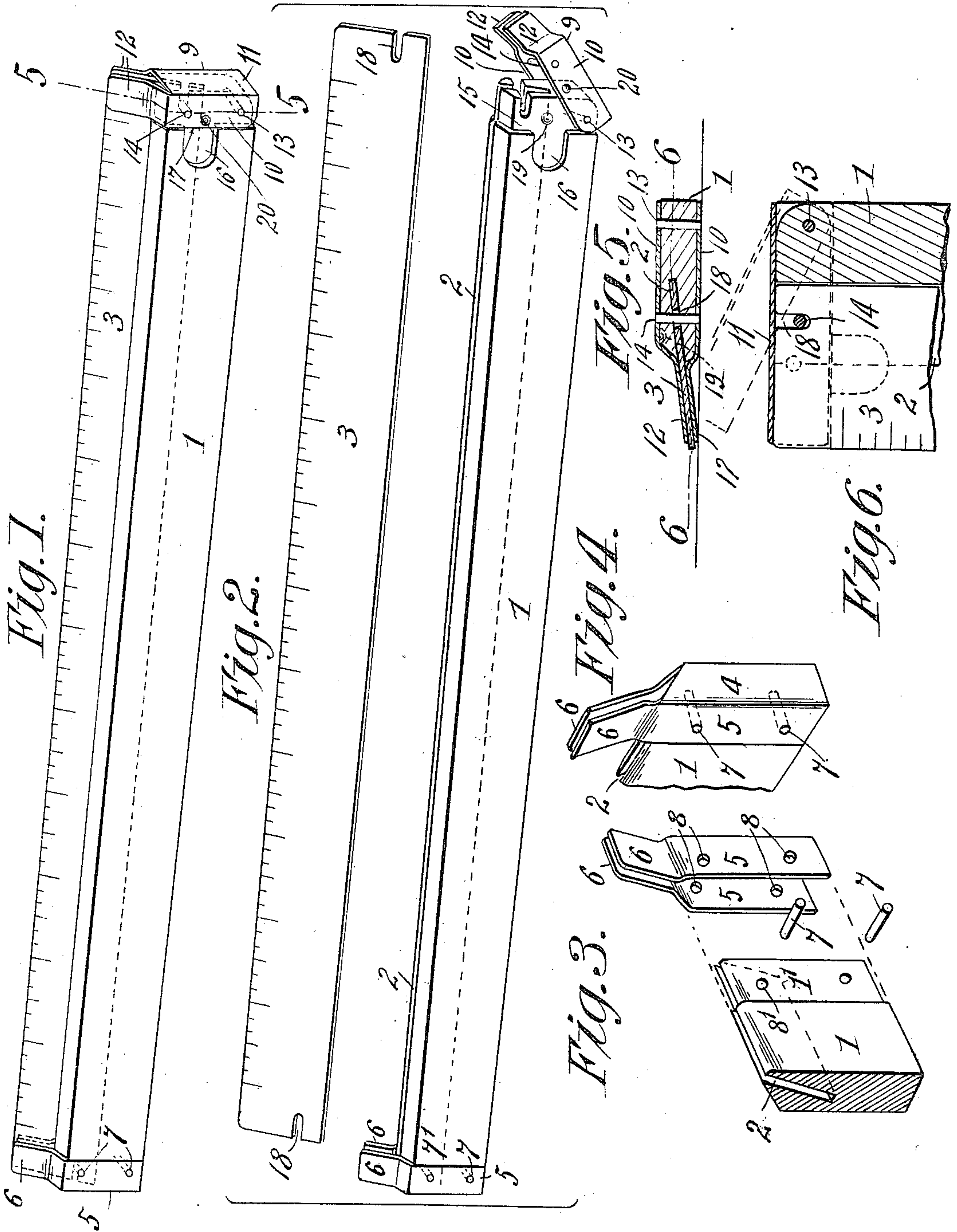


J. W. BRIGHAM.  
 HOLDER FOR INTERCHANGEABLE SCALES.  
 APPLICATION FILED FEB. 26, 1909.

962,399.

Patented June 21, 1910.



WITNESSES:

J. R. Gayfield  
 C. R. Griswold

INVENTOR.

Joseph W. Brigham,

BY

M. H. Collins,  
 ATTORNEY.



# UNITED STATES PATENT OFFICE.

JOSEPH W. BRIGHAM, OF SMITHS FERRY, MASSACHUSETTS, ASSIGNOR OF ONE-HALF  
TO WILLIAM C. MCLEOD, OF HOLYOKE, MASSACHUSETTS.

HOLDER FOR INTERCHANGEABLE SCALES.

962,399.

Specification of Letters Patent.

Patented June 21, 1910.

Application filed February 26, 1909. Serial No. 480,182.

*To all whom it may concern:*

Be it known that I, JOSEPH W. BRIGHAM, a citizen of the United States of America, and resident of Smiths Ferry, in the county of Hampshire and State of Massachusetts, have invented certain new and useful Improvements in Holders for Interchangeable Scales, of which the following is a full, clear, and exact description.

This invention pertains to holders for interchangeable scales, and has for its object a device of this type which will permit of ready removal and replacement of a scale in the holder.

Further the invention aims to provide a simple, comparatively inexpensive device of this class which will embody novel means for clamping the scale to the holder so as to allow quick removal of one scale and substitution therefor of another of dissimilar character.

Still further objects will be later manifest herein.

