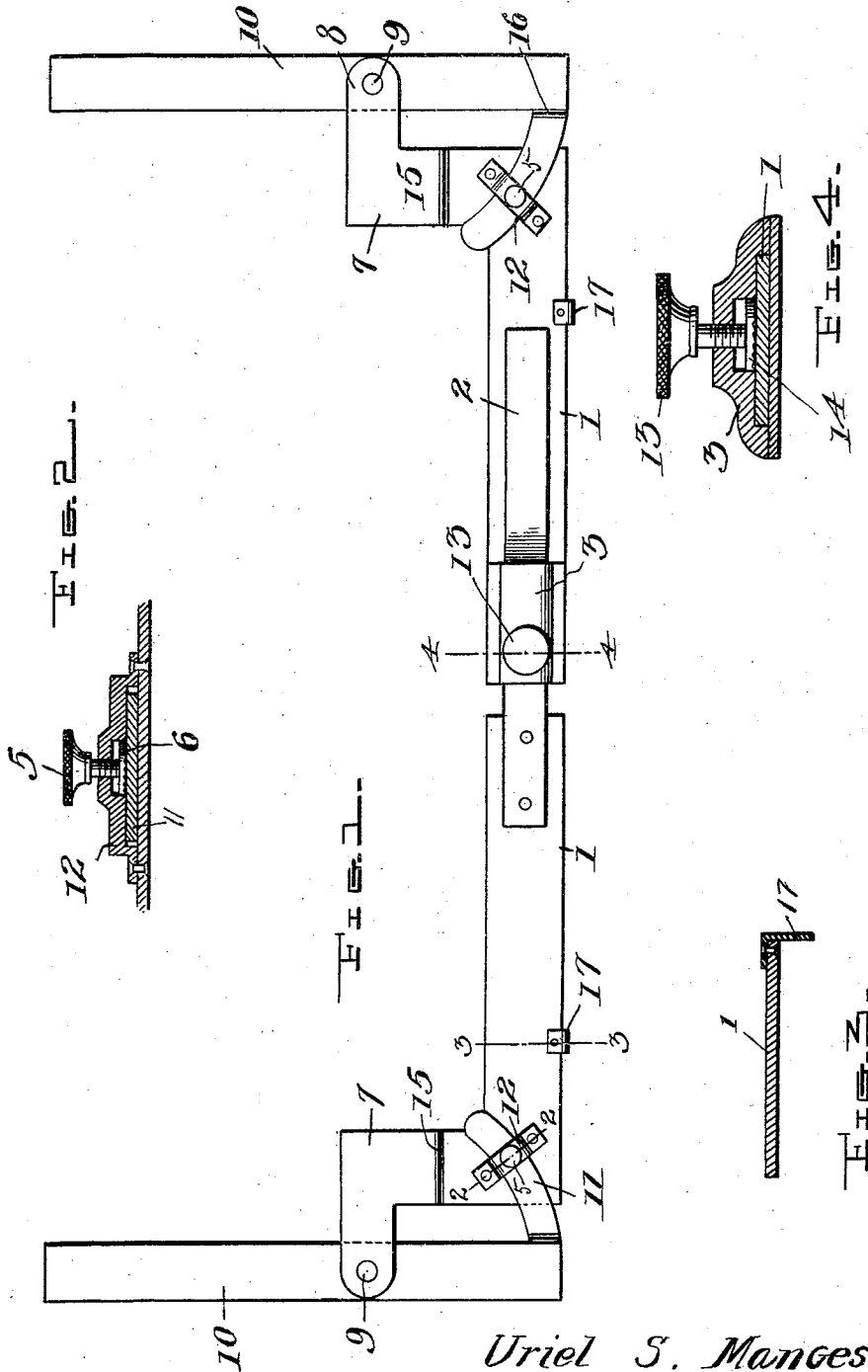


U. S. MANGES.
CARPENTER'S GAGE.
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Uriel S. Manges ^{Inventor}

Witnesses
F. L. Gibson.
R. M. Smith.

334 Victor J. Evans
^{Attorney}

UNITED STATES PATENT OFFICE.

URIEL SEDGWICK MANGES, OF SCALP LEVEL, PENNSYLVANIA.

CARPENTER'S GAGE.

