(No Model.)

J. A. MEAD.

MEANS FOR ATTACHING CASTERS OR WHEELS TO SCALES OR OTHER ARTICLES.

No. 441,433. Patented Nov. 25, 1890.

Fig. 1.

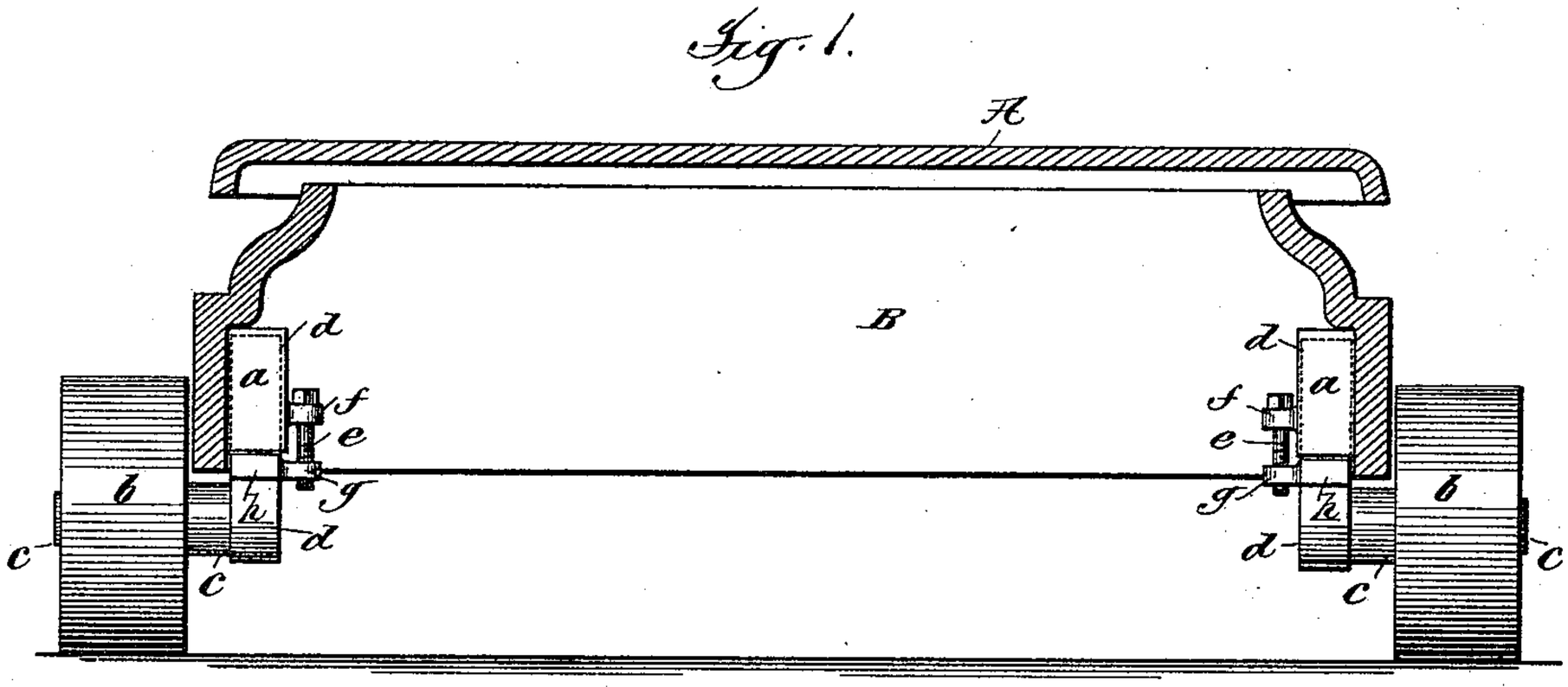


Fig. 2.

