

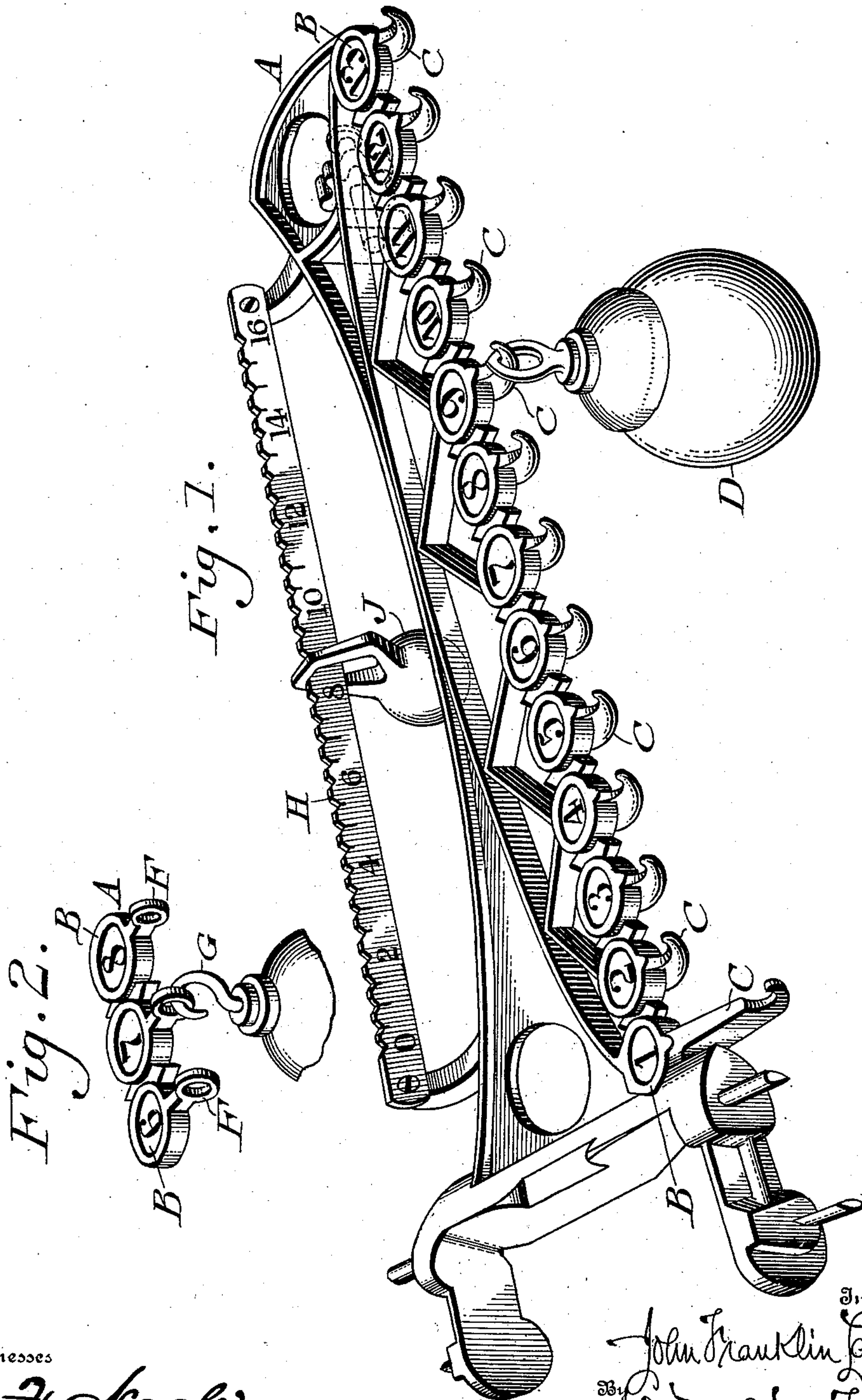
No. 689,810.

Patented Dec. 24, 1901.

