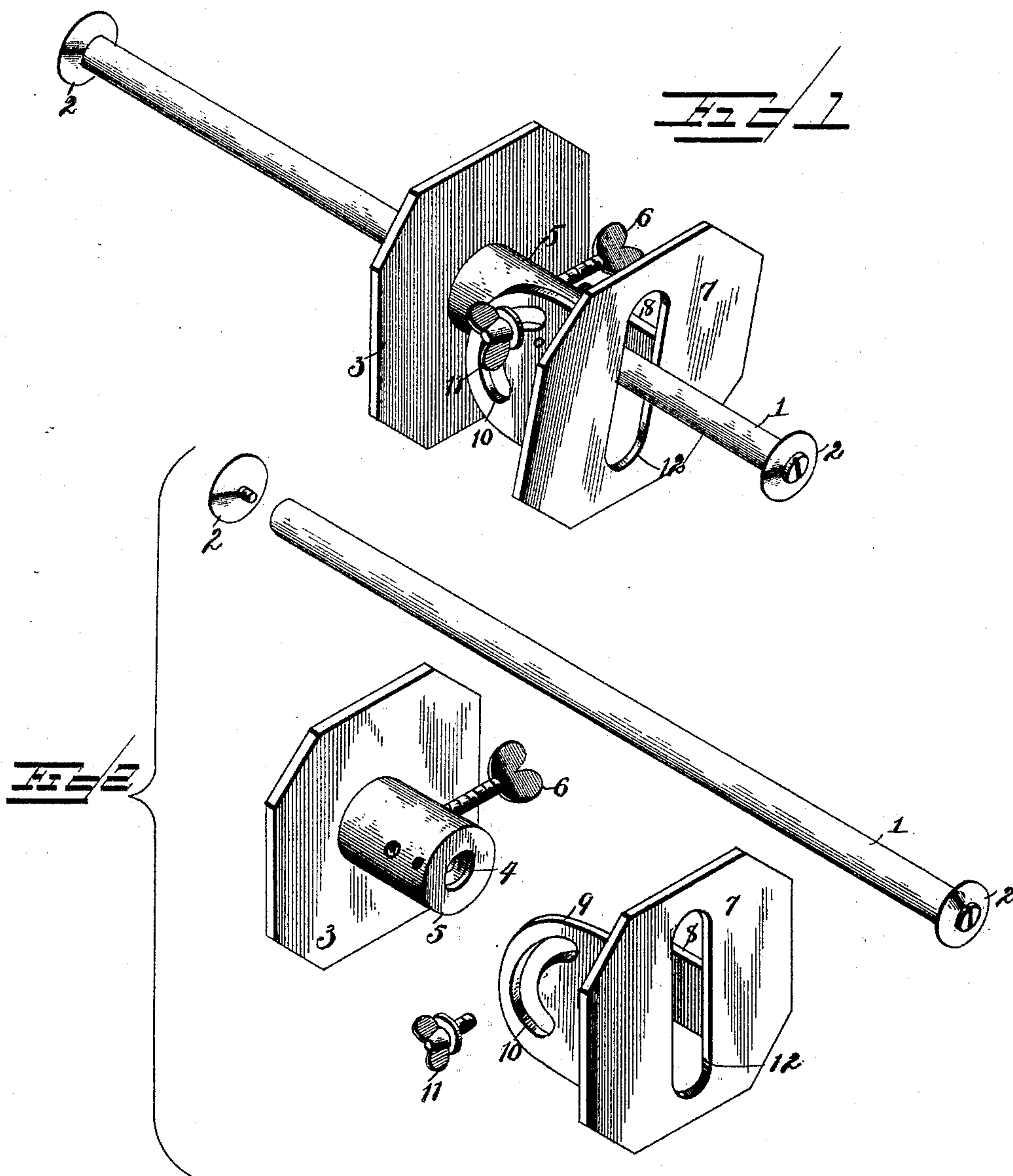


(No Model.)

J. W. YINGLING.  
COMBINED SQUARE AND BEVEL GAGE.

No. 497,938.

Patented May 23, 1893.



Witnesses

W. Schneider.  
Chas. B. Hoyer.

Inventor

J. W. Yingling.

By his Attorneys,

C. A. Snow & Co.



# UNITED STATES PATENT OFFICE.

JOHN W. YINGLING, OF LATROBE, PENNSYLVANIA.

## COMBINED SQUARE AND BEVEL-GAGE.

SPECIFICATION forming part of Letters Patent No. 497,938, dated May 23, 1893.

