

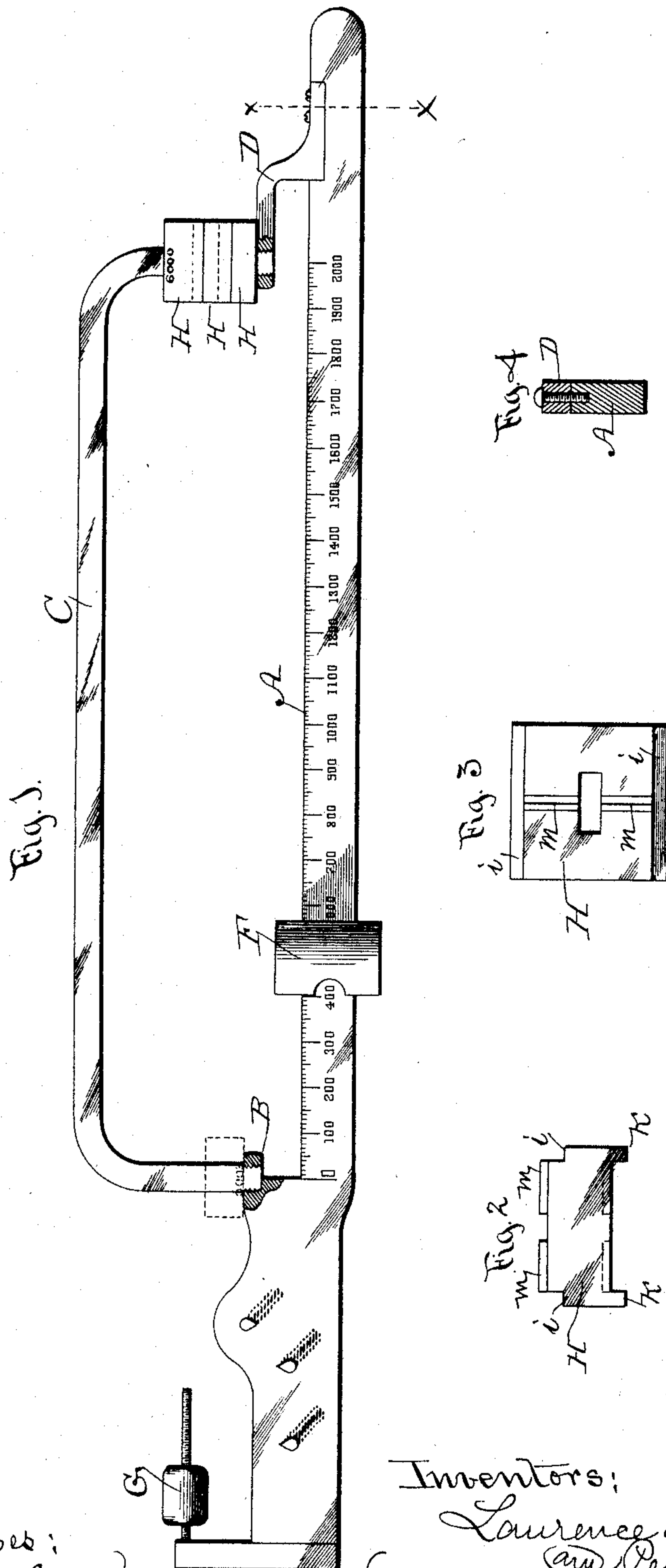
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L. A. MACCAULEY & P. S. GABRIO.
SCALE BEAM ATTACHMENT.

(Application filed Feb. 19, 1898.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

LAWRENCE A. MACCAULEY AND PETER S. GABRIO, OF DES MOINES, IOWA.

SCALE-BEAM ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 620,606, dated March 7, 1899.

Application filed February 19, 1898. Serial No. 670,990. (No model.)

To all whom it may concern:

Be it known that we, LAWRENCE A. MACCAULEY and PETER S. GABRIO, citizens of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Scale-Beam Attachment for Supporting Adjustable Graduated Weights, of which the following is a specification.

