

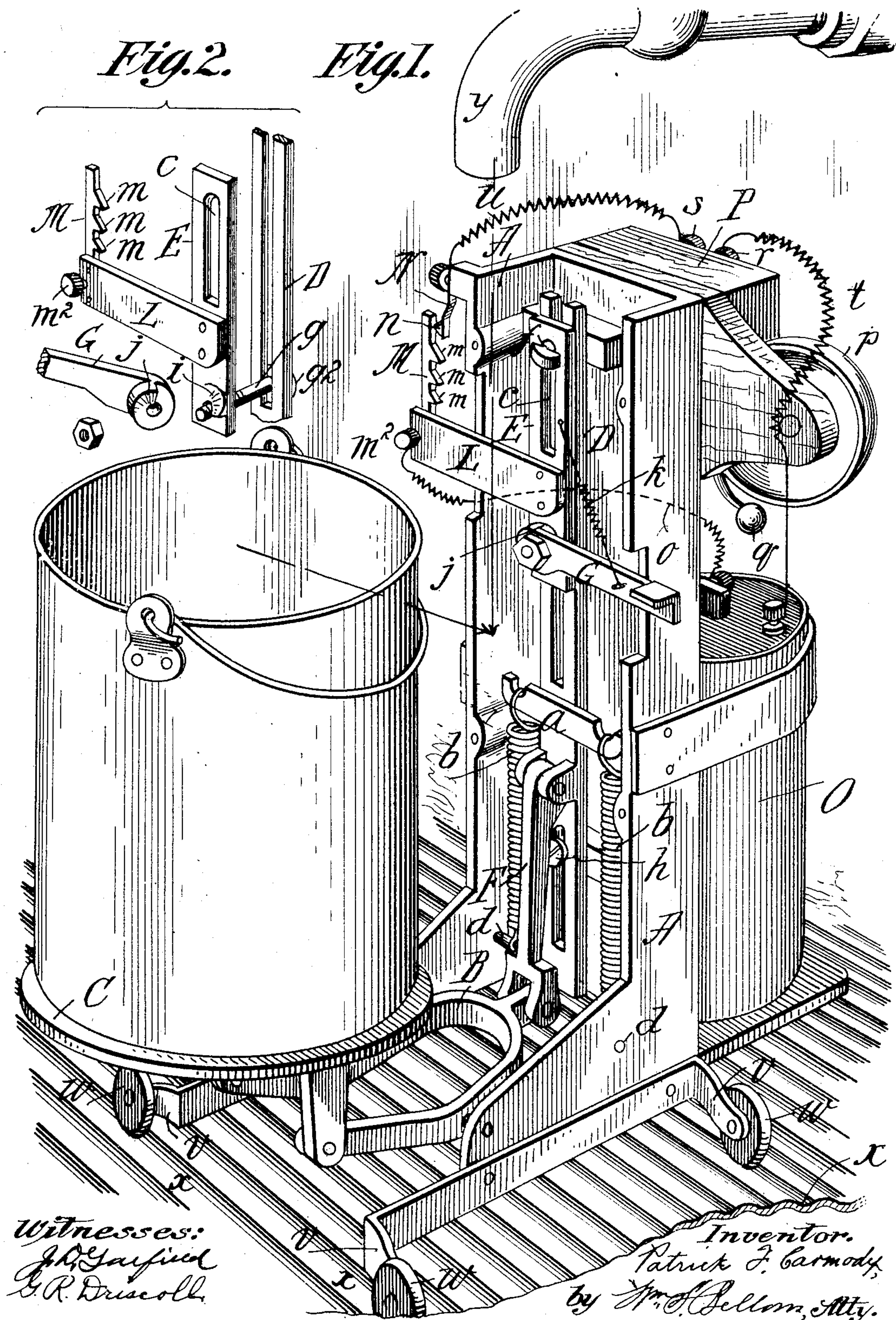
No. 779,838.

