

No. 636,389.

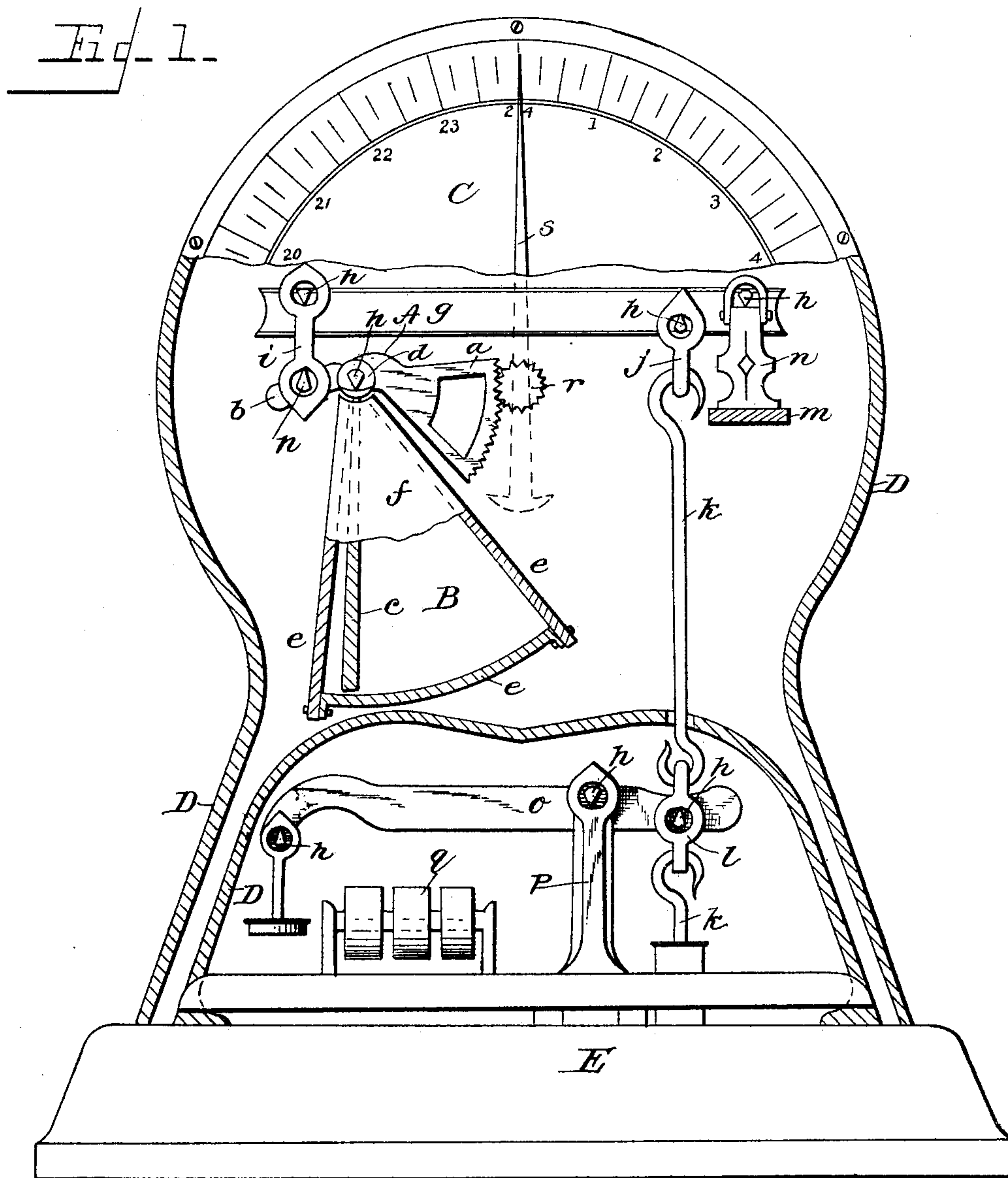
Patented Nov. 7, 1899.

E. C. POOL.
AUTOMATIC WEIGHING SCALE.

(Application filed Oct. 31, 1898. Renewed Oct. 7, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:
Frank L. Ormand.

