereto. The opposite ends of these bands are fastened to links h h. Each link is made the width of the stave, or thereabout, and these links form the hinges for collapsing the barrel, as in Figs. 2 and 5. A piece of tin, k, is the bent over these links, and with the links fastened to a stave. As the links are on opposite staves, and as all the links on each side are on the same stave when the barrel is collapsed, square ends to the flattened-out barrel are obtained, and a space, D, is left between the upper and lower tiers of staves, in which the barrel-heads can be put when the barrel is returned to the shipper.

To make what is called by fruit packers a "closed barrel," I bevel off the inner edges of all the staves at a' a', (see Fig. 3,) which shows the barrel flattened out. When the barrel is set up, these beveled edges a' a' all close tightly together, and no spaces are left between the staves. Without fastening my link h to the stave this effect could not be produced. The staves which carry the links should be beveled off at a greater angle than the other staves of the barrel.

The head-fastening is very simple, and is permanent, and the whole head so constructed as to be virtually in one piece.

I claim--

1. In a knockdown fruit-barrel, in combination with the staves a a a and attached metal bands g g, the uniting-links h h, each having the metal covering and fastening-pieces k, nailed to a stave, making a square hinge and effecting the space D between the collapsed sides, substantially as specified.

2. In a knockdown fruit-barrel, the combination of the metal bands g g g, hinges h h k, and staves having the beveled edges a' a' a',

as and for the purpose specified.

3. In combination with the staves a a a, having the shoulder b, the cut c therein, and the head A A', with the metal fastening-pieces B B B, these parts having headed pins d and slots e e, whereby the said pieces can be moved in and out of the cuts c, all substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. BARTRAM.

Witnesses:

J. R. DRAKE, T. H. PARSONS.