I. W. LITCHFIELD.

COMBINED RULER AND POSTAL SCALE.

APPLICATION FILED MAR. 8, 1916.

1,201,063. Patented Oct. 10, 1916.

Fig. 1.

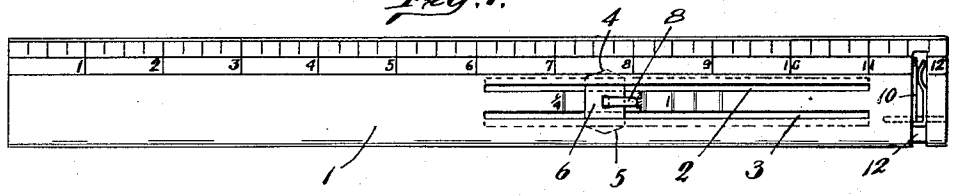


Fig. 2.

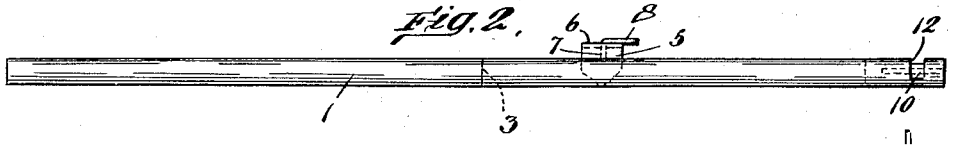
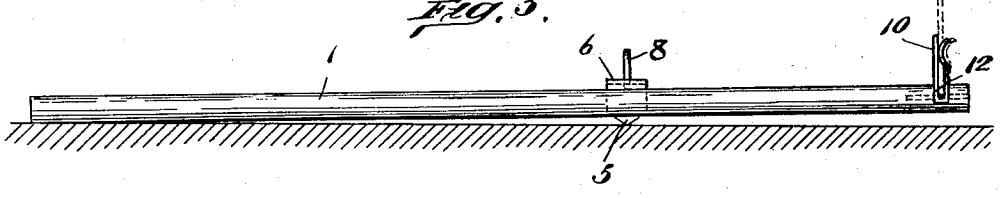


Fig. 3.



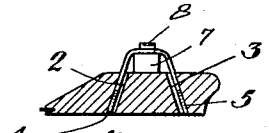


Fig. 4.

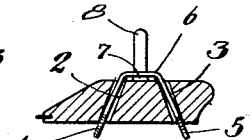


Fig. 5.

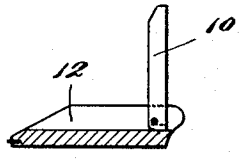


Fig. 6.

Witness.
H. B. Davis.

Inventor.
Isaac W. Litchfield.
By Sayles & Harriman
Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ISAAC W. LITCHFIELD, OF NEWTONVILLE, MASSACHUSETTS.

COMBINED RULER AND POSTAL SCALE.

1,201,063. Specification of Letters Patent. Patented Oct. 10, 1916.

Application filed March 8, 1916. Serial No. 82,953.

To all whom it may concern:

Be it known that I, ISAAC W. LITCHFIELD, a citizen of the United States, residing at Newtonville, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Combined Rulers and Postal Scales, of which the following is a specification.

This invention relates to a combined ruler and postal scale, and has for its object the provision of a ruler having a fulcrum-member with fulcrum points arranged in slots in the ruler, said member and ruler being slidable longitudinally one with respect to the other to admit of balancing the ruler like unto a scale-beam, and said member also being movable vertically with respect to the ruler to draw inward and thrust outward its fulcrum points, so that when it is desired to use the ruler as a scale, said points may be thrust outward or caused to project from the slots, and when it is not desired to so use the ruler the points may be drawn into the slots and thereby concealed.

Another object is to provide the fulcrum-member with a cam-lever for moving it vertically, and also for holding it to admit of longitudinal movement of the ruler, said lever being pivotally connected with said member to admit of its being turned outward to be grasped by the fingers, and to be turned down flat on the fulcrum-member when it is not desired for use.

