Feb. 14, 1933. A. F. DURAND 1,897,366

BASKET

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Fig. 1

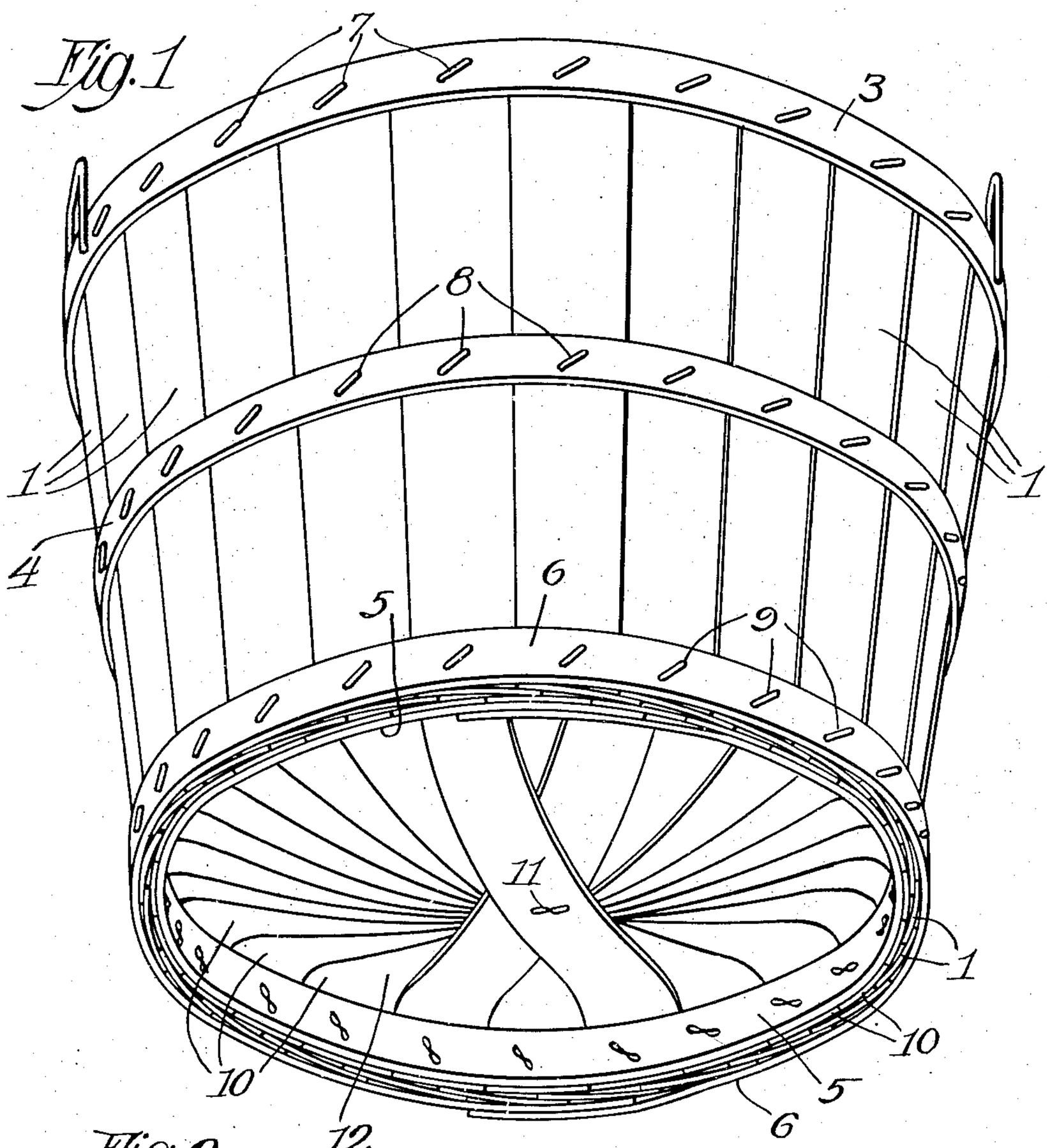

Fig. 2

