

(No Model.)

W. B. GLOVER.

COAL TUB.

No. 262,946.

Patented Aug. 22, 1882.

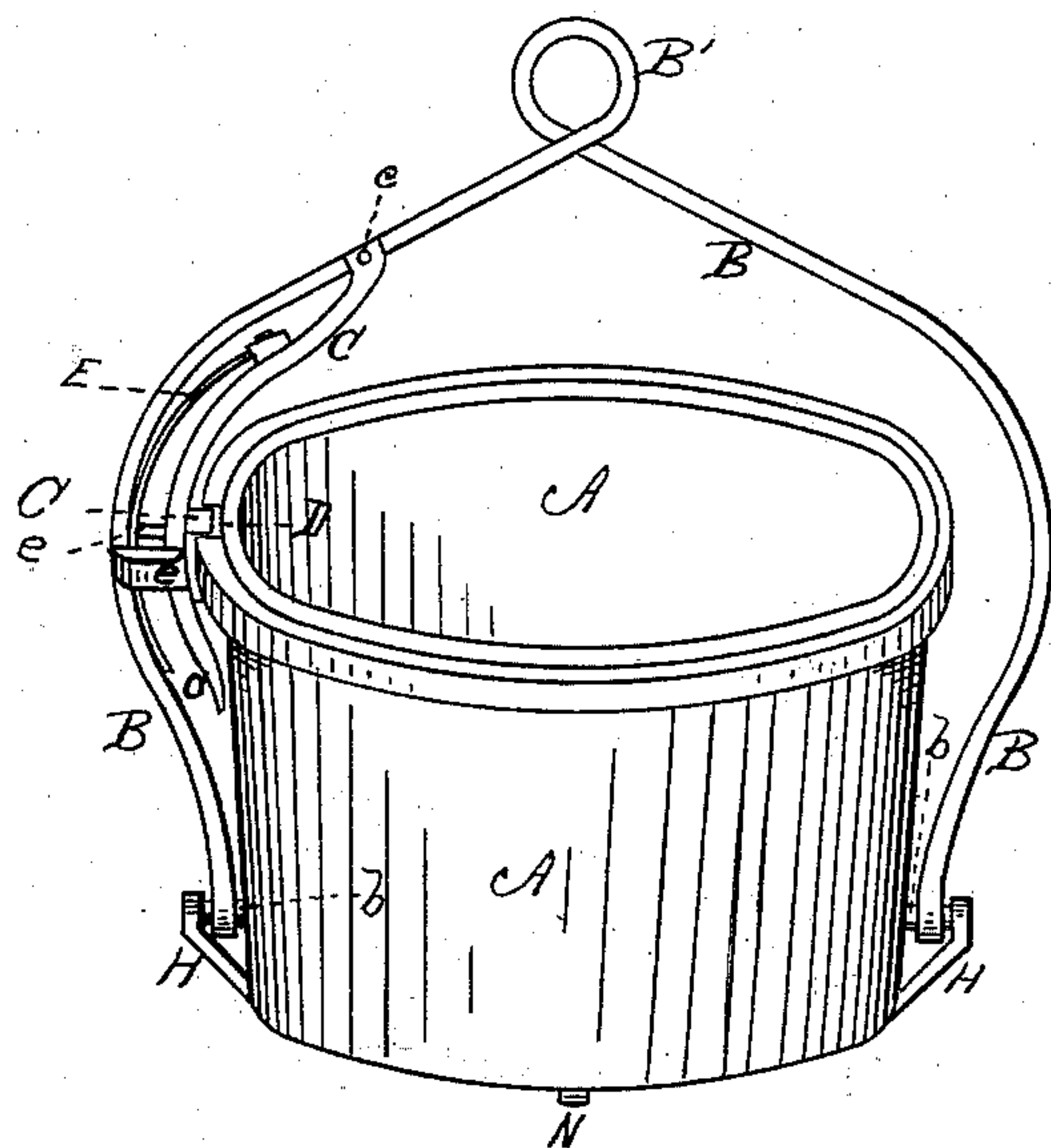


Fig. 1.

