

(No Model.)

F. W. TAYLOR.  
WEIGHING SCALE.

No. 597,697.

Patented Jan. 18, 1898.

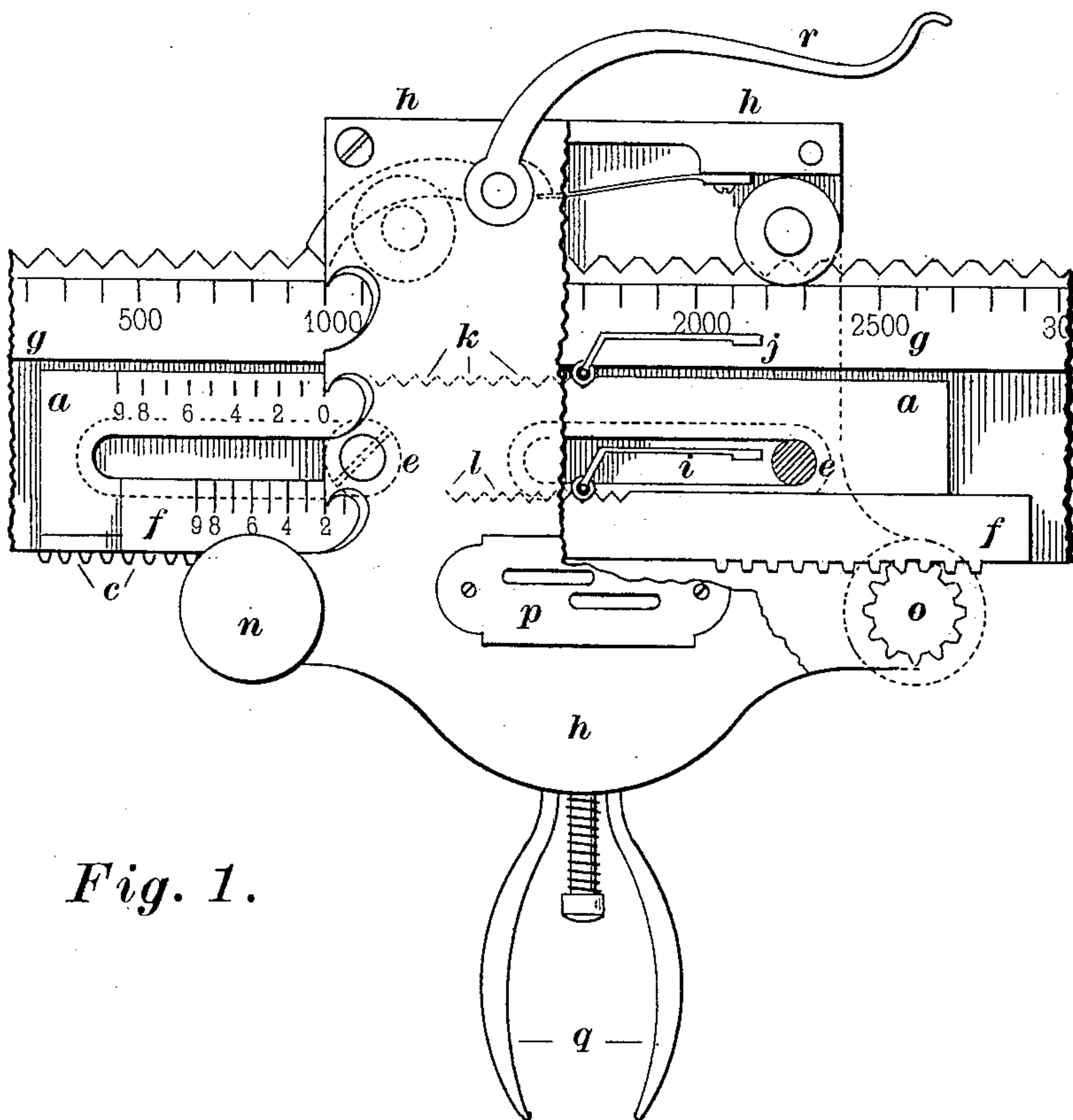


Fig. 1.

