

(No Model.)

J. HILL.

APPARATUS FOR TILTING CASKS.

No. 376,652.

Patented Jan. 17, 1888.

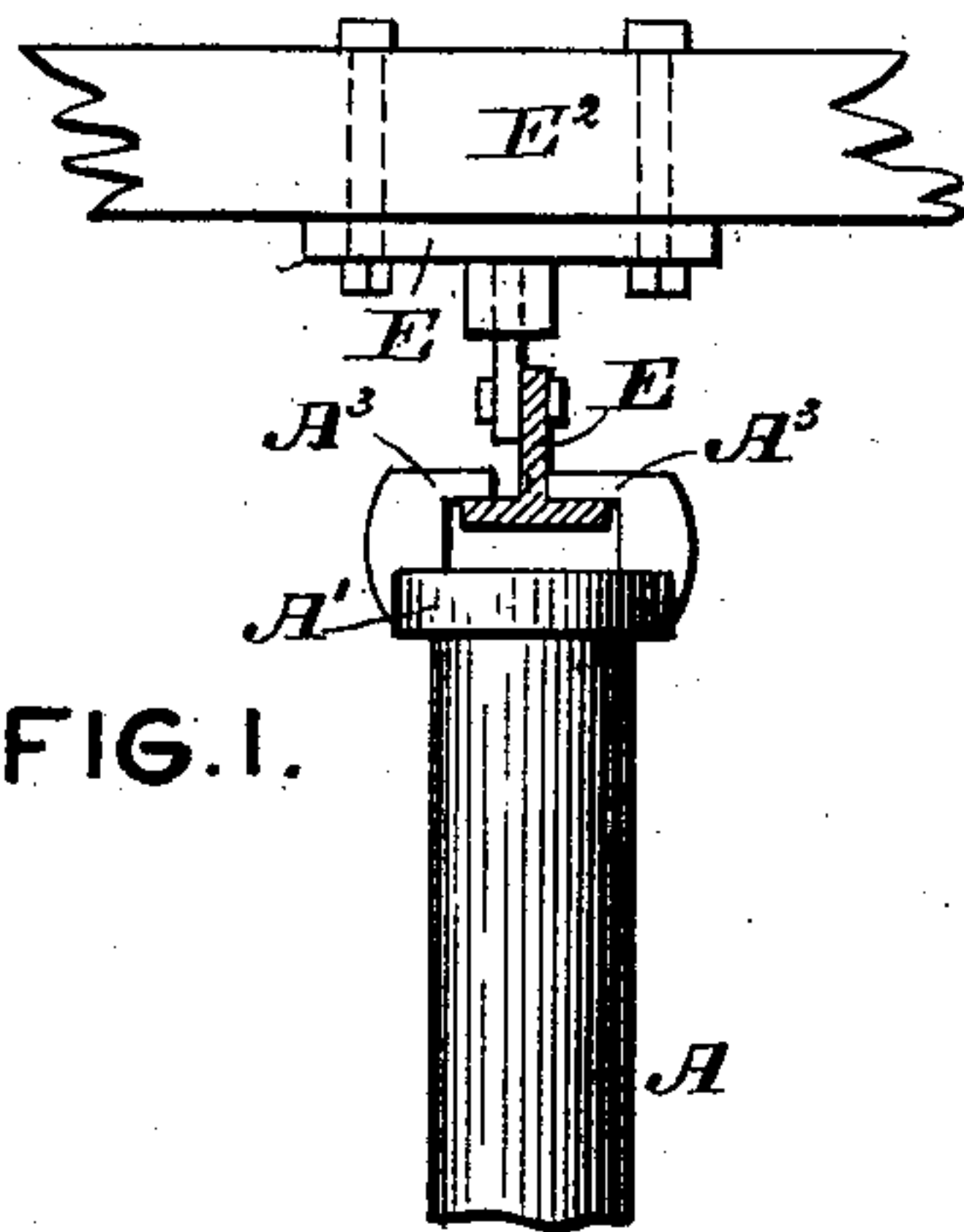


FIG. 1.