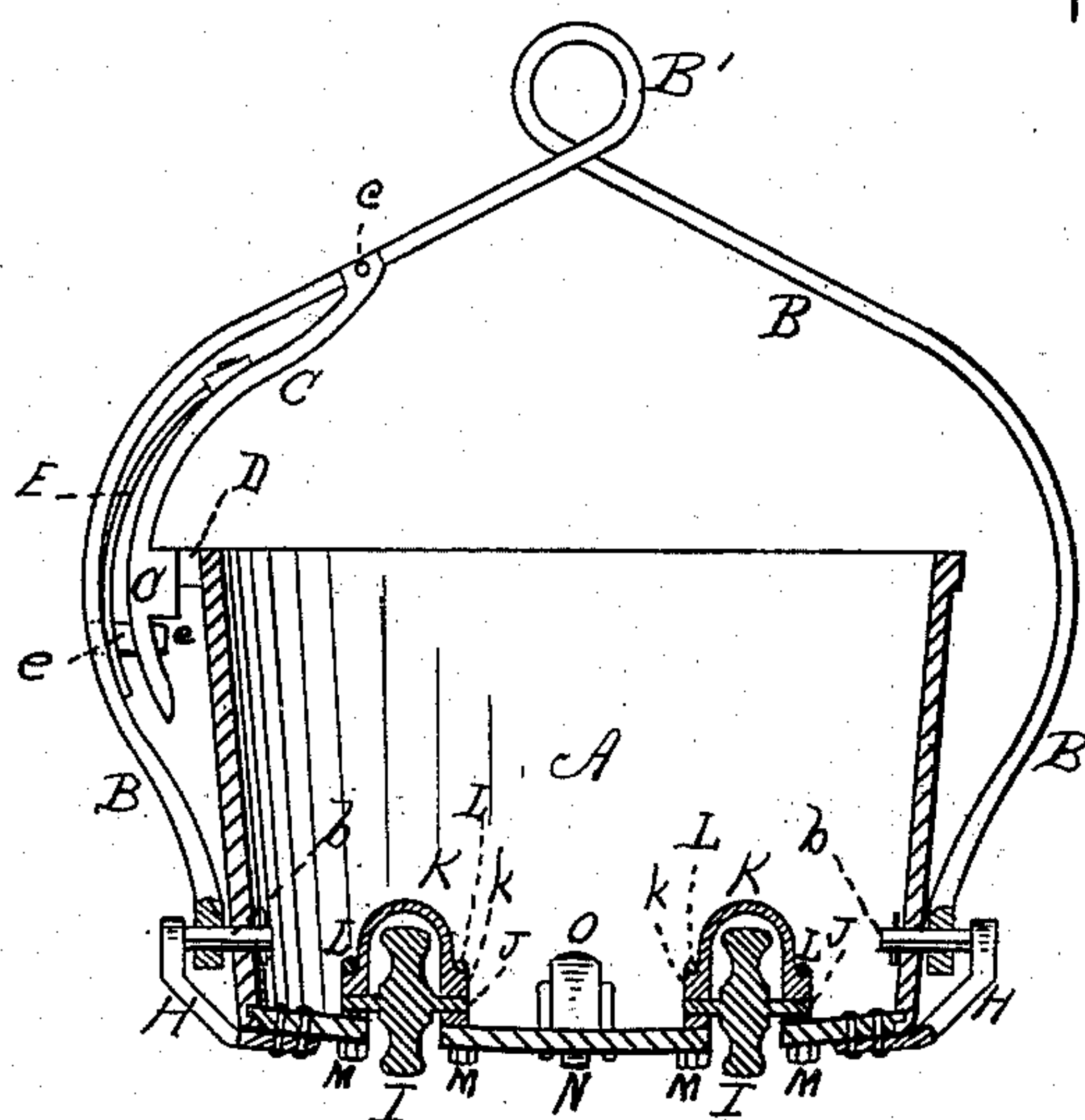


Fig. 2.