Another object is to provide a clip to receive the matter to be weighed, such as a letter, and to pivot the same to the ruler within the boundaries of a slot or recess, said clip being adapted to be projected for use and to be confined within the slot or recess when out of use.

Figure 1 is a plan view of a ruler and postal scale embodying this invention. Fig. 2 is a front elevation of the same. Fig. 3 is a similar view with the parts in position to enable the device to be used as a postal scale. Figs. 4 and 5 are sectional details showing the fulcrum-member in its two different positions. Fig. 6 is a sectional detail showing the holding-clip for the postal matter in the position shown in Fig. 3.

The ruler 1 may be of any well-known or suitable construction, such as an ordinary desk ruler. This ruler is provided with slots 2, 3, extended for any desired distance and arranged in parallel relation. These slots are diagonally disposed with respect to the plane of the ruler, and are angularly related to each other, so that they diverge from the top to the bottom of the ruler. The fulcrum-member is arranged to slide longitudinally in said slots, and to be held in any desired position at or between the ends thereof. The fulcrum-member consists of a strip of sheet metal, bent staple-like, to form two prongs or arms 4, 5, and a crown 6. These arms are divergently arranged to correspond with the slots 2 and 3, and they are arranged in said slots, and their extremities are more or less pointed to form fulcrum-points; and said arms are resilient to frictionally engage the outer walls of said slots, thus to prevent unrestrained sliding movement of the member. Said arms are made longer than the width of the slots 2 and 3, so that the fulcrum-points may project from said slots, below the surface of the ruler, and serve as fulcrum supports for the ruler, or beam.

A cam-lever is pivotally supported on the crown 6, it comprising a ruler-engaging portion or projection 7, arranged on the under side of the crown 6, and a finger-engaging portion 8, above said crown. This lever is quite short and thin, it being made of sheet metal, but is sufficiently long to enable it to be grasped by the fingers when turned outward. Said lever is provided particularly for the purpose of moving the fulcrum-member vertically, yet it also serves as a means for holding said member while the ruler is being moved longitudinally for the purpose of balancing it as a scale-beam. When the device is being used as a ruler, said lever will be arranged in horizontal position, and its projection 7 will be arranged in vertical position between the crown and the surface of the ruler, so that the fulcrum-member is held in elevated position and its fulcrum points retracted or drawn into and concealed within the slots, and as said member is lifted into this position its arms 4 and 5 are contracted and held under tension. When the device is being used as a scale said lever will be arranged in vertical position, and its projection 7 in horizontal position between the crown and the surface of the ruler, so that the fulcrum-member will be caused to move downward by the resiliency of its arms 4 and 5, and its fulcrum points to project sufficiently to support the ruler as a scale-beam.

A clip 10 is arranged at the end of the

ruler, which is adapted to hold postal matter between its resilient arms, and said clip is arranged in a transverse groove or recess 12 formed in the ruler, and is pivoted in said recess at one end, so that it may be projected from the recess when it is desired to use it to engage the postal matter to be weighed, and, at other times, it may be turned on its pivot, to retract it and conceal it in the recess.

I claim:—

1. The device herein described consisting of a ruler having divergently arranged slots, a fulcrum member arranged in said slots to slide longitudinally and move vertically, said fulcrum-member comprising a pair of divergent resilient arms and a crown, said arms having fulcrum points at their extremities, and a cam-lever pivotally connected with the crown of said member, the cam-projection of which is adapted to engage the surface of the ruler to lift said member upon a turning movement of the lever, in one direction, and to permit downward movement of said member upon a turning movement of said lever in the other direction, said ruler having means for holding the matter to be weighed.

2. The device herein described consisting of a ruler having a transverse recess, a fulcrum-member slidable longitudinally and movable vertically with respect to the ruler, to admit of its fulcrum points being projected and retracted, and a clip pivotally arranged in the transverse recess in the ruler, and adapted to be projected and retracted.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ISAAC W. LITCHFIELD.

Witnesses:
B. J. NOYES,
H. B. DAVIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."