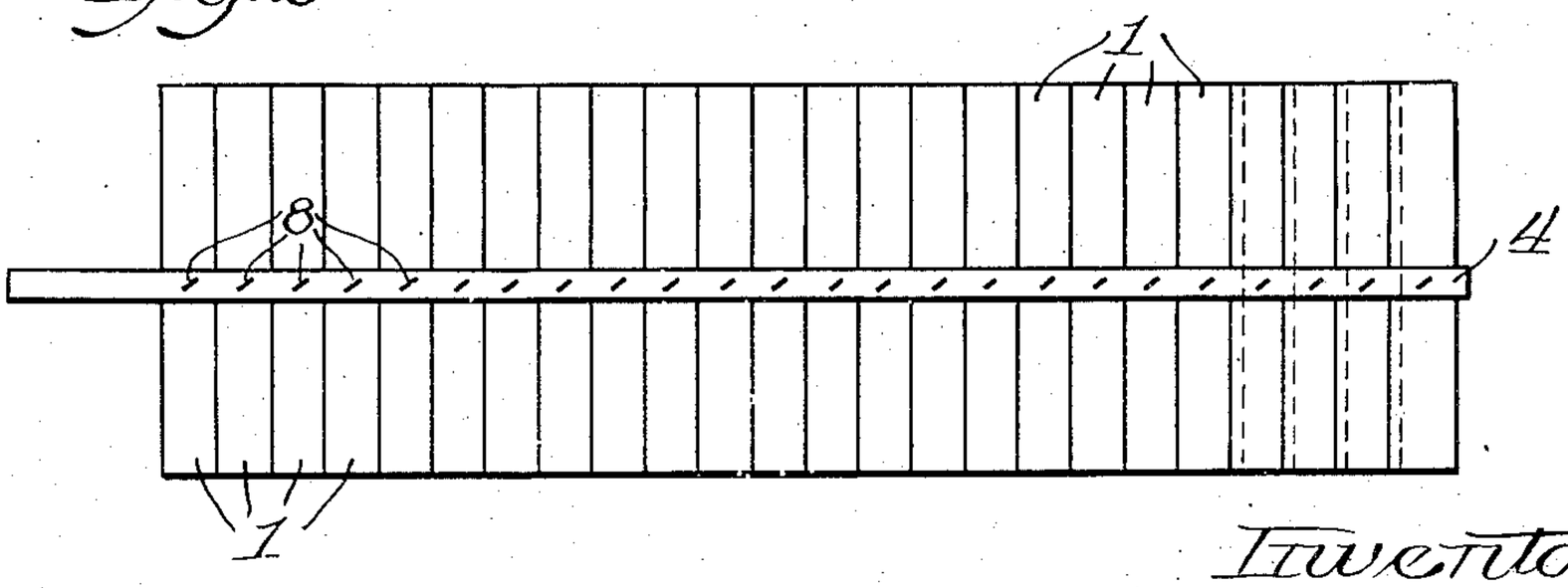

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Fig. 3

