

G. J. CAVE.

FASTENER FOR BARRELS, CRATES, &c.

No. 602,826.

Patented Apr. 26, 1898.

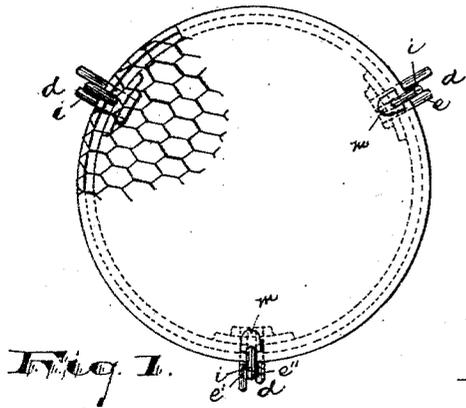


Fig. 1.

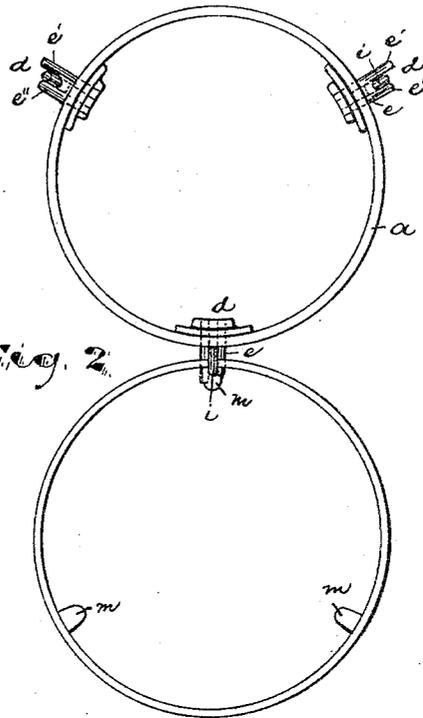


Fig. 2.

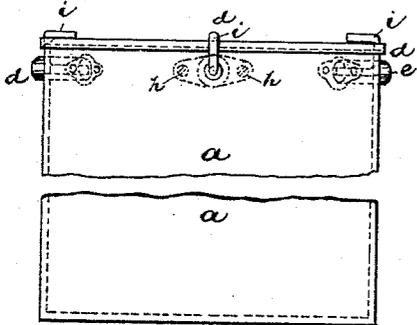


Fig. 3.

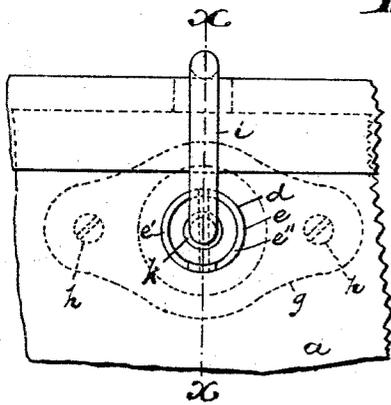


Fig. 4.

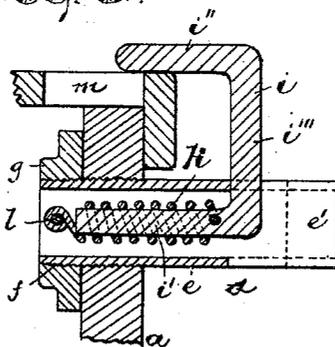


Fig. 5.

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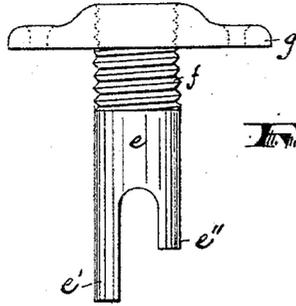


Fig. 10.

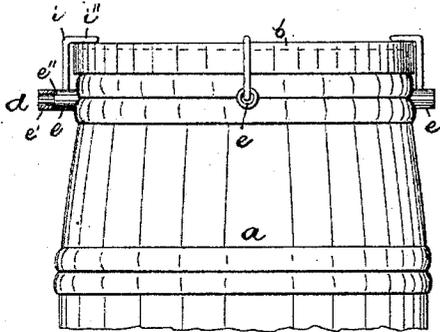


Fig. 6.

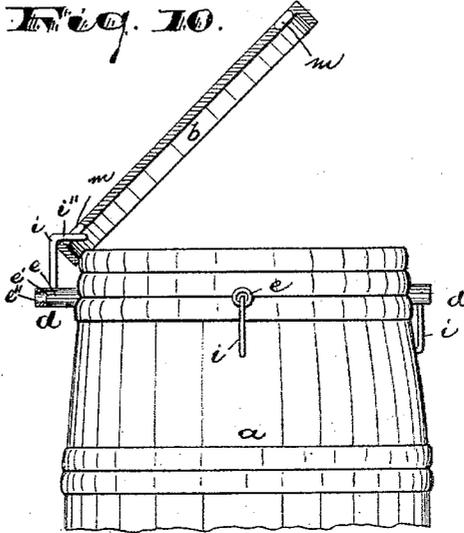


Fig. 7.

