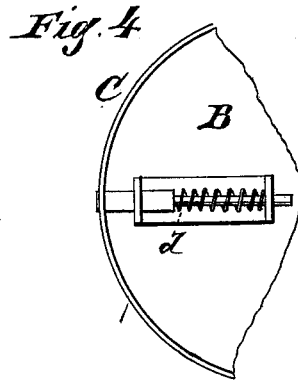
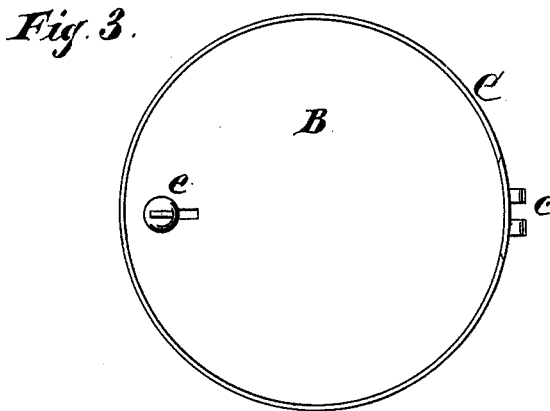
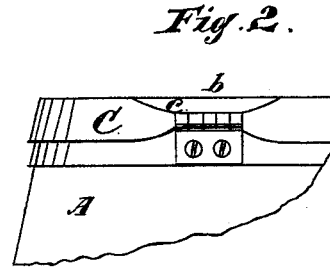
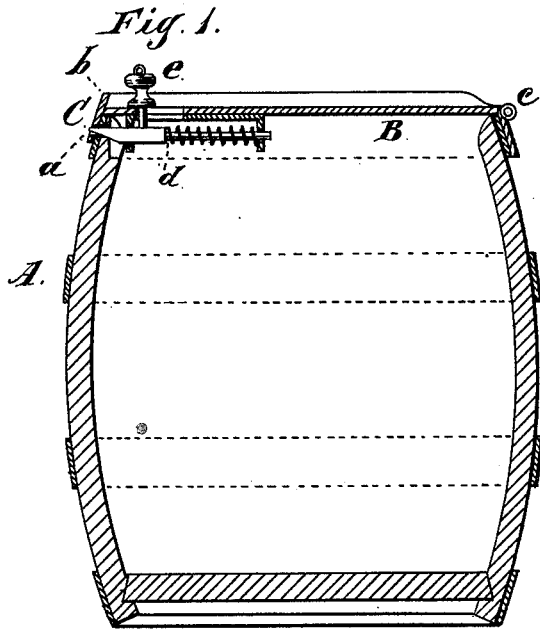


A. McDOUGALL.
Barrel-Cover.

No. 203,059.

Patented April 30, 1878.



Witnesses:
O. W. Bond
C. A. Mott

Inventor:
Alex Mc Dougall

UNITED STATES PATENT OFFICE.

ALEXANDER McDOUGALL, OF CHICAGO, ILLINOIS, ASSIGNOR TO DAVID G. ROSS, OF TORONTO, CANADA.

IMPROVEMENT IN BARREL-COVERS.

Specification forming part of Letters Patent No. 203,059, dated April 30, 1878; application filed October 25, 1877.

To all whom it may concern:

Be it known that I, ALEXANDER McDOUGALL, of Chicago, Cook county, State of Illinois, have invented a new and useful Improvement in Barrel-Covers, of which the following is a full description, reference being had to the accompanying drawing, in which—

Figure 1 is a vertical section; Fig. 2 is a rear elevation of the parts shown; Fig. 3, a top view of the cover; Fig. 4, an inside view of so much of the cover as is represented.

It is frequently necessary to unload grain which has been shipped in bulk from vessels at places where there are no grain-elevators. Heretofore this has been done by carrying the grain in bags or in some open receptacle, which is a laborious operation.

The object of my invention is to provide means for the more easy performance of such work, which I accomplish by providing a barrel with a head or cover which can be readily opened or removed, and with which one of a pair of hooks can engage. Such cover, as shown, consists of a flat piece or head as large as the end of the barrel, having a rim projecting both ways from it, so that in effect the head has two flanges, one of which fits over the chine-hoop, while the other takes the place of the chine of the barrel in part, furnishing a projection with which one of a pair of hoisting-hooks can engage for the purpose of raising the barrel from the hold of a vessel in the usual manner.

In the drawings, A represents a barrel, one end of which is constructed in the usual manner. B is the main portion of a cover, the diameter of which equals the diameter of the barrel at the end. This part, B, does not enter the barrel, but comes in contact with the end thereof. C is a rim permanently secured to the edge of B. One portion of this rim, *a*, fits over the chine-hoop of the barrel, and another portion, *b*, projects out from B, as the chine of a barrel projects beyond the head.

As shown, the cover is hinged directly to the barrel by means of a single strong hinge, *e*, and the rim is cut away a little each side of the hinge, so as not to interfere with opening the cover. Opposite to the hinge is a spring-bolt, *d*, properly secured to the inside of the cover, and so arranged that it passes through holes in the barrel and chine-hoop, and in that part of the rim C marked *a*, thus firmly hold-

ing the cover in place when closed. The bolt can be drawn back by means of the knob *e* or other suitable device.

In use, the barrel is to be filled with grain or other article to be moved, and the cover closed. Then, by means of hoisting hooks and other devices in common use, the barrel can be raised from the hold, the hooks engaging one with the chine at one end of the barrel, and the other with the flange *b* at the other end. The barrel can then be rolled to the place where the grain or other contents are to be emptied; then the cover can be opened and the contents discharged, after which the cover can be closed and the barrel rolled back to the vessel to be refilled.

Same part of that portion, *a*, of the rim C which fits over the chine-hoop bears against such hoop while the barrel is being raised from the hold and furnishes a support for that end.

The chine-hoop should be made of iron.

As shown, the head is hinged directly to the barrel, but a portion of this head or cover might be permanently secured to the barrel, the remaining portion being hinged to such permanent part. So the hinge might be omitted and the cover could be secured to the barrel by means of two or more spring-bolts suitably located; but such construction would not be as convenient in use.

In practice, I make both parts, B C, of the cover of metal. The rim C may be a piece of angle-iron, to which B can be riveted.

I am aware that barrels have been provided with covers hinged thereto and not hinged thereto, but I am not aware that a barrel has ever been made having either a hinged or removable cover, provided with a flange with which one of a pair of hooks can engage the same as with the chine of a barrel.

What I claim as new, and desire to secure by Letters Patent, is as follows:

In a barrel-cover, the plate or disk B, with the band C projecting on opposite sides to form the flanges *a b*, and suitable fastening and locking devices, substantially as and for the purpose specified.

ALX. McDOUGALL.

Witnesses:

E. A. WEST,
O. W. BOND.