

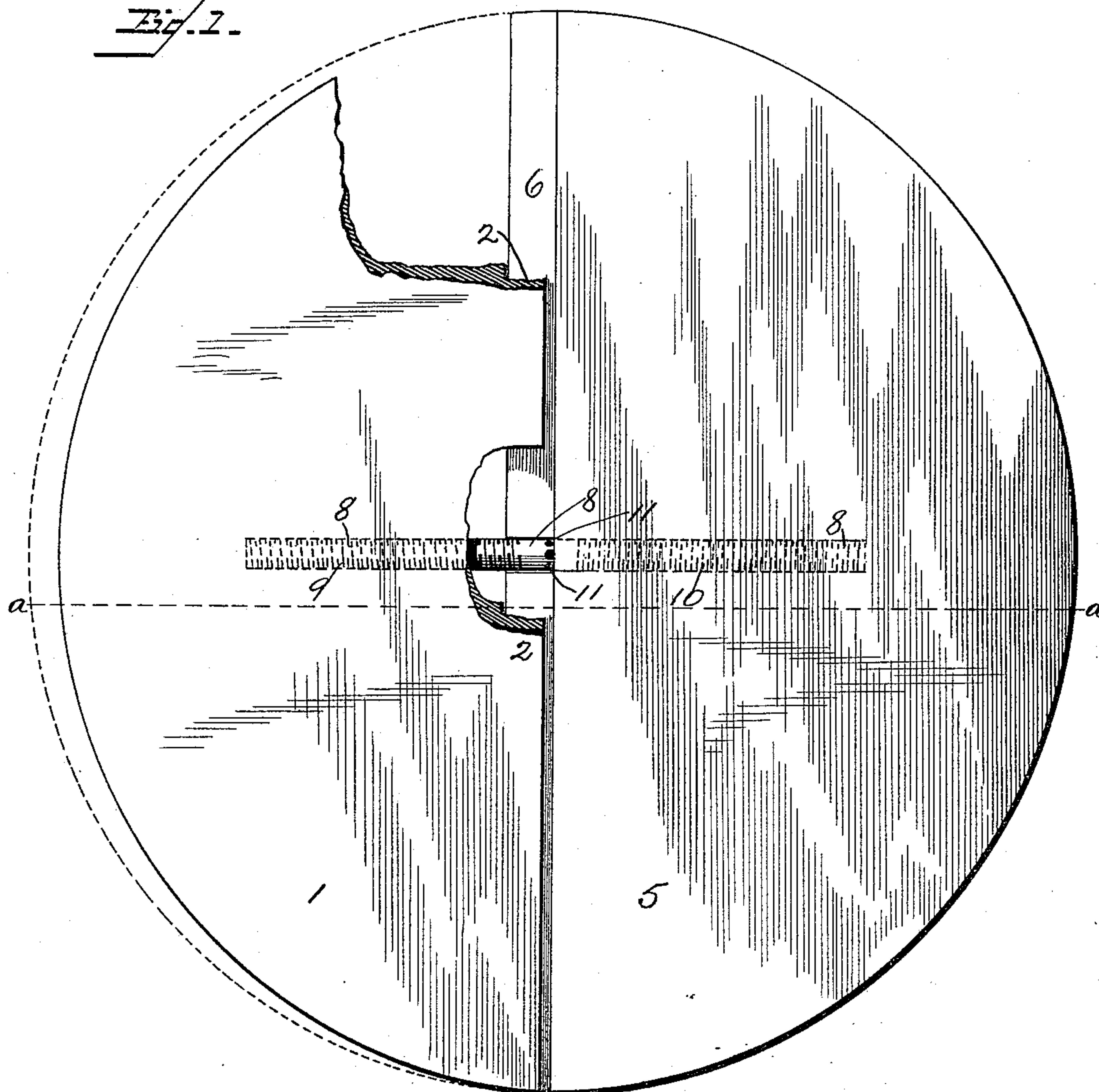
(No Model.)

G. E. BEAN.
BARREL HEAD.

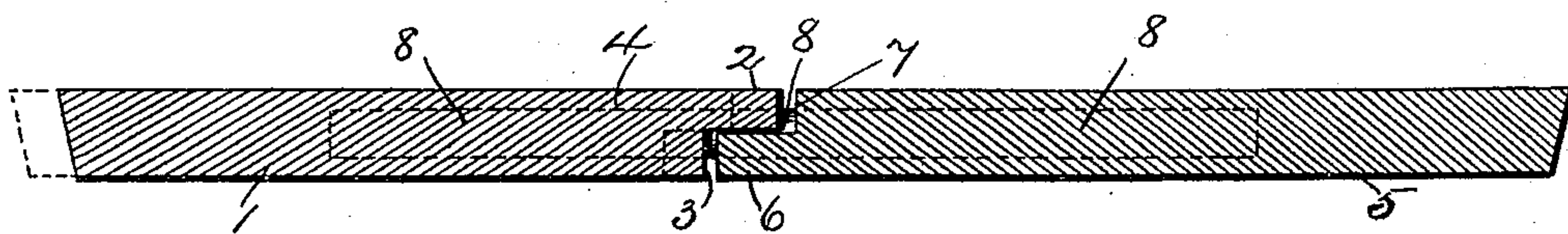
No. 470,173.

Patented Mar. 8, 1892.

Fig. 1.



~~Ex. 2.~~



Witnesses
Wm. S. Hendon.

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Inventor

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UNITED STATES PATENT OFFICE.

GEORGE EMERSON BEAN, OF TAMPA, FLORIDA.

BARREL-HEAD.

SPECIFICATION forming part of Letters Patent No. 470,173, dated March 8, 1892.

Application filed November 14, 1890. Serial No. 371,429. (No model.)