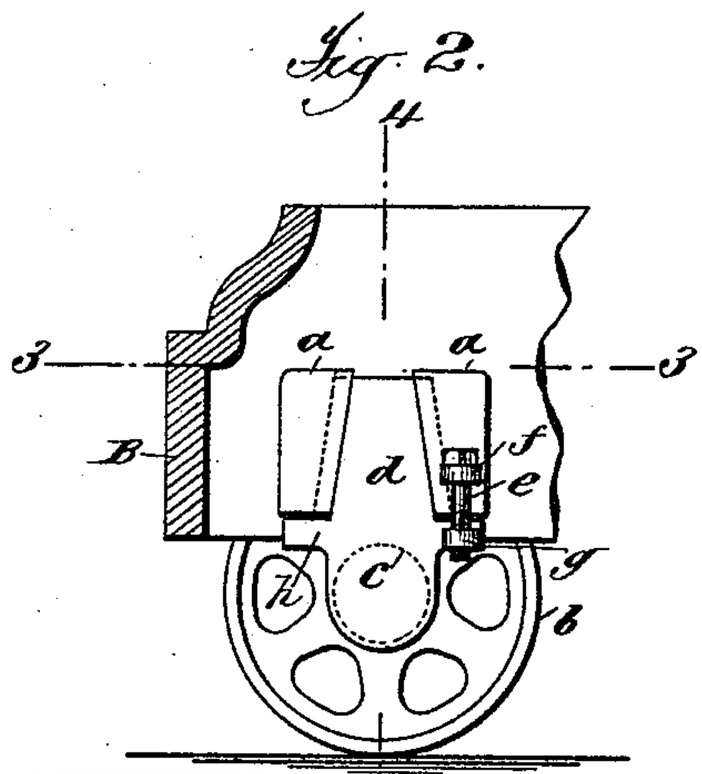


Fig. 3.

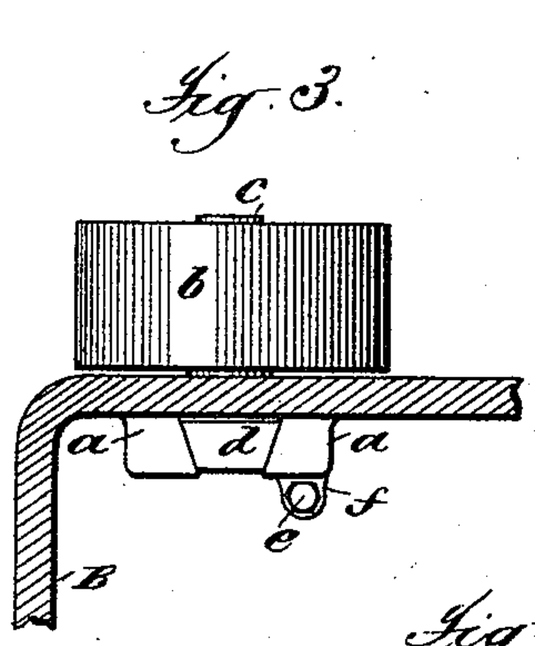


Fig. 5.

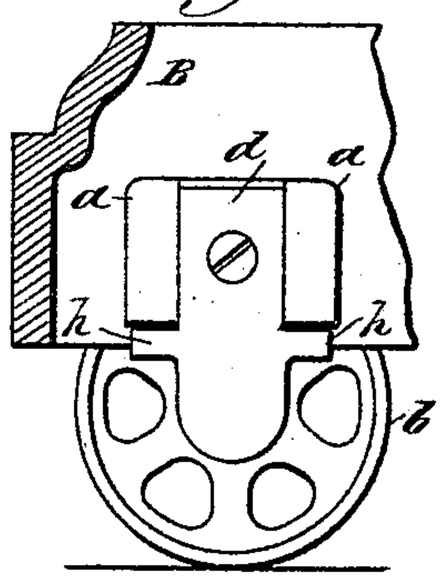


Fig. 6.

