J. LYNCH.

TILTING BARRELS.

APPLICATION FILED SEPT. 23, 1907.

908,019.

Patented Dec. 29, 1908.

2 SHEETS—SHEET 1.

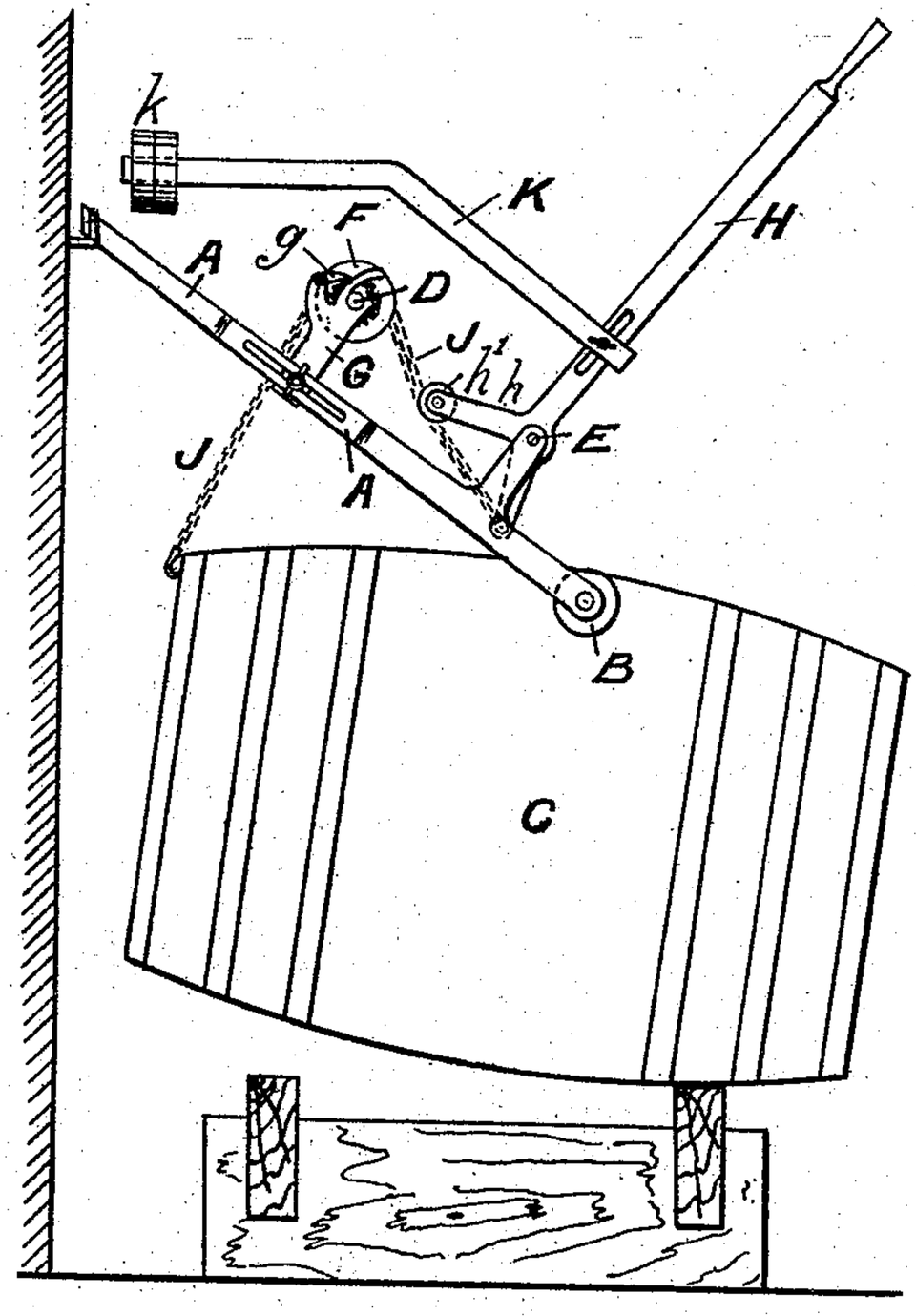

FIG. 1.