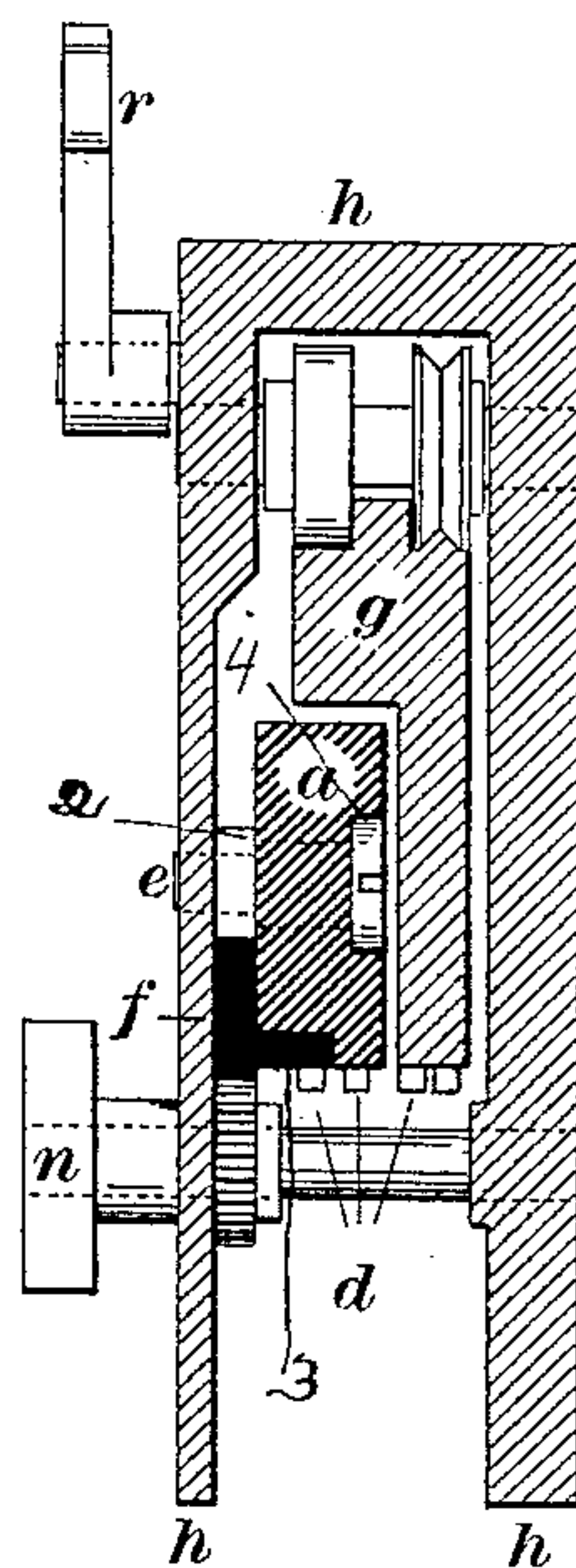


Fig. 2.

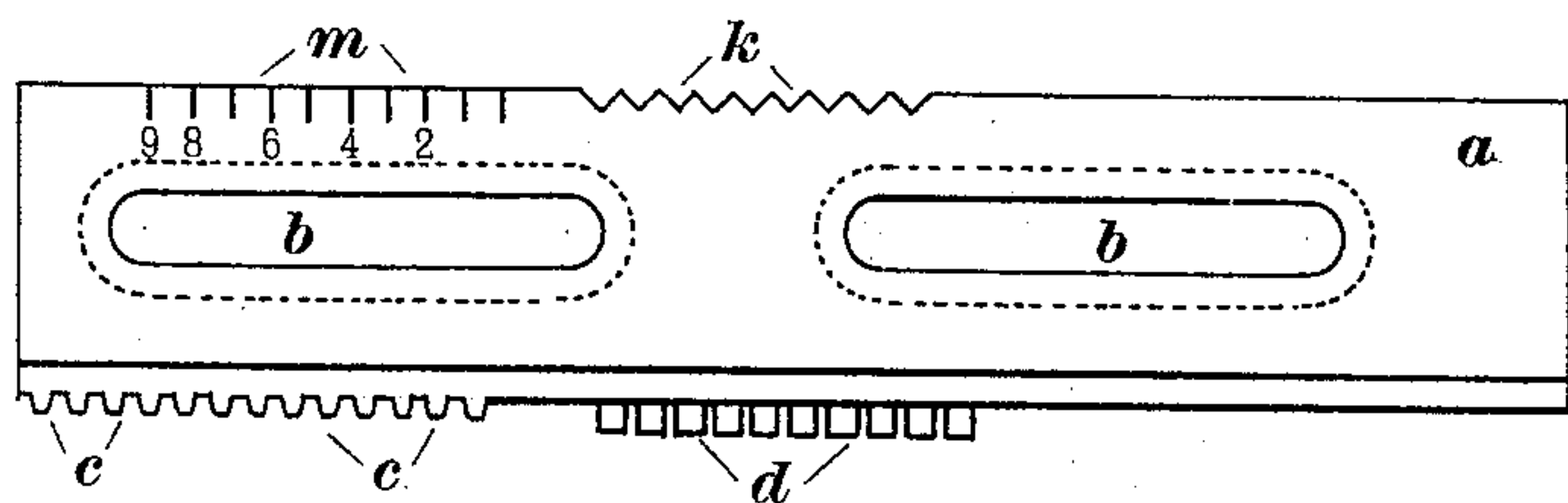


Fig. 3.

