(No Model.)

W. C. KELLY.

PLATFORM SCALE.

No. 381,931. Patented May 1, 1888.

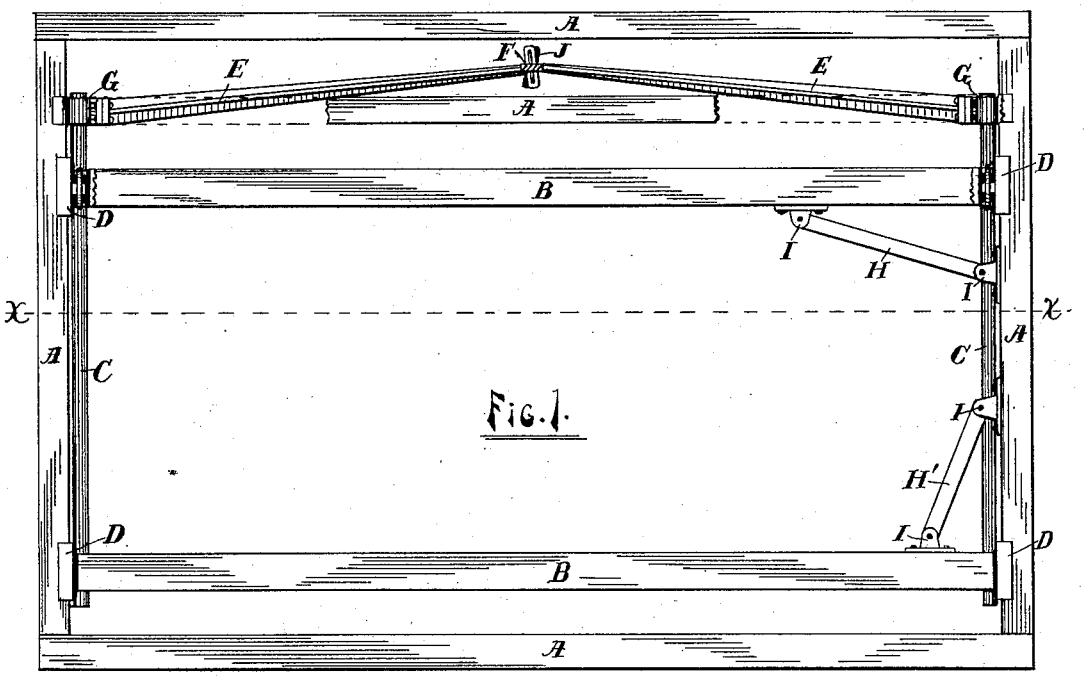
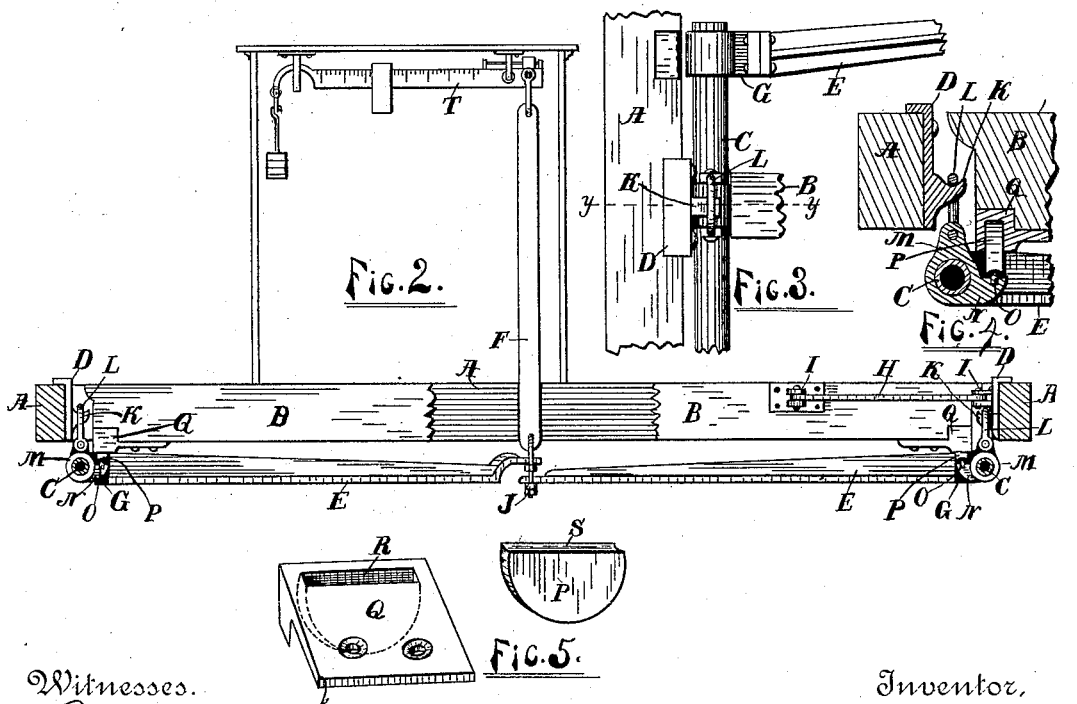


