C. L. TOPLIFF.

Barrel-Roller.

No. 159,864. Patented Feb. 16, 1875.

Fig. 1.

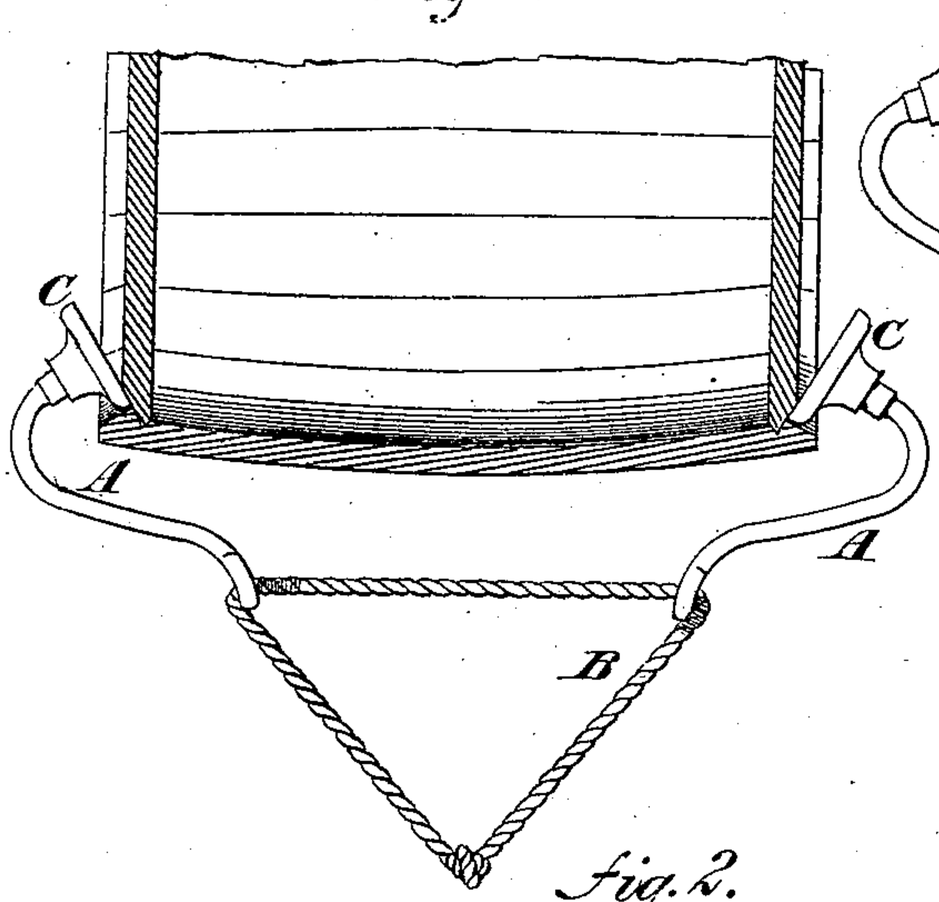


Fig. 6.

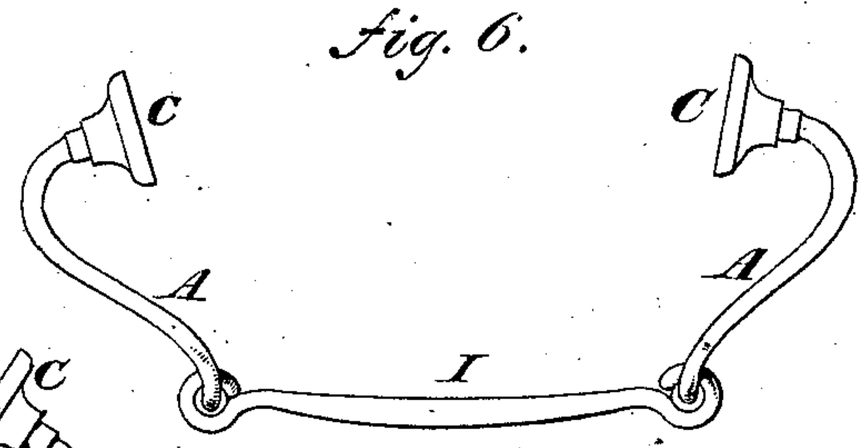


Fig. 3.

