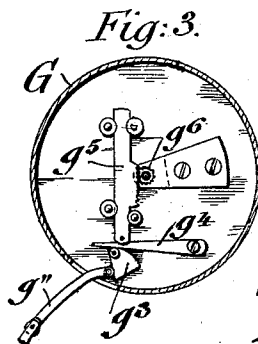
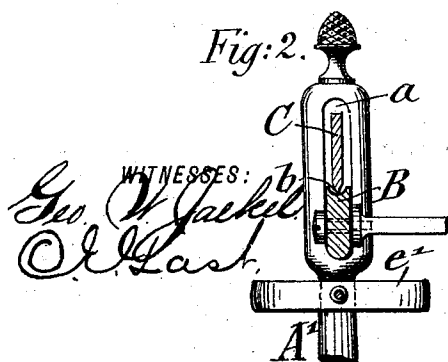
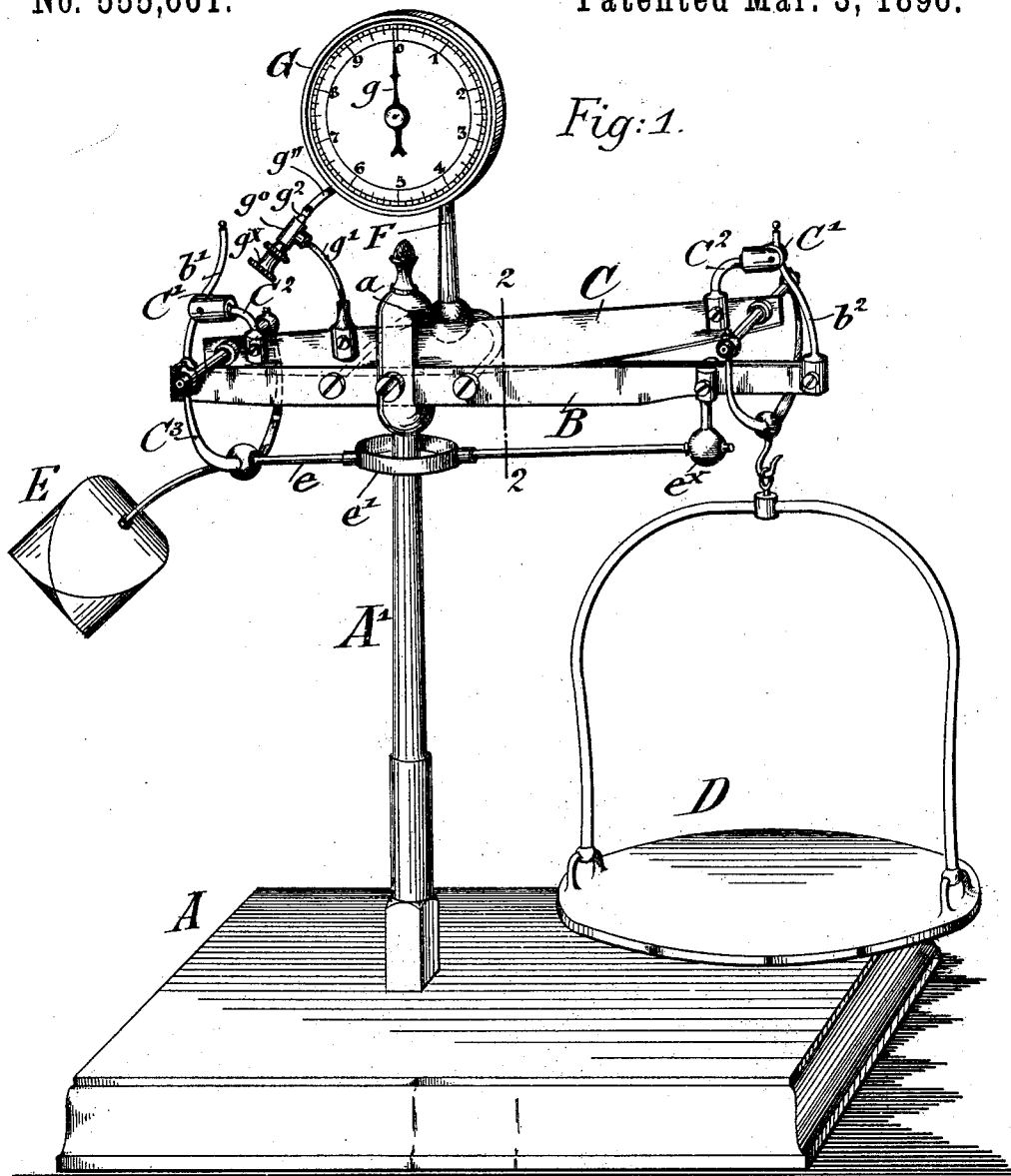


(No Model.)

A. REBELSKI.
WEIGHING SCALE.

No. 555,661.

Patented Mar. 3, 1896.



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UNITED STATES PATENT OFFICE.

AUGUST REBELSKI, OF BROOKLYN, NEW YORK.

WEIGHING-SCALE.

SPECIFICATION forming part of Letters Patent No. 555,661, dated March 3, 1896.

Application filed October 19, 1895. Serial No. 566,221. (No model.)