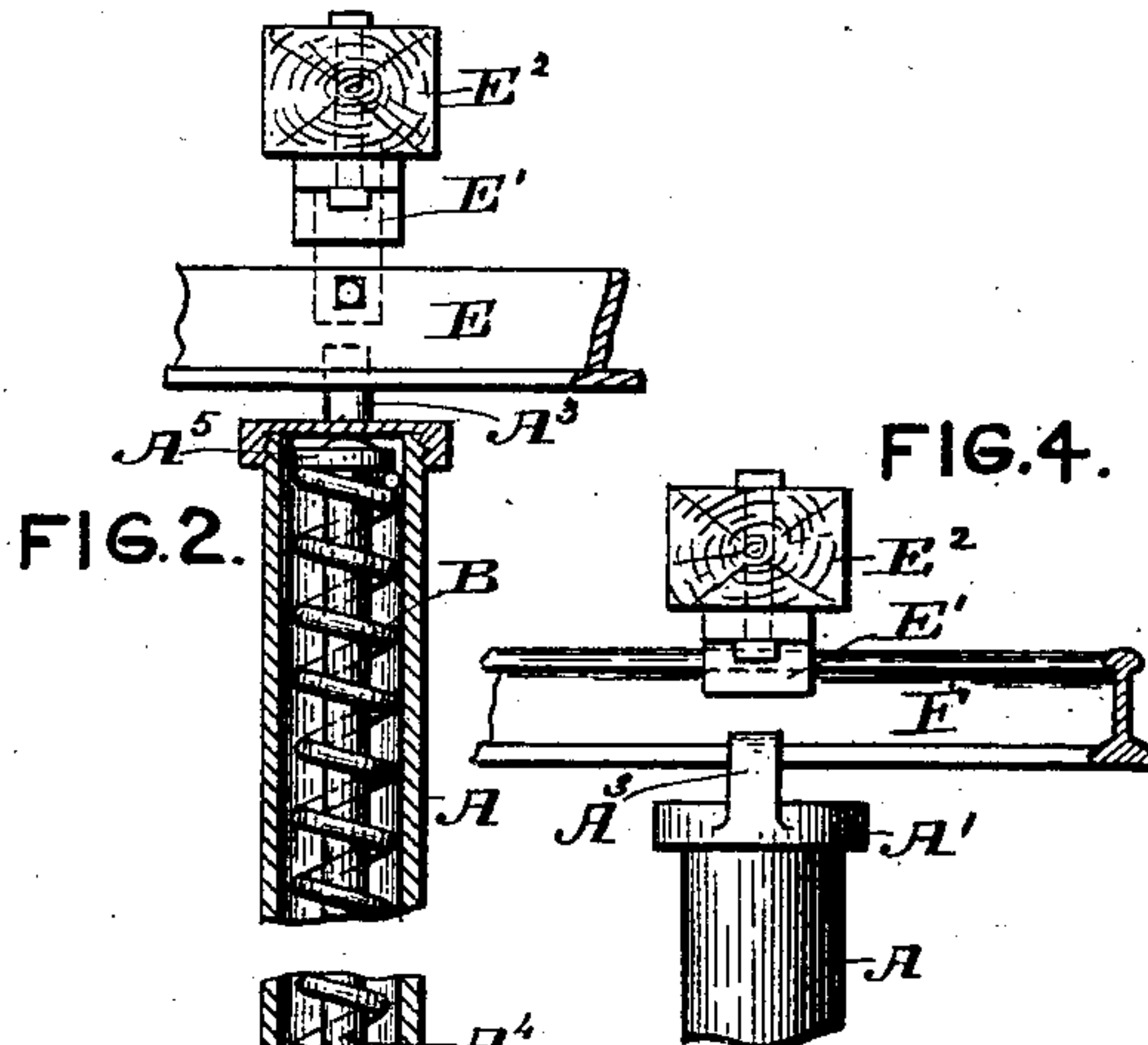


FIG. 2.

FIG. 4.

FIG. 3.