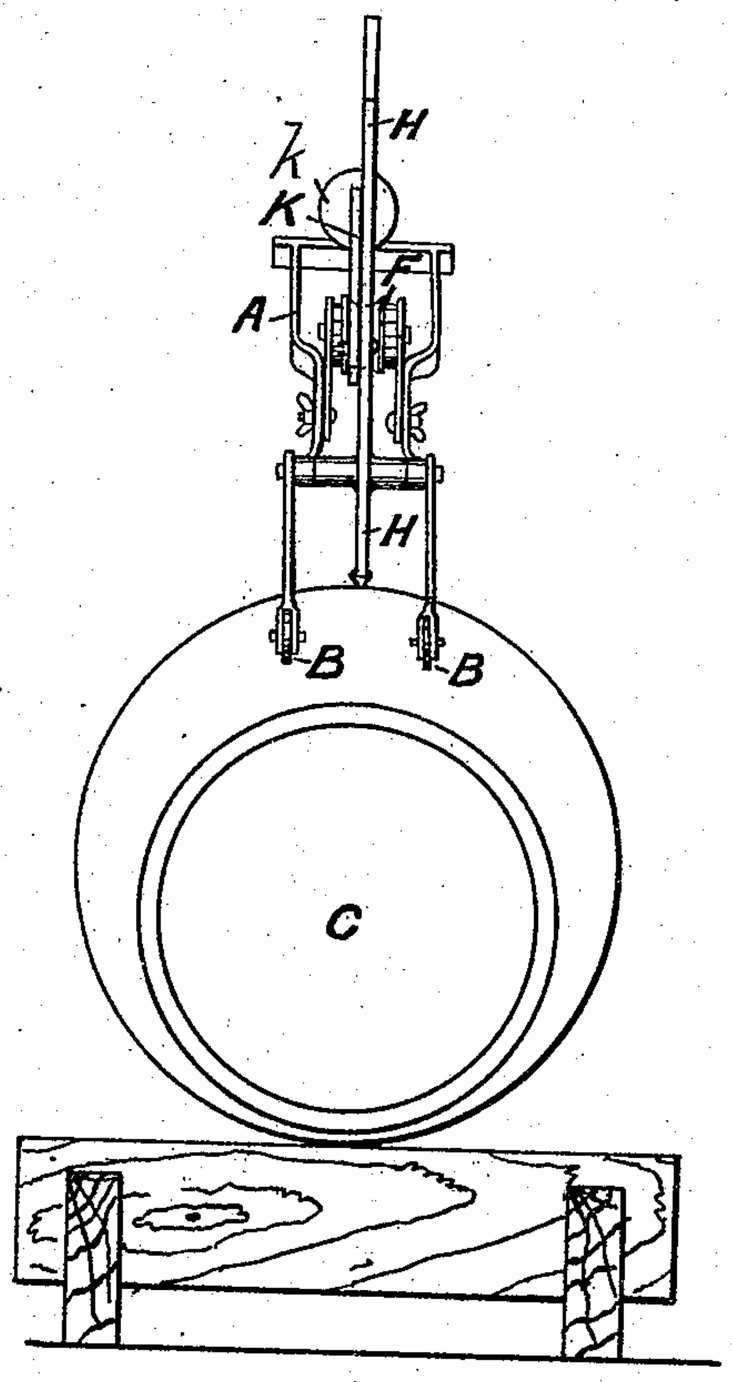

FIG. 2.

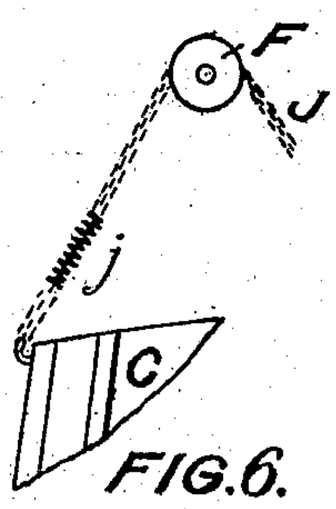

FIG. 6.