George J. Huber

INVENTOR
Elmer C. Pool

BY *E. W. Baer.*

ATTORNEY

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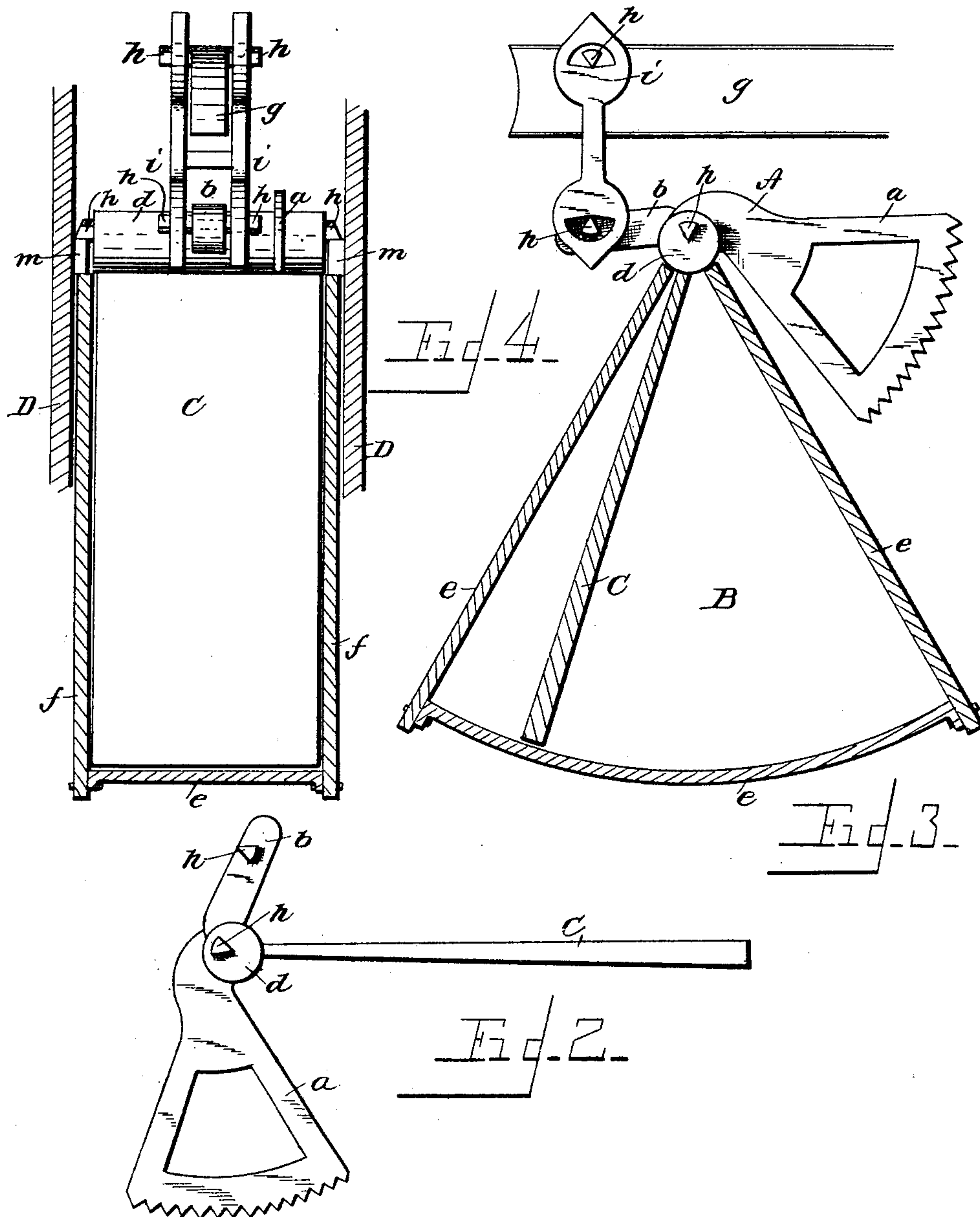
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WITNESSES:
Frauck L. Ouraud
George J. Huber

INVENTOR
Elmer C. Pool
BY *E. W. Baur*
ATTORNEY

UNITED STATES PATENT OFFICE.

ELMER C. POOL, OF NEW CASTLE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
TO ALEXANDER E. BAER, OF SAME PLACE.

AUTOMATIC WEIGHING-SCALE.