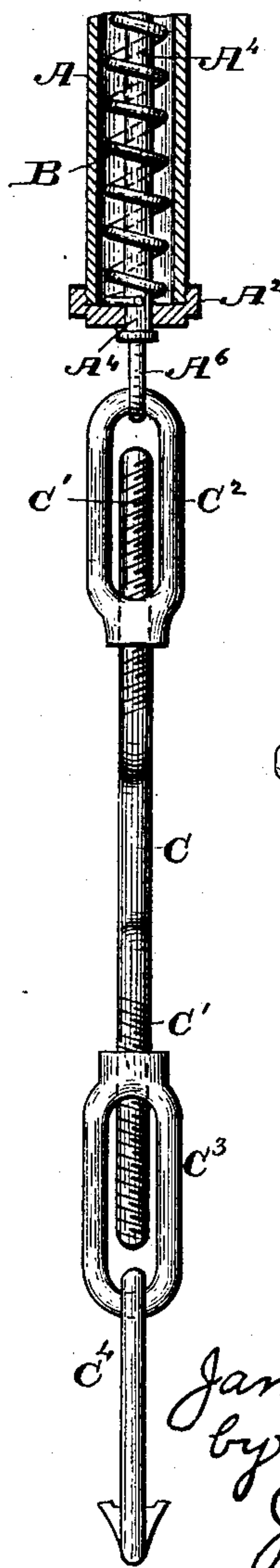
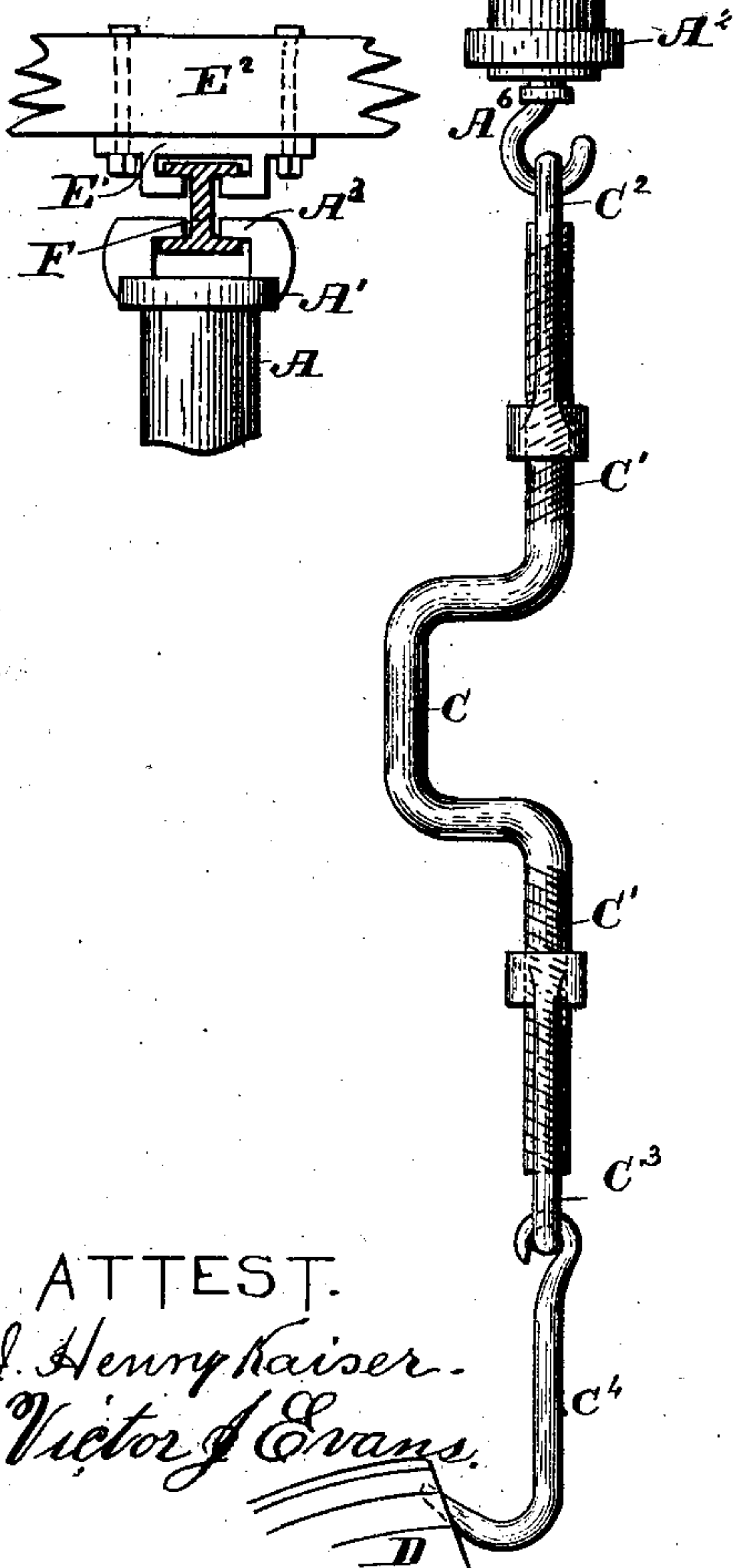