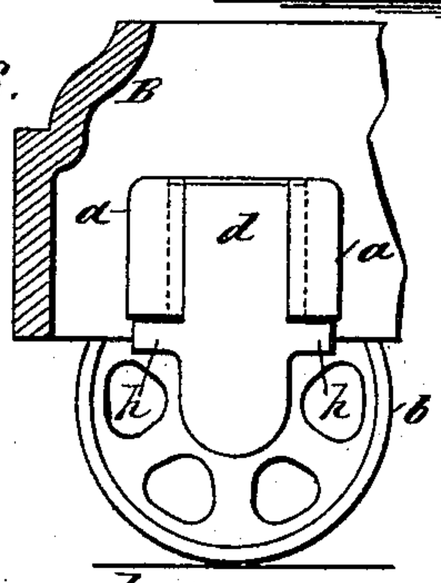
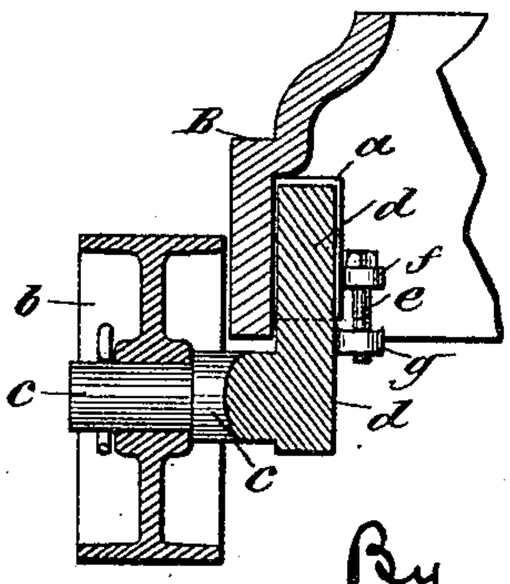


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN A. MEAD, OF RUTLAND, VERMONT.

MEANS FOR ATTACHING CASTERS OR WHEELS TO SCALES OR OTHER ARTICLES.

SPECIFICATION forming part of Letters Patent No. 441,433, dated November 25, 1890.

Application filed March 20, 1890. Serial No. 344,661. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. MEAD, a citizen of the United States, residing at Rutland, county of Rutland, and State of Vermont, have invented certain new and useful Improvements in Means for Attaching Casters or Wheels to Scales and other Articles, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to improvements in means for attaching casters or wheels to scales and other articles.

The improvements of the present invention are designed particularly for use in connection with platform-scales, and they are therefore herein illustrated, and will be hereinafter described as applied to such use.

In scales of this class as heretofore constructed with which supporting-wheels have been used, such wheels have been connected permanently to the base of the scale upon wooden blocks bolted upon the inner side thereof. These platform-scales, however, are frequently used where it is not desired to move the scale from one position of use to another without supporting-wheels. This renders it necessary for a dealer in such scales to keep on hand a supply of such scales, some provided with and some without supporting-wheels, in order to meet the usual demands of the business.

It is the object of the present invention to provide a simple and inexpensive means of attachment for the supporting-wheels of a scale which can be provided in all the scales, both those which are to be provided with and those which are to be without supporting-wheels, so that upon the receipt of an order from a purchaser for scales which are to be provided with supporting-wheels such supporting-wheels can be easily and quickly connected to the scale, the dealer thus not being compelled to keep on hand a supply of scales provided with supporting-wheels to meet such demand in addition to those without such wheels.

The improvements of the present invention in their preferable form consist, briefly, of a series of pairs of lugs cast upon the interior of the side portions of the base of the scale at or near its end portions, each pair of lugs having inclined and beveled adjacent faces for receiving the correspondingly-shaped upper end of a bracket carrying a supporting-wheel, the wheel-supporting bracket when in position beneath the scale being thus dovetailed between the lugs upon the base of the scale.

In the accompanying drawings, Figure 1 is a vertical sectional elevation of the base and platform of an ordinary platform-scale provided with the improvements of the present invention. Fig. 2 is a vertical section of the same looking toward the right of Fig. 1. Fig. 3 is a section on the line 3 3 of Fig. 2. Fig. 4 is a section on the line 4 4 of Fig. 2. Figs. 5 and 6 are views similar to Fig. 2, illustrating modifications which will hereinafter be referred to.

Referring to Figs. 1 to 4, it will be understood that A represents the platform of a familiar form of platform-scales, and B the base thereof. The base B has cast upon the interior of its two side portions a series of pairs of vertical lugs *a*, one pair of lugs at or near each end portion of the scale-base, in the usual manner. The adjacent faces of the lugs *a* are tapered outwardly from each other in a downward direction and are beveled inwardly in opposite directions from each other, as shown best in Fig. 3. Each of the supporting-wheels *b* (of which there will usually be four) is mounted loosely upon a stud *c*, extending from a bracket *d*, the upper end of which is adapted to enter the recess formed by the adjacent faces of the lugs *a*. The upper end of the bracket *d* has its sides tapered and beveled, so as to fit snugly within the correspondingly inclined and tapered adjacent faces of the lugs *a*. The bracket *d* may be provided, if desired, with shoulders or extensions *h*, resting against the under side of the lugs *a* to aid in supporting the weight of the scale.

