L. TRUDEAU.

SCRUBBER.

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1,067,889. Patented July 22, 1913.

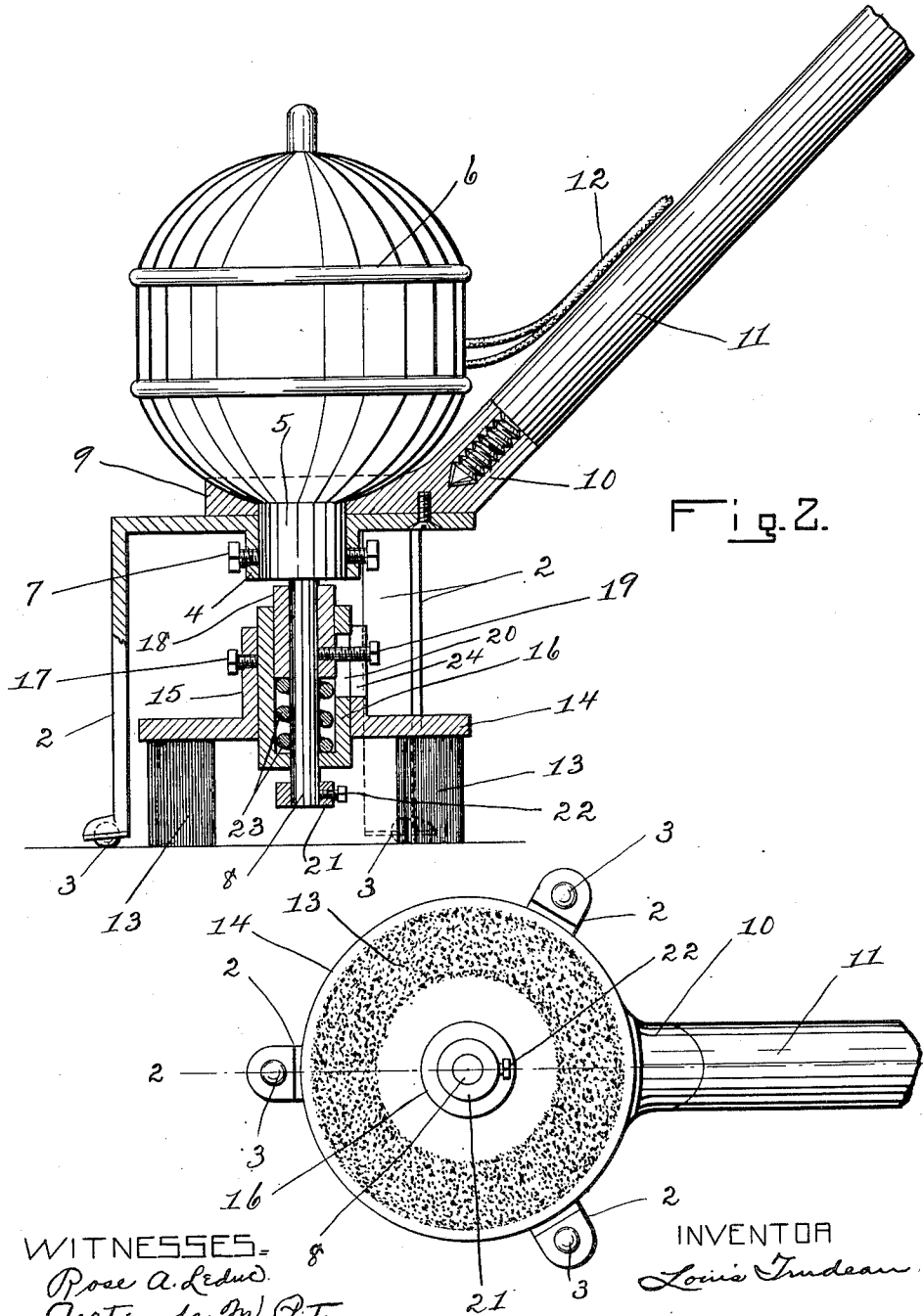


Fig. 2.

Fig. 1.

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SCRUBBER.

1,067,889. Specification of Letters Patent. Patented July 22, 1913.

Application filed November 30, 1912. Serial No. 734,280.