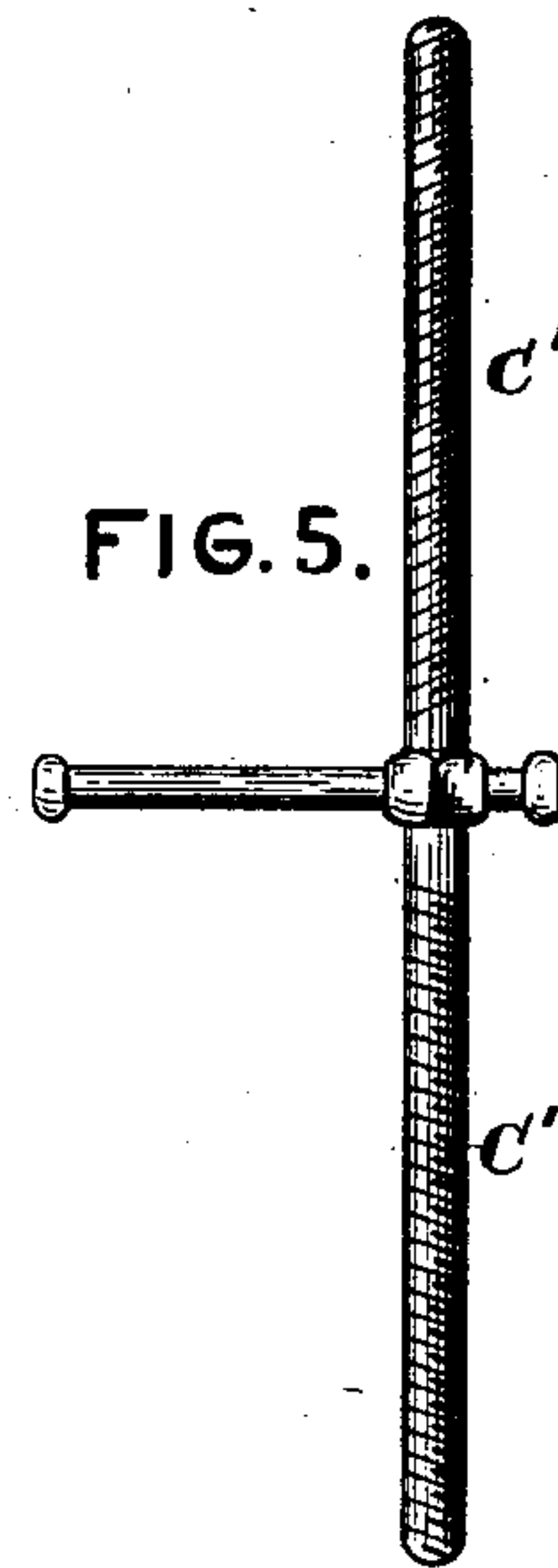