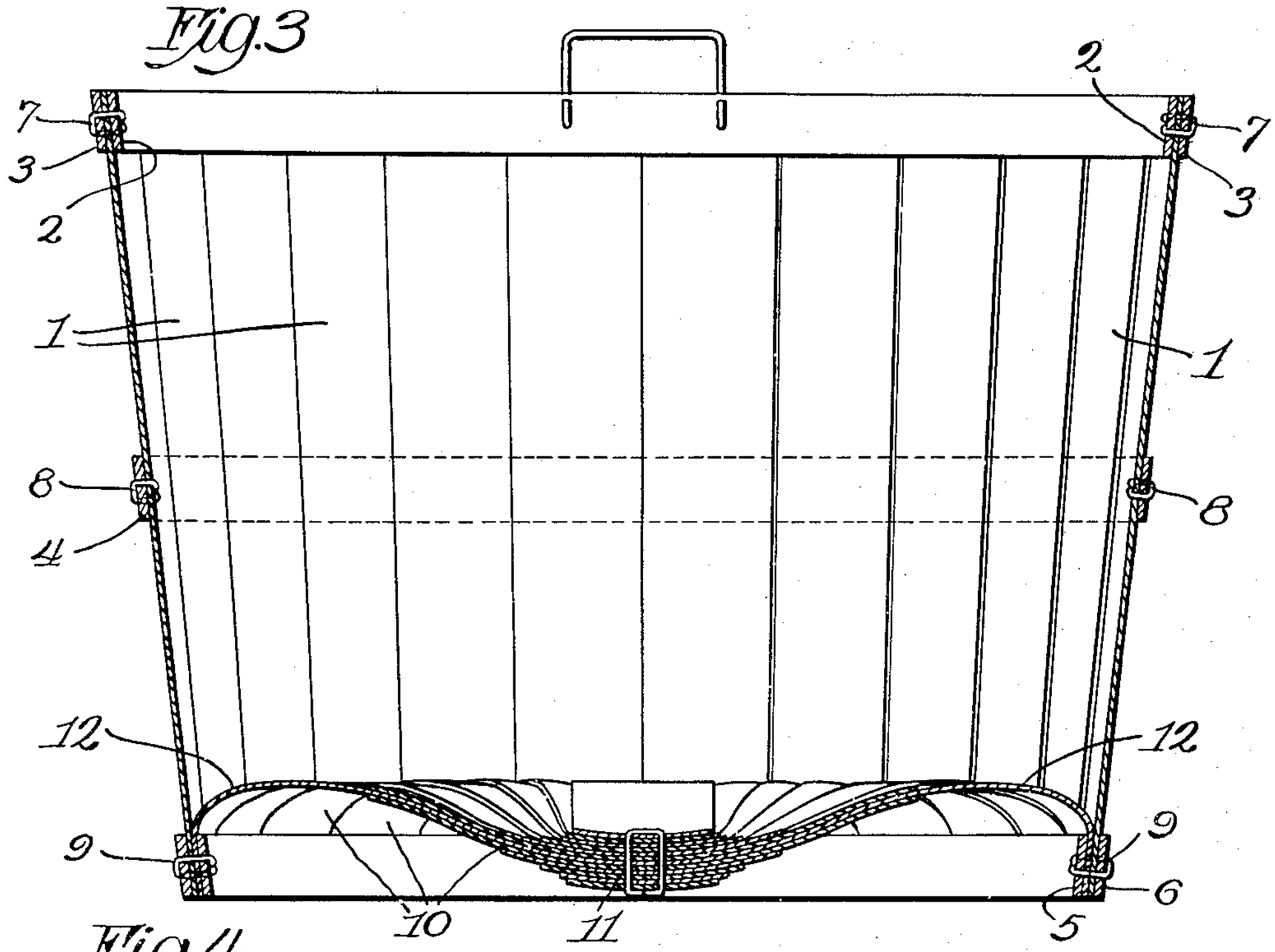
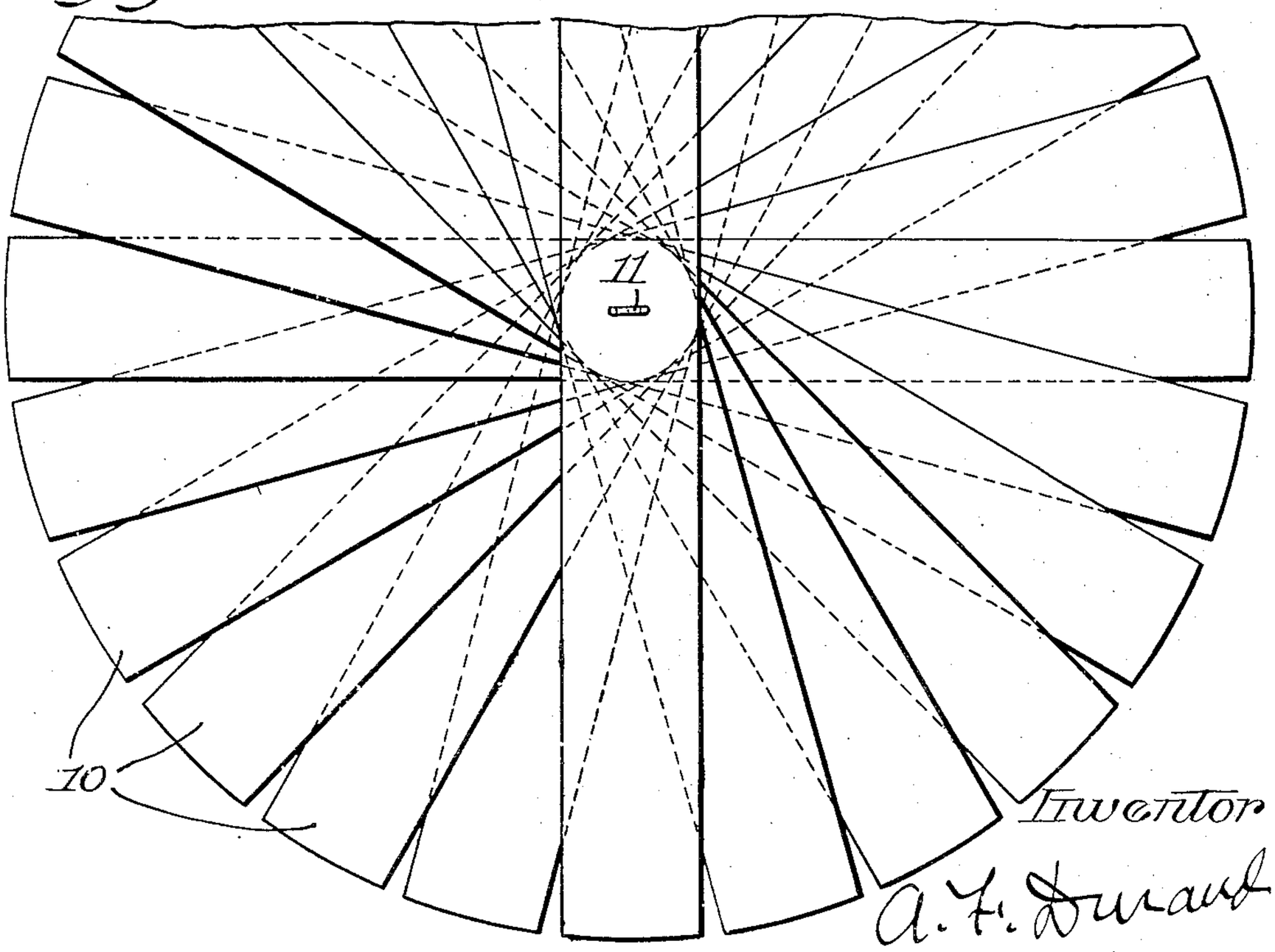


