

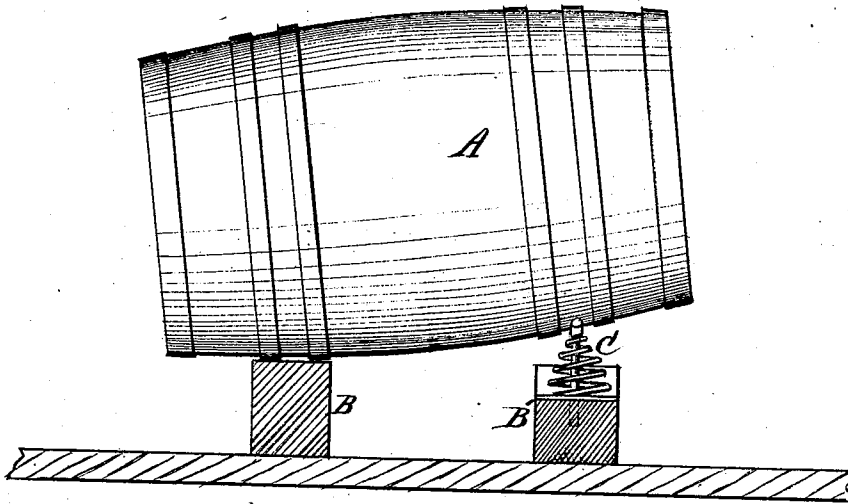
G. ARMSTRONG.

BARREL TILTER.

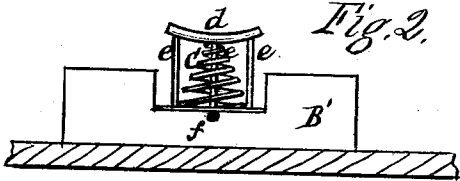
No. 103,540.

Patented May 31, 1870.

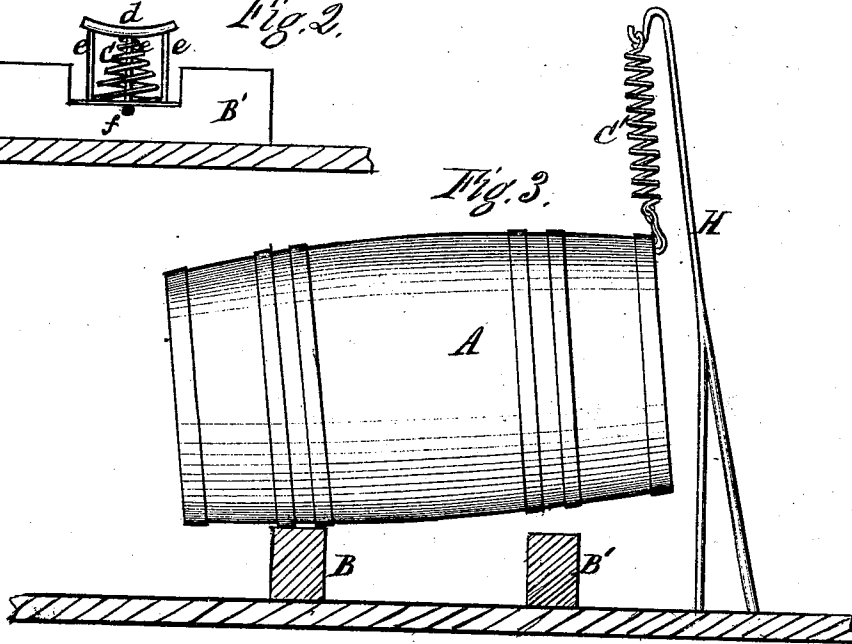
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses

*Wm. H. Eckert*  
*T. A. Morley*

Inventor

*George Armstrong*

# United States Patent Office.

GEORGE ARMSTRONG, OF LIVERPOOL, ENGLAND, ASSIGNOR TO HIMSELF  
AND WILLIAM H. ECKERT, OF OSWEGO, NEW YORK.

Letters Patent No. 103,540, dated May 31, 1870.

## IMPROVEMENT IN BARREL-TILTER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, GEORGE ARMSTRONG, of the city of Liverpool, England, have invented a new and improved Barrel-Tilter; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a sectional side view of my invention;

Figure 2 is a front view; and

Figure 3 shows a modification of the same.

Similar letters of reference indicate like parts in the several figures.

In drawing ale and beer from the barrel, as the liquor gets low the barrel has to be tilted up to get all the liquor, but in so doing the sediment and hops are liable to be so disturbed as to make the liquor objectionable, and the hops are shaken down and settle at the faucet, so as to interfere with its free action.

The object of this invention is to provide a means by which the barrel will be self-tilting, and will change its position so gradually, as the barrel becomes emptied, that these objections shall be entirely obviated; and

The invention consists in supporting the rear end of the barrel by a spring, which will gradually raise that end as the weight of liquor within the barrel is diminished by drawing therefrom, as hereinafter more fully explained.

In the accompanying drawing—

A is the barrel.

B B' are the stringers or bed-pieces of timber, upon which the barrels rest.

C, fig. 1, is a coiled spring, which is placed on the stringer B' and under the rear end of the barrel. This spring has guide-rods *e e e*, shown in front view, fig. 2, and has also a seat, *d*, on its upper end, for the barrel to rest on.

Before placing a barrel on the stringers, the spring is depressed and secured in that position by inserting a pin in the hole *f*, fig. 2, and, after the barrel has been seated, said pin is withdrawn and the spring released; and when the liquor has been partly withdrawn from the barrel, the tilting spring C begins to act, and gradually elevates the rear end of the barrel, until it has been entirely emptied. By this means the liquor is all drawn from the barrel, and there is no waste or trouble with sediment, as heretofore.

I do not wish to confine myself to any particular modification of spring, as it can be made and arranged in many ways, one of which is shown in fig. 3, H being a standard, which supports a spring, C', above the barrel. But this standard can be, in some cases, dispensed with, and the spring C' be supported above the barrel by a rope, rod, or chain from the ceiling overhead, especially when the barrels are kept in cellars. A flat spring can also be arranged longitudinally under the barrel, with one end fastened to or resting upon the front stringer B, while the rear end of the spring is left free to act on the barrel; or a leaf spring, something similar to a carriage spring, can be used on the rear stringer B' in place of the coiled spring C.

Having thus described my invention,

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

A spring support for the rear end of the barrel A, so arranged as to tilt the barrel as the weight of liquor within it is diminished, for the purpose herein specified.

The above specification of my invention signed by me this 4th day of January, 1870.

GEORGE ARMSTRONG.

Witnesses:

R. HIRSH,

F. A. MORLEY.