FIG. 5.



ATTEST.
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UNITED STATES PATENT OFFICE.

JAMES HILL, OF MELBOURNE, VICTORIA.

APPARATUS FOR TILTING CASKS.

SPECIFICATION forming part of Letters Patent No. 376,652, dated January 17, 1888.

Application filed July 27, 1887. Serial No. 245,465. (No model.) Patented in Victoria May 21, 1887, No. 5,087.

To all whom it may concern:

Be it known that I, JAMES HILL, a subject of the Queen of Great Britain, residing at No. 201 Bourke street west, in the city of Melbourne and British colony of Victoria, bell-founder, have invented an Improved Apparatus for Tilting Casks, (for which I have filed an application for Letters Patent in the British colony of Victoria on the 21st day of May, 1887, and numbered 5,087; that under the laws governing the grant of patents in said colony the Letters Patent will bear date as of the day of filing, and that up to the present time the patent on said application filed in said colony has not been granted,) of which the following is a specification.

My improved apparatus for tilting casks is so constructed as to act automatically and with the greatest precision, and so as to be easily removable from one cask to another. It is suspended from an overhead rail or support of either T or H iron section, along which it can be readily slid from point to point or off one rail and onto another. I first provide a spiral or coiled spring of suitable strength and place it inside a tubular casing or cylinder, which is closed at the top, but has an opening at the bottom to allow of the passage of a rod, the upper end of which is furnished with a flat disk, which rests on the top of said spring inside the cylinder. The lower end of this rod below the cylinder terminates in a hook or an eye, to which is attached the upper coupling-link of the suspension-rod, which has a hook at its lower end to hook under the chine of the cask. The suspension-rod is composed of a cranked or lever-handle coupling-rod, the one stem of which has a right-handed and the other stem a left-handed thread cut in it to suit the threaded holes in the ends of the coupling-links, so that by rotating such coupling-rod in the desired direction the suspension-rod can be lengthened or shortened. The top cap of the cylinder has two hooks or lugs on it to embrace the flat flanges of the T or H iron bar, which is suitably supported from the beam above.

In order that my invention may be well understood, I will now describe it with reference to the accompanying sheet of drawings, which show, in—

Figure 1, a side view of my apparatus suspended from a T-bar bolted to a bracket secured to an overhead beam, the lower hook of the apparatus being attached to the chine of a cask which is tilted. Fig. 2 is a view at right angles to Fig. 1, with the tubular casing or cylinder in section to show its contained spring and bar. Fig. 3 is a side view of the top part of the apparatus, showing an alternative means for supporting it, consisting of the H-bar, such H-bar being movable, as it is supported in a slotted bracket attached to the overhead beam. Fig. 4 is a view of such alternative construction taken at right angles to Fig. 3. Fig. 5 shows an alternative construction of the screwed coupling-rod.

A is the tubular casing or cylinder, having the upper and lower cap-pieces, A' and A², screwed on its ends, the upper cap-piece, A', having the hook-shaped snugs A³ formed on it to embrace its supporting-bar, while the lower cap, A², has a square hole through it to allow of the passage of the square bar A⁴, upon the upper end of which is riveted the disk or washer A⁵, which fits loosely within the casing. The lower end of bar A⁴ has a hook, A⁶, formed on it. The coiled or spiral spring B is arranged within the casing between the lower cap, A², and the disk A⁵ and around the central bar, A⁴.

C is the screwed coupling-bar, shown furnished with a crank-handle in Figs. 1 and 2, and with a lever-handle in Fig. 5. The stems C' of the coupling-bar are screwed in a reverse direction to one another, the upper stem passing into the screwed coupling-link C², which is supported on hook A⁶, before referred to, and the lower stem passing into the lower coupling-link, C³, which supports the lowermost hook, C⁴, which engages with the chine of the cask D.

In Figs. 1 and 2 the hook-snugs A³ are supported on the flat flange of the T-iron bar E, which is bolted to the stem of the bracket-pieces E', which in turn are bolted to the overhead beams E², as shown.

In Figs. 3 and 4 the hook-snugs are supported on the flat flange of the H-bar F, which is loosely supported in the slotted brackets F', bolted to the overhead beams, E², as shown.

To put my improved apparatus for tilting casks in operation when it is suspended from

either the T or the H bar above the end of a full cask, the lower hook, C⁴, is first attached to the chine of the cask and the screwed coupling rotated until there is sufficient strain upon the
5 spring to barely lift the end of the cask, the spring being so arranged with relation to the cask to which it is to be attached that such compression will reduce it to about one-half
10 the expanding power of the spring gradually lifts up the end of the cask, thus tilting it in a gradual and automatic manner.

Having now particularly described and explained the nature of my said invention and
15 in what manner the same is to be performed, I declare that what I claim is—

1. The combination of a cylindrical casing containing a spring, with a rod having a disk
20 at its top to press on such spring, a hook for engaging the barrel-chine, and an adjustable

connection between said hook and rod, substantially as described.

2. The combination of the cylindrical casing having engaging-lugs on its upper end, a rail engaging said lugs and upon which said cyl- 25
inder is movably supported, a spring in said casing, and a rod having a disk bearing on said spring, and a hook for engaging the barrel-chine, substantially as described.

3. The combination of the screwed coupling- 30
bar, means for rotating said bar, hooks connected to the lower end of said bar, and cylindrical casing above said bar, containing a spring, and rod connected to said bar, substantially as specified.

JAMES HILL.

Witnesses:

WALTER SMYTHE BAYSTON,
PERCIVAL AUGUSTUS SMITH.