

(No Model.)

2 Sheets—Sheet 1.

G. G. MERRY.
COIN OPERATED WEIGHING SCALE.

No. 453,787.

Patented June 9, 1891.

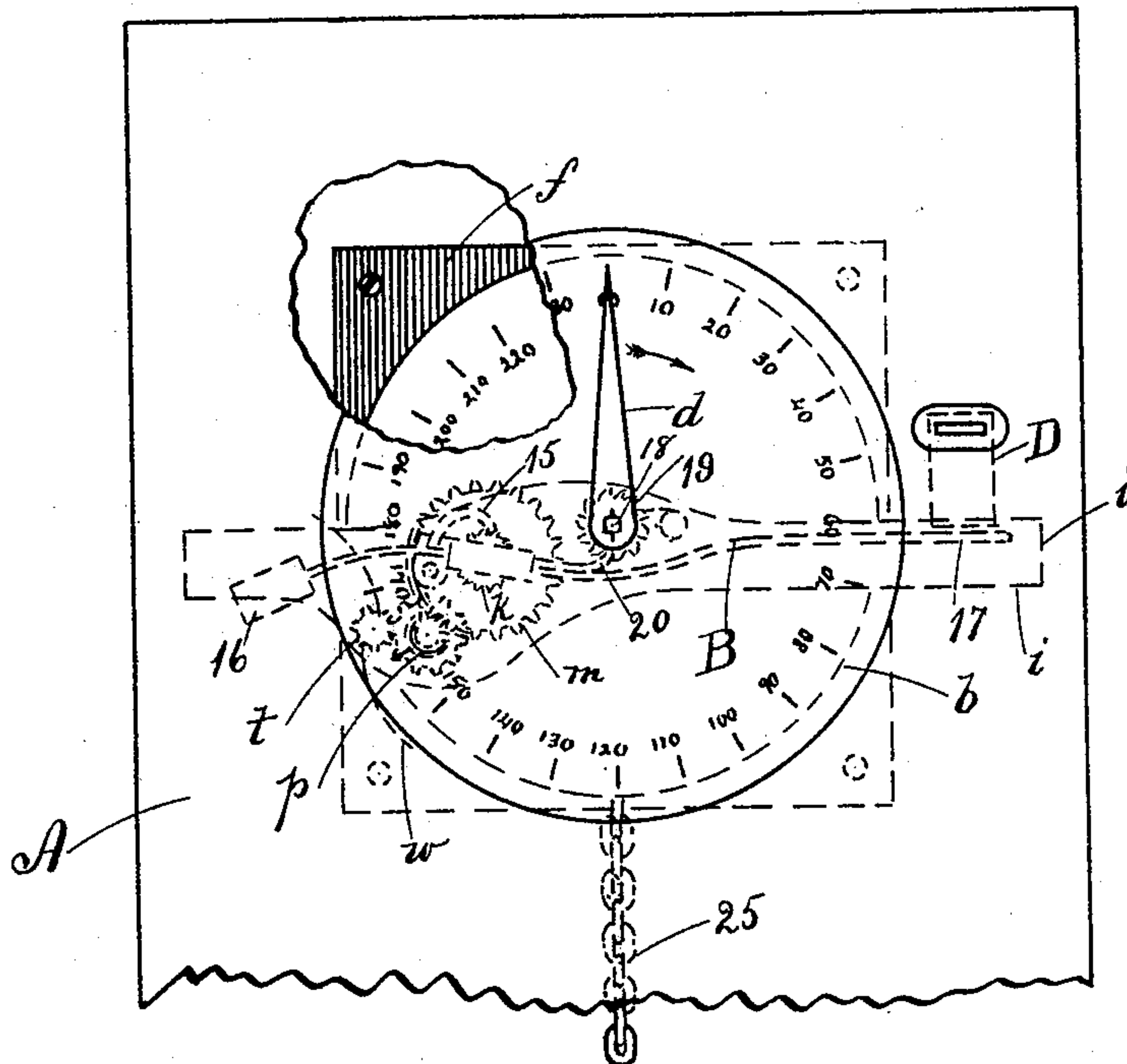


Fig. 1.