PATENTED JAN. 10, 1905.

P. F. CARMODY.

BEER SCALE.

APPLICATION FILED SEPT. 22, 1904.





# UNITED STATES PATENT OFFICE.

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## BEER-SCALE.

SPECIFICATION forming part of Letters Patent No. 779,838, dated January 10, 1905.

Application filed September 22, 1904. Serial No. 225,437.

*To all whom it may concern:*

Be it known that I, PATRICK F. CARMODY, a citizen of the United States of America, and a resident of Holyoke, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Beer-Scales, of which the following is a full, clear, and exact description.

This invention relates to improvements in beer or other liquid scales.

The object of the invention is to produce a beer-scale adapted to primarily receive on the platform thereof a can, pail, or other receptacle to permit the members of a compound scale-bar to be locked together, so that the further weight movement of the scale as produced by the net contents of the liquid which is run into the receptacle will cause the corresponding or proportionate movement of an electrical contact with another contact, both of which are included in connection with normally open electric conductors, which have also electrically connected therein a generator and an audible electrically-operable alarm device, such as an electric bell or buzzer, whereby given predetermined quantities of a liquid as drawn into the receptacle supported on the scale—such, for instance, as pints—will cause the audible sounding of the electric alarm, so that the bartender can shut off the beer-cock, the whole being conducive to accuracy in the liquor delivery and saving thereof and the avoidance of the necessity of watchful care on the part of the barman.

Another object of the invention is to render the apparatus conveniently capable of being moved to carry the receptacle-support under any one of several beer or ale cocks.

The invention consists in the combination and arrangements of parts, all substantially as hereinafter fully described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the beer-scale with the front plate of the case or frame removed. Fig. 2 is a perspective view showing the parts for locking together the members of the compound scale-bar, one of which carries the succession of electric points or contacts.

Similar characters of reference indicate corresponding parts in both of the views.

In the drawings, A represents an upright frame having the scale-beam B pivotally mounted thereon and at the lower portion thereof, said beam carrying at its forward extensions the platform or receptacle-support C, the depending members of such platform being rigidly riveted to the scale-beam.

D and E represent the facewise-adjoined members of a vertical compound scale-bar, the member D having the cross-arm *a*, to which the upper ends of the scale-springs *b b* are connected, the lower ends of said spring being connected to the fixed studs, and the link F pivotally connects the rear end of the scale-beam with the scale-bar member D. Both scale-bar members are longitudinally slotted and both thereof are in part guided by the upper stud *f*, and the bar D is furthermore guided by the lower stud *h*. The upper end of the slot *c* in the secondary scale-bar member E forms a stock by contact against the aforesaid stud *f* for limiting the play or movement in a downward direction of such part E.

The scale-bar members are normally loose and free relatively to each other, so that when the can or pail to receive liquid drawn thereinto is placed on the scale-platform, more or less swinging the scale-beam against the reaction of the scale-springs, the main scale-bar member D will be correspondingly elevated without imparting any movement to the secondary scale-bar member E; but devices are provided for locking the two scale-bars together to move in unison for the indication of the net weight constituted by the pint or several pints of the liquid drawn and to be delivered, and the device for such purpose is here shown as consisting of a lever G, fulcrumed on the end portion of the stud *g*, having the head *g*<sup>2</sup> in bearing against the back of bar D and projecting through the slots of both the bar members. The said lever has at its fulcrumed extremity the face-cam *j*, which acts with the cam-surface *i* on the outer side of the part E.

The spiral spring *k* keeps the released cam



in its freed position, the swinging of the lever by the coaction of the cam-surfaces *i* and *j* binding the parts of the compound scale-bar one to the other for their movements as a unit 5 in the final weighing operation.

The secondary scale-bar member E has the horizontal arm L rigidly secured thereto, the same carrying at its outer end the vertical bar M, provided with the suitably-distanced electric contact-points *m m*, three thereof being 10 shown in the present drawings.

