

(No Model.)

G. E. WHITEHEAD.
MICROMETER GAGE.

No. 375,688.

Patented Dec. 27, 1887.

Fig. 1.

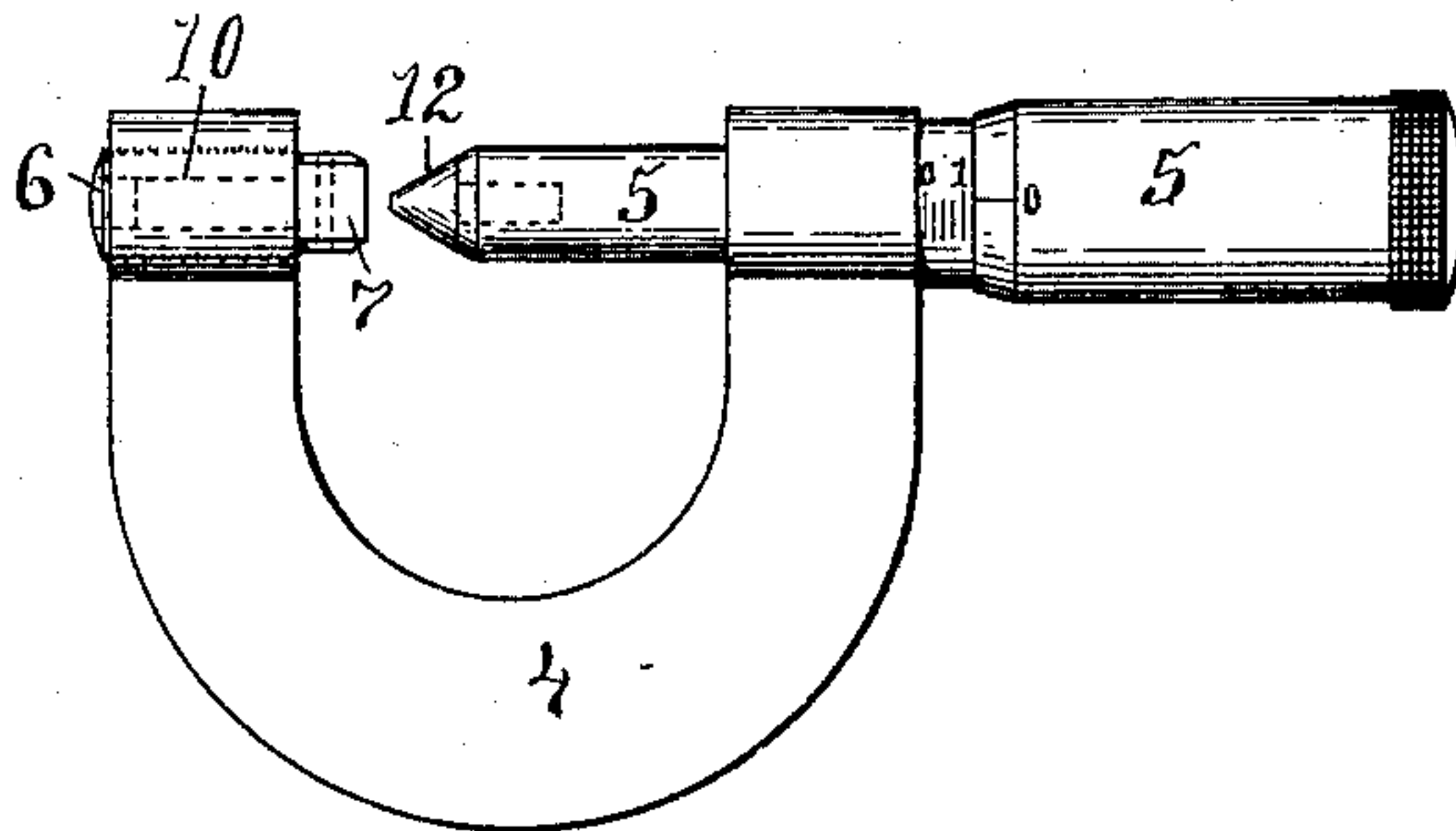


Fig. 2.