933,655.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, URIEL SEDGWICK MANGES, a citizen of the United States, residing at Scalp Level, in the county of Cambria and State of Pennsylvania, have invented new and useful Improvements in Carpenters' Gages, of which the following is a specification.

This invention relates to carpenters' gages, the object in view being to provide a gage especially designed to enable a carpenter to obtain the correct or exact length and cut or bevel on the ends of the treads and risers of stairways, the device, embodying in connection with a main yoke, which is longitudinally extensible, end gage members which have a jointed connection with the yoke, means for clamping and bracing the end gages relatively to the yoke for holding the several parts of the gage as a whole in fixed relation to each other after the desired adjustment has been effected.

With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts as hereinafter more particularly set forth, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a plan view of a carpenter's gage embodying the present invention. Fig. 2 is an enlarged detail cross section on the line 2—2 of Fig. 1. Fig. 3 is a detail cross section on the line 3—3 of Fig. 1. Fig. 4 is a cross section on the line 4—4 of Fig. 1.

The carpenter's gage embodies a main bar or yoke 1 which consists of a pair of similar sections arranged in longitudinal alinement with each other and adapted for relative longitudinal movement. To accomplish this, an extension strip 2 is firmly secured to one of the sections so as to extend a considerable distance beyond the end thereof while the other section is provided at its inner end with a guide 3 through which an extension strip 1 is adapted to move and slide, the parts when adjusted in the desired relation to each other being held by means of a set screw 13 which, as shown in Fig. 4, is threaded through the guide 3 and provided at its inner end with a swiveled head 14 preferably formed with a serrated contact face adapted to bear against the extension strip 1, as shown in Fig. 4.

Each of the sections 1 of the yoke is provided with a laterally projecting end extension 7, the extensions 7 at the opposite ends

of the yoke being offset to the same side thereof. Each of said extensions is provided with an outwardly extending pivot lug 8 to which is pivotally connected at 9 an end gage member 10, the pivot 9 occurring at a point intermediate the ends of the gage member 10 while at the inner end, the member 10 is provided with a laterally projecting arcuate brace tongue 11 which works through a guide 12 secured to the adjacent yoke section 1, the brace tongue 11 being held when adjusted by means of a set screw 5 which passes through the guide 12 and like the set screw 13 above described, is provided at its inner end with a swiveled head 6 adapted to bear against the adjacent surface of the tongue 11. It will further be observed that the extension 7 is offset, as shown at 15 and the tongue 11 is offset as shown at 16 to enable the gage member 10 to be folded inward into substantially parallel relation to the adjacent yoke section 1 in order to render the device compact for storage or transportation. The yoke sections 1 are also provided with stops 17 arranged at suitable points thereon and projecting beyond one face of the yoke as shown in Fig. 3 to abut against the edge of the tread or riser in connection with which the device is being used.

In use, the yoke 1 is extended in length so as to bring the outer edges of the end gage members 10 flush with the wall stringers of a stairway and when adjusted to the proper length the adjustment is fixed by means of the set screw 13. With the set screws 5 loose, the outer edges of the end gage members 10 automatically adjust themselves to the angles of the inner faces of the stringers, after which the set screws 5 are tightened. This serves to hold the end gage members in fixed position relatively to the yoke and to each other and enable the carpenter to lay off a tread or riser corresponding exactly in measurement with the angles to the place where such tread or riser is to fit. The device thus saves a great amount of time and labor and calculation on the part of the carpenter and insures a perfectly fitting tread or riser, as the case may be.

The extension strip 2 may be connected to the section 1 by fasteners such as screws which will enable longer or shorter extension strips to be used. The section 1 containing guide 3 is flexible for the purpose of enabling the gage as a whole to be easily removed

from its position when adjusted. The extension strip extending over the flexible piece will serve to brace it unless extra wide stairs are being built, in which instance there will
5 be a middle stair horse to prevent sagging.

I claim:—

10 A gage of the class described comprising a longitudinally extensible yoke having rigid laterally projecting extensions at its opposite ends, adjustable end gage members having a jointed connection with and a pivotal connection to said extensions, and provided

with arcuate brace tongues overlapping portions of the yoke, and means for clamping and holding the tongues in fixed relation to 15 the yoke to maintain the adjustment of the end gages.

In testimony whereof I affix my signature in presence of two witnesses.

URIEL SEDGWICK MANGES.

Witnesses:

JAMES I. LIVINGSTON,
JOHN EAKINS.