A spring-finger N is secured in a depending position at an upper lateral portion of the frame, and said spring-finger has at its lower 15 extremity an electric contact-point *n*, located in the path of rising motion of the aforementioned series of contacts *m*.

O represents a generator, practically a battery of any of the well-known descriptions. 20 The electric wire *o* runs from connection with one pole of the battery to the binding-post *m*<sup>2</sup>, which is in electrical connection with the contact-points *m m*.

P represents an electrical alarm, the same 25 being understood as the most common description of alarm-bell or buzzer, illustration here being given of the bell and vibratory striker portions *p* and *q* thereof and the binding-posts *r* and *s*, connected with the electrical make-and-break device well known as 30 included in the alarm apparatus.

The electric wire *t* is shown as running from connection with the second pole of the battery to one of the contacts *r* of the electrical alarm 35 device, from the other contact *s* of which device the wire *u* runs to electrical connection with the spring-finger N, which has the contact-point at its lower end.

Manifestly with the scale and conjunctive 40 parts properly constructed and adjusted after the pail or can has been placed on the scale-platform and the scale-bar members D and E bound together by the setting of the lever G the drawing of a given predetermined quantity of liquid—as, for instance, one pint—into 45 the pail through the elevation of the compound scale-bar brings about a contacting of the upper contact-point *m* against the contact-point *n*, closing the normally open circuit and the actuation of the electrical alarm-bell, and thus the barman is immediately apprised of the introduction into the pail of the 50 pint of the liquid, and if the liquid is permitted to continue to run into the pail the presence of a second and a third pint as successively drawn will be announced simultaneously with the contaction of the middle and the lower contacts *m m* with the spring-finger contact *n*. 55

60 After each use of the scale, as described, the bars D and E are unlocked and rendered free of each other by the mere upward swinging of the cam-lever G for the self-adjusting of the scale to its condition in readiness to re-

ceive and accommodate itself to another receptacle. 65

The frame of the beer-scale is shown as having foot-lugs *v v*, carrying wheels or rolls *w w*, which run in the longitudinal depressions, forming trackways *x*, which may be desirably constituted by a corrugated sheet-metal top surface for the rear portion of the bar, which ranges under the several beer and ale cocks, one of which is indicated at *y*. 70

The scale, with the receptacle thereon, may 75 be run horizontally from under one to another of the beer-cocks, as occasion requires.

I may within the scope of my invention make reasonable changes and departures from the details of construction herein shown and 80 described without dispensing with those leading characteristics which constitute the gist of the present improvements.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is— 85

1. In a beer-scale, in combination, a supporting-frame, a receptacle-support, a scale with which such support is connected, and operable by such receptacle and its contents, and 90 comprising a vertically-movable bar having a horizontal arm provided with a vertically-arranged series of separate contact-points, a spring-finger mounted on the frame end, and having a contact-point located across the path 95 of movement of said series of contact-points, an electrical generator and an electric alarm device, and electric-circuit-constituting conductors comprising a wire connecting the generator with said succession of contacts, and a 100 conductor connecting the contact-provided spring-finger with the generator and including in connection therewith the electrically-operable alarm device.

2. In a beer-scale, in combination, a horizontal trackway, and a frame having rollers at its base, and supporting a receptacle-support, and a scale with which such support is connected, and operable by such receptacle and its contents, which scale comprises a compound bar, one section of which is movable 110 relatively to the other, and means for temporarily locking both members of said bar together, and one of said bar members carrying an arm supporting a succession of contacts, an electrical generator and an alarm device, and electric-circuit-constituting conductors comprising a wire connecting the generator with said succession of contacts, and a 115 conductor connecting the other contact with the generator and including in connection therewith the electrically-operable alarm device. 120

Signed by me at Springfield, Massachusetts, in presence of two subscribing witnesses.

PATRICK F. CARMODY.

Witnesses:

WM. S. BELLOWS,  
G. R. DRISCOLL.