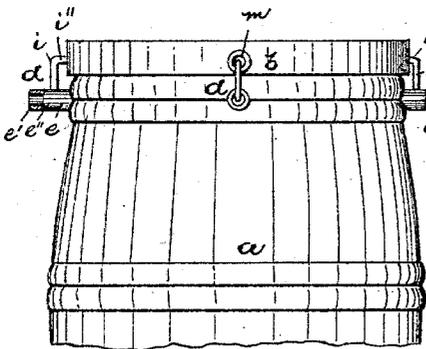


Fig. 8.

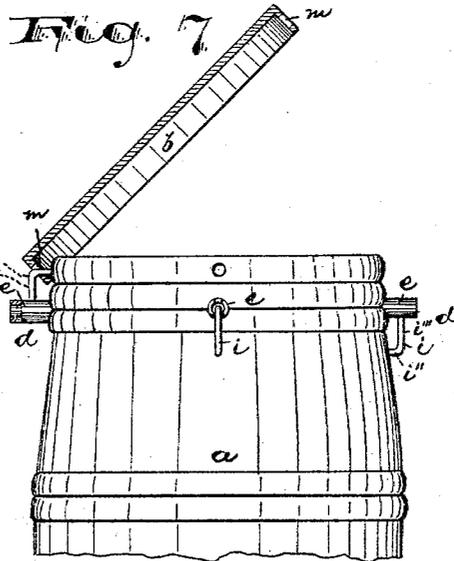


Fig. 9.

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UNITED STATES PATENT OFFICE.

GEORGE J. CAVE, OF ELIZABETH, NEW JERSEY.

FASTENER FOR BARRELS, CRATES, &c.

SPECIFICATION forming part of Letters Patent No. 602,826, dated April 26, 1898.

Application filed August 24, 1897. Serial No. 649,406. (No model.)

To all whom it may concern:

Be it known that I, GEORGE J. CAVE, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Fasteners for Barrels, &c.; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The objects of this invention are to more securely and conveniently protect the contents of barrels, crates, and similar packages from being stolen, and more especially when exposed for sale; to provide a cover which can be easily and conveniently removed to permit access to the goods; to provide a lock or catch which will be easy to operate, simple of construction, durable, of a neat appearance, and one that can be applied to packages of any size and will be effective in holding the cover in position on the barrel or body of the package with great security while the said package is in course of transmission or transportation, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved fastener for barrels, crates, and similar packages and in the arrangement and combinations of parts, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the views, Figure 1 is a plan of a barrel or package containing my improvements. Fig. 2 is a similar plan with the cover open. Fig. 3 is a side elevation of the said package. Fig. 4 is a detailed front elevation showing the relation of the catch to the cover and body of the package more clearly. Fig. 5 is a sectional view of such parts, taken on line *x*. Fig. 6 is another side elevation of a portion of a barrel, showing the cover closed thereon and held by the catches or locks. Fig. 7 is

a similar elevation showing the cover open and in section. Figs. 8 and 9 are elevations corresponding with Figs. 6 and 7, but showing a modification of construction, which modification is ordinarily preferred. Fig. 10 is a detailed plan of the body portion of the lock on an enlarged scale.

In the said drawings, *a* indicates the body portion of the package. *b* indicates the cover, which is removable from said body portion, the said cover having a depending rim or flange adapted to fit around the periphery of the body portion at its end. Near the end of the body portion, preferably at three points equidistant from one another, as in Figs. 1 and 2, are arranged the locks or catches *d d d*, the barrel-body being suitably perforated to receive the same. Each of the said locks or catches *d* comprises a short tubular socket *e*, which may be of gas-pipe or such like tubing. This is threaded on its inner end, as at *f*, to receive an inside plate *g*, which is correspondingly threaded to receive said tube. This plate *g* is provided with screw-holes to receive screws *h h*, by means of which the said plate is firmly and rigidly fastened upon the inside of the barrel, the engaging face of said plate being curved to correspond with the curved interior of the barrel. The opposite end of the said tubular socket *a* projects from the outside of the barrel, as shown more clearly in Fig. 5, and is provided with a transverse end slot which forms tongues or lips *e' e''*, between which is arranged a locking-bolt *i*. One of said tongues or lips is considerably shorter than the other, as shown clearly in Fig. 10, for a purpose hereinafter described.