To all whom it may concern:

Be it known that I, AUGUST REBELSKI, a citizen of the United States, residing in the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Weighing-Scales, of which the following is a specification.

This invention relates to an improved weighing-scale which combines the advantage of a platform-scale with the facility of a spring-scale by permitting the direct reading off of the weight of the article placed on the scale pan or platform, and which has the further advantage of certain features of construction and combinations of parts to be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a perspective view of my improved weighing-scale. Fig. 2 is a transverse section on line 2 2, Fig. 1; and Fig. 3 is a front view of the indicator with the dial-plate removed so as to show the motion-transmitting mechanism.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the base; A', an upright standard attached to the base; B, a horizontal bar that is attached to the upper end of said standard; C, the scale-beam that is supported on the horizontal bar B, and D the scale-pan which is suspended by means of knife-edges from one end of the scale-beam C. The lower edge of the scale-beam C is made in the shape of an arc and beveled, said beveled edge moving in a corresponding groove *b* in the upper edge of the supporting-bar B, so that when the scale-beam is oscillated under the action of the weight it has a so-called "rolling motion" on the supporting-bar B. By means of the beveled lower edge of the rolling scale-beam, which edge is in the grooved upper edge of the supporting-bar B, the lateral shifting of the scale-beam is prevented, while the longitudinal shifting of the same is prevented by means of curved steadying-pieces *b'* *b''*, which are attached to and project upwardly from the ends of the horizontal supporting-bar B and along which the ends of the scale-beam move by means of

sheaves or blocks attached by curved arms C² to the ends of said scale-beam, as shown clearly in Fig. 1.

The scale-pan D is suspended from that part of the scale-beam which extends a greater length at one side of the standard A', while from the other end of the scale-beam C is suspended likewise, by means of knife-edges, a weight E that serves to counterbalance the weight of the scale-pan. The weight E may be suspended directly from the shorter part of the scale-beam C, or it may be applied to an arm *e* that is suspended loosely below the supporting-bar B in a keeper *e'* of the same and in the lower part of a yoke C³ suspended from said shorter part of the scale-beam, said arm being made in two sections, which are connected by a ring-shaped portion *e'*, through which passes the upright standard A', so as to move freely without interfering with the movement of any part. The scale-beam C passes through an opening *a* in the upper end of the standard A', said opening being large enough so that the scale-beam moves freely therein without coming in contact with the standard. To the bar B and at the upper end of the standard A' is applied a supporting-arm F, on which the indicator G is supported. The dial of the indicator is graduated in pounds and fractions of pounds, according to the size of the weighing-scale. The pointer *g* is moved over the face of the dial by suitable transmitting-gear, which gear is connected with the shorter end of the scale-beam C and consists of a fixed arm *g'* attached to the scale-beam, an arm *g''* supported in a sleeve *g⁰* of the same and capable of adjustment in said sleeve by means of nuts *g^x*, a link *g''* pivoted to the arm *g''* extended into the casing of the indicator and pivoted to the eccentric *g³*, which acts on a pivoted finger *g⁴* that rests on said eccentric and serves to operate a rack *g⁵* that is guided between two pairs of antifriction-rollers, said rack *g⁵* engaging a pinion *g⁶* on the shaft of the pointer, as shown clearly in Fig. 3. In place of the transmitting-gear described any other well-known mechanism can be employed by which the section of the scale-beam can be transmitted to the pointer so as to read off gradually from the dial the weight of the arti-

cle placed on the scale, as I do not confine myself to any special construction of transmitting mechanism.

Before using the scale the weight is adjusted so as to counterbalance the scale-pan. The pointer is then adjusted to zero on the dial by means of the adjusting-nuts g^x of the transmitting mechanism. When this is accomplished the scale is ready for use. It will instantly and accurately (accuracy is, as well known, missing in spring-scales) indicate the weight of the article placed in the scale-pan, and without the putting on or shifting of weights as in beam-scales.

My improved scale is adapted for commercial as well as domestic purposes, as it plainly and quickly indicates the weight of the article placed on the scale-pan without the inconvenience of the beam or spring scales heretofore in use.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A weighing-scale, composed of a horizontal supporting-bar, an oscillating or rolling scale-beam supported on said bar, steadying devices applied to the ends of the bar and beam respectively for preventing the longitudinal shifting of the beam, a scale-pan sus-

pended from one end of the beam below the supporting-bar, a counterbalancing-weight suspended from the other end of the beam below the supporting-bar, an indicator provided with a graduated dial and a rotary pointer, and mechanism connecting the shorter end of the scale-beam with the arbor of the pointer of the indicator, substantially as set forth.

2. A weighing-scale, consisting of a horizontal supporting-bar, an oscillating or rolling scale-beam supported on said bar, curved steadying-pieces applied to the ends of the supporting-bar for guiding the scale-beam and preventing the longitudinal shifting thereof, a scale-pan suspended from the longer part of the beam, a counterbalancing-weight suspended from the shorter part of the beam, an indicator, and transmitting mechanism between the shorter part of the beam and the arbor of the pointer of the indicator, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

AUGUST REBELSKI.

Witnesses:

PAUL GOEPEL,
GEO. W. JAEKEL.