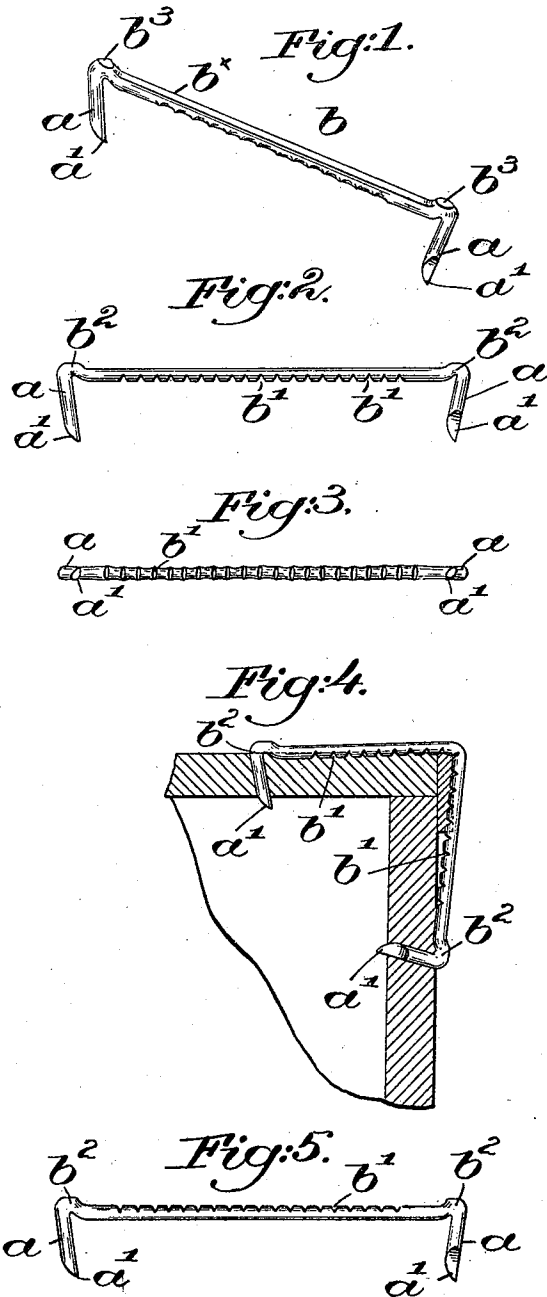


(No Model.)

F. T. BRADISH.  
FASTENING DEVICE FOR TUBS, BOXES, &c.

No. 517,836.

Patented Apr. 10, 1894.



Witnesses.

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# UNITED STATES PATENT OFFICE.

FREDERICK T. BRADISH, OF BOSTON, MASSACHUSETTS.

## FASTENING DEVICE FOR TUBS, BOXES, &c.

SPECIFICATION forming part of Letters Patent No. 517,836, dated April 10, 1894.

Application filed November 29, 1893. Serial No. 492,358. (No model.)

### *To all whom it may concern:*

Be it known that I, FREDERICK T. BRADISH, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Fastening Devices for Tubs, Boxes, &c., of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention relates to staple-like fastening devices employed in securing the covers or tops of wooden tubs, boxes, pails and the like. Prior to this invention fastening devices for this purpose have been made in which the end prongs or driving legs have been joined by a thin flat top-bar or crown, the latter being purposely made thin in order that its resiliency may be so reduced as to prevent the crown, when bent over the corner of the tub or box, from springing back sufficient to draw out the legs or prongs. In practice, however, I have found that staples of this construction when driven hurriedly do not always bend squarely over the edge of the tub or box, but are apt to bend on an angle thereby causing the lower sharpened leg or prong to assume a wrong position for driving and, as is frequently the case, causing the hammer blow to flatten the leg out upon the surface of the wood without driving the same into it. I have also found in driving fasteners of this construction that if the hammer face strikes the crown of the fastener slightly in or back from the prong or leg, the latter is thrown out from its proper position and receives the blow at an angle, frequently being thereby flattened out upon the wood or driven slightly into the latter at an angle. In my experiments to overcome these objections and to produce a fastener capable of being driven hurriedly yet with accuracy, I have devised the staple-like fastener embodying this invention, in which the crown is provided for a portion or for its entire length with serrations or cross-grooves which constitute lines of weakness at right angles to the length of the fastener and cause the fastener when bent over the edge of the tub or box to always bend squarely at one of these lines of weakness.

In order that the hammer blow may be delivered always squarely or substantially upon or

at the top of the driving leg, I provide the crown, where it joins the legs, with auxiliary upward bends which carry the driving faces of the fastener above the crown thereof, so that they and they alone always receive the driving blow.

