

(No Model.)

G. W. REED.
CARPENTER'S GAGE.

No. 551,873.

Patented Dec. 24, 1895.

Fig. 1.

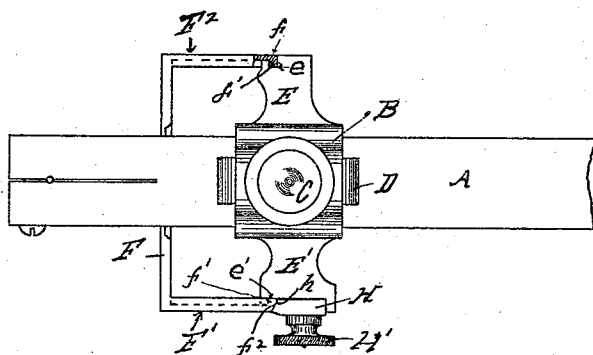


Fig. 2.

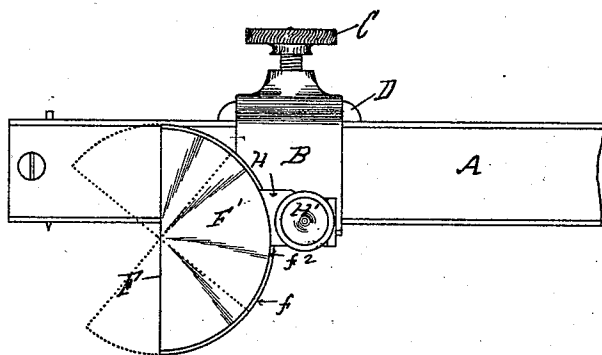
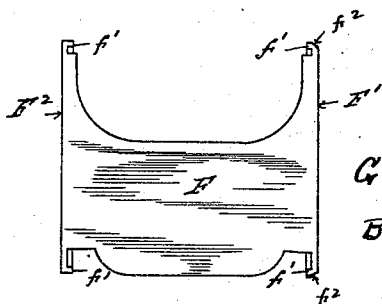


Fig. 3.



WITNESSES.

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CARPENTER'S GAGE.

SPECIFICATION forming part of Letters Patent No. 551,873, dated December 24, 1895.

Application filed January 30, 1895. Serial No. 536,648. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. REED, a citizen of the United States, residing at the city of Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Carpenters' Gages; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

My invention consists in the improvements in carpenters' gages, hereinafter set forth and explained and illustrated in the accompanying drawings, in which—

Figure 1 is a top or plan view of my improved carpenter's gage. Fig. 2 is a side view in elevation of the same. Fig. 3 is a view in elevation of the face of the adjustable portion of the gage-head.

The object of my invention is to construct a carpenter's gage, having the gage-head constructed in two sections, one of which is so adjustable upon the other that the gage can be adjusted to fit and operate on surfaces of varying angles to each other with the same facility as though such surfaces were always at right angles or at other given angles to each other.

In the accompanying drawings illustrating my invention, A is the stem of the gage, and B one section of the gage-head. The stem A may be of wood or metal, and is of the ordinary construction used in carpenters' gages. The section B of the head is adapted to be moved longitudinally on the stem A and is provided with a thumb-screw C and clamping-block D, adapted to be depressed upon the stem A by means of the thumb-screw C, so as to secure the section B upon the stem A. The movable section of the gage-head consists of a plate F having rearwardly-projecting semicircular flanges F' and F² thereon, as and for the purpose hereinafter set forth.

Projecting from the sides of the section B are arms E and E'. In the front of the end of the arm E is a groove *e* cut therein on the arc of a circle corresponding with the arc of the circle formed by the rear edges *f* of the flanges F' F² of the movable section F of the gage-

head, said groove being adapted to engage the inwardly-projecting flange *f'* on the edge *f* of the section F, and on the arm E' is also cut a like circular groove *e'*, the shoulder at the rear of said groove being, however, cut away far enough so that its place is taken by a movable block H, which is secured to the end of the arm E' by means of a thumb-screw H'. The front edge *h* of this block H is beveled, as illustrated in Fig. 1, so as to fit a like bevel *f*² on the edge *f* of the flange F'.

From the foregoing description it will readily be seen that the axis of rotation of the face of the plate F is slightly below the under surface of the stem A, so that when the section B of the gage-head is clamped to the stem A at any point thereon the changing of the angle of the plate F will not vary the distance between it and the scratch-point of the gage.

In operation the inwardly-projecting flanges *f'* on the semicircular flanges F' and F² of the movable section F are inserted in the grooves *e* and *e'* on the arms E and E' of the section B of the gage-head and the movable section F rotated therein until the face of the section F is at the desired angle to the under side of the gage-stem A, where it is secured by means of the thumb-screw H', which forces the beveled edge *h* on the block H against the beveled edge *f*² on the flange F' and firmly secures the movable head F against any rotation in the grooves *e* and *e'*. Thus it will be seen that the gage can be set to operate on surfaces at varying angles to each other, as may be desired.

Having thus fully described my invention, so as to enable others to construct and operate the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination in a carpenters' gage, of a gage stem, a gage-head section adapted to be moved longitudinally on the gage stem, a gage-head section having semi-circular flanges thereon, and grooves on the first named section in which the circular flanges of the second section are adapted to be circularly adjusted and secured, substantially as and for the purpose set forth.

2. A gage head consisting substantially of a section adapted to be secured to a gage stem, lateral arms on said section, grooves in the

ends of said arms, and a movable block and thumb-screw on one of said arms, and a section having semi-circular flanges thereon, adapted to fit into the grooves on the first
5 named section, and be clamped therein by said movable block and thumb-screw, substantially as and for the purpose set forth.

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

GEORGE W. REED.

Witnesses:

ALICE ANTENRITH,
F. EINFELDT.