To all whom it may concern:

Be it known that I, LOUIS TRUDEAU, a citizen of the United States, residing at Pittsfield, county of Berkshire, and State of Massachusetts, have invented certain new and useful Improvements in Scrubbers, of which the following is a specification.

The invention relates to such improvements and consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the reference characters marked thereon, which form a part of this specification. Similar characters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a bottom plan view of my improved electric scrubber. Fig. 2 is a central vertical section of the same taken on the broken line 2—2 in Fig. 1.

The principal object of the invention is to combine in a simple and inexpensive manner an electric motor and a scrubbing-brush in a form adapted for household use.

Referring to the drawings wherein the invention is shown in preferred form, 1 is a truck having three legs, 2, terminating in casters, 3, adapted to roll upon the floor or surface to be scrubbed. The top of the truck is provided with a central aperture surrounded by a depending cylindrical flange, 4, said aperture and flange being adapted to receive and fit the hub, 5, of an electric motor, 6, shown as an ordinary fan-motor. The hub, 5, of the motor is secured within the flange, 4, by means of one or more set-screws, 7, whereby the casing of the motor is firmly mounted upon the truck with the shaft, 8, of the motor projecting vertically downward. A handle socket-plate, 9, is interposed and clamped between the motor and the top of the truck, being apertured to receive the hub of the motor. This socket-plate has a screw-socket, 10, adapted to receive a detachable handle, 11, whereby the truck can be conveniently propelled along the floor. Electric power is supplied to the motor through a flexible cord or cable, 12, from any convenient source, as a lamp-socket, not shown.

A scrubbing-brush, 13, is mounted upon the motor-shaft, 8, and connected to rotate therewith in engagement with the surface upon which the truck-casters rest. For certain purposes of the invention the brush may be mounted upon the motor-shaft, 8, in any known manner. I prefer, however, to so mount it that it can be adjusted longitudinally of the motor-shaft to compensate for wear of the bristles or brush-fiber. I have shown the brush in circular form projecting from a block or head, 14, having a hub, 15, adapted to receive a sleeve, 16, and to be secured thereon by means of a set-screw, 17. The lower end of the sleeve, 16, fits the motor-shaft, 8, and is adapted to slide longitudinally thereupon, while its upper end is adapted to receive a sleeve, 18, fixed upon the motor-shaft, 8, by means of a set-screw, 19, the sleeve, 16, being provided with a longitudinal slot, 20, through which the set-screw, 19, passes with freedom for the sleeve, 16, to reciprocate longitudinally, while causing said sleeve, 16, to rotate in unison with the sleeve, 18, and motor-shaft, 8. Downward movement of the sleeve, 16, is limited by means of a collar, 21, fixed upon the shaft, 8, by means of a set-screw, 22. Between the lower end of the sleeve, 16, and the sleeve, 18, is interposed a coil-spring, 23, which yieldingly holds the sleeve, 16, and the brush, 13, in lowermost position, in which position the brush slightly projects below the plane of the casters, 3. The spring, 23, is preferably of such limited strength only as to be overcome by the weight of the truck and motor when the device rests upon the floor, so that the device will roll readily along the floor while the brush is held against the floor by the yielding force of the spring. The hub, 15, of the brush may be provided with a longitudinal slot, 24, adapted to freely receive the set-screw, 19.

The device as shown is simple in construction and light in weight, so that it may be easily assembled or repaired, and can be readily propelled along a floor by a woman or child.

The construction shown permits the use of the ordinary type of fan-motor, so that no special construction of motor or motor-casing is required, thus making it possible to produce the device at small cost.

In the preferred form of my invention, the motor-casing is convexed in form adjacent to the hub, 5, and the socket-plate, 9, is provided with a correspondingly con-

caved upper surface adapted to receive and form a seat for said convexed portion of the motor-casing.

What I claim as new and desire to secure by Letters Patent is—

A scrubbing-machine including a truck; a vertical driving-shaft on the truck; a sleeve upon said shaft connected to rotate therewith while capable of longitudinal movement thereupon; a spring tending to force said sleeve downward; a brush vertically adjustable upon said sleeve; and detachable means for securing said brush in adjusted position upon the sleeve.

In testimony whereof, I have hereunto set my hand this 22nd day of November, 1912.

LOUIS TRUDEAU.

Witnesses:
JAMES D. SHIPTON,
ANNIE E. COWLIN.