

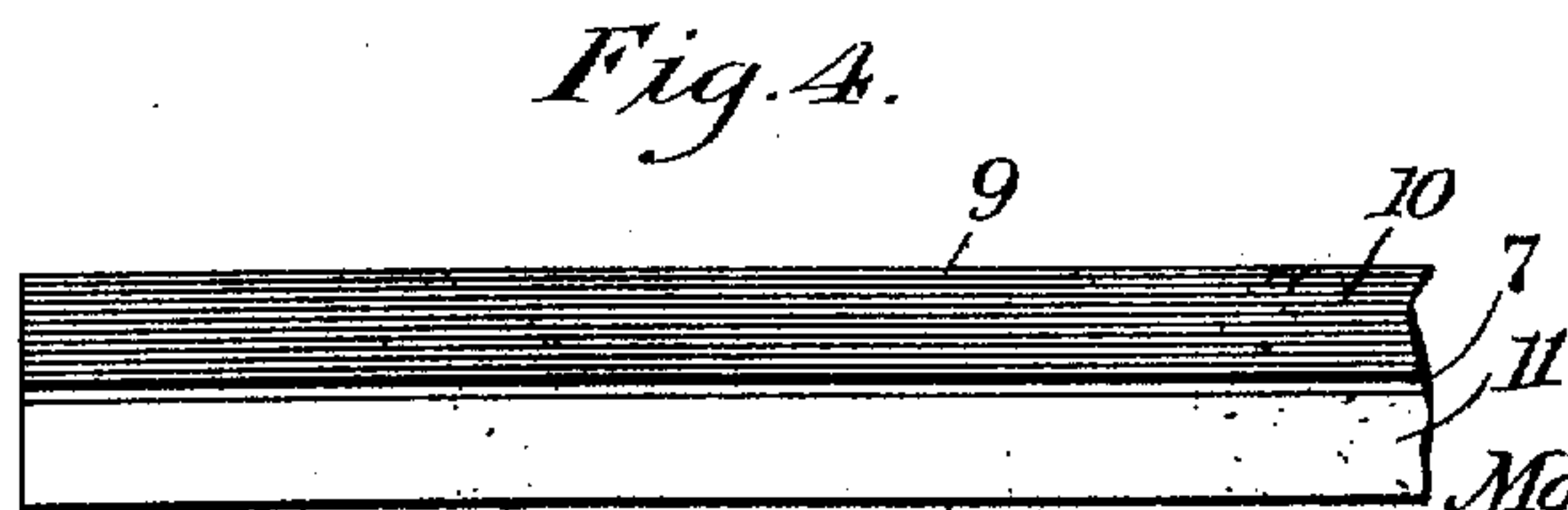