SPECIFICATION forming part of Letters Patent No. 636,389, dated November 7, 1899.

Application filed October 31, 1898. Renewed October 7, 1899. Serial No. 732,965. (No model.)

To all whom it may concern:

Be it known that I, ELMER C. POOL, a citizen of the United States, residing at New Castle, in the county of Lawrence and State of Pennsylvania, have invented certain new and useful Improvements in Automatic Weighing-Scales; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to that class of automatic weighing-scales having the principal mechanism inclosed within a dust-proof case, and arranged within said case an air-chamber having suspended within it a balancing-arm, the equalization of the air about said balancing-arm in said chamber causing a regular and even movement of the weight-indicator and instantaneous stopping. The scales may be made with single or double face and with or without a platform; but for counter use the platform and double face are intended, thus showing at once both to the merchant and customer the exact weight of the commodity placed upon the platform.

Similar letters refer to similar parts throughout the several views.

Figure 1 is a view from the platform side of the scales with part of the face, walls, and casing removed, showing internal arrangements.

Fig. 2 is a side view of the combined segment and balancing-arm. Fig. 3 is a side view of the air-chamber with casing removed and showing the combined segment and balancing-arm in position. Fig. 4 is an end or edge view of the air-chamber with the casing removed and showing the combined segment and balancing-arm in position.

A is the combined segment and balancing-arm, of which *a* is the segment; *b*, the pivot end; *c*, the balancing-arm, and *d* the shaft.

B is the air-chamber, and *e* the end or edge casing of same.

C is the face of the scales; D, the walls or main casing; *g*, the internal and principal beam; *h*, the knife-edge pivots; *i*, the link connecting said beam with the air-chamber

attachment; *j*, the link connecting said beam with platform-rods *k*; *l*, the link connecting the auxiliary beam *o* and uniting connecting-rods *k*, and *m* lugs on inside of side walls of dust-proof case, forming seats for brackets *n*.

o is the auxiliary beam for increasing the capacity of the scales, adjusted on standard *p* and connected with rods *k* at link *l*, *q* the additional weights, and *s* the weight-indicator.

The scales described are what is commonly called "platform counter-scales" and are intended to have a double face, one for the merchant and the other for the customer, and on the outside, above the platform, will appear the same on both sides and within the dust-proof case have the same supports and bearings on the one side as upon the other.

It is obvious that instead of the lugs on the inside of the main casing the mechanism inside of the dust-proof case may be supported by a separate framework and also that by a little change and alteration and appropriate attachments the platform may be dispensed with and the scales made into a hanging scale, and the applicant waives nothing by not setting these out in detail.

By the use of the air-chamber the quiver and irregular movement of the weight-indicator so common in what are known as "butchers" and other similar scales are entirely overcome, the equalization of the air about the balancing-arm causing an even and regular movement of the arm and weight-indicator and instantaneous stopping.

By the use of the auxiliary beam and weights the capacity of the scales may be increased to any desired amount.

The operation is simple, to-wit: An article being placed on or in the platform, scoop, or weighing-pan causes a downward movement of beam *g* and an upward movement of balancing-arm *c* and segment *a*, the cogs in segment *a*, working in pinion *r*, driving the weight-indicator forward, and the air in the air-chamber gives a regular and even movement to the mechanism and causes instantaneous stoppage.

Having described my invention, what I desire to secure by Letters Patent is—

1. In an automatic weighing-scale, having a

dust-proof case, the combination of an internal beam *g*, connected with a segment and balancing-arm *A*, by means of link *i* and pivots *h*, the balancing-arm *c* suspended within
5 an air-chamber *B*, segment *a* having cogs working in pinion *r* operating weight-indicators, and said scales having an auxiliary beam *o*, for increasing their capacity, connected with the principal mechanism at link *l*, all
10 substantially as above set forth and described.

2. The combination in an automatic weighing-scale having a dust-proof case, of an air-chamber, having suspended within it a balancing-arm, said balancing-arm having con-

nected with it external to the air-chamber, a 15 pivot end connecting with a beam, and a segment operating the weight-indicator, and said beam attached to the platform and auxiliary beam by means of connecting rods, links, and knife-edge pivots, all substantially as above 20 set forth and described.

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

ELMER C. POOL.

Witnesses:

CHAS. A. MOORE, Jr.,
E. E. MARSHALL.