J. F. LAWRENCE.
SCALE.

(Application filed May 14, 1901.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN FRANKLIN LAWRENCE, OF PHILADELPHIA, PENNSYLVANIA, AS-
SIGNOR TO G. W. & J. F. LAWRENCE, OF PHILADELPHIA, PENNSYL-
VANIA, TRADING AS SOUTHWARK SCALE COMPANY.

SCALE.

SPECIFICATION forming part of Letters Patent No. 689,810, dated December 24, 1901.

Application filed May 14, 1901. Serial No. 60,186. (No model.)

To all whom it may concern:

Be it known that I, JOHN FRANKLIN LAW-
RENCE, a citizen of the United States, resid-
ing in the city and county of Philadelphia,
5 State of Pennsylvania, have invented a new
and useful Improvement in Scales, of which
the following is a specification.

My invention relates to weighing-scales;
and it consists of a beam adapted for opera-
10 tion with a single weight or bob, said beam
being provided with a series of figures or other
marks indicative of weighing, and means pro-
jecting from said member on which said
weight or bob may be centrally suspended,
15 thus providing a convenient, easily-operated,
and accurate device for the purpose intended,
as will be hereinafter described, and the novel
features thereof pointed out in the claims.

Figure 1 represents a perspective view of a
20 scale-beam embodying my invention. Fig.
2 represents a perspective view of a modifica-
tion.

Similar letters of reference indicate corre-
sponding parts in the figures.

25 Referring to the drawings, A designates a
member of a scale-beam having thereon, as
at B, in the longitudinal direction of the
same, the figures "1," "2," "3," "4," &c.,
the same forming numbered tablets and in-
30 dicating pounds or other amounts, said tab-
lets constituting portions of the beam in the
direction of the length thereof. Projecting
laterally from said member A are rigidly se-
cured arms C, in the form of hooks, the latter
35 being respectively opposite said figures B.
The numbers on the tablets are consecutive,
"1," "2," "3," "4," &c., as has been stated;
but the tablets as such may be dispensed
with, they being shown in the form of circular
40 rims more particularly intended for orna-
mentation.

D designates a weight or bob having the
eye E, whereby it may be hung on either of
the hooks C, it being evident that when a pre-
45 determined amount is to be weighed the bob
D is hung on the hook opposite to the figure
indicating said amount, after which the
weighing is accomplished as usual. The up-
per faces of the hooks are formed with con-
50 verging sides, thus producing a knife-edge or

approximately a sharp edge, on which rests
the contacting portion of the eye E of the sus-
pended weight or bob, said edge being truly
centered, whereby there will be exactness in
the weighing, as the suspension of the weight 55
or bob is directly on said edge.

In order to prevent the bob when placed on
the first hook or that incident to No. 1 from
interfering with the adjacent fulcrum or
knife-edge of the scale, said hook is extended 60
so that the bob hangs beyond said fulcrum,
the effect of which is evident. The other
hooks are, however, short, so that when
weighted they avoid severe leverage on the
beam and materially prevent the same from 65
turning downwardly and straining the pivot
or knife-edge axis of the beam. The tablets
extend in horizontal direction and present
their numbers to view at the top thereof,
where they can be most conveniently read off. 70

In lieu of the hooks C, I may use the eyes
F and a bob or counterbalance provided with
the hook G, which latter is adapted to be
fitted in either of said eyes, and thus accom-
plish the same result as in the previous case. 75
For intermediate amounts the supplemental
beam H and bob J may be employed.

Having thus described my invention, what
I claim as new, and desire to secure by Letters
Patent, is— 80

1. A scale-beam having a series of horizon-
tally-extending tablets connected therewith,
amount-marks thereon, and a series of means
for supporting a weight or bob therefrom, op-
posite to said marks, and connected with said 85
tablets, the first of said series being extended
beyond the adjacent knife-edge of the scale.

2. A scale-beam having tablets thereon and
amount-marks on the faces of said tablets
and arms projecting outwardly from said 90
beam centered from said tablets, the sides of
said arms converging upwardly forming sharp
edges, each for the support thereon of a
weight or bob, said tablets constituting por-
tions of the length of said beam.

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Witnesses:

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