Fig. 4



Inventor

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Patented Feb. 14, 1933 1,897,366

UNITED STATES PATENT OFFICE

ARTHUR F. DURAND, OF RAVINIA, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO SARANAC MACHINE COMPANY, OF BENTON HARBOR, MICHIGAN, A CORPORATION OF MICHIGAN

BASKET

Application filed January 13, 1930. Serial No. 420,367.

This invention relates to baskets, and more particularly to bushel baskets for shipping fruit or vegetables, and especially baskets of this kind having top and bottom hoops and straight outwardly inclined side walls between said hoops, the bottom hoop, or hoops, resting on the floor when the baskets are set down right side up.

Generally stated, the object of the invention is to provide a novel and improved construction and arrangement whereby a basket of the foregoing general character has a bottom formed of crossed staves, with the ends of the staves bent downwardly and fastened with the side walls between the two bottom hoops of the basket.

It is also an object to provide certain details and features of construction and combinations tending to increase the general efficiency and the desirability of a so-called straight side basket of this particular character.

To the foregoing and other useful ends, the invention consists in matters hereinafter set forth and claimed and shown in the accompanying drawings, in which—

Fig. 1 is a perspective of a basket embodying the principles of the invention;

Fig. 2 is a plan view, more or less diagrammatic, of a preformed mat of staves at a hoop strip, which mat can be used to form the side walls of the basket, as will hereinafter more fully appear;

Fig. 3 is a vertical section of said basket; and

Fig. 4 is a plan view of the mat formed of radially arranged or crossed staves or splints, which mat can be used to form the bottom of the basket, as will hereinafter fully appear;

As thus illustrated, the invention comprises straight and downwardly tapered or outwardly inclined side walls formed of splints or staves 1, arranged preferably as shown in the drawings. These side walls are preferably bound together by inner and outer top hoops 2 and 3, an intermediate or middle outside hoop 4, and inner and outer bottom hoops 5 and 6, as shown. Staples 7 are inserted through the top hoops and the interposed side wall staves, to rigidly connect the two hoops together, and thus form a strong rim for the top of the basket. Staples 8 are inserted through the hoop 4 and the side walls of the basket, as shown. Also, staples 9 are inserted through the hoops 5 and 6, and through the side walls of the basket, as shown, thus forming a bottom rim or bottom hoop structure, capable of supporting the basket on the floor, when the basket is set down right side up.

The bottom of the basket is preferably formed of radially arranged and crossed staves or splints 10, as shown. For example, in Fig. 4, a preliminary mat is formed of the staves or splints 10, and fastened together at the center of the mat by a staple 11, or by other suitable fastening means. The bottom thus formed has the end portions of the splints or staves 10 gradually curved or bent at the outer margin of the bottom, as shown at 12 in Fig. 3 of the drawings, and the end portions of the staves or splints 10 are bent down and inserted between the inner hoop 5 and the side wall staves or splints 1, as shown. Thus, the staples 9 are inserted through the hoops 5 and 6, and through the staves 1, and through the end portions of the staves or splints 10, whereby one set of horizontal staples is sufficient for the bottom hoop structure of the basket.

As shown, the basket bottom thus formed is shaped to bulge downwardly, so that it is concave at its upper side and its center, and convex on its under side, as shown in Fig. 3 of the drawings. But, it will be understood, the bottom may be formed with this concavity and convexity omitted, and with the center of the bottom level, or even bulging upwardly to some extent, if such is necessary or desirable.

As shown in the drawings, the various hoops have the same downward taper as the basket, but it will be understood that in practice the hoops can be this way, or they can be cylindrical instead of tapered, depending somewhat upon the method and machinery employed for making the basket. It will be understood that the side walls and bottom and hoops are preferably of wood, and that,

in the manufacture of baskets of this kind, such materials are usually steamed to make them flex or bend easily in the process of manufacture.

There are different methods or processes by which this basket can be made. For example, the bottom can be formed, as shown, around the inner hoop 5, and the staves 1 can then be assembled around the perimeter of the bottom, and the structure rotated, and the outer hoops can be bent around and applied in the stapling operation by which the hoops and the staves or splints are secured together. If desired, the staves 1 can be first formed into a flat mat, with the outer metal hoop 4 stapled thereto, as shown in Fig. 2, and this mat can be wrapped around the perimeter of the bottom, and the hoops 3 and 6 can then be bent around and applied to the outer surface of the side walls, as shown. However, also, the inner top hoop 2 is preformed and placed in position to have the staves 1 assembled around its periphery. Again, a sort of preformed bottom unit can be formed by stapling the end portions of the staves or splints 10 to the preformed inner hoop 5, if desired, and the side walls and other hoops can then be fabricated around the perimeter of this preformed bottom unit; but in such case, there will be two sets of horizontal staples in the bottom hoop structure, one set of relatively short staples to fasten the end portions of the staves 10 to the hoop 5, to form the preformed bottom unit, and then a second set of staples 9, as shown, the staples of the first set being necessarily driven prior to the insertion of the staples of the second set.

