J. W. & C. V. DYER.

BARREL SUPPORT.

APPLICATION FILED MAY 28, 1912.

1,045,133. **Patented Nov. 26, 1912.**

3 SHEETS—SHEET 1.

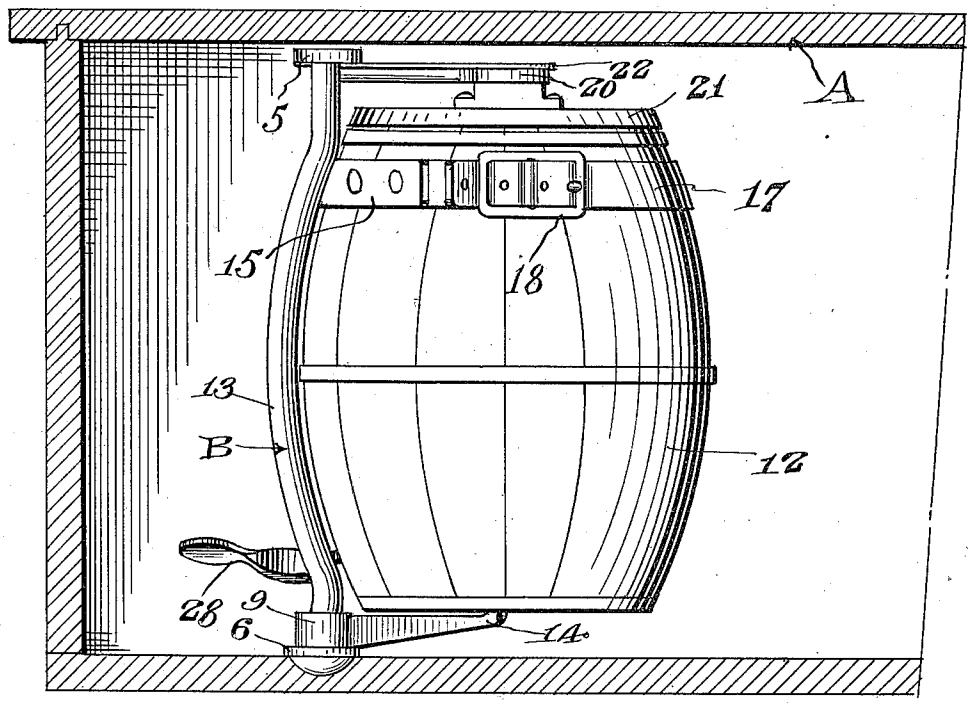


Fig. 1.

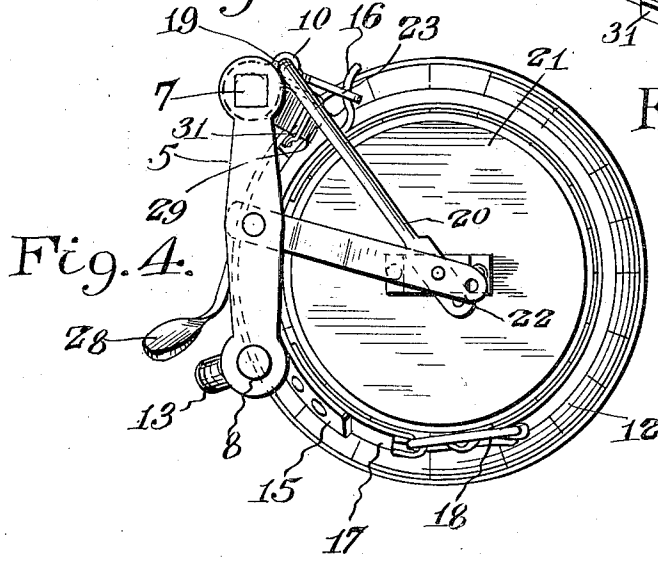


Fig. 4.

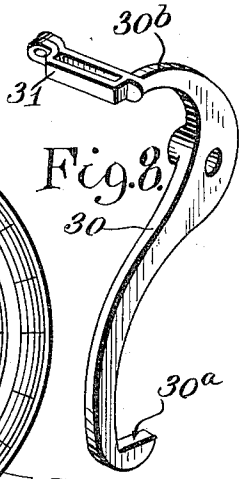


Fig. 6.

Witnesses:-

J. P. Walker

George Talbot

Inventors

J. W. Dyer

C. V. Dyer.

By Howson & Howson

Attorneys

J. W. & C. V. DYER.

BARREL SUPPORT.

APPLICATION FILED MAY 28, 1912.

1,045,133.

Patented Nov. 26, 1912.

