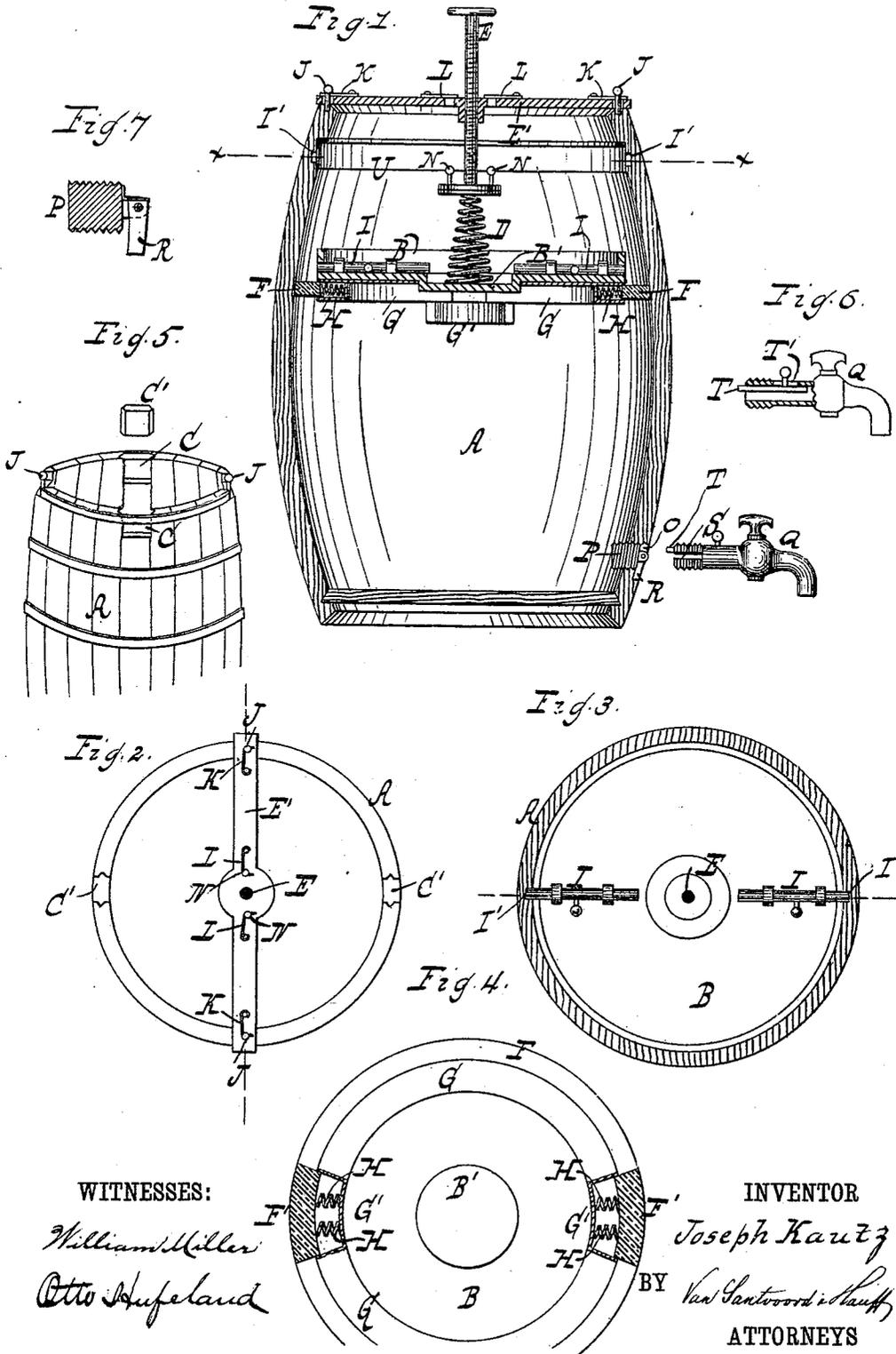


(No Model.)

J. KAUTZ.
BARREL.

No. 273,853.

Patented Mar. 13, 1883.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOSEPH KAUTZ OF NEW YORK, N. Y.

BARREL.

SPECIFICATION forming part of Letters Patent No. 273,853, dated March 13, 1883.

Application filed January 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH KAUTZ, a citizen of the Austrian Empire, residing at New York, in the county and State of New York, have invented new and useful Improvements in Barrels, of which the following is a specification.

This invention consists in a barrel in which one of the heads is left detached, and is forced inward, as the liquid is drawn from the barrel, by the action of a spring, such head being provided with a self-adjusting packing to preserve a tight joint with the inside of the barrel, and also with bolts for locking it in position when desirable, the details of construction being hereinafter fully described, and illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical central section. Fig. 2 is an end view. Fig. 3 is a cross-section on the line *xx* of Fig. 1, showing the loose head in its upper and locked position. Fig. 4 is an inside view of the loose head, showing the packing. Fig. 5 is a perspective view of the barrel; and Figs. 6 and 7, detached sectional views, respectively, of the faucet and the plug carrying the pivoted plate.