In any event, a strong and yet light and practical straight side bushel basket is provided, in which the bottom is formed of crossed staves or splints having their end portions bent down and firmly anchored between the inner and outer bottom hoops, as well as fastened to the side walls of the basket. In this way, there is practically no danger of the bottom of the basket, under a heavy load, pulling away or becoming detached at its margin from the bottom hoop structure. Also, the invention obviates the necessity of employing any staples driven vertically in the bottom hoop structure.

It will be understood that the curvature at 12 can be either gradual or abrupt, although a gradual curve may be preferable, as there is less danger of breakage of the staves or splints 10 over the upper edge of the inner hoop 5, when the basket is loaded. Of course, one form of the invention could involve the scoring of the staves or splints 10, on the line of a circle, the diameter of which would be substantially the same as the diameter of the inner hoop 5, whereby the said splints or staves would bend or break more or less sharply over the upper edge of the inner hoop 5, for producing either a substantially flat bottom, or a bottom curved more or less at its middle, as shown. But whether the staves or splints 10 are scored, as stated, or whether they are unscored and gradually bent downwardly as at 12 in the drawings, it is nevertheless true that the bottom will have marginal portions bent down and inserted between the inner and outer bottom hoops, preferably in direct engagement with the inner surface of the side wall material of the basket.

The invention, therefore, provides a basket having a bottom the outer edge portions of which are raised a distance above the floor or ground, when the basket is loaded, and resting on its bottom. However, the central or middle portion of the bottom is depressed, and this in effect adds to the capacity of the basket, for a basket of any given height. The advantages of strength and a raised bottom are obtained around the marginal portions of the bottom, while the advantages of a depressed bottom are obtained at the middle or central portion thereof. This, in effect, makes it possible to somewhat reduce the height of the basket, or to make it of less height than would be necessary if the entire bottom was bulged upwardly, as such upward bulge would reduce the capacity or internal area of the basket, whereby full measure would not be provided except as the height of the basket was then increased. The invention, therefore, in effect gets the load off the floor or ground, so that the basket practically rests only on its two lower hoops, but at the same time there is a depression of the bottom of such character that the basket does not need to be as high as would be necessary if the entire bottom was bulged upwardly, in order to insure full measure for the basket.

It will be seen, therefore, that in effect the bottom has a well at the center thereof, with an arch formation surrounding said well, and with said well preferably formed in such manner that it will rest, or substantially rest, on the floor when the basket is loaded.

What I claim as my invention is:

1. The method of making a basket, comprising the formation of a round mat from staves, by crossing the staves at the center of the mat, fastening the staves together at said center, bending the ends of the staves in one direction, and depressing the middle portion of the mat in the same direction, whereby said middle portion is brought substantially into the plane of the depressed or bent end portions of the staves, forming curves in the staves between said end portions and the middle portion, and fastening said end portions between the side walls and an inside bottom hoop of the basket, whereby the mat forms a raised bottom for the basket,

with the multiple-thickness middle portion of the bottom depressed into the plane of said hoop, and with the outer portions of the bottom elevated a distance above said hoop.

2. The method specified in claim 1, comprising the fastening of an outside bottom hoop concentrically of said inside bottom hoop, by inserting staples through both hoops and through the side walls of the basket and through the depressed or bent end portions of the bottom staves.

3. The method specified in claim 1, comprising the fabricating of the basket body around the said preformed bottom, whereby the bottom is formed first, in the manner and form specified, and the basket body is then made afterward around the bottom.

Specification signed this 11th day of January, 1930.

ARTHUR F. DURAND.