3 SHEETS—SHEET 2.

Fig. 2.

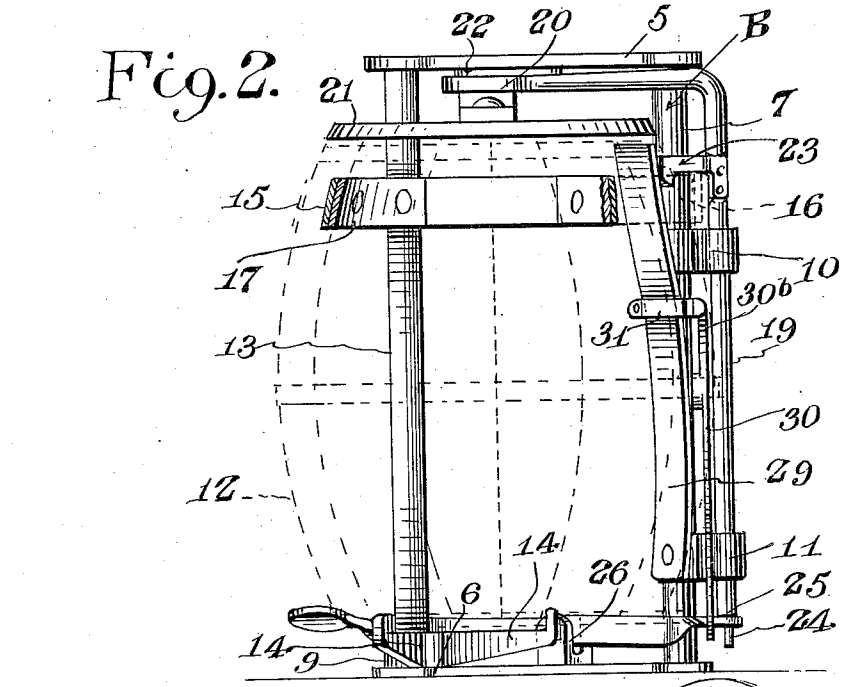
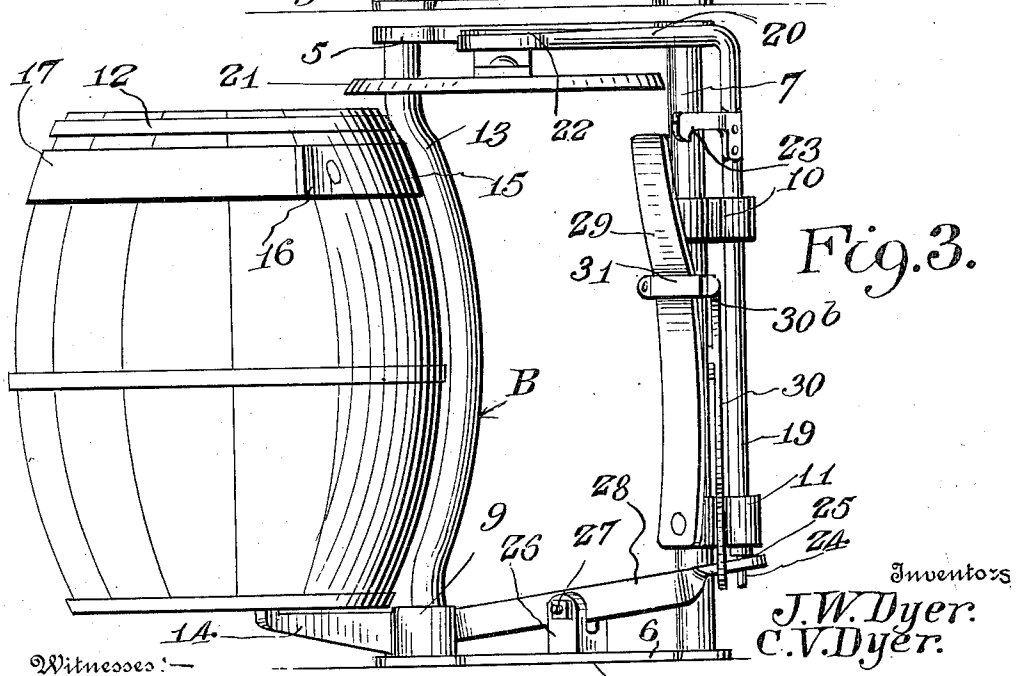


Fig. 3.



Witnesses:—

J. P. Mahler

George Tatz.

Inventors

J. W. Dyer.

C. V. Dyer.

By Chandlee & Chandlee

Attorneys

J. W. & C. V. DYER.

BARREL SUPPORT.