The locking-bolt *i* consists of a U-shaped rod or wire, one prong *i'* of which is made longer than the other, the longer prong *i'* being arranged longitudinally within the tube, as shown in Fig. 5, where it is held by means of a spring *k*, which is coiled around the said longer prong and at one end is fastened thereto by being passed through a perforation in said prong or by any other suitable means of fastening. The opposite end of said spring *k* is fastened to the inner end of the tube by being wound around a transverse pin *l*, as indicated in Fig. 5, or by any other means of fastening. By means of this mode of attaching the U-shaped locking-bolt to the tube the

said locking-bolt is allowed a limited longitudinal movement with respect to said tube, sufficient to permit it to be drawn outward a distance sufficient to disengage the shorter prong from the cover and the portion i''' of said bolt to pass over the end of the shorter lip e'' , but not sufficient by ordinary draft to pass beyond the longer lip e' . This mode also permits to the said bolt a pivotal movement, by which, when the portion i''' of the said bolt is withdrawn beyond the extremity of the shorter lip, it may be turned so that its shorter prong may be brought into locking or catching engagement with the cover or be drawn to lie downward, as at the center and right of Fig. 9. When turned up into locking engagement, the said spring acts automatically to draw the bolt inward into the desired catching relation. The said cover b is provided with perforations m to receive the locking-bolts, the said perforations being sufficiently large not only to receive the prongs of said bolts, but also to permit a free hinge movement of said cover upon one of the said prongs. These perforations may be either in the top of the cover, as in Figs. 1, 2, and 5, or they may be in the side or flange of the cover, as indicated in Figs. 8 and 9.

In operating the device to close or lock the cover after fitting the latter upon the barrel-body and bringing the perforations in the said cover into proper relation to the locks or catches the catching-bolts are drawn out longitudinally with respect to the tubular sockets and turned so that the shorter prongs may be brought into proper coincidence with the perforations in the cover. Said shorter prong being brought into coincidence, the locking-bolts are released, when the said shorter prong enters automatically into the desired locking relation.

Should I wish to gain access to the contents of the barrel without entirely detaching the cover, I simply unfasten two of the three catches and turn them to their unlocked positions and then raise the cover. The third catch serves as a hinge upon which the cover turns.

Having thus described the invention, what I claim as new is—

1. In a fastener for barrels, crates and similar packing and storing vessels or containers, the combination with a tubular socket arranged on the said barrel or other container and having its outer end transversely slotted forming long and short lips, of a locking-bolt normally lying between said lips, and having an arm entering into locking engagement with the cover of the barrel or other container, a second arm extending into the tubular socket and a spring within the said tubular socket fastened at one end to said socket and at the other end to the said bolt, substantially as set forth.

2. The combination with the package-body, of a tubular socket arranged on the walls of said body, a U-shaped locking-bolt, one prong

of which is inserted into the open end of said socket and held by a spring allowing longitudinal movement of the bolt, the other prong lying outside of the package and being adapted to enter into locking relation with the cover, substantially as set forth.

3. The combination with a barrel or other package-body, of a tubular socket fitted within said package-body and threaded at its inner end, a plate correspondingly threaded to receive said tubular socket, and having means whereby it is fastened to the inner side of said package-body; the opposite end of said tubular socket being provided with long and short lips, a spring fastened within said tubular socket, and a locking-bolt having a U-shaped tongue with long and short prongs, the longer prongs being arranged longitudinally within said tube and held by said spring, and the shorter prong lying outside of said tube, free to turn into and from locking engagement with the cover, substantially as herein set forth.

4. The improved fastener for barrels, &c., comprising a tubular socket projecting from the body of the barrel adjacent to the end thereof, and a bolt having an arm lying within said tubular socket and serving as a pivot upon which the bolt may be turned, and a second arm extending inward past the edge of the barrel-cover and preventing movement of the cover upward or laterally outward but allowing said cover to be opened upon the bolt as a hinge, said cover being suitably perforated near its periphery to receive said arm substantially as set forth.

5. In a fastener for barrels, the combination of a tube transversely slotted at one end forming lips, a locking-bolt lying normally in said slot between said lips and having an arm extending into locking engagement with the cover of the barrel, a second arm extending into the tube, and a spring within said tube fastened at one end to said tube and at the other end to said arm, substantially as set forth.

6. In a fastener for barrels, the combination with a tubular socket having one end transversely slotted forming lips, of a locking-bolt and a spring normally holding said bolt in said slot, the locking-bolt having an arm which extends into the tubular socket and serves as a pivot upon which the bolt may be turned when withdrawn from the slot against the power of the spring, one of said lips being longer than the other to prevent turning of the bolt in that direction, and a second arm upon said bolt adapted to enter into locking engagement with the cover of the barrel, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 9th day of August, 1897.

GEORGE J. CAVE.

Witnesses:

CHARLES H. PELL,
C. B. PITNEY.