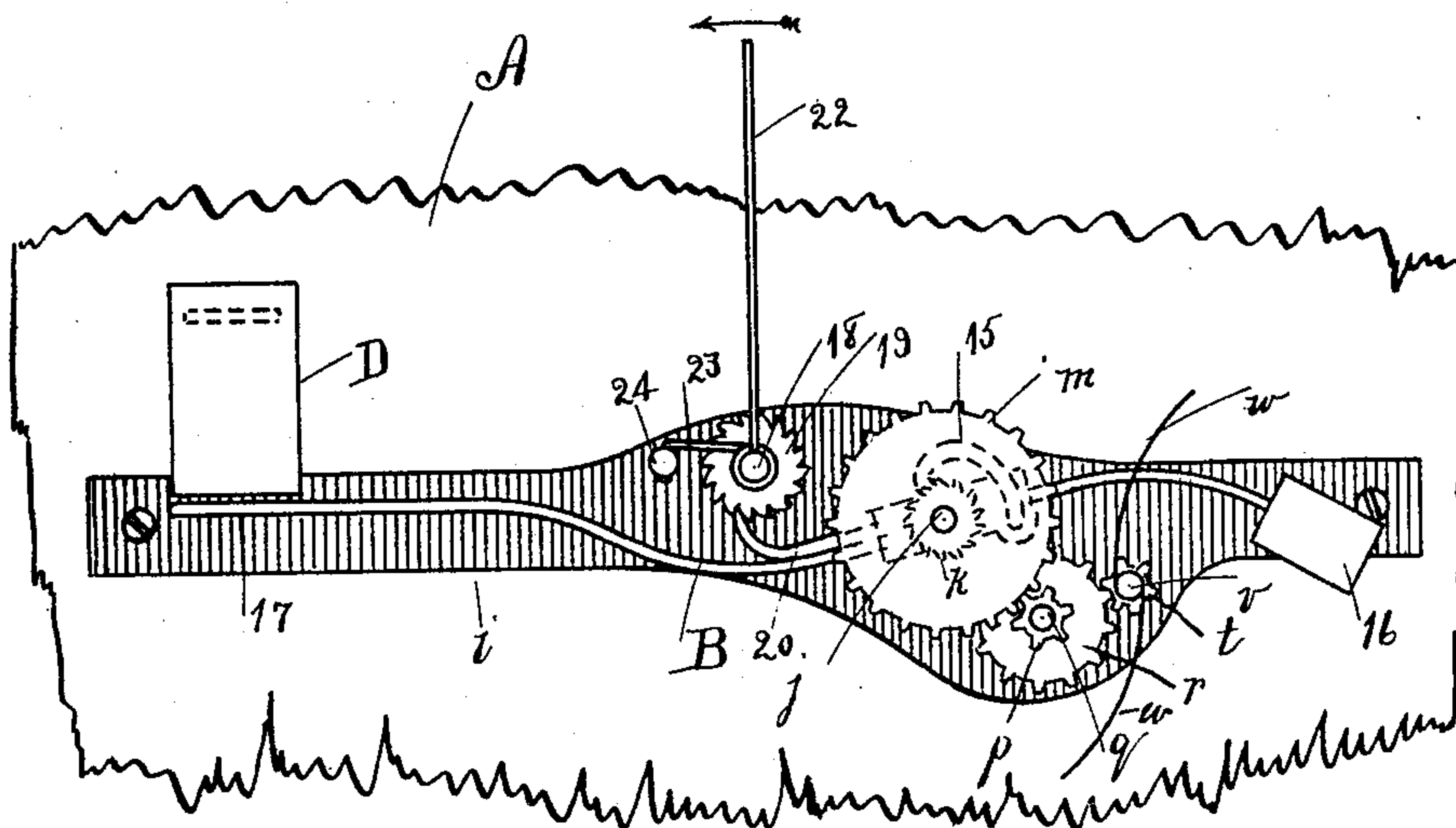


Fig. 3.