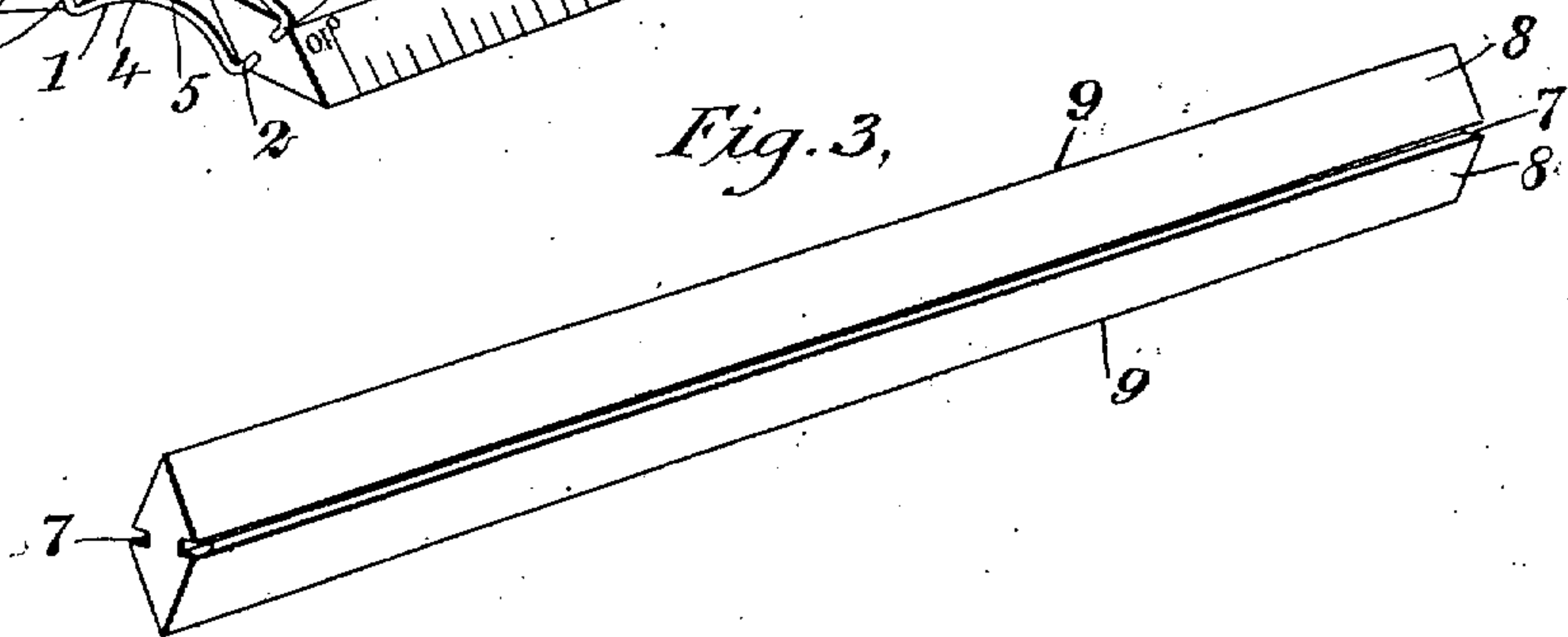
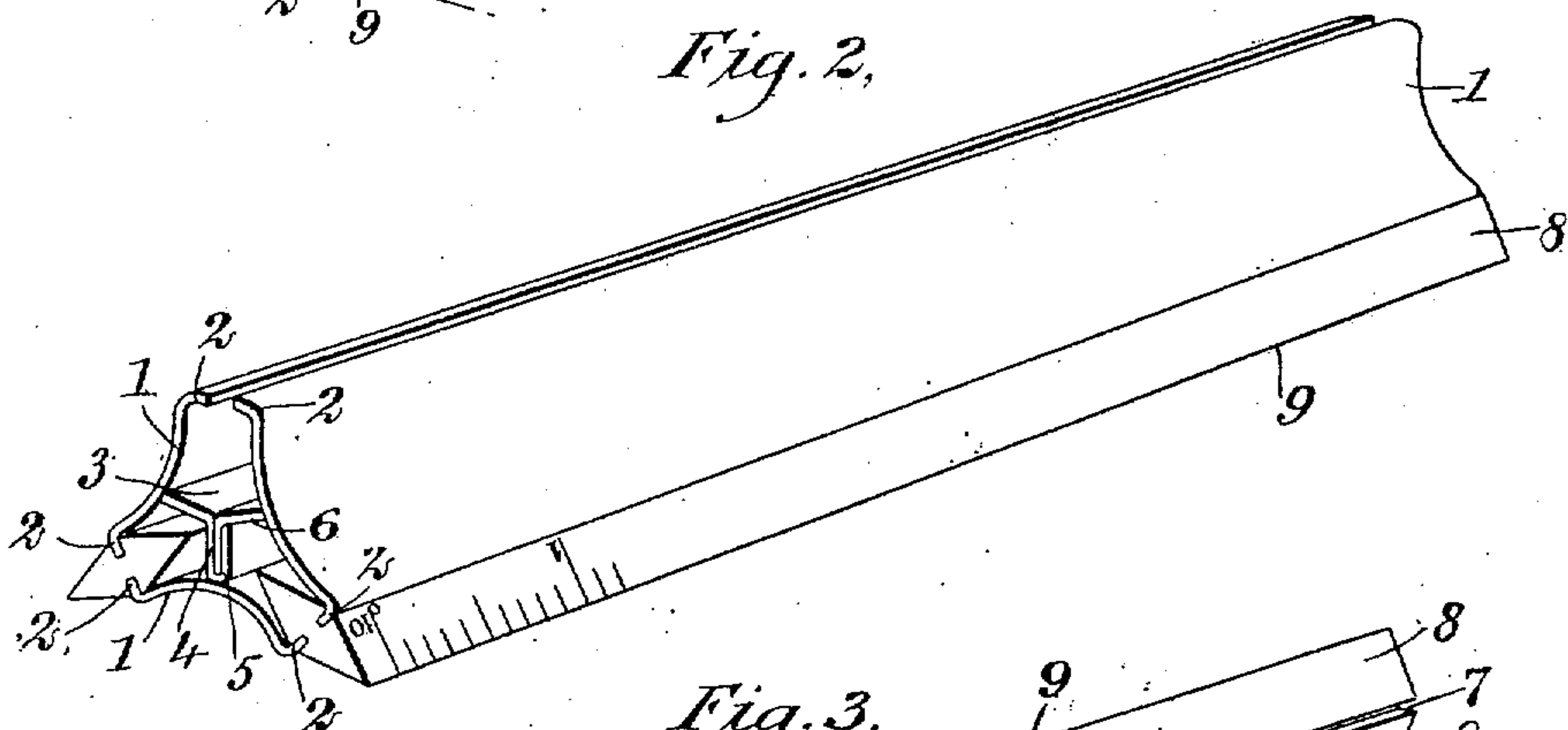