APPLICATION FILED MAY 28, 1912.

1,045,133.

Patented Nov. 26, 1912.

3 SHEETS—SHEET 3.

Fig. 7.

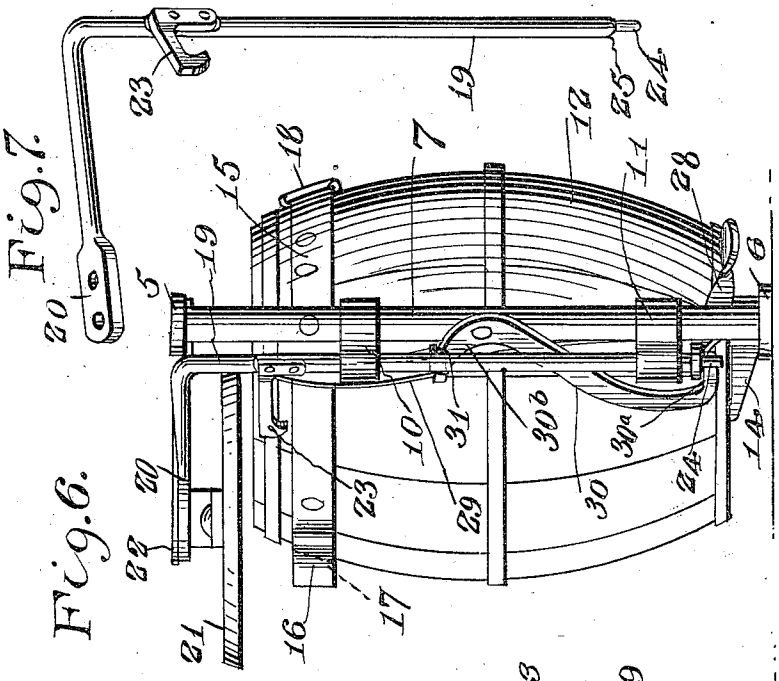


Fig. 6.

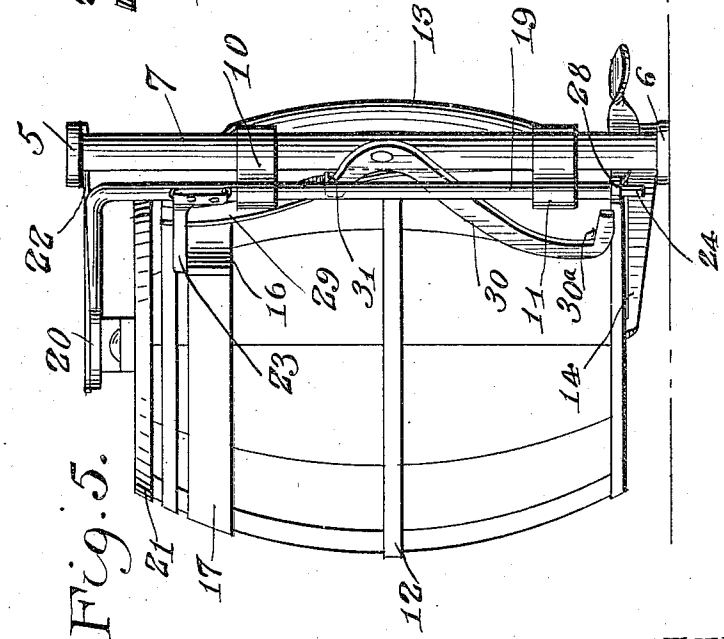


Fig. 5.

Witnesses:—

J. P. Wahler.

George Sale.

Inventors

J. W. Dyer.

C. V. Dyer,

By Chandlee & Chandlee

Attorneys

UNITED STATES PATENT OFFICE.

JOHN W. DYER AND CALVIN V. DYER, OF HEMLOCK, NORTH CAROLINA.

BARREL-SUPPORT.

1,045,133. Specification of Letters Patent. Patented Nov. 26, 1912.

Application filed May 28, 1912. Serial No. 700,213.

To all whom it may concern:

Be it known that we, JOHN W. DYER and CALVIN V. DYER, citizens of the United States, residing at Hemlock, in the county of Ashe, State of North Carolina, have invented certain new and useful Improvements in Barrel-Supports; and we 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 improvements in barrel supports.

In stores generally, barrels containing sugar and other commodities are placed partially under a store counter, and inasmuch as these barrels are not provided with closures this arrangement permits of considerable dirt to drop into said barrels.

