

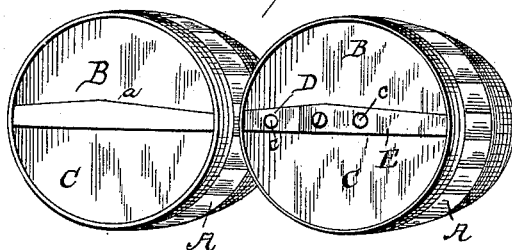
(No Model.)

J. A. CAMPBELL.  
BARREL HEAD.

No. 422,008.

Patented Feb. 25, 1890.

Fig. 1.



*Fig. 2.*

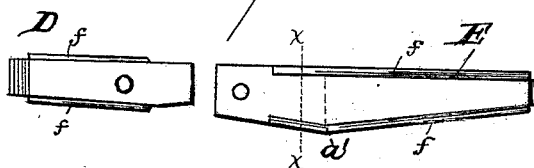


Fig. 3.

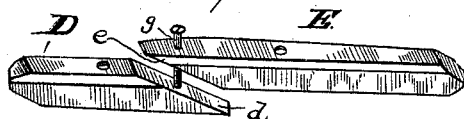
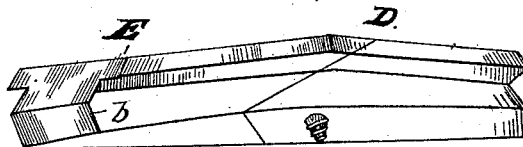


Fig. 5.



Fig. 4.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JAMES A. CAMPBELL, OF NEW ORLEANS, LOUISIANA.

## BARREL-HEAD.

SPECIFICATION forming part of Letters Patent No. 422,008, dated February 25, 1890.

Application filed December 31, 1889. Serial No. 335,507. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES A. CAMPBELL, a citizen of the United States, residing at New Orleans, parish of Orleans, State of Louisiana, have invented a new and useful Barrel-Head, of which the following is a specification.

My invention relates to improvements in barrel-heads; and it consists in providing the same with means, substantially as shown and described, whereby the barrel-head may be firmly secured in position and when desired readily detached without disturbing the hoops thereof.

Figure 1 represents end views, in perspective, of two barrels, one of which shows the opening in the head for the insertion of the wedges, the other having the wedges in place. Fig. 2 represents bottom views of the wedges. Fig. 3 represents perspective views of the same parts. Fig. 4 represents a perspective view of the same parts, showing the flanges. Fig. 5 represents a cross-section on line *x x*, Fig. 2.

Similar letters refer to similar parts throughout the several views.

A represents a barrel-head formed of two sections B and C, the section B having a recessed edge, as shown at *a*, while the adjacent edge of the section C is right-lined or straight.

D and E represent wedges adapted to be fitted in the opening between the two sections B and C. Each of the wedges has a straight side *b* to contact with the straight edge of the section C, the opposite sides of each wedge respectively corresponding with the sides of the recess *a*, the side of the wedge E having a widened portion, as at *a'*, with narrowing ends. The wedges are beveled at their outer ends so as to readily enter the channel in the chine of the barrel, and have recesses *c* in their tops, whereby a driving-tool may be inserted for pushing the wedges into place. The inner ends of each of the wedges are formed with inclined faces *d* and *e*, so that they may slide or move one on the other when operated and form a tight joint when secured together. On the sides of the wedges which are vertical to the plane of the barrel-head are flanges *f*, adapted to rest on the top of the edges of the sections, thus serving to keep them from falling into the opening or below

the sections. The sides of the wedges D and E are vertical to the plane of the tops thereof, as is clearly shown in Fig. 5.

The operation of securing the head in place is as follows: The curved edges of the sections B and C are placed in the croze or channel in the chine of a barrel and the wedges D and E inserted in the opening between the said sections, the outer ends being in the direction of the channel. The wedges are then driven by means of a proper tool, which is inserted in the recesses *c*, into the channel, thus further separating the sections and spreading the barrel. It will be noticed that the flanges *f* cause the wedges to move horizontally on the sections directly toward the channel, and the inclined contact-faces *d* and *e* of the ends form a close joint while the head is being tightened. When the head is in place, a screw or nail may be passed through the inner ends of the wedges, thus firmly holding them in position. The two wedges D and E are readily formed of a single piece of material cut in two diagonally, so that the inclined faces at the inner ends have the same slope or incline.

In lieu of the recesses in the tops of the wedges, a piece of wood or other material may be secured thereto for a bearing for the driving-tool.

What I desire to claim and secure by Letters Patent is—

1. A barrel-head formed of two sections, one having a straight-line edge and the other a recessed edge, and both having said edges at right angles with the plane of the tops thereof, wedges having outer ends with beveled upper and lower faces and inner ends, each having an inclined contact-face, the said wedges having flanges on the upper portions of their sides adapted to rest on the top of the sections, and provided with recesses in their tops, said parts being combined substantially as described.

2. In combination with corresponding sections of a barrel, a wedge composed of two sections, the one having a wider section and tapering in both directions, and said sections adapted to fit endwise, substantially as described.

3. A barrel-head consisting of two sections,

one having a straight contact-edge and the other a recessed edge *a*, the wedges D and E, having inclined upper and lower contact-faces and beveled outer ends, and flanges on the  
5 upper portion of the sides of the said wedges, one of the wedges having a widened central portion coinciding with the recess in the bar-

rel-section, and both wedges having vertical sides below the flanges, said parts being combined substantially as described.

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Witnesses:

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