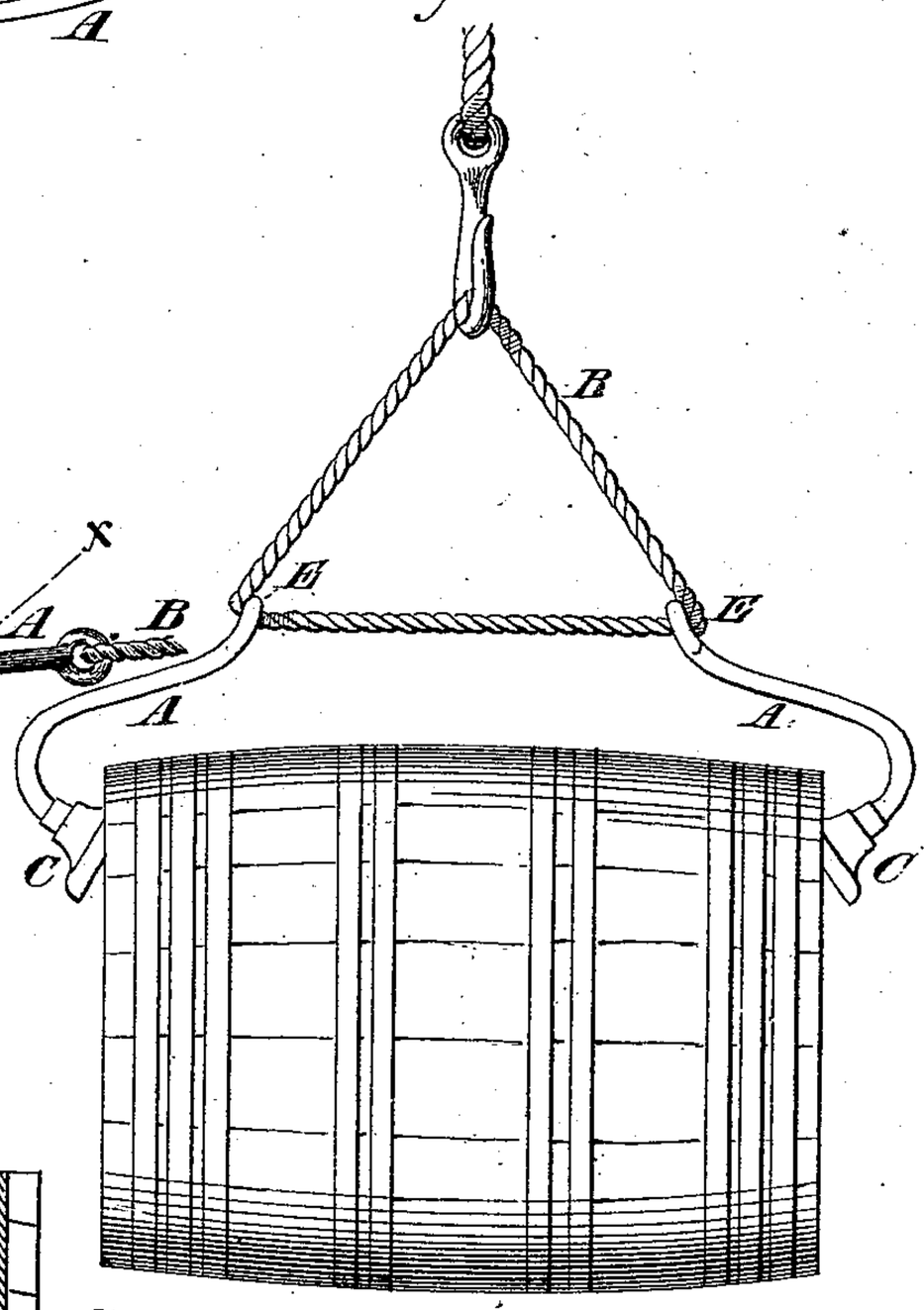


Fig. 2.