The principal object of the invention is, therefore, to provide a support for barrels by means of which the same may be normally held under the counter and yet permitting of said barrels to be swung outwardly when it is desired to gain access to the contents thereof.

Another object of the invention is to provide a closure for the barrel which will be automatically raised slightly previous to the outward swinging of the barrel.

A further object of the invention is to provide a support of the character described which is composed of a minimum number of parts, is therefore simple in construction, is easy of operation, and is cheap to manufacture.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings: Figure 1 is an inside elevation of a store counter showing the application of a support for barrels constructed in accordance with our invention, Fig. 2 is a transverse section showing the barrel in its closed position, Fig. 3 is a similar view but showing the barrel disposed in its open position, Fig. 4 is a top plan view of a support, Fig. 5 is a rear elevation of the support, the barrel being shown in its closed position, Fig. 6 is a similar view but showing the barrel in its open position, Fig. 7 is a perspective view of the closure supporting rod, and Fig. 8 is a perspective view of the rod latch.

Like reference numerals designate corresponding parts in all the figures of the drawings.

Referring to the drawings, A designates a counter of any construction, and B indicates our improved support for barrels. This support includes a frame which consists of spaced upper and lower horizontal arms 5 and 6 respectively, the lower arm being secured to the floor by any suitable means. These arms are disposed transversely of the counter and below the top thereof, and are connected at their inner ends by means of a standard 7, said standard serving to support the upper arm 5, as will be readily understood. The front end of the upper arm 5 is formed with an opening 8 and formed on the outer end of the lower arm 6 is a bearing 9. Supported by the standard 7 and extending rearwardly therefrom are spaced upper and lower guides 10 and 11 respectively. A barrel 12 of any suitable construction is mounted upon the frame for horizontal swinging movements by means of a vertically disposed shaft 13, the upper end thereof being rotatably mounted within the opening 8 of the upper arm 5 and the lower end thereof being rounded and seated within the bearing 9 of the lower arm 6. This shaft is bent to conform to the shape of the barrel, and a pair of spaced hooks 14—14 are carried by the lower end of the shaft 13 for engagement with the bottom of the barrel 12. Secured to the upper portion of the shaft is an arcuate arm 15, the curve thereof being of such character as to conform to the barrel. One end of this arm is bent outwardly to form a finger 16 which is adapted to be engaged by a latch as will hereinafter more fully appear. Secured to the inner face of the arm 15 is a strap 17 which is adapted to encircle the upper portion of the barrel 12 and this strap is provided at one end with a buckle 18 for detachable connection within the other end of this strap.

Our invention further comprises a vertically disposed rod 19 which is slidably mounted within the guides 10 and 11. The upper end of this rod is bent at right angles

to form a horizontal supporting arm 20, the end of said arm being disposed centrally above the barrel when the latter is in its closed position. A closure 21 is suitably connected to the end of the arm 20 and this closure is normally held upon the barrel 12 by means of a flat spring 22 which is connected at one end to the upper arm 5 of the frame. It will be observed in this connection that the rod 19 is capable of being moved upwardly against the tension of the spring 22 and thereby raise the closure 21 from the barrel. Carried by the rod 19 and extending inwardly therefrom is a latch 23 which is adapted to engage the finger 16 of the arcuate arm 15 when the barrel is in its closed position and thereby retain said barrel against outward movement. The ends of the rod 19 extend below the lower guide 11 and is reduced as at 24 to form a resultant shoulder 25. Mounted upon the lower arm 6 of the frame is a bracket 26, and centrally fulcrumed upon this bracket, as at 27, is a foot lever 28. This lever is disposed transversely of the counter and has its inner end formed with an opening wherethrough projects the reduced end 24 of the rod 19, the shoulder 25 of said rod normally bearing against the inner end of said lever. It will thus be observed that upon downward movement of the outer end of the lever, the rod 19 will be raised against the tension of the spring 22. This movement will first elevate the closure 21 from the barrel 12 and will immediately thereafter cause the latch 23 to become disengaged from the finger 16. In order to automatically swing the barrel outwardly, a vertically disposed flat spring 29 is fixed at its lower end to the standard 7. This spring extends forwardly, and is adapted to engage the barrel so that upon the release of the latch 23 as above noted, the spring will exert a sufficient pressure upon said barrel and swing the same outwardly.

In order to support the closure 21 in an elevated position ready to receive the barrel when it is swung inwardly a latch lever 30 is fulcrumed intermediate its ends upon the standard 7 between the upper and lower guides 10 and 11. This latch lever is capable of vertical swinging movements and its lower end 30^a is adapted in one position to engage the inner end of the foot lever 28 and by this means the rod 19 will be supported by said foot lever and consequently the closure 21 will be held in its elevated position. The upper end of this lever terminates in a laterally extending short arm 30^b which carries a guide 31, said guide receiving the free end of the spring 29.