In the drawings, Figure 1 represents in perspective one form of fastener embodying this invention; Fig. 2, a side elevation of the fastener shown in Fig. 1; Fig. 3, an under side view of Fig. 2; Fig. 4, a detail showing one of the fasteners as it will appear when driven into the tub or box, and Fig. 5, a side elevation of a modified form of fastener.

Referring to the drawings, my improved fastener consists of the driving legs or prongs *a, a*, joined by the crown or top-bar *b*, the latter being of sufficient length to adapt the fastener for the class of work for which it is designed.

In accordance with one part of this invention I provide the crown *b*, preferably for the greater part of its length, with closely arranged cross-grooves or serrations *b'*, the depth of which is varied according to the size of the fastener and the character of the goods to which it is to be applied, the said grooves or serrations in any event being of such depth as to constitute cross lines of weakness in the crown, whereby the latter when bent in either direction naturally bends in one of these lines of weakness. These lines of weakness preferably extend at right angles to the length of the crown, in order that said crown when caused to bend shall necessarily bend squarely with relation to the length of the fastener. In Figs. 1 to 4 inclusive these serrations are at the inner face of the crown.

In order that the driving blow may always be received directly upon or close to the top of the pointed leg *a* to be driven, I have herein given the crown an auxiliary bend *b<sup>2</sup>* at each end, the top *b<sup>3</sup>* of which is thereby carried above the level of the crown proper and is preferably flattened, as shown, to constitute a substantially flat driving face close to and almost directly over the driving leg. This driving face being raised above the crown proper always receives the driving blow, so that the latter is delivered substantially upon the top of the leg to be driven, causing the latter to enter the wood squarely without any

apparent tendency to be thrown or flattened out upon the surface of the wood or upon the latter at such an angle as shall render the fastening insecure. The legs *a* are pointed or sharpened in suitable manner to better enable them to enter into the wood.

Referring now to Fig. 4, in applying a fastener to a tub, box, or other suitable receptacle, one of the legs is first driven into the cover, after which the crown is bent down over the edge of the cover or box and the other leg driven into the side thereof. By reference to this figure it will be seen that by raising the driving face of the fastener above the crown of the same, the blow when delivered upon the face and in driving the leg into the wood as far as possible has a tendency to embed the depressed or lower crown portion in the wood, as shown, the leg of the fastener usually entering the wood until the top of the auxiliary bend in the fastener contacts with the surface of the wood, the end portion of the crown at such times being then necessarily embedded in the wood. By serrating or grooving the crown-bar at its under side the said bar is more easily embedded in the wood, as above described, the raised portions between the serrations or grooves when so embedded in the wood acting to prevent lateral working of the cover with relation to the tub or box, thereby preventing loosening of the fastener which so frequently occurs with ordinary fasteners by reason of this working of the cover. I prefer to place the serrations or lines of weakness at the under side of the crown, as in Figs. 1 to 4, because the fastener so formed bends better, has a tendency to hug the corner better, and the projecting portions between the serrations are embedded in the wood and act to hold the staple. The serrations or lines of weakness may, however, be placed at the outer side or face of the crown, as in Fig. 5, with excellent results.

In the preferred method of producing these fasteners the face of the crown opposite that at which the serrations are located is necessarily slightly flattened, as shown at *b*<sup>x</sup> Fig. 1, although this face may be left rounded by the use of suitable dies or machinery.

This invention is not limited to the exact form, shape, or construction of fastener here-

in shown, for the same obviously may be varied and still come within the scope of the invention. The serrations may extend for a greater or less distance along the crown; the serrated crown may be used without the auxiliary bends at the tops of the legs, or the auxiliary bends may be used at the tops without the serrations.

Having described my invention, and without limiting myself to details, what I claim, and desire to secure by Letters Patent, is—

1. The herein-described staple-like fastener for tubs, boxes, &c., the same consisting of two driving legs, and a connecting integral crown provided with a continuous series of transverse serrations or notches forming as many lines of weakness to facilitate the bending of such fastener about an angle or corner of an object, substantially as set forth.

2. The herein-described staple-like fastener for tubs, boxes, &c., the same consisting of two driving legs, and a connecting integral crown provided with a continuous series of transverse serrations or notches made in its edge, and having its outer edge flat and unbroken, the said serrations or notches forming lines of weakness to facilitate the bending of the fastener about an angle or corner of an object, substantially as set forth.

3. The herein described staple-like fastener, consisting of a crown bent downwardly at its ends to form driving legs, and having auxiliary upward bends inside and adjacent the tops of said legs to provide raised driving surfaces, substantially as and for the purpose specified.

4. The herein described staple-like fastener, consisting of a serrated crown bent downwardly at its ends to form driving legs, and having auxiliary upward bends inside and adjacent the tops of said legs to provide raised driving surfaces, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK T. BRADISH.

Witnesses:

FREDERICK L. EMERY,  
AUGUSTA E. DEAN.