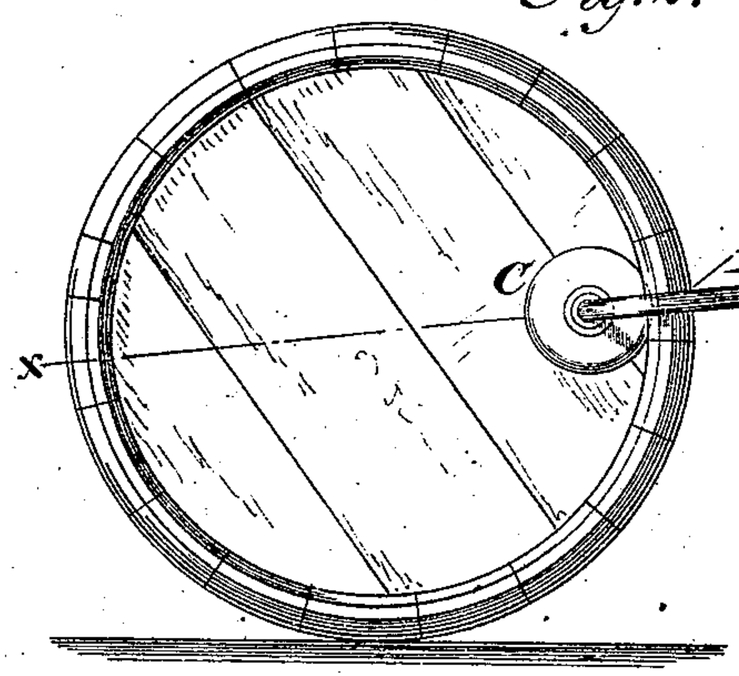


Fig. 5.

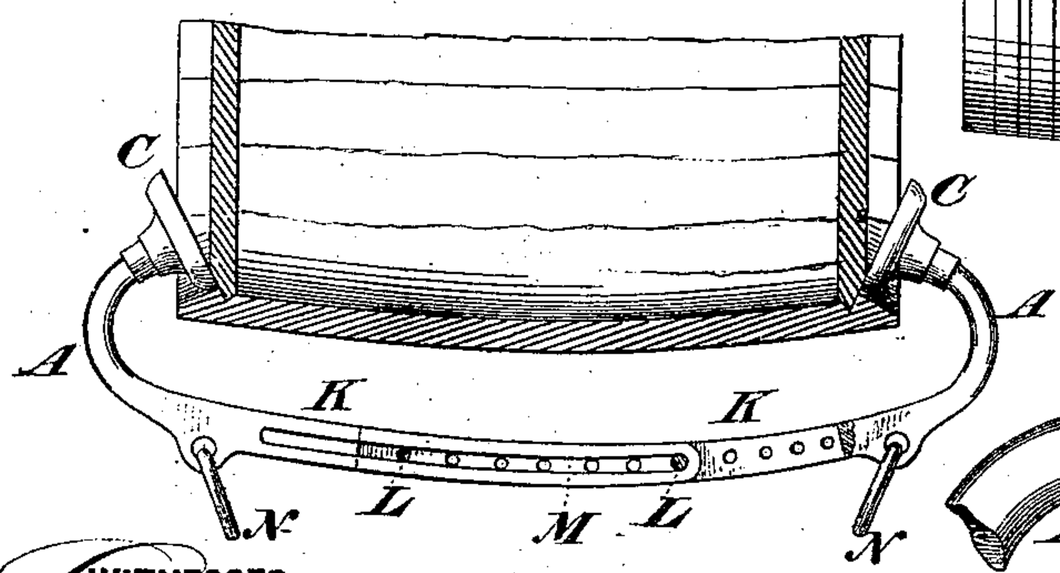
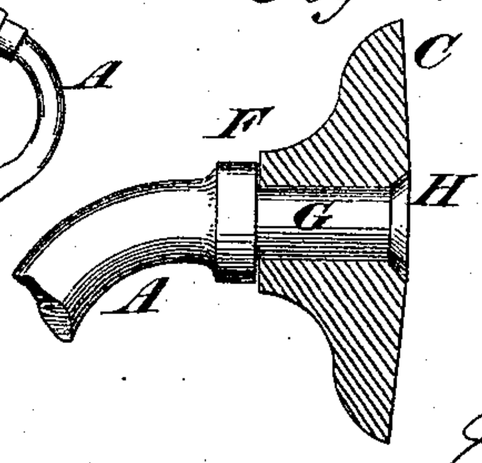