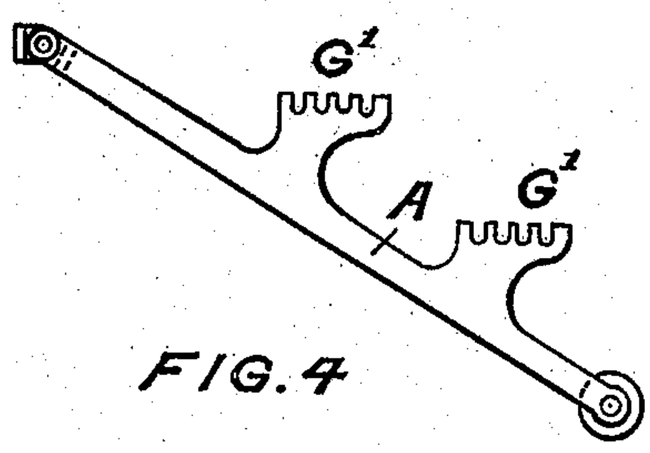

FIG. 4

WITNESSES.

William Cheney.

Joseph Bates.

INVENTOR.

James Lynch

by O'Brien & O'Brien

atty's

J. LYNCH.

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2 SHEETS—SHEET 2.

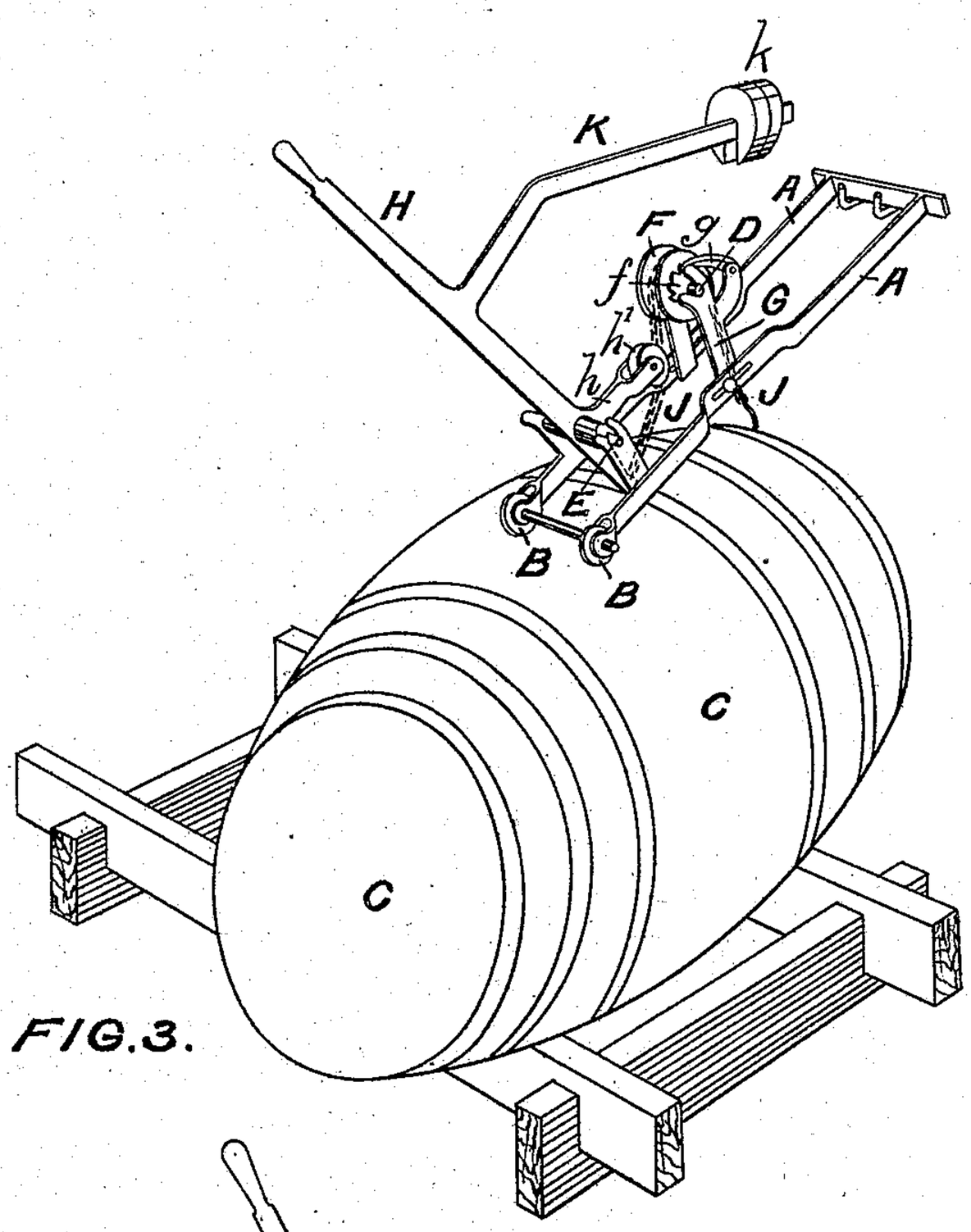

FIG. 3.

