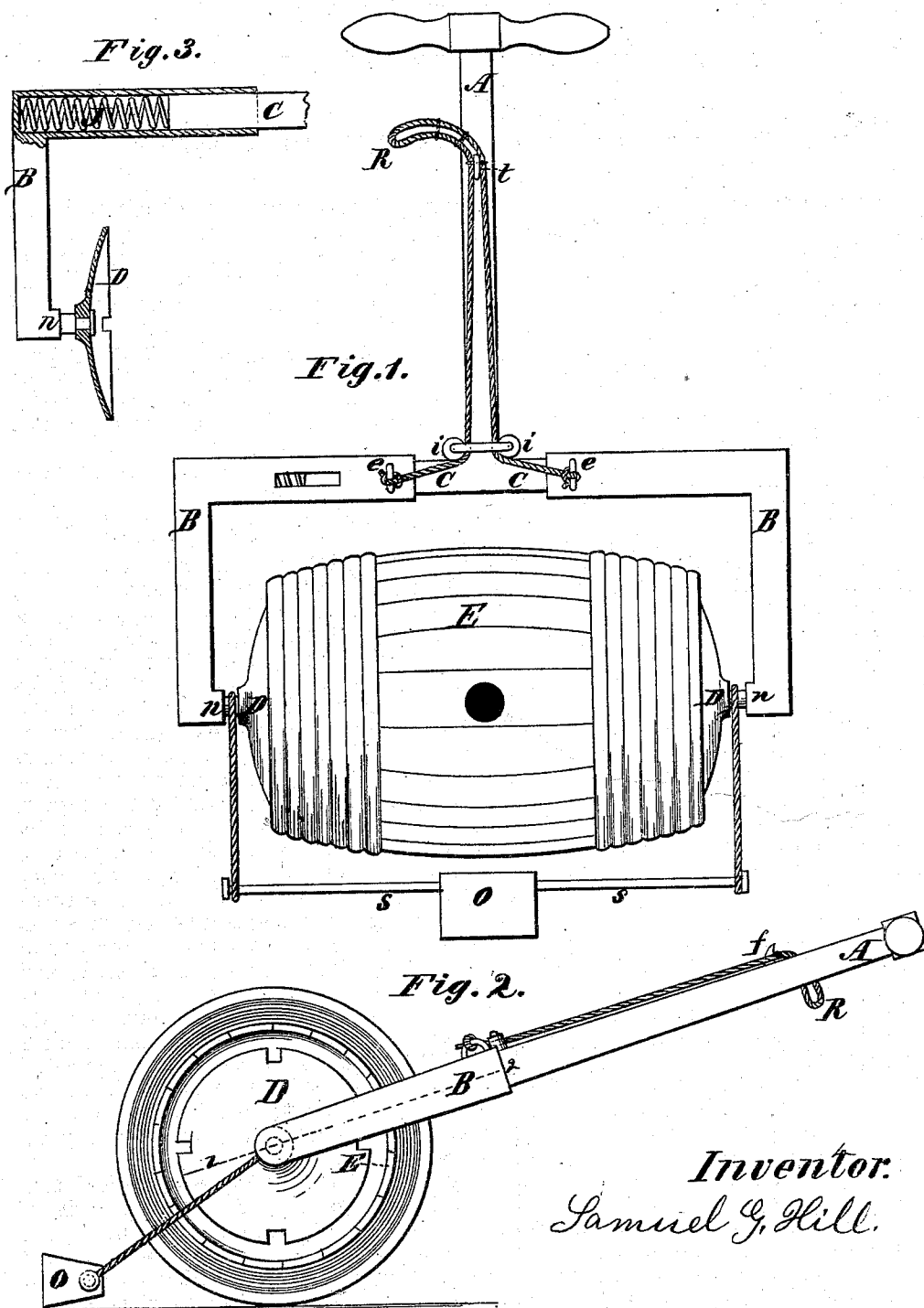


S. G. HILL.

Improvement in Barrel-Roller.

No. 127,236.

Patented May 28, 1872.



Inventor.
Samuel G. Hill.

Witnesses: Samuel Brock,
Edw. B. Mustagh.

UNITED STATES PATENT OFFICE.

SAMUEL G. HILL, OF MUSCATINE, IOWA.