Ordinarily the friction between the adjacent faces of the lugs *a* and the sides of the bracket *d*, with which they make contact, will be sufficient to retain the bracket in position on the base of the scale and to prevent it and its wheel from falling out of position upon the scale-base upon the lifting of the scale for transportation or any other purpose. If desired, however, one of the lugs *a* may be

provided with a screw *e*, carried by an ear *f*, cast upon the lug, the opposite end of the screw *e* being screwed into an ear *g*, cast upon the bracket *a*, the provision of the screw *e* avoiding all possibility of the bracket *d* falling out of position between the lugs *a*.

It will be obvious that the adjacent faces of the lugs *a*, instead of being tapered in opposite directions and beveled inwardly toward the base B, as described, may be made parallel and perpendicular, or their edges may be made parallel and perpendicular, their faces being beveled inwardly toward the base, as shown in Figs. 5 and 6. In the former case it will be necessary to provide the bracket *d* with some means for retaining the bracket within the lugs *a*—for example, by a bolt passing through the bracket and the base of the scale, as shown in Fig. 5. In both of these constructions, however, the bracket *d* will be provided with extensions *h* for contact with the under side of the lugs *a*, the weight of the scale and the articles to be weighed upon it being in this case borne by these extensions. The construction illustrated in Figs. 1 to 4 will, however, be found most desirable, particularly where the scales are of large size or intended for weighing articles of great bulk, as the connection between the wheel-supporting bracket *d* and the lugs *a* is such as to cause the weight of the scale itself and the articles to be weighed upon it to be borne by the main portion of the bracket.

It will be obvious that the base B, instead of being provided with a pair of lugs *a*, may, without departing from the present invention, be provided with a single lug of a shape corresponding to that of the bracket *d*, the bracket *d* being in such a construction bifurcated at its upper portion for receiving the lug *a* upon the base B, the position of the parts being thus merely reversed.

From the foregoing it will be seen that a scale dealer or manufacturer need only keep on hand to meet all demands but one supply of scales, all provided with the means described for the attachment thereto of the supporting-wheels, and that on receipt of an order for scales with such supporting-wheels the same may be quickly and easily inserted between the lugs to fill such order. With the construction described, also, the wooden blocks to which the supporting-wheels have been secured in prior structures are dispensed with, and the cost of production of the scales thus materially decreased, the provision of the lugs upon the base of the scale for this purpose increasing but very slightly the cost of production of the base of the scale itself, the lugs being cast therewith at one operation.

What is claimed is—

1. The combination, with a scale or other article, of a series of pairs of vertical lugs cast in its base, the lugs of each pair having their adjacent faces tapered and beveled in opposite directions, and a correspondingly-shaped wheel-supporting bracket adapted to be entered and held between the faces of the lugs, substantially as described.

2. The combination, with a scale or other article, of a series of pairs of vertical lugs cast in its base, the lugs of each pair having their adjacent faces tapered inwardly toward the base in opposite directions, and a correspondingly-shaped wheel-supporting bracket adapted to be entered and held between the faces of the lugs, substantially as described.

3. The combination, with a scale or other article, of a series of pairs of vertical lugs cast in its base, a wheel-supporting bracket adapted to be entered between the faces of said lugs, and means for holding said bracket within the same, substantially as described.

4. The combination, with the base B, of a pair of vertical lugs *a*, having their adjacent faces tapered downwardly and beveled inwardly in opposite directions, and the bracket *d*, having correspondingly-shaped sides adapted to be entered and held between the adjacent faces of the lugs *a*, substantially as described.

5. In a scale or other article, the combination, with the base B, of a series of pairs of vertical lugs *a*, the lugs of each pair having their adjacent faces tapered downwardly and beveled inwardly in opposite directions, and the wheel-supporting bracket *d*, having correspondingly-shaped sides for entrance between said lugs, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN A. MEAD.

Witnesses:
JOHN W. NORTON,
JOHN S. PIERCE.