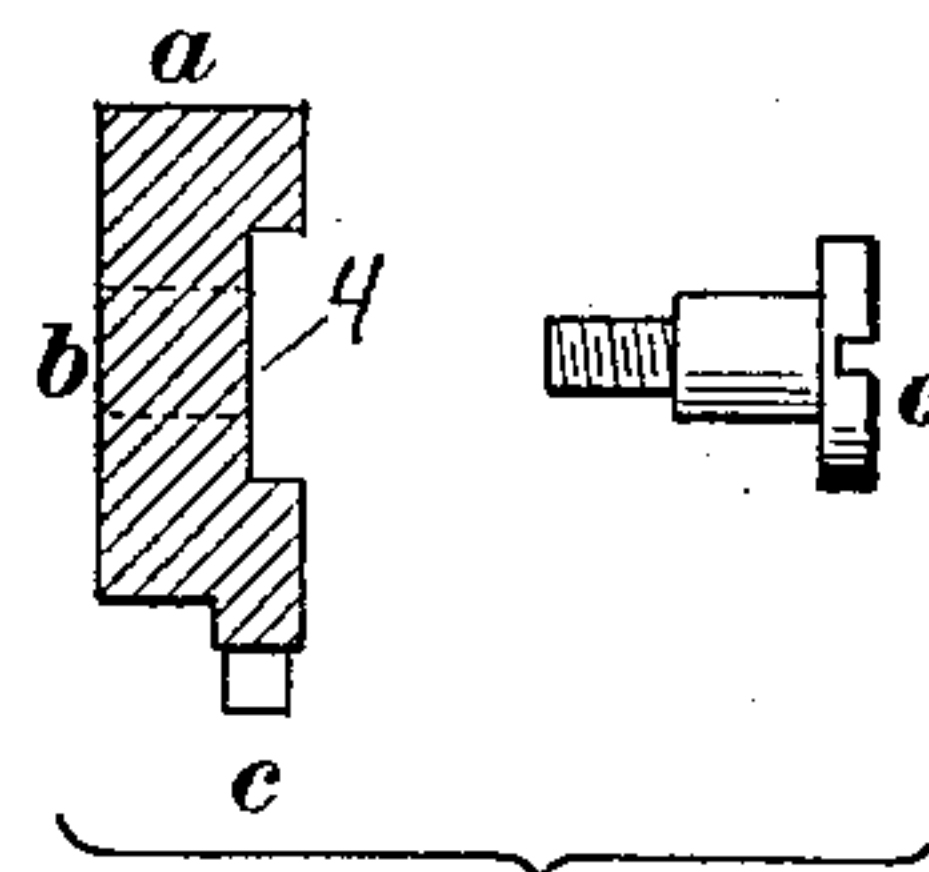


Fig. 4.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

FREDERICK W. TAYLOR, OF ST. JOHNSBURY, VERMONT, ASSIGNOR TO  
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## WEIGHING-SCALE.

SPECIFICATION forming part of Letters Patent No. 597,697, dated January 18, 1898.

Application filed October 25, 1897. Serial No. 656,261. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK W. TAYLOR, a citizen of the United States, residing at St. Johnsbury, in the county of Caledonia, State of Vermont, have invented certain new and useful Improvements in Weighing-Scales, of which the following is a description, reference being had to the accompanying drawings and to the letters and figures of reference marked thereon.

My invention relates to an improvement in weighing-scales, and particularly to that class known as "registering" or "recording" scales, in which, as ordinarily constructed, a main poise is provided which supports one or more auxiliary poises or poise-slides, the numerals of the beam and poise-slides being arranged in line and there being provided on the poise a slot or slots for the reception of a ticket or card upon which by a suitable apparatus is printed or impressed the weight of the article on the scale.

The object of the present invention is to provide a novel construction of means upon which the poise-slides are supported and by which they are guided, whereby a simple, effective, and comparatively inexpensive arrangement results.

The invention therefore consists, primarily, of a recording-scale which includes a beam, a main poise sliding thereon, a poise slide or slides included within the walls of the main poise, and means carried by the poise for guiding and supporting the poise-slides.

Secondly, the invention consists of a recording-scale which includes a beam, a main poise sliding thereon, a guiding stud or studs carried by the main poise, and a poise slide or slides supported on said studs.

Finally, the invention consists in the matters hereinafter described, and referred to in the appended claims.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of so much of a recording weighing-scale as is necessary to a complete understanding of my invention. Fig. 2 is a cross-section of the beam, poise, and poise-slides. Fig. 3 is a side view of the first poise-slide

detached, and Fig. 4 is a sectional view of the first poise-slide and of one of the studs upon which it is supported.