IMPROVEMENT IN BARREL-ROLLERS.

Specification forming part of Letters Patent No. 127,236, dated May 28, 1872.

To all whom it may concern:

Be it known that I, SAMUEL G. HILL, of Muscatine, county of Muscatine, State of Iowa, have invented certain new and useful improvements in means and mode of handling barrels, casks, or rolling such cylindric-formed bodies to or from steamboats, ships, vessels, warehouses, or any other place where the same invention may be used.

Figure 1 is a top view of an apparatus employed in carrying out my invention. Fig. 2 is a side view of the same apparatus. Fig. 3 is a sectional view, as cut through the dotted line from 1 to 3 in Fig. 2.

Similar letters of reference indicate corresponding parts in all three of the figures.

First, this improvement will enable barrels, casks, or other cylindrical-formed bodies to be rotated or rolled with great facility and safety on their outer perimeter with a variable and adjustable axis. Second, this improvement will effectually secure the heads or ends of barrels, casks, or such other like cylindrical-formed bodies from falling out or being loosened or detached, thus saving from waste or damage the contents of such barrels, casks, or other cylindrical-formed bodies while being rotated or rolled on their outer perimeter with and by the aid of a variable and adjustable axis.

Having now stated the purposes for which this improvement is made, I will now describe its construction. The handle, tongue, or guide A is securely attached to the cross-bar C C, on which the variable and adjustable arms B B work or slide. R is a flexible cord, chain, or lever attached to the adjustable arms B B at *e e*, working over the fulcrums *i i* on the cross-bar C C. At the extreme ends of the adjustable arms B B are the pivots or journals *n n*, on which are attached the disks or spiders D D, which are something smaller in diameter than the barrel-heads, and are serrated or have openings on their outer edges, thus insuring their close contact against the head and chime of the barrel or cask E attached to the journals (loosely) at *n n*, or at any other convenient place, by means of a cord or rope to the cross-bar S S, which is firmly attached to the safety-brake or block O, which is dragging behind the cask or barrel, to prevent the

retrograde movement of the cask or barrel while ascending a hill or steep incline.

I will now describe the method of working and using my improvement. For ordinary rolling of casks or barrels on plane surfaces, I will take the apparatus as is shown in Fig. 1, divested of the safety-brake or block O; then clasp the barrel or cask E on its outer ends or heads by pulling on the flexible cord, chain, or lever R, which will cause the adjustable arms B B to be drawn toward a common center, thus pressing the variable disks or spiders D D against the outer ends or heads of the barrel or cask E when a sufficient rigidity has been obtained. I then secure the flexible cord, chain, or lever R to the pin or catch *f* on handle A, and proceed to roll the barrels, casks, or other cylindrical-formed bodies by applying power of any suitable kind to the handle or tongue A, thus causing the barrel or cask to revolve on its outer perimeter while the disks are clasping the outer ends or heads of the casks or barrels, and the extreme circumference of the disks or spiders are brought in contact with the chime or inner perimeter of the cask or barrel, thus causing the cask or barrel to be rolled on its outer perimeter by and with the aid of a variable and adjustable axis, and at the same time effectually preventing the heads or ends of the barrels or casks from coming out or being loosened, thus preventing from waste or damage the contents of such casks or barrels while being rolled; and when the barrel or cask has been rolled to its place of destination, then the flexible chain on lever R is detached from the pin or catch *f*, and the adjustable arms B B are distended by the expansion of the springs J J, and the apparatus is thus detached from the barrel or cask; and the same operations can be repeated again and again.

Having stated the purposes for which this invention has been made, also the mode of constructing and operating the same so that others skilled in the art may construct and operate the same, what I claim as new and useful, and desire to secure by Letters Patent, is—

1. The handle, tongue, or guide A secured to the cross-bar C C, on or to which the variable and adjustable arms B B work or slide

to and from a common center, substantially as and for the purposes hereinafter set forth.

2. I claim the serrated disks or spiders D D with openings on their outer circumference, for the purposes shown and described.

3. I claim the constructing and operating of the apparatus with or without the safety-brake

or block O, substantially as described, and for the purposes hereinbefore set forth.

SAMUEL G. HILL.

Witness:

SAMUEL BROCK,
JAS. B. MANTAGH.