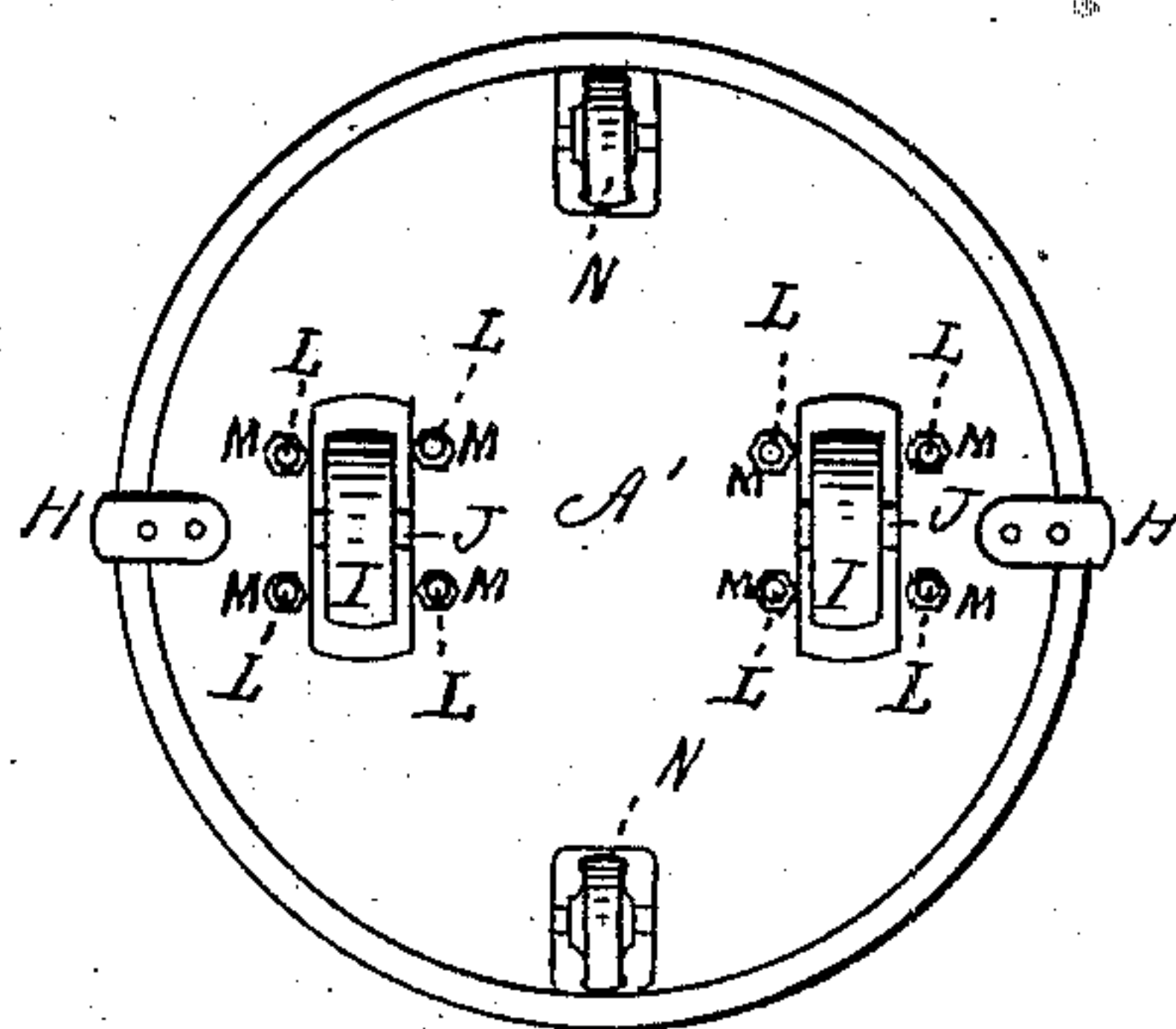


Fig. 3.