In operation, when it is desired to swing the barrel outwardly from below the counter, the foot lever 28 is depressed, and as a result, the inner end thereof which bears against the shoulder 25 lifts the rod 19. This rod carries the closure 21 and thereby elevates the closure from the barrel. Immediately thereafter the latch 23 is raised from its engagement with the finger 16, and the spring 29 which has been pressed by the barrel toward the standard 7, exerts a pressure upon said barrel and causes the same to swing outwardly upon the shaft 13. The spring 29 as above stated is normally pressed toward the standard 7 and as a result the guide 31 of the latch lever 30 is swung inwardly. This holds the lower end 31^a of the latch from engagement with the foot lever 28. When, however, the barrel is swung open, as above stated, the spring 29 causes the latch lever 30 to rock upon its fulcrum and as a result, the lower end 30^a thereof is held to support the inner end of the foot lever 28, and this lever through the medium of the shoulder 25 supports the rod 19 against downward movement. Thus it will be observed that the closure 21 is held in an elevated position when the barrel is in its open position. When the barrel is returned to its initial position, the finger 16 engages the latch 23 and at the same time the barrel 12 forces the spring 29 toward the standard 7 and immediately thereafter this causes the latch lever 36 to be rocked upon its fulcrum so that the lower end 30^a will become disengaged from the foot lever 28, and as a result, the rod 19 will automatically drop by gravity and carry with it the closure 21. It will thus be observed that the barrel will be automatically closed when it is returned to its initial position.

What is claimed is:

1. In a barrel support, a frame, a barrel supporting element swingingly supported on the frame, means for locking the element against the frame, means for releasing said locking means, and a spring carried by the frame for urging the element outwardly upon release of said locking means.

2. In a barrel support, a frame, a barrel supporting element swingingly mounted on the frame, a finger carried by the element, a rod supported by the frame for vertical longitudinal movements, a latch carried by the rod for engagement with the finger to lock said element against the frame, and means for raising the rod to disengage the latch from the finger.

3. In a barrel support, a frame, a barrel supporting element swingingly mounted on the frame, a finger carried by the element, a rod supported by the frame for vertical longitudinal movements, a latch carried by the rod for engagement with the finger to lock said element against the frame, means for raising the rod to disengage the latch from the finger, and a spring carried by the frame for urging the element outwardly upon the release of said latch.

4. In a barrel support, a frame, a barrel supporting element swingingly mounted on the frame, a finger carried by the element, a rod supported by the frame for vertical longitudinal movements, a latch carried by the rod for engagement with the finger to lock said element against the frame, means for yieldably holding the rod in its initial position, and means for raising the rod against the tension of said yieldable holding means to disengage the latch from the finger.

5. In a barrel support, a frame, a barrel supporting element swingingly mounted on the frame, a finger carried by the element, a rod supported by the frame for vertical longitudinal movements, a latch carried by the rod for engagement with the finger to lock said element against the frame, and a foot lever fulcrumed upon the frame and engageable with the lower end of the rod to raise the same to disengage the latch from the finger.

6. In a barrel support, a frame, a barrel supporting element swingingly mounted on the frame, means for locking the elements against the frame including a movable rod, a barrel closure supported by the rod, and means for shifting the rod to release the locking means and elevate the closure in succession.

7. In a barrel support, a frame, a barrel supporting element swingingly mounted on the frame, means for locking the elements against the frame including a movable rod, a barrel closure supported by the rod, means for yieldably holding the rod in its initial position, and means for shifting the rod against the tension of said yieldable holding means to release the locking means and elevate the closure in succession.

8. In a barrel support, a frame, a barrel supporting element swingingly mounted on the frame, means for locking the elements against the frame including a movable rod, a barrel closure supported by the rod, means for shifting the rod to release the locking means and elevate the closure in succession, and means for automatically locking the rod in its elevated position.

9. In a barrel support, a frame, a barrel supporting element swingingly mounted on the frame, means for locking the elements against the frame including a movable rod, a barrel closure supported by the rod, means for shifting the rod to release the locking means and elevate the closure in succession, a spring carried by the frame for urging the element outwardly upon release of said locking means, and a latch lever fulcrumed upon the frame and engageable by the spring to lock the rod in its elevated position on release of said locking means.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN W. DYER.
CALVIN V. DYER.

Witnesses:
A. H. McQueen,
Mary C. Brown.