In the drawings, *g* represents the beam, which is rabbeted or cut out, as shown, and upon its lower edge has printing-numerals *d* and upon its upper edge tracks on which rollers carried by the main poise *h* move, the main poise being latched by the latching-lever *r*. The said main poise *h* is of the form shown and surrounds the beam and poise-slides *a f*. The main poise-slide *a* is also rabbeted, as shown in Fig. 4, and is arranged to fit within the recess formed on the main beam. This main poise-slide is slotted, as shown at *b b*, and through these slots pass screw-bolts *e*, being threaded at their outer ends into the front wall of the main poise. Between the front of the main poise-slide *a* and the wall of the main poise is preferably interposed a washer 2, of about the thickness of the second poise-slide *f*, which has an inwardly-projecting portion 3, upon which its printing-numeral is supported, this inwardly-projecting portion fitting within a recess formed in the main poise-slide *a*. The head of the bolt *e* is countersunk within the recess 4 of the main poise-slide *a*, and, if desired, the portions adjacent the head may be provided with an antifriction-roller to allow of easy sliding of the poise-slide *a* upon the bolt *e* and prevent friction of the walls of the slots *b* against the bolt. To move the poise-slides *a f*, teeth are provided on their under surfaces meshing with pinions, one of which, *o*, is shown in Fig. 1, while in said Figs. 1 and 2 is shown a thumb-piece *n*, which operates the other pinion meshing with the teeth *c*, which pinion is not shown in the drawings. It will be seen that by this construction a support for the poise-slides *a* and *f* is formed on the main poise *h*, the parts being guided on the bolt or stud *e* and being secured thereby, so that the shock of printing is taken up by the main poise.

It will be understood that instead of placing the washer 2 in between the poise-slide *a* and the wall of the poise that the wall of the poise itself may be made thick at that point and the upper end of the poise-slide *f* rest



against that, the shock of printing of the said poise-slide *f* being taken up against the poise-slide *a*, which latter is supported entirely by the stud or bolt *e*.

- 5 *i j* represent spring devices for holding the slides *f a* in position, these spring devices being provided with rollers fitting notches *l k*, formed in the upper edges of said poise-slides. The ticket-slots are provided within  
10 the removable plate *p*, and the levers *q* represent handles by which the tickets are forced up against the printing-numerals on the under sides of the beam and poise-slides.

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

1. In a registering or recording scale, a beam provided with printing-numerals, a poise sliding thereon, a poise-slide movable with  
20 respect to the main poise and coöperating guiding members on the poise and poise-slide including a slot and a projection fitting in said slot; substantially as described.

2. In a registering or recording scale, the  
25 beam, the main poise sliding thereon, a poise-slide supported and guided on the main poise independent of the beam, and a second poise-slide also supported and guided on the main poise and having a part or projection lying  
30 beneath and backing against the first poise-slide, whereby a compact structure is formed and the shock of printing against both poise-slides taken up by the main poise, substantially as described.

3. In a registering or recording scale the  
35 beam, the main poise sliding thereon, a poise-slide supported and guided on the main poise, independent of the beam, and having a recess forming a way or guide, and a second poise-slide also supported and guided on the main  
40 poise having a part fitting within said way or guide whereby a compact structure is formed and the shock of printing against both poise-

slides is taken up by the main poise; substantially as described. 45

4. In a registering or recording scale, a beam having printing-numerals, a main poise sliding thereon, guiding studs or bolts carried by the said main poise, and a poise-slide provided with slots, the walls of which embrace  
50 the said guiding studs or bolts; substantially as described.

5. In combination with the beam, the main poise thereon, the guiding-studs on the main poise, a poise-slide having slots through which  
55 the said studs pass, and a second poise-slide having a projection fitting within a recess in the first poise-slide; substantially as described.

6. In combination, the rabbeted beam, the  
60 main poise sliding thereon, the studs *e* on said poise, the poise-slide *a* resting within the recess on the beam and having a recess to receive the head of the stud, a washer between the poise-slide and the wall of the poise, and a  
65 second poise-slide resting at its upper edge against the washer and having a projection fitting within the recess in the first poise-slide; substantially as described.

7. In a registering or recording scale, the  
70 beam, the main poise sliding thereon, a poise-slide supported and guided on the main poise, a washer or projecting part between the poise-slide and the wall of the poise, and a second poise-slide resting at its upper edge against  
75 said washer or projecting part and having a part or projection lying beneath and backing against the first poise-slide, substantially as described.

In testimony whereof I affix my signature 80  
in presence of two witnesses.

FREDERICK W. TAYLOR.

Witnesses:

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ALBERT L. FARWELL.