Similar letters indicate corresponding parts.

The letter A designates the body of the barrel, and B the loose or detached head. This head B is larger in diameter than the smallest diameter of the barrel—namely, the ends of the barrel—and it is introduced by holding it in an inclined position through notches C, Fig. 5, which are formed in the open end of the barrel, diametrically opposite to each other, by cutting away portions of the appropriate staves, such notches being provided with filling-pieces C', which are inserted therein when the head has been introduced.

The letter D indicates the spring, acting on the loose head B to force it inward as the beer or other liquid is drawn from the barrel. This spring rests in a socket, B', formed in the center of the loose head, and is held in position by a set-screw, E, which passes through a bridge, E', attached to the open end of the barrel, the screw serving also to adjust the tension of the spring. On the inner or lower surface of the loose head is arranged the self-adjusting packing, whereby it preserves a tight

joint with the inside of the barrel. This packing is made in four sections, F F', of segmental form, the sections F' breaking joints with the sections F, and each section is fitted to a casing, G or G', containing springs H, which act on the sections with a tendency to force the same radially outward. It is preferred to make said sections F F' of the packing of india-rubber; but it is obvious that other material may be employed. On the outer surface of the loose head are arranged the bolts I for locking the loose head to the barrel. These bolts are intended to be used, especially when the barrel has been emptied of its contents, for preventing the unnecessary movement of the head, and they are arranged to catch into suitable sockets, I', formed near the open end of the barrel.

For the purpose of attaching the bridge E' to the barrel the latter is provided at its open end with studs J, passing through suitable holes in the bridge, and the bridge is provided with swinging hook K to engage such studs, so that the bridge can be readily detached. Said bridge is also provided with hooks L to engage with studs N, projecting outward from a plate secured to the end coil of the spring D through suitable holes in the bridge, so that when the bridge is removed the spring may be connected to it. When, however, the parts are applied to use the hooks L are swung back to release the studs N and allow the free action of the spring.

Near the closed end of the barrel is a hole, O, which is screw-threaded to receive a plug, P, or faucet Q. To the outer end of the plug P is pivoted a blade, R, and in the rear end of the faucet is a notch, S, adapted to receive the blade. When it is desired to introduce the faucet it is made to engage the blade R of the plug, and is then turned in the proper direction for screwing it into the hole O, whereby the plug P is driven inward into the barrel and is replaced by the faucet. The blade R of the plug is provided with a spring similar to the blade of a knife, and under normal conditions such blade is turned into a suitable recess of the barrel, as shown in Fig. 1, so that it is both protected and concealed. For the purpose of disengaging the plug P from the faucet the latter is provided with a pusher, T,

Fig. 6, which slides longitudinally in the faucet, it being guided by a slot, T', and which, when moved in the proper direction, strikes the attached plug.

5 The extreme outer position of the loose head B is determined by a recess, U, which is formed on the interior of the barrel to receive the head, and provided with a packing-ring.

10 What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the barrel, of the loose head, its self-adjusting packing, composed of segmental sections and springs acting to force the sections radially outward, and the spring serving to force the loose head inward, substantially as shown and described.

2. The combination, with the barrel, the loose head, the self-adjusting packing, and the spring acting on the loose head to force the same inward, of means, such substantially as described, for adjusting the tension of the spring and holding the latter in proper position, as set forth.

3. The combination, substantially as here-
25 inbefore set forth, with the barrel, of the loose head, its self-adjusting packing, the bolts for locking such head in position, and the spring acting on the head to force the same inward.

4. The combination, substantially as here-

inbefore set forth, with the barrel, of the loose 30 head, its self-adjusting packing, the spring acting on such head to force the same inward, the bridge E', the attaching-hook K, and the studs J of the barrel.

5. The combination, substantially as here- 35 inbefore described, with the barrel, of the loose head, its self-adjusting packing, the spring acting on such head to force the same inward, the bridge E', the connecting-hooks L, and the studs N of the spring.

6. The combination, substantially as here- 40 inbefore described, of the barrel having the screw-threaded hole O, the plug P, having the pivoted blade R, and the faucet having the notch S to receive such blade.

7. The combination, substantially as here- 45 inbefore set forth, of the barrel having the screw-threaded hole O, the plug P, having the pivoted blade R, and the faucet having the notch S to receive such blade, and the pusher 50 T for disengaging the plug from the faucet.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

JOSEPH KAUTZ. [L. s.]

Witnesses:

E. F. KASTENHUBER,
W. HAUFF.