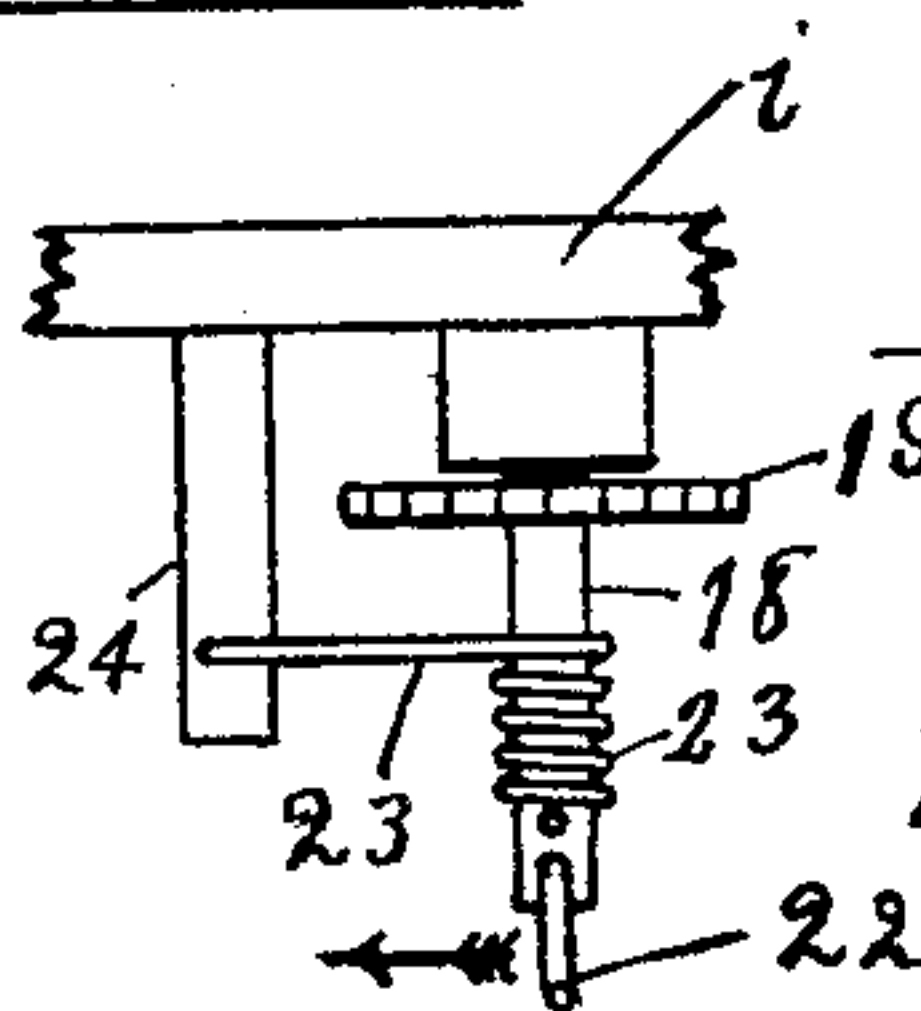


Fig. 4.