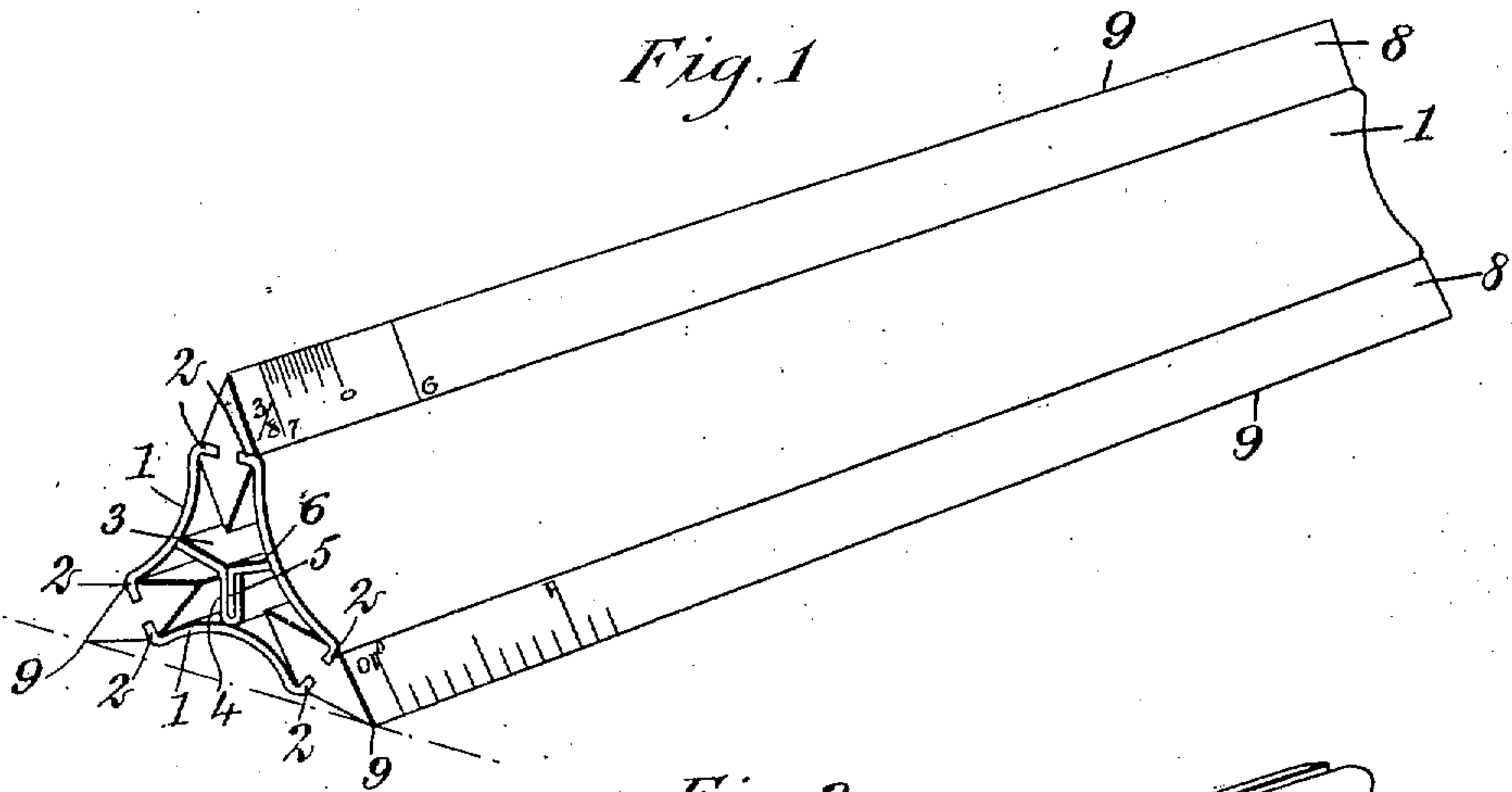
No. 857,416