WITNESSES.

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WINSLOW B. GLOVER, OF BOSTON, MASSACHUSETTS.

COAL-TUB.

SPECIFICATION forming part of Letters Patent No. 262,946, dated August 22, 1882.

Application filed February 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, WINSLOW B. GLOVER, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Coal-Tubs, of which the following is a specification.

This improvement relates to coal-tubs used principally in loading vessels with coal or discharging coal from them.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a view of a coal-tub embodying my invention. Fig. 2 is a vertical section of the same. Fig. 3 is a plan of the under side.

A is the body of the tub, A' being the bottom, made slightly convex or bulging in order to add to its power of resistance when striking.

B is the bail, B' being the loop for facilitating the attachment of the lifting means. The bail B is attached to the tub below the center instead of above it, as usual, being secured thereto by means of the pins *b b*. In order to prevent the tub from tipping until desired, a latch, C, is pivoted to the bail at *c*, said latch being held in the notch or catch D in the tub by means of the spring E, whose upper end is riveted to the latch, and whose lower end is free and presses against the bail.

A supporting-guide, *e*, extends from the bail around the latch C, as shown, allowing the latch to vibrate therein and preventing the weight of the loaded tub from breaking it. The normal position of the latch C is in the catch D, holding the tub in the position shown. To dump the coal and empty the tub the latch is pressed back against the bail and the tub tips over bottom upward.

H H are guards extending from the outer ends of the pins *b b* downward, and riveted to the bottom A' of the tub. Their object is to protect the bail, and the pins *b b* likewise, when the tub strikes heavily, often sidewise—as on the keelson of a vessel, for example—there being great liability of injury to the bail from this cause.

I I are wheels, whose axles J have their bearings in casings or housings K, which are placed in the bottom of the tub on a line with the bail-pins and bail. Each casing or housing K is provided with two shoulders or ledges, *k*. Straps or rods L pass through the bottom A' of the tub and over these shoulders *k*. By means of nuts M, which are placed on the ends of the straps L, (which ends project

through and below the tub-bottom,) the casings K are held down firmly in position.

N N are small wheels similarly arranged in smaller casings, O. The large wheels, I, project perhaps an inch lower than the small wheels, N. Hence when the tub is standing it rests on the two large wheels and slightly tipping on one of the smaller wheels.

It is not novel to attach wheels to the bottoms of coal-tubs; but by this arrangement of wheels—viz., two large wheels on a line with the bail and two small wheels at other opposite points—the tub may be wheeled not in one direction only, but by resting it on the large wheels I only it can be easily turned in any direction and then propelled in any direction. This could not be done if the wheels were all the same size, or conveniently if the large wheels were elsewhere than on a line with the bail. The device would work, although not so satisfactorily, with one small wheel omitted.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with the tub A, provided with the catch D, the latch C, spring E, guide *e*, and bail B, having its ends pivoted to the tub A below the center of gravity, arranged and constructed substantially as and for the purpose set forth.

2. In combination with the bail B and tub A, the guards H, having their lower ends secured to the tub and their upper ends projecting outside and beyond the lower ends of the bail, substantially as and for the purpose described.

3. In a coal-tub, the wheels I, two or more in number, secured, substantially as described, in the bottom of the tub and on a line with the bail-pins and bail, as and for the purpose specified.

4. In a coal-tub, the combination of two or more relatively large wheels, I, set in the bottom of the tub, substantially as set forth, and on a line with the bail-pins and bail, and one or more wheels, N, similarly set in the tub-bottom, but not on a line with the bail-pins and bail and not projecting so far below the bottom as the wheels I, all arranged and constructed substantially as and for the purpose set forth.

Witnesses:

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