Application filed September 7, 1892. Serial No. 445,235. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. YINGLING, a citizen of the United States, residing at Latrobe, in the county of Westmoreland and State of Pennsylvania, have invented a new and useful Combined Square and Bevel-Gage, of which the following is a specification.

This invention relates to a combined square and bevel gage, and has for its object to adopt a single device for the double purpose of gaging either against square or bevel edges, and with this object in view the invention consists of the construction and arrangement of the parts as will be more fully hereinafter described and claimed.

In the drawings:—Figure 1 is a perspective view of the improved device. Fig. 2 is a similar view of the parts disconnected.

Similar numerals of reference are employed to indicate corresponding parts in the several figures.

Referring to the drawings, the numeral 1, designates the marking stem or rod, having scorers 2 on opposite ends thereof in the form of rotatable disk knives, and on the said stem or rod 1 is adjustably mounted a head 3 of suitable form having an opening 4 extending centrally therethrough and in alignment with the bore of a sleeve 5 integrally formed with said head, the said stem or rod having a free movement through said opening 4 and sleeve 5. A set screw 6 of suitable form is mounted in the sleeve 5 and is adapted to clamp against the stem or rod 1 to hold the head and parts carried thereby stationarily in an adjusted position.

A head 7 is provided, similar in form to the head 3, and has a small ear 8 that is pivoted to one side of the outer end of the sleeve 5, and is also provided with a larger ear 9 opposite to the ear 8 and formed with a segmental slot 10 through which is passed a clamping screw 11 into the sleeve 5. The said head 7 is formed with a slot 12 extending across the same and through which passes the stem or rod 1. The head 7, and ears 8 and 9 are preferably of integral construction, and from the construction set forth it will be seen that said head is adjustable and may be permanently set at any desirable angle. The head 7 being attached to the head 3 is unitedly adjustable with the latter on the stem or rod 1, and in

use the said head 7 is set at the proper angle and moved against a beveled edge while the adjacent scorer makes a mark parallel with the said beveled edge. The head 3 is to be employed for engagement with straight edges, but if desired at any time, the head 7 could be properly arranged to perform the same function. The head 3 forms a vertical gage adapted to coact with horizontal surfaces or planes and always retains its proper and true position because it is integrally connected with the sleeve 5, and no adjustment is necessary to arrange this vertical gage in position and it is, therefore, always ready for use. The head 7 forms a bevel gage and is adjustable at any angle on the sleeve 5, it being seen that a scorer is used at each end of the stem or rod 1 and that the device is thereby arranged to be quickly used at either end either in laying off on horizontal surfaces, or coacting with bevels without the adjustment of either of the heads 5 or 7. This is an important feature in that there exists at all times a true right angle to coact with the stem or rod and which is provided by the head 5. Further, it will be noticed that the adjustment of the sleeve on the stem or rod simultaneously adjusts the head 7, and this latter head or bevel gage of itself has an individual adjustment through its pivotal connection with the said sleeve, and also it will be noticed that the adjustment of the sleeve, and consequently of the two gages, is attained by loosening one set-screw only and fixing the adjustment by again tightening said set-screw, and thereby save the expense of labor and time.

By the construction and arrangement set forth a very useful and convenient device is produced, and being simple is comparatively inexpensive.

The nature of the material of which the device is formed may be varied, but it is preferable that it be constructed of metal. Also the device may be made in different sizes to suit different purposes and uses.

Having thus described the invention, what is claimed as new is—

1. In a combined square and bevel gage, the combination of a stem or rod having a scorer at each end thereof, a sleeve adjustably mounted on said stem or rod and having



a vertically disposed head extending above, below, and laterally on opposite sides of said sleeve to form a rigid straight gage at one end thereof, a bevel gage adjustably carried by  
5 the opposite end of said sleeve and arranged to be moved at varying angles, and a single set-screw engaging the said sleeve for the purpose of holding the same in adjusted position, the said vertical and bevel gages being  
10 unitedly adjustable longitudinally on the stem or rod, substantially as described.

2. In a gage, the combination of a marking stem or rod having scorers on the opposite ends thereof, a vertically disposed head hav-  
15 ing an integral sleeve adjustably fitted on said stem or rod, a second head having an elongated vertical slot therein through which said

rod or stem extends, and formed with a pair of ears oppositely-disposed and embracing opposite sides of the forward end of the said  
20 sleeve, one of said ears being smaller than the other and pivotally connected to said sleeve, and the larger ear formed with a segmental slot, and set-screws engaging said sleeve and the said segmental slot of the larger  
25 ear, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN W. YINGLING.

Witnesses:

A. R. SHAW,  
WM. DALE.