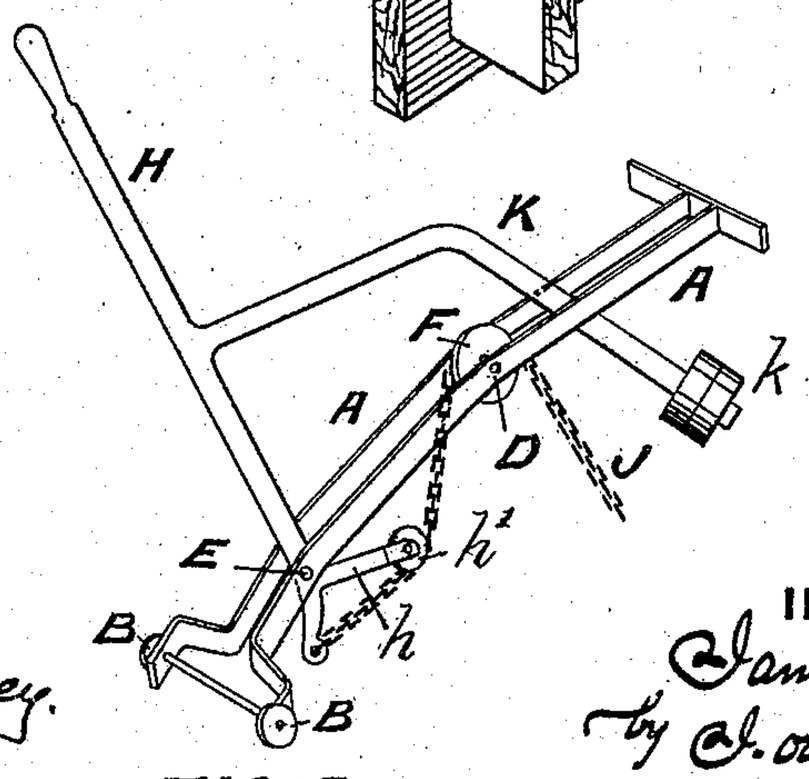

FIG. 5.

WITNESSES.

William Cheney.

Joseph Bates.

INVENTOR.

James Lynch

by J. Owen O'Brien

atty.

UNITED STATES PATENT OFFICE.

JAMES LYNCH, OF MANCHESTER, ENGLAND.

TILTING BARRELS.

No. 908,019. Specification of Letters Patent. Patented Dec. 29, 1908.

Application filed September 23, 1907. Serial No. 394,223.

To all whom it may concern:

Be it known that I, JAMES LYNCH, British subject, and resident of Manchester, county of Lancaster, England, have invented certain new and useful Improvements in Means for Tilting Barrels, of which the following is a specification.

This invention relates to apparatus for tilting barrels to enable all the liquor to be drawn off from them while they are upon the stand and is designed to provide improved apparatus for the purpose, which can be operated either automatically or by hand.

The invention will be fully described with reference to the accompanying drawings.

Figure 1 is a side view of one form of the tilter. Fig. 2 is a front view of same. Fig. 3 is a perspective view of same. Fig. 4 is a side view of modified form of frame. Fig. 5 is a perspective view of another modification. Fig. 6 is a view of a detail modification.

A frame or support A which may be of any suitable shape but preferably such as shown in the drawings and formed of any suitable material is pivoted or supported at one end against the wall above the barrel C either removably or permanently and at the other end carries one or more runners or rollers B which rest upon the barrel C preferably at or near its center or widest part. These rollers are so arranged that when the barrel tilts or is moved lengthwise they roll upon the side of the barrel.