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CYRUS L. TOPLIFF, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN BARREL-ROLLERS.

Specification forming part of Letters Patent No. **159,864**, dated February 16, 1875; application filed October 1, 1874.

To all whom it may concern:

Be it known that I, CYRUS L. TOPLIFF, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Barrel-Roller; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification.

This invention relates to certain improvements in barrel-rollers; and consists in making a pair of griping-arms provided with end disks or rollers, so detached and provided each with an eye as to adapt the same, when connected by a flexible loop, to any size of barrel, keg, or hogshead, the side next the barrel of the triangle formed by the three points of traction in the loop being increased, and the other two sides correspondingly decreased, as the barrel is longer, and the said side next the barrel being decreased and the other two sides increased as the barrel is shorter, thus making the devices applicable to a far more extended use, and the resultant line of draft always the same with reference to the plane of the rollers.

Figure 1 is a sectional elevation of a barrel with my improved rolling and hoisting contrivance, showing the method of applying and using it for rolling the barrel, the section being taken on line *x x* of Fig. 2. Fig. 2 is an end elevation of Fig. 1. Fig. 3 is a side elevation, showing the method of using the device as a sling.

In the drawing, A represents the hook-shaped griping-arms, having the rollers C at one end, which rest under the chines of the barrel, and an eye at the other, through which passes the flexible loop B. I prefer to make the rollers C with beveled edges, to run close in the angle between the head and the staves, and also to make the set of the arms so that the planes of the rollers will coincide with the lines of the draft or traction, which latter is a resultant between the two sides of the loop that form the angle E.

It will be observed that, when the draft is applied through the hook in Fig. 3, the line of traction is neither in the direction B E nor E E, but in an intermediate direction, which is the resultant of the two. This is in consequence of the flexibility of the loop, and is a great advantage gained, in that the loop automatically adjusts itself, so that the draft is always in the direction of the plane of the rollers, regardless of the size of the barrel; and the device may be used upon any sized barrels without any danger from a strain from lateral pressure upon the rollers.

By means of this arrangement, also, my devices are equally as well adapted to be used as a sling, for the purpose of hoisting without removing the griping-arms from the barrel. Thus, if a barrel be at one end of a warehouse, and it is desired to transfer it to the other end and elevate it to the next story, the hook is, once for all, attached to the loop, and the barrel rolled until it is about to be swung, when the operation of hoisting is commenced and made a continuous movement without necessitating the removal of the griping-arms.

I know that it is not new to construct barrel-rollers with small rollers or wheels attached to the ends of pivoted griping-arms; but, as this arrangement makes the device limited in its uses, and awkward in handling when applied to larger or smaller barrels, I disclaim the broad idea of the rollers and griping-arms, and confine myself to my particular devices for using the same, wherein peculiar advantages are secured.

What I claim is—

The detached hook-shaped griping-arms A, constructed as described, with rollers C at one end and eyes at the other, in combination with a flexible loop, B, substantially as and for the purpose specified.

C. L. TOPLIFF.

Witnesses:
T. B. MOSHER,
EDGAR TATE.