

A. HEIRAN.
Carpenter's Gage.

No. 219,942.

Patented Sept. 23, 1879.

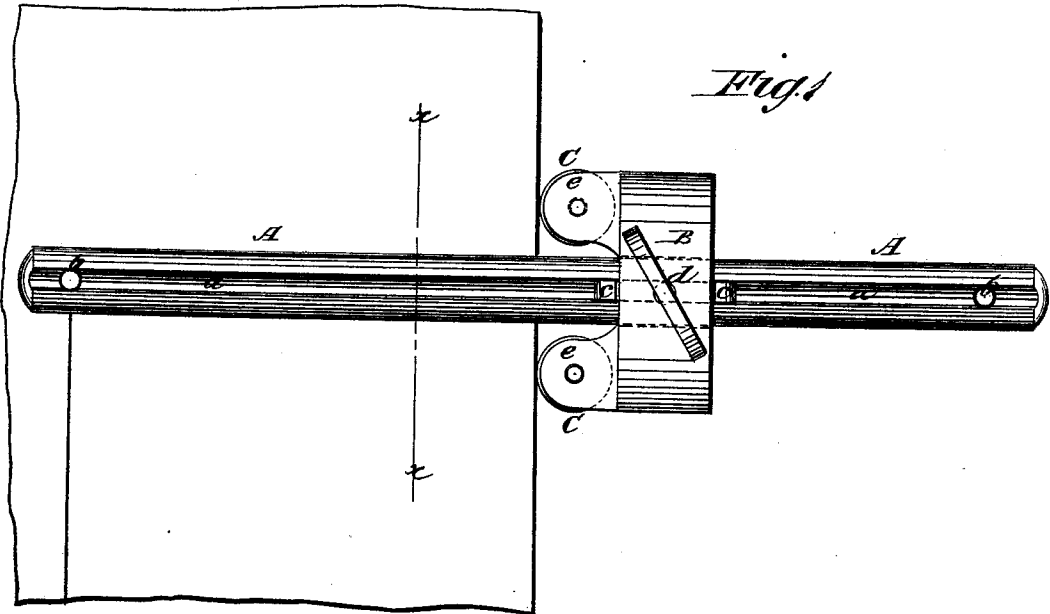
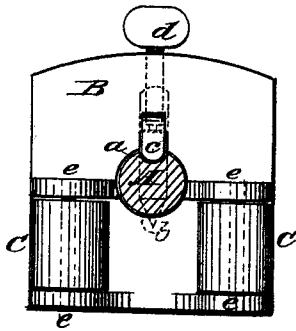


Fig. 2.



WITNESSES:

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ALBAN HEIRAN, OF SAN LEANDRO, CALIFORNIA.

IMPROVEMENT IN CARPENTERS' GAGES.

Specification forming part of Letters Patent No. **219,942**, dated September 23, 1879; application filed June 5, 1879.

To all whom it may concern:

Be it known that I, ALBAN HEIRAN, of San Leandro, in the county of Alameda and State of California, have invented a new and Improved Gage, of which the following is a specification.

This invention relates to improvements in the construction of carpenters' measuring and marking gages. Heretofore these have been made with a right-angular guide, and thus they were inadequate to the measurement of work where the guiding-edge was curved out of a right line.

The object of my invention is to enable the gage to be used on a curved guiding-edge.

It consists in providing the guide with two bearing-rollers, one on each side of the shaft, and at right angles thereto, so that they will furnish two bearing-points, and thus maintain the point of the gage in the proper place.

In the accompanying drawings, Figure 1 is a top plan of the improvement; and Fig. 2 is a front view of the guide and rollers with the shaft in section on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A is the shaft of the gage, having in it a longitudinal groove, *a*, and at the ends steel points or markers *b b*, passed down through holes made in the shaft from the groove.

B is the guide, having a hole through the center, in which is set a feather, *c*. The shaft is passed through the hole with the feather in the groove, whereby the guide is prevented

from turning on the shaft, but is permitted to move back and forth thereon easily. A set-screw, *d*, is passed down through the guide and feather, so that its end can be projected against the shaft in the groove for the purpose of holding the guide fixed.

On one face of the guide, on either side of the shaft, jaws *e e* project out at right angles, and between these are pivoted the upright rollers C C, forming the bearing-surface for this face of the guide. The opposite face of the guide is a flat surface for use in measuring from a straight edge exclusively.

The rollers furnishing two separate bearing-points for the face of the guide, as shown in Fig. 1, enables it to be run along a curved edge, or a measurement to be made from the curved edge with the same accuracy as from a straight edge.

The gage is also useful in finding centers of circular objects, enabling this to be done quicker and more accurately than with dividers.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

As an improvement in gages, the upright rollers C C, pivoted between jaws *e e*, furnishing two bearing-points for the face of the guide, in combination with the guide B and shaft A, substantially as and for the purpose described.

ALBAN HEIRAN.

Witnesses:

SAMUEL FILLMAN,
THOMAS ISAACS.