Fig. 1.



Witnesses.

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UNITED STATES PATENT OFFICE.

WALLACE C. KELLY, OF HASTINGS, MICHIGAN, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO HENRY GOODELL, EDWARD B. WILCOX, AND WHITMAN S. BENHAM, OF SAME PLACE.

PLATFORM-SCALE.

SPECIFICATION forming part of Letters Patent No. 381,931, dated May 1, 1888.

Application filed August 4, 1887. Serial No. 246,163. (No model.)

To all whom it may concern:

Be it known that I, WALLACE C. KELLY, a citizen of the United States, residing at the village of Hastings, county of Barry, and State of Michigan, have invented certain new and useful Improvements in Platform-Scales, of which the following is a specification.

My invention relates particularly to platform-scales of large size used for weighing cattle, hay, &c.; but it is applicable to any scales constructed on the same principle, and its objects are to secure greater delicacy of action and to preserve the same more perfectly than is done by the ordinary scales when the relative positions of the parts become changed, as described. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of my scales. Fig. 2 is a vertical view of the same, partly in section on the line *x x* of Fig. 1, but showing also in vertical section and in plan other portions of the scales not in the plane of the line *x x*. Fig. 3 is an enlarged plan of a part shown in Fig. 1, showing in detail the means of supporting the platform and transmitting motion to the scale-beam. Fig. 4 is a vertical section of the same part on the line *y y* of Fig. 3, and Fig. 5 is a detailed perspective of certain attachments to the sill in an inverted position.

Similar letters refer to similar parts throughout the several views.

In the drawings complete scales are shown; but in most particulars they are such as are in common use, and I therefore omit a detailed description.

Q is a casting in the form shown in perspective in Fig. 5 and in cross section in Fig. 4. Its lower surface may be flat, as in Fig. 5, or it may be provided with an offset, as in Fig. 4. It is securely fastened to the lower face of the sill B at the end. In its lower edge, when so fastened, is the recess R.

P is a block, in form substantially the segment of a circle, and of any desired thickness. The recess R is made substantially the same size and shape as the block P, so that the latter will fit and work therein. After the casting Q is attached to the sill, the block P is inserted in the recess R, with the face S of block P downward. The convex part of the block P sets into the recess R, and the concave face S of the block P rests on the knife-edge O.

The operation of scales containing my invention is as follows: The article to be weighed is placed upon the platform, and this platform, carrying in the lower surface of its sills the castings Q, is made to descend, the castings Q, bearing upon the blocks P, and the lower concave faces of these blocks bearing upon the knife-edge O, through which motion is transmitted to the scale-beam in the usual manner. The blocks P and Q, by their form and their use in combination, as described, permit the sills B to turn somewhat in any direction without interfering at all with the perfect operation of the knife-edge bearing. As the sills warp or are twisted sidewise, they will turn upon the block P, bearing in the recess R, and the power will still be exerted directly downward upon the knife-edge O. So if one end of the sill is depressed more than the other, the concave face S of block P permits the block to turn, so that no lateral force is brought to bear on the knife-edge. It is obvious that the scales would be operative, though perhaps not so perfectly, if the face S was not concave. It is apparent also that the bearing device, which I have shown in connection with the knife-edge, may be used on other forms of scales.

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

In platform-scales, the bearing-block P, the casting Q, attached to the platform and provided with the recess R, to form a bearing for the upper face of block P, in combination with the knife-edge O, which is connected with and operates the scale-beam, the lower face of block P bearing upon the knife-edge O, substantially as described.

WALLACE C. KELLY.

Witnesses:
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