No. 697,098. Patented Apr. 8, 1902.

F. E. MEFFORD.

COMPUTING SCALE.

(Application filed Oct. 12, 1901.)

(No Model.)

Fig. 1.

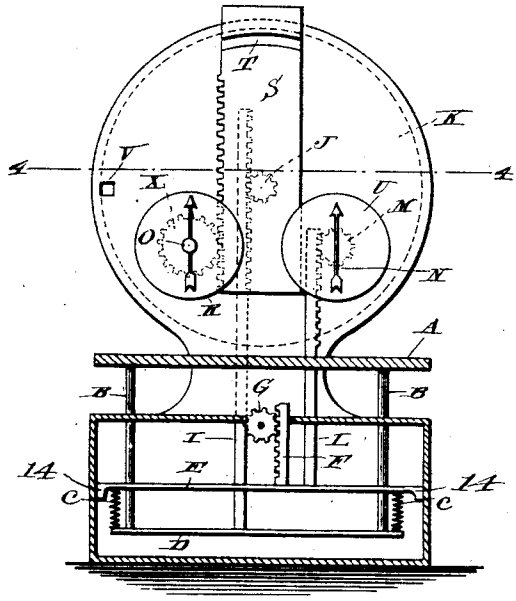


Fig. 2.

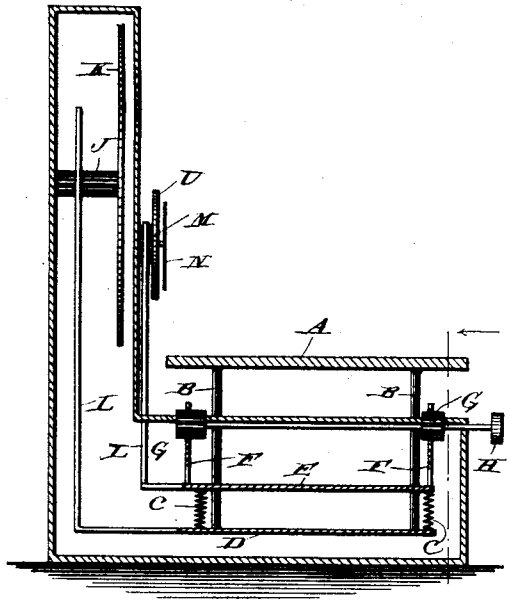


Fig. 3.

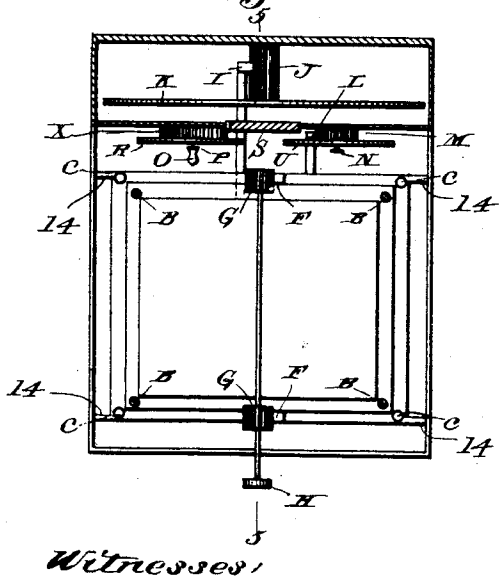
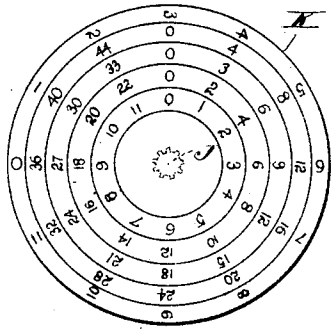


Fig. 4.



Witnesses:
G. J. Miller.
J. L. McDowell.

Inventor:
Fred E Mefford

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRED E. MEFFORD, OF PARKLAND, OKLAHOMA TERRITORY.

COMPUTING-SCALE.

SPECIFICATION forming part of Letters Patent No. 697,098, dated April 8, 1902.

Application filed October 12, 1901. Serial No. 78,507. (No model.)