PATENTED JUNE 18, 1907

M. M. SCHWARTZ.

SCALE.

APPLICATION FILED FEB. 26, 1907.



WITNESSES

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MORRIS M. SCHWARTZ, OF NORTH BERGEN, NEW JERSEY.

SCALE.

No. 857,416.

Specification of Letters Patent.

Patented June 18, 1907.

Application filed February 25, 1907. Serial No. 359,056.

To all whom it may concern:

Be it known that I, MORRIS M. SCHWARTZ, a citizen of the United States, and a resident of the town of North Bergen, in the county of Hudson and State of New Jersey, have invented a new and Improved Scale, of which the following is a full, clear, and exact description.

The object of this invention is to provide a scale having a plurality of members adapted to be reversed and used interchangeably with each other, and so constructed and arranged as to be adapted to be held in complete contact with a drawing and give a proper angle of vision, to protect the divided surfaces of the members of the scale from friction with a drawing and the wear consequent thereto, and to avoid the necessity of raising the edges of the scale from a drawing, thereby obviating the unsteadiness due to lack of contact and the errors frequently arising therefrom.

A further object of my invention consists in providing a scale with either a box wood or a white surface, or with a box wood surface on one or more faces, and a white surface on the remaining faces.

Such objects I accomplish by the means illustrated in the accompanying drawings, which embody my invention in its preferred form, in which

Figure 1 is a perspective view of a scale embodying my invention; Fig. 2 is a perspective view of the device shown in Fig. 1 with one of the scale members removed; Fig. 3 is a perspective view of a scale embodying my invention removed from the holder; and Fig. 4 is a side elevation of a section of a scale provided with a box wood face and a white face.

As illustrated in the drawing, the scale comprises a central holder having a plurality of double members detachably secured thereto. The holder comprises segmental sections 1 provided with free off-set edges 2 and connected together in any suitable manner, preferably by means of a bridge consisting of a plate 3 having an off-set edge 4 doubled on itself to provide a longitudinal groove or socket adapted to receive the off-set edge 5 of a bridge plate 6. The outer edges of the bridge plates 3 and 6 and the off-set portion of the plate 3, are soldered or otherwise secured to the central portion of the segmental sections so as to hold said sections firmly in position with their off-set edges 2 spaced

from each other and form receptacles adapted to receive the inner portion of the several scale members. These members are provided on opposite sides with centrally disposed grooves 7 extending longitudinally of the scale members and adapted to engage the free edges 2 of the segmental guard sections of the holder. Inclined faces 8 extend from the central longitudinal grooves 7 to the outer edges of the members where they meet at an acute angle forming bearing edges 9. When the device is in use, these bearing edges form a bridge and support the scale, as illustrated in Fig. 1, thereby raising and protecting the divided surfaces from wear. Each of the surfaces of a scale member is provided with a division differing from all of the divisions of the other surfaces of the same member of the scale, and also differing from all the divisions of all of the remaining members of the scale. By means of such construction a scale is formed provided with members having divisions adapted to be used for either architectural, engineering or other purposes at will.

The desirability of having the face of a scale provided with either box wood or a white surface is commonly recognized by the users of scales of the character shown herein, and my invention contemplates the use of a box wood face 10, or a white face 11 as may be desired; thus on both sides of a member the scale may be provided with similar surfaces, or one of the faces on one side of a member may be provided with a white surface and the other face with a box wood surface, and the opposite side of the member may be provided with similar surfaces reversed. The holder upon which the members of the scale are mounted, is adapted to be conveniently handled and used to much better advantage than the scales now in use having triangular wings provided with divisions which are separated from each other only by narrow shallow grooves. The markings of the different divisions are made on the faces of the members of the scale and are plainly visible instead of being marked within the narrow groove of the constructions now in use.

In the construction shown herein, the holder is adapted to support but three scale members. It is obvious, however, that the number of retaining sections of the holder may be increased, and that five members may, if desired be mounted upon a single

holder. While for convenience and strength of construction I prefer to support the sections of the holder in the manner shown and described herein, other means having similar capabilities may be used for this purpose without departing from my invention.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is:—

10 1. A rhomb scale having centrally disposed longitudinal grooves on opposite sides thereof, and beveled faces extending from said grooves and meeting at the edges of the scale in acute angles.

15 2. A rhomb scale having centrally disposed longitudinal grooves on opposite sides thereof, and beveled faces of different character of finish extending from said grooves and converging at the edges of the scales in acute angles.

20 3. A scale comprising a holder and a plurality of members having longitudinal grooves engaging said holder, and beveled faces extending from said grooves to the outer edges of the members, and so inclined

relatively to the holder that only the edges of two adjacent members bear on a supporting surface.

4. The combination of a plurality of scales each having on each side a double bevel and an intermediate groove, and a holder having segmental sections provided with offset edges engaging said grooves and with longitudinal recesses adapted to receive the inner bevels of the scales.

35 5. The combination of a plurality of scales each having on each side a double bevel, and a holder having longitudinal recesses adapted to receive the inner bevels of the scales, and retaining means adapted to engage the central portion of said scales intermediate of said bevels.

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

MORRIS M. SCHWARTZ.

Witnesses:

ROBERT W. HARDIE,
JNO. M. RITTER.