In the drawings:—Figure 1, is a perspective view of the invention assembled for use, Fig. 2, is a similar view showing the parts in separated rotation, Fig. 3, is a fragmentary detail view in perspective showing the rigidly secured scale holding means prior to being secured in position, Fig. 4, is a similar view showing the parts of Fig. 3 in normal assembled relation, Fig. 5, is a sectional view on line 5—5 of Fig. 1, and Fig. 6, is a like view on line 6—6 of Fig. 5.

As at present contemplated the invention embodies a holder 1, formed of a strip or bar of any desired material, wood being preferred. The holder is formed along one of its longitudinal side edges with a slot 2, which extends throughout the length thereof and which is inclined as depicted in Fig. 5, so that when the holder is placed flat on the work the free longitudinal side edge of the scale 3, which is secured in slot 2, will directly engage with the work.

As illustrated in Fig. 3, one end of the holder is cut away as at 1', on its opposite sides and its slotted edge to receive a metal scale engaging and retaining member formed of a clip 4, which consists of a body U-shaped in cross section having integral sides 5, arranged in spaced relation and a pair of outwardly disposed flat fingers 6, which are formed of prolongations of the sides 5. These sides 5, engage on opposite sides of

holder 1, in cut-away portions 1', and are rigidly secured by means of transverse pins 7, which extend through suitable openings 8, formed in sides 5 and holder 1. One of the pins, 7', extends across the slot 2 for a purpose later manifest. On the opposite end of holder 1, is arranged a scale engaging and retaining member 9, which is movable and which locks the scale against movement after same has been properly engaged with the pin 7' and clip 4. Member 9, is constructed in a manner similar in all respects to member 4, having sides 10, and 11, and flat fingers 12, and is pivoted at its lower end as by means of a pin 13, and rigidly carries a transverse pin 14, at an intermediate portion. The member 9 works in a cut-away portion 15, formed in the end of the holder similar to that in which the clip 4 is received, whereby when members or clips 4 and 9 are properly positioned they will lie flush with the sides and bottom edge of the holder, permitting the latter to lie flat on the work throughout its length. The cutaway part 15 has leading thereinto a finger recess 16, whereby the edge 17 of the member 9 will be exposed so as to be easily engaged by one of the fingers of the user so as to swing the member 9 to open position, allowing of the removal of the scale in a manner now to be described.

The scale is formed at each end thereof with a slot 18, adapted to receive the pins 7', and 14, when the parts are properly positioned. It will be evident from Fig. 2, of the drawings that when the member 9, is swung to its open position, the pin 14, carried by member 9, will be disengaged from the slot 18, at which time the scale may be removed by simply lifting the same from the holder 1. As shown in Fig. 2, I may employ a fastening means to secure member 9 in its locked position which is illustrated as comprising a snap fastening formed of members 19 and 20, 19 being a socket formed in holder 1, and 20 a punched out head of semicircular form which engages in the socket. It will thus be evident that when the scale is in position it will be held against outward movement by virtue of the pins 7' and 14 engaging in the slots 18. Furthermore since member 9 is locked by virtue of the snap fastening above described it will not be possible to remove the scale until member 9 is swung to open position at which



time the pin 14 thereof is disengaged from the scale.

By use of this invention, a scale of celluloid, thin steel, cardboard, or any other material may be easily replaced, or substituted by another. Scales which contain different systems or units of measurement, such for instance as "shrinkage" scales may thus be easily secured to the holder, enabling one holder to serve for a multiplicity of scales. Further it will be evident that the fingers 6 and 12 which engage on opposite sides of the scale not only protect the ends of the latter but they further serve to rigidly support the scale in firm and secure manner.

What is claimed is:—

1. A holder for scales composed of a holding member, a scale having a slot in each end thereof, a member secured at one end of the holding member and having a pin to project in one of the slots of the scale, a second member secured to the opposite end of the holding member so as to be movable with respect thereto, said second member carrying a pin to project in the slot at the opposite end of the scale, and means to lock the second member to the holding member.

2. A holder for scales composed of a holding member, a scale removably engaged therewith, and means to secure the scale to the holding member, said means engaging at each end of the scale and including sides which engage the opposite sides of the holding member, ends which engage the ends of the holding member, and fingers which engage on opposite sides of the scale.

3. A holder for scales composed of a holding member, a scale removably engaged therewith, said scale being formed with a slot at each end thereof, means rigidly secured at one end of the scale to removably engage one of the slots in the scale, and means at the opposite end of the holding

member to engage the slot at the opposite end of the scale.

4. A holder for scales composed of a holding member, a scale engaged therewith, said holding member being formed with a slot adapted to receive one side portion of the scale, means carried by the holding member to lock said scale in said slot.

5. The combination with a longitudinally grooved holder, of a flat scale adapted to have its rear edge slipped freely into said groove from the front of the holder and having slots formed in each of its ends, and manually operable locking means mounted upon said holder for engaging said scale, said means being adapted to engage slots formed in the opposite ends of the scale.

6. The combination with a longitudinally slotted holder, of a flat scale having a longitudinal slot formed in each of its opposite ends, a scale engaging member fixedly mounted at one end of the holder and adapted to engage in one of said slots, and a movable member mounted at the opposite end of said holder and adapted to engage in the other of said slots.

7. The combination with a longitudinally slotted holder, of a flat scale having a longitudinal slot formed in each of its opposite ends, a scale engaging member fixedly mounted at one end of the holder and adapted to engage in one of said slots, and a movable member mounted at the opposite end of said holder and adapted to engage in the other of said slots, said movable member being pivotally mounted for swinging movement upon the holder.

Signed by me at Springfield, Mass., in presence of two subscribing witnesses.

JOSEPH W. BRIGHAM.

Witnesses:

WM. S. BELLOWS,  
G. R. DRISCOLL.