To all whom it may concern:

Be it known that I, FRED E. MEFFORD, a citizen of the United States, residing at Parkland, in the county of Lincoln and Territory of Oklahoma, have invented a new and useful Computing-Scale, of which the following is a specification.

My invention relates to computing-scales.

The objects of my invention are, first, to provide a new form of computing-scales which shall be simple and rapid in operation; second, to provide a computing-scale that will show at one time the price per pound, the number of pounds, the total cost of the article weighed, and the weight of the scoop or other receptacle used; third, to provide a computing-scale which does not require weights to balance it.

With these objects in view my invention consists in the peculiar construction of the various parts and their novel combination or arrangement, all of which will be fully described, and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a front elevation. Fig. 2 is a section on the line 5 5, Fig. 3. Fig. 3 is a top view with the platform and section on the line 4 4, Fig. 1, removed. Fig. 4 is a view of the disk, showing circles and arrangement of figures.

Similar characters refer to similar parts throughout the several views.

The platform A is connected to D by the supports B B, which rest upon the frame D. D and E are two rectangular frames and are connected to each other by the springs C C.

G is a pinion which works in the teeth of the rack F, which is connected to E.

The above is in Fig. 1.

When the knob H, Fig. 2, is turned, the pinions G G engage the teeth of the racks F F and raise or lower the two frames D and frame E, and said frame has vertical extensions 14, which bear against the sides of the casing and prevent the frame from tilting and the platform A.

L is a rack fastened to E and works in the pinion M and turns the pointer N.

U is a dial graduated to pounds and fractions of pounds.

I is a rack fastened to D and works in the pinion J, which turns the disk K.

O is a knob.

X is a pinion which works in the teeth of S.

S is a slide having an aperture T and teeth on one side.

R is a dial upon which the price per pound is printed.

V is an opening through which the number of pounds can be seen.

K is a disk upon which are printed a number of concentric circles divided into a certain number of parts corresponding to pound-marks. Upon the largest circle the numbers denoting the number of pounds are placed. On the smaller circles the cost of one or more pounds is placed. It is accomplished in the following manner: Beginning at a point which is one fourth the distance around the circle from the one-pound mark, the price of one pound is placed, on the next pound-mark the cost of two pounds is placed, and so on around the circle. Each circle is treated in the same way, except another price is used as the price of one pound.

Fig. 4 shows the disk when it is figured as above.

It must be understood that any price can be used and any number of circles and divisions may be used, according to the strength of the springs C C.

The scale is operated in the following manner: The knob O is turned until the pointer P points to the price of one pound. The slide S will move and bring the opening T over the circle which shows the cost of the different number of pounds at that price. The article to be weighed is placed upon the platform A, and it descends, moving the frame D and the rack I. The rack I works in the pinion J and revolves the disk K. The number of pounds will be seen at V and the cost at T. If a scoop or other receptacle is used, the knob H is turned until the zero-point is seen at V. The pinions G G engage the teeth of the racks F F and raise the platform A and the frames D and E and the rack I. The rack L being fastened to E also moves upward and turns the pointer N. When the zero shows at V, the number of pounds will be shown at the head of the pointer N on the dial U.

It is evident that in order to bring the zero-point at V the frames and platform and rack I must be raised a distance equal to the dis-

tance it moved down. The dial U and pointer N show that distance.

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

1. In a computing-scale the combination of a knob, rod two pinions G G two racks F F a frame E rack L pinion M for the purpose specified substantially as described.

2. In a price-scale, in combination, a spring-balance, a disk rotated thereby, said disk having a circular scale of weight-marks and a series of scales of price-marks, an indicator adjustable to a desired scale of said series, means to adjust the disk to allow for tare, and a scale to indicate the amount of such tare.

3. In a price-scale, the combination with a balance, a disk rotated thereby, said disk having scales of weight and price-marks thereon, and indicators for said scales, of means to reverse the motion of the disk to allow for tare, and a supplementary scale and index actuated by said reversing means to indicate the tare.

In testimony whereof I have signed my name in the presence of two subscribing witnesses.

FRED E. MEFFORD.

Witnesses:
FRANK CASTATOR,
JOSEPH HAWES.