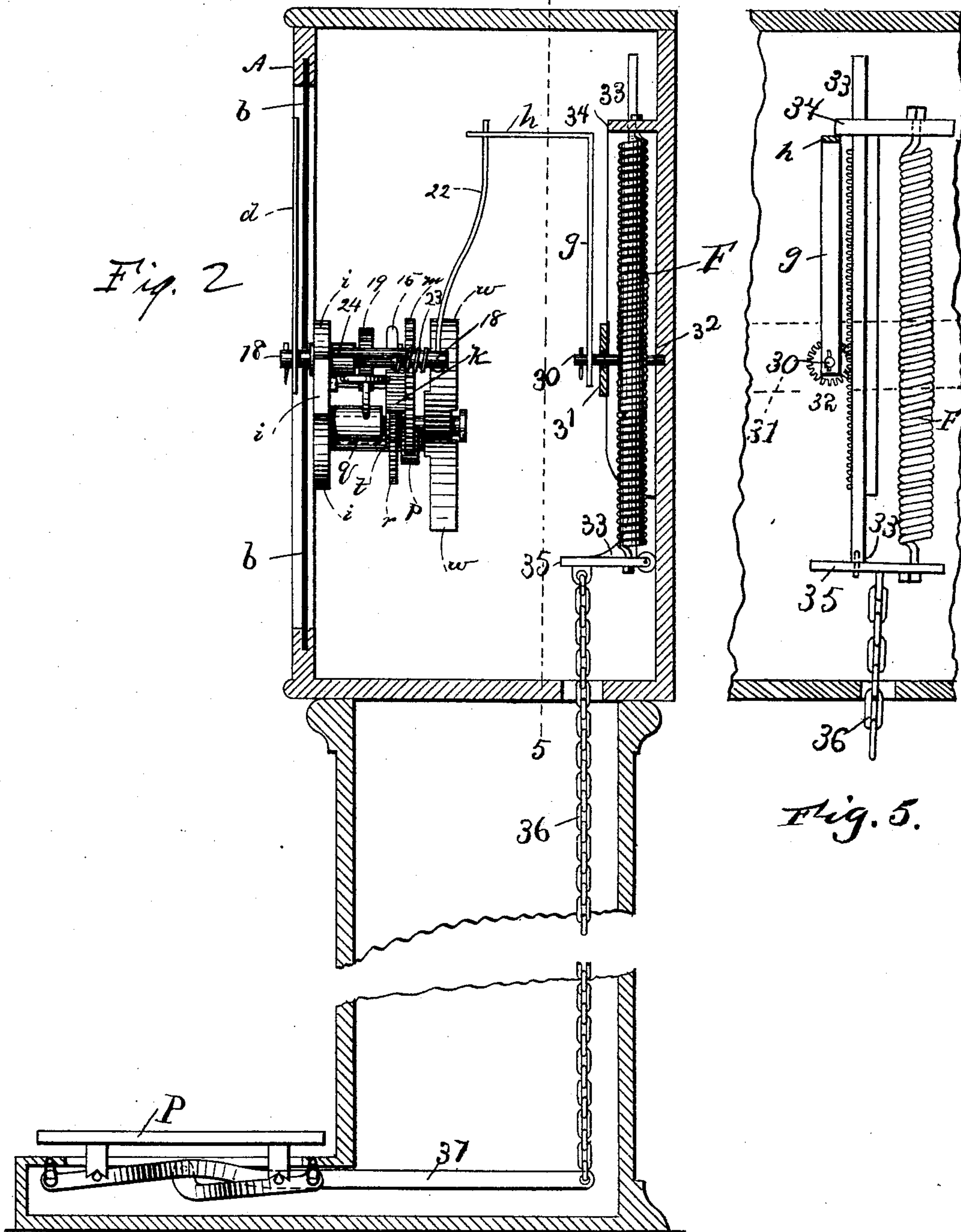
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UNITED STATES PATENT OFFICE.

GEORGE G. MERRY, OF PAWTUCKET, RHODE ISLAND, ASSIGNOR TO IRVING E. WILLIAMS, OF WOBURN, MASSACHUSETTS, AND J. C. DICKERSON, OF BROOKLYN, NEW YORK.

COIN-OPERATED WEIGHING-SCALE.

SPECIFICATION forming part of Letters Patent No. 453,787, dated June 9, 1891.

Application filed February 8, 1890. Serial No. 339,648. (No model.)

To all whom it may concern:

Be it known that I, GEORGE G. MERRY, of Pawtucket, in the county of Providence, State of Rhode Island, have invented certain new and useful Improvements in Coin-Operated Weighing-Scales, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation of my improved scales, showing the indicating-disk, the main portion of the body being broken away. Fig. 2 represents an enlarged vertical section of this improved platform-scale, a portion of the box being broken away; Fig. 3, a side elevation showing the releasing mechanism; Fig. 4, a top plan view illustrating certain details of construction; and Fig. 5 is a vertical section on line 5 5 of Fig. 2, looking toward the right.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to weighing-scales wherein the weighing mechanism is released by the weight of a coin; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the case or box, which is provided in its lower portion with a platform P, suitable for a person to stand on in the usual manner. A spaced dial b, provided with an index-finger d, is disposed in the upper part of the case. A stub-shaft 30 is supported at one end on a bracket-arm 31 and at the other end on the inner wall of the case. This stub-shaft is provided with a pinion 32, with which a vertical rack 33 engages. This vertical rack is guided in a lug 34, attached to the rear of the casing and pro-

