

Scale-Beams.

No. 147,512.

Patented Feb. 17, 1874.

Fig. I

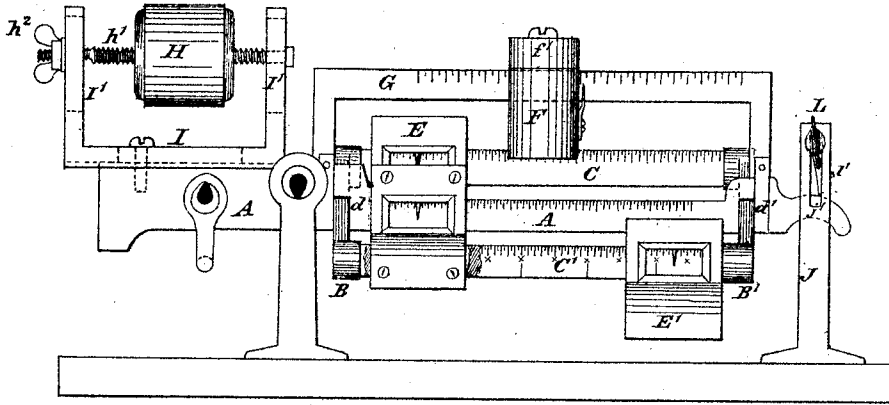


Fig. II

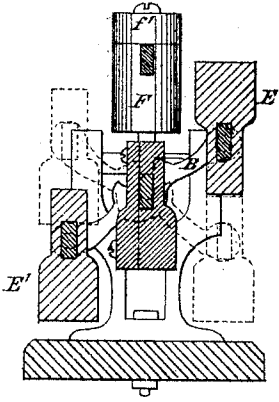


Fig. III

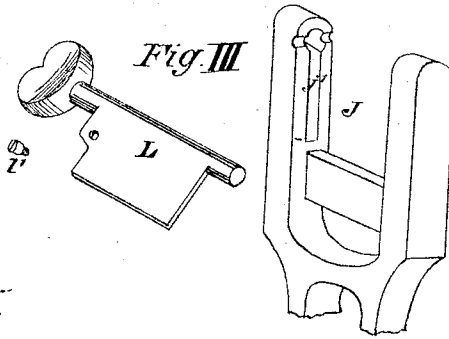
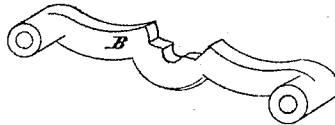


Fig IV.



WITNESSES;

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CHARLES H. MILLER, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF
HIS RIGHT TO J. V. WACKERMAN, OF SAME PLACE.

IMPROVEMENT IN SCALE-BEAMS.

Specification forming part of Letters Patent No. **147,512**, dated February 17, 1874; application filed
June 2, 1873.

To all whom it may concern:

Be it known that I, CHARLES H. MILLER, of the city of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Scale-Beams, of which the following is a specification:

The first part of my invention relates to an improvement in so-called combination-beams; and consists more particularly in arranging an equal number of beams upon both sides of the central or main beam, and supporting them upon swivel side pieces or saddles, which have their fulcrum or bearing upon the central or main beam, so that the additional beams upon one side may be raised above, and those on the other side lowered below, the central beam, and vice versa, for the purpose hereinafter described. The second part of my invention consists in the combination of a key provided with a lip or beard, with the slotted trick-loop provided with a stop, as hereinafter set forth.

In the accompanying drawing, Figure I is a side view of my improved scale-beam and trick-loop. Fig. II is a cross-section of the same, showing a change of position of the beams by dotted lines. Fig. III is a perspective view of the so-called trick-loop, showing all its parts separate. Fig. IV is a perspective view of one of the swivel-saddles.

A represents the central or main beam of a scale, which is connected with the platform of the scale in the usual manner. B B' represent a pair of swivels or saddles, upon which the two additional beams C C' are supported, one on each side of the main beam. (There may be more than two beams C C', but the number upon each side, and their distance apart, must be equal.) The swivel-saddles have their fulcrums upon the main beam A, as shown at *d d'*, and may be turned upon the same so as to change the position of the additional beams C C' in relation to the main beam A, as represented by dotted lines in Fig. II. All beams are marked on both sides.

The object of this improvement consists in that the combination-beam can be used and

read from the right or left side alike by simply turning the swivels B B', thereby enabling weighing clerks sitting at desks on opposite sides of the beam to read the scale.

In the manufacture of the scale-beam my improvement recommends itself for its simplicity of construction, the necessity of a great number of screws is obviated, and scales may be fitted with right or left beams, with the same parts and castings, and changed from right to left in a moment. The ends of the beams C C' are fitted into round holes or bearings formed in the sides of the swivel-saddles, and hence may revolve so as to retain their perpendicularity when the swivels are turned. The poises E E' consist of but one casting each, with a slot near their top, which fits onto the beam. These poises are placed upon their respective beams by passing them along from the ends of the beams when one of the swivel-saddles is removed.

The trick-loop arrangement is represented at J. The key L is cast in one piece, as shown in Fig. III. A long slot, *j'*, in one of the standards, permits the beard of the key to be passed into its position, and the small stop-pin *l'* serves to prevent the key from being removed. A rubber spring, within the bearing opposite to the handle of the key, forces the key forward into its bearing at the end of the slot *j'*. A key thus constructed and adjusted is much cheaper than the kind now in use, and operates as well and perfect as any.

I claim as my invention—

1. The swivel-saddles B B', in combination with the main beam A and the beams C C', substantially as described.

2. The combination, with the key L, provided with the lip *l*, of the slotted standard J provided with the notch *l'*, substantially as and for the purpose set forth.

CHARLES H. MILLER.

Witnesses:

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W. J. DAVIS.