To all whom it may concern:

Be it known that I, GEORGE EMERSON BEAN, a citizen of the United States, residing at Tampa, in the county of Hillsborough and State of Florida, have invented certain new and useful Improvements in Barrel-Heads and Similar Packing and Storing Vessels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved construction of heads for barrels and similar packing and storing vessels whereby such heads are adapted for ready application to and removal from barrels and the like without injury, are capable of ready reuse, and are rendered adjustable to completely fit and cover the ends of the vessel. Succinctly stated, my improved head for barrels and the like is formed of two sections, the meeting edges of which are constructed the one with an inwardly-extending flange on its under side and the other with a similar flange on its upper side, a screw having at its respective ends right and left handed threads serving to connect the respective sections and adjust them to secure the closure of the barrel or other opening and lock said sections in closed position.

In the accompanying drawings, Figure 1 represents a top plan view of a barrel-head constructed according to my invention. Fig. 2 represents a section on the line *a a* of Fig. 1, the full lines showing the position of the sections of the head when placed in the barrel end to be closed, while the dotted lines show the mode of adjustment to secure the closure of the barrel.

Customarily, when it is desired to open a barrel, the head is pried off and either destroyed or so injured as to be incapable of further use, or, if used again, only at the expenditure of considerable trouble and annoyance. By my improvement the head is formed in two sections, the circumferential edges of each of which are constructed to fit the chines of barrels generally, one section on its top face being of a size corresponding or about so with the half of the mouth of the barrel, while the other section is on its upper face

about half an inch shorter, so that it may be readily sprung or placed in the mouth after the first-named section is placed in position. Lapping flanges are formed on the inner edges of the respective sections to cover and securely close the jointure of the two sections, and a screw having right and left threaded ends is engaged with the respective inner edges of the sections, so that by turning said screw in one direction said shorter section will be forced in position to entirely cover the barrel-mouth and also lock the sections, while by turning said screw in the reverse direction the sections will be unlocked, loosened, and their ready removal without injury permitted.

Referring to the drawings, 1 represents one of the sections of my improved adjustable head for barrels and the like. This section is provided at its inner edge with a flange 2, formed by cutting away a portion of one face, as at 3, and has a horizontal threaded hole 4, formed in the flange or lip 2, to receive one end of the threaded screw to be presently described.

5 represents the other section of my improved barrel-head. This has at its inner or meeting edge a similar lapping flange or lip 6, formed by recessing or cutting away a portion of the head on the face thereof opposite to that on which the similar recess is formed in the other section. The barrel or other head constructed according to my invention is constructed somewhat thicker than ordinary heads to permit of such recessing and flanging as herein described without weakening the head.

7 represents a horizontal threaded hole formed in the inner edge of the section 5 to receive the other end of the adjusting and securing screw 8. This screw extends about five inches into each section to strengthen the same, and has on its respective ends right and left handed threads 9 10 and mediately thereof transverse holes or slots 11, with which any suitable tool may be engaged to secure the rotation of said screw.

The operation is as follows: The two sections, of which one, as 1, is about half an inch shorter than the other, are first connected together by the screw 8, which is about ten

inches long and extends about five inches into each section to securely connect said sections together and strengthen them. In this connected position the head is placed in the mouth of the vessel by first placing in position therein the larger section and then springing into position therein the other portion of the head. This is readily accomplished by reason of the less width of the adjustable section 1 and the consequent less length at that time, as shown in full lines in Fig. 2, of the head than the mouth. The screw 8 is then turned to expand the diminished section, as 1, to the position shown in dotted lines in Fig. 2, to thereby force said section 1 outward and close the barrel-mouth and tightly wedge said sections into position to secure a perfect closure and also to lock said sections in closed position. Any suitable tool may be employed for turning the screw—as, for instance, a wrench or a pin or the like inserted in the holes or slots 11. By flanging the respective inner edges of the sections, as shown, it will be apparent that the sections can readily be adjusted to fit barrels and other receptacles of different degrees of opening without impairing the closing quality of the head, as the flanges 2 6 slide the one over the other in the adjustment of the sections and overlap each other, as shown, at all times thereby entirely closing and sealing the jointure of the sections. By my arrangement the necessity for nailing the head in position or of breaking it into parts to secure its removal are avoided. When it is desired to remove the head, all that is necessary is to turn the screw to bring the smaller section toward the other section, as shown in full lines, Fig. 2, whereupon the head can be readily drawn away from the mouth, and the head will then be in condition to be placed in position in another barrel-mouth or again in the mouth of the barrel from which it was removed. Such

a head as I have described is always ready for application and can be used indefinitely. 45

While I have not illustrated any specific application of my improved head, it is manifest that it can be applied to boxes and other similar packing and storing vessels beside barrels, and I do not limit myself to its application to barrels alone. 50

Having thus described my invention, what I claim is—

1. A closure for barrels and similar storage-vessels, consisting of a head composed of two sections, one section being substantially equal in size to one-half of the area of the barrel-mouth and the other section somewhat shorter, said sections having integral lapping flanges at their inner edges, in combination with a screw having reversely-threaded ends and extending horizontally within and through a greater portion of the length of the respective sections for the purpose of bracing the same, adjusting the shorter section in position, and securing the respective sections, substantially as and for the purpose set forth. 60 65

2. A barrel-head consisting of a pair of sections having lapping flanges at their inner edges, one of said sections being stationary and adapted to fit and close about one-half of the barrel-mouth, the other section being shorter than the rigid section and being adjustable toward and from said stationary section and the circumference of the barrel, as explained, and a screw extending horizontally lengthwise within said sections and having reversely-threaded ends and central transverse holes, substantially as and for the purpose set forth. 70 75 80

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

GEORGE EMERSON BEAN.

Witnesses:

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J. W. BRYAN.