The frame A carries two spindles cross bars or rods D, E, on one of which D, is mounted a wheel F. The ends of the rod or spindle D rest in brackets G mounted on the frame A which brackets are made capable of adjustment in the frame by means of slots. The brackets G also carry pawls *g* which engage the ratchet *f* formed on the side or sides of the wheel F. The cross bar or spindle E carries a two-armed lever H to the inner extremity of which is attached a chain J which passes over the wheel F and the other end of which engages the end of the barrel C. The outer and longer end of the lever H forms a handle for operating the apparatus.

It will be seen that when the handle of the lever H is pressed inwards a pull is exerted by the other extremity of the lever upon the chain J, which, passing over the pulley or wheel F raises the inner end of the barrel C. As the barrel is tilted and the wheel F is rotated the pawl *g* engages the ratchet *f* and prevents the return of the barrel.

To increase the action of the lever H upon the chain J a projection *h* carrying a roller *h'* may be made on the lever which roller engages the chain between the wheel F and the extremity of the lever H, in such a manner as to multiply the action of the lever.

To decrease the power necessary to operate the apparatus or to make it self-acting an arm K may be either rigidly or adjustably secured to the lever H and extend backwards behind the wheel F which arm is adapted to carry counter-balance weights *k* arranged to almost counter-balance the weight of the barrel upon the chain J, so that very little pressure need be exerted upon the handle to tilt the barrel. Or the weight may be so calculated as to automatically tilt the barrel when the amount of liquid contained therein reaches a certain fixed level.

If desired a spring *j* may be inserted in the chain J, as shown in Fig. 6, to increase the automatic action of the apparatus, and when this is done the weights *k* may be omitted if desired.

Instead of employing adjustable brackets G to carry the wheel F a frame G' provided with recesses to receive and support the spindle D at different positions may be employed as shown in Fig. 4, and similar brackets may be employed for supporting the spindle E.

Instead of using brackets to support the spindles D and E in the frame A, the frame may be constructed as shown in Fig. 5, with the two sides close together and suitably bent to raise the positions where the rods D and E are supported so that they can be carried directly by the frame.

When not in use the apparatus can be turned up against the wall out of the way or removed altogether.

What I claim as my invention and desire to protect by Letters Patent is:—

1. In apparatus for tilting barrels the combination with a frame pivotally supported at one end and provided at the other end with rollers which rest upon the barrel top, of a lever H pivoted to the frame, a chain wheel F also journaled in the frame, a chain J connected at one end to the lower end of the lever and passing over the chain pulley F, means to connect the said chain to the lever

and to the barrel, and a member *h* of the lever H provided with a roller *h'* by which pressure is applied to the chain between the end of the lever H and the chain pulley F, substantially as described.

2. In apparatus for tilting barrels the combination with a frame pivotally supported at one end and provided at the other end with rollers which rest upon the barrel top, of a lever H pivoted to the frame, a chain wheel F also journaled in the frame, a chain J connected at one end to the lower end of the lever and passing over the chain pulley F, means to connect the said chain to the lever and to the barrel, a member *h* of the lever H provided with a roller *h'* by which pressure is applied to the chain between the end of the lever H and the chain pulley F and a weighted lever K with weights *k* affixed to the lever H substantially as described.

3. In apparatus for tilting barrels the combination with a frame supported at one end and resting at the other end by rollers upon the barrel, of a transverse spindle D journaled thereon a chain wheel F mounted thereon, a ratchet upon the same spindle, a pawl to engage same, a chain J passing over said chain wheel, a hook at one end of the said chain to engage the barrel, a lever H pivoted in the frame, to one end of which the other end of said chain is attached, a projecting member *h* of said lever to engage and apply pressure to the chain between the lever and the chain wheel, an arm upon said lever and a weight upon the extremity of said arm substantially as hereinbefore described.

4. In apparatus for tilting barrels the combination with a frame supported at one end and resting at the other end by rollers upon the barrel, of a spindle D, a chain wheel F mounted thereon, a ratchet upon the same spindle, a pawl to engage same, a chain J passing over said chain wheel, a spring inserted in said chain, a hook at one end of said chain to engage the barrel, and a lever H journaled in the frame, to one end of which the said chain is attached and a projecting member *h* of such lever by which pressure is applied to the chain between the lever and the chain wheel substantially as described.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES LYNCH.

Witnesses:

J. OWDEN O'BRIEN,

B. TATHAM WOODHEAD.