vided at its lower end with an arm 35. A weighing-spring F is connected at its upper end to the fixed lug 34 and at its lower end to the arm 35 of the rack. A chain 36 connects the arm 35 with one of the weighing-levers 37, connected with the scale-platform. A metallic frame or bar i is secured across the inner face of the dial b. A stub-shaft j is journaled in said frame and bears a ratchet k and a gear m, which meshes with a pinion p on a similar shaft q, journaled in said frame. The shaft q bears a gear r, which meshes with a pinion t on a similar shaft v, to which a fan-wheel w is secured. A horizontally-arranged lever B is secured to the shaft j, and is provided with a curved click or pawl 15, which engages the ratchet k on said shaft. The lever is provided at one end with a counter-balance-weight 16, and its opposite end 17 is disposed under a coin-chute D, leading from the front wall of the case.

On the shaft 18 of the index-finger d a ratchet 19 is secured, with which a retaining-pawl 20, secured to the lever B, engages. The shaft 18 is extended inward beyond the gear m, and secured in its inner end there is a vertically-arranged rod 22, the free end of which engages the horizontal arm h of the finger g, actuated by the spring-scales. A coiled spring 23 (see Fig. 4) has one end secured to an arm 24, projecting from the frame i, and is wound around and secured to the shaft 18, said spring acting torsionally to move the index-finger d when the ratchet 19 is released, as hereinafter described. These parts constitute an actuating device for the index-finger.

In the use of my improvement the person to be weighed stands on the platform in the usual manner. The spring-scales are thereby operated and the finger g thereof is moved from left to right, leaving the vertical rod 22 in its normal position. A coin being inserted in the chute D it strikes the table 17 of the lever B, depressing said lever and freeing the ratchet 19 from the pawl 20. The spring 23 now acts on the shaft 18 and moves the index d of the outer dial b from left to right until the rod 22 engages the arm h on the spring-scale index, which has meanwhile remained

at the point to which the weight of the person moved it. This stops the index *d* at a corresponding point on the dial *b*. The weight of the person, as ascertained by the spring-scales within the case, is thereby indicated on said dial. As soon as the person steps from off the scale-platform the scale-spring *F* at once returns its index-finger *g* to the zero-point in the usual manner. The arm *h* on said finger, in engagement with the rod 22 on the shaft 18, carries the dial-finger *d* back with it and winds up the spring 23 in preparation for subsequent indication. The coin on the table 17 falls therefrom as soon as the lever *B* has been depressed to a suitable angle. The counter-balance 16 now acts to return said lever to its normal position. The pawl 15 and train of gears connecting the pivot of said lever with the fan-wheel *w* serve to check the return motion of the lever sufficiently to prevent the pawl 20 from engaging the ratchet 19 of the shaft 18 until the index-finger *d* has been returned to its normal position, as described.

Having thus explained my invention, what I claim is—

1. The combination of the case *A*, provided with the dial *b*, the shaft 18, bearing the index-finger *d*, ratchet 19, and rod 22, the spring-

scales *F*, provided with a finger *g* to engage said rod, the lever *B*, bearing the pawl 20, adapted to engage said ratchet, and a torsion-spring 23 for rotating said shaft, substantially as described.

2. The combination of a case provided with an index dial and finger, a spring-scale having its finger adapted to engage a rod on the shaft of said dial, a coiled spring for rotating said shaft, a pivoted lever within the case bearing a pawl in engagement with a ratchet on said shaft for opposing the actuation of said spring, and a coin-chute for directing the coins onto said lever and disengaging said pawl and ratchet, substantially as described.

3. In a coin-operated mechanism, the weighing-platform, the case *A*, provided with the chute *D*, dial *b*, and spring-actuated index *d*, in combination with the lever *B*, provided with the pawl 20, the ratchet 19, the spring-scales *F*, having the finger *g*, and connecting mechanism between said dial-index and scale-finger, substantially as described.

GEORGE G. MERRY.

Witnesses:

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O. M. SHAW.