Our object is to facilitate weighing horses and wagons and merchandise of all kinds in large quantities upon platform-scales and to add and register the weights of different objects and quantities of matter when they are weighed.

Our invention consists in the arrangement and combination of a scale-beam attachment for supporting and retaining adjustable weights and a plurality of movable weights and a counterpoise with a scale-beam, as hereinafter set forth, pointed out in our claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a view of a scale-beam, showing our invention applied thereto as required for practical use. Fig. 2 is an edge view, and Fig. 3 a top view, of one of our movable weights adapted to be permanently connected with the scale-beam, as shown in Fig. 1. Fig. 4 is a view on the line xx of Fig. 1, showing the manner in which a weight-bearer is fixed to the free end portion of the beam.

The letter A designates a scale-beam of common form, with the exception that it has an integral lug B, adapted for detachably fastening our attachment and weight-support thereto.

B is an integral lug that has a screw-seat for admitting and retaining one end of our weight-support.

C is the weight-support, that has curved elbows at its ends that terminate in screws adapted to enter screw-seats, as shown in Fig. 1. This bar and weight-support is preferably angular, as shown in Fig. 4.

D is a bearer in the form of a bracket fitted in the top edge of a recess in the free end portion of the beam A and detachably fixed thereto by means of screws. To fasten the weight-support C to the beam, we first insert

the screw on the one end thereof in the screw-seat formed in the lug B and rotate it as required to fasten that end of the support. We next slip a plurality of weights that have holes through their centers over the free end of the support and slide them to the other end to rest upon the lug B and then screw the bearer D to the free end and place it in position, as shown in Fig. 1, and fasten it to the beam by means of screws.

F is an adjustable counterpoise slidably connected with the beam before the bearer D is fastened to the beam.

G is a balance on a screw fixed to the beam for regulating or truing the scales in a common way.

The weights H are preferably four-sided and provided with shoulders i at the top edges of their parallel sides and corresponding flanges k at their lower edges, as shown in Figs. 2 and 3. On their top faces are ribs m on the opposite sides of the central opening, and in their bottom faces are corresponding grooves n to admit the ribs of another and overlapping weight for the purpose of preventing the weights from any sliding motions relative to each other and the beam and as required to maintain accuracy in weighing.

The weights H may vary in number, shape, and size. In the drawings three are shown overlying each other, and each is designed to balance two thousand pounds avoirdupois, and consequently the three six thousand pounds. The numerals "2000" on the lower weight and "4000" on the central weight are concealed by the flanges K, that overlie the figures and conceal them, and consequently only the figures "6000" on the upper weight are visible and show their aggregate of six thousand, that corresponds with six thousand pounds on the platform of the scales. The counterpoise F, slidably connected with the beam A, will balance any fractional part of two thousand pounds, for which the beam is adapted, and as shown in Fig. 1 indicates that there are four hundred pounds more on the platform than the "6000" indicated by the upper weight H, and consequently the entire weight on the platform is registered by the upper weight H on the weight-support C and the

counterpoise F on the beam and clearly visible, making a total of six thousand four hundred pounds.

5 To poise the beam, the weights H are slipped over the support C to rest upon the stud B on the beam, as indicated by dotted lines in Fig. 1, and the counterpoise moved to the cipher "0" on the beam.

10 From the foregoing description of the construction and function of each part the practical operation and utility of our invention will be readily understood by persons familiar with platform-scales.

We claim as our invention—

15 1. A scale-beam attachment consisting of a straight bar of uniform shape and size having a curved elbow at each end adapted to be fastened to the top and end portions of a scale-beam, in combination with a scale-beam to
20 support a plurality of weights slidingly con-

nected with the said bar as shown and described to operate in the manner set forth for the purposes stated.

2. A straight bar and weight-support hav- 25 ing elbows at its ends and said elbows terminating in screws, a scale-beam having an integral lug and a screw-seat in the lug, a bracket or bearer having a screw-seat and the end of one of said elbows detachably fixed in said screw-seat and the said bearer detachably 30 fastened to the free end portion of the scale-beam to support a plurality of weights slidingly connected with said bar and weight-support to operate in the manner set forth.

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Witnesses:

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