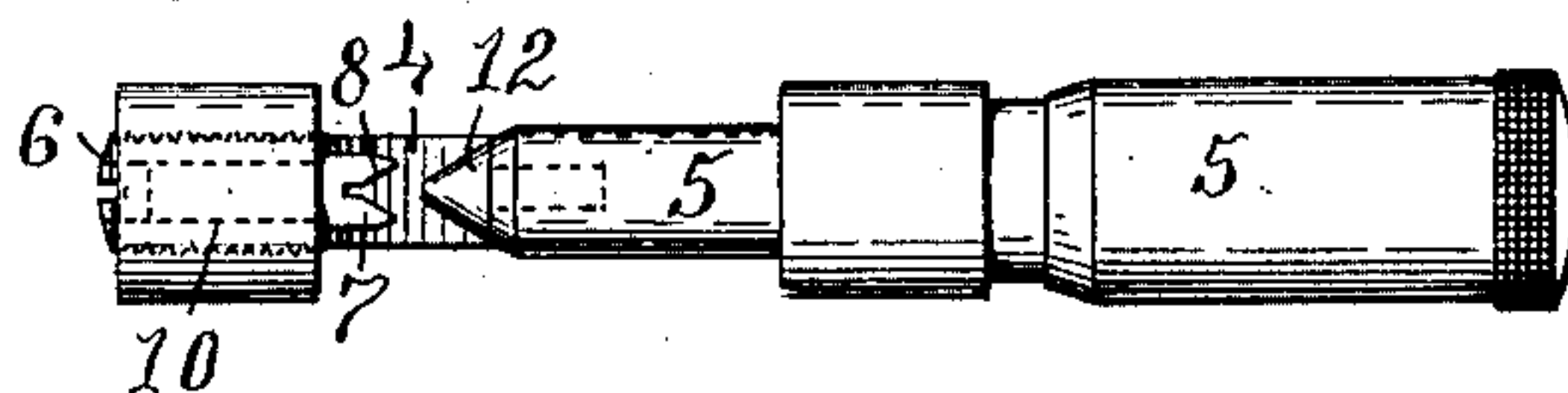
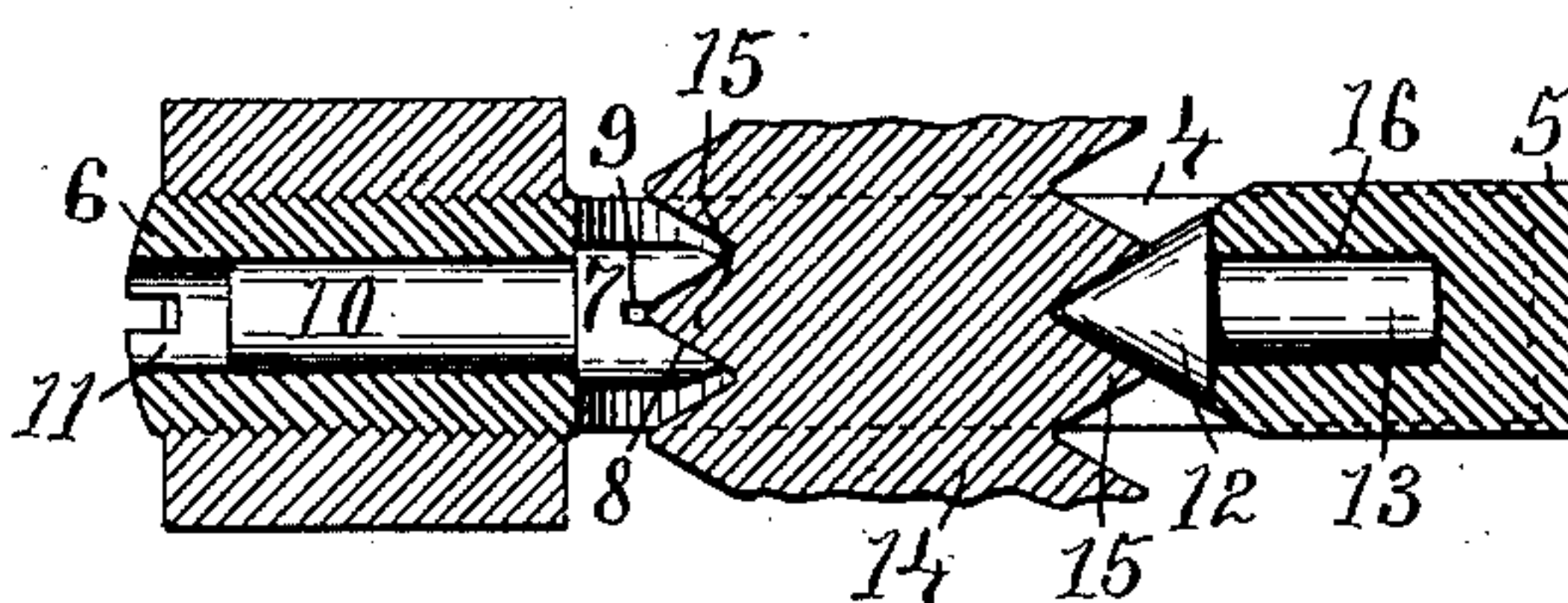


Fig. 3.



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GEORGE E. WHITEHEAD, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO
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MICROMETER-GAGE.

SPECIFICATION forming part of Letters Patent No. 375,688, dated December 27, 1887.

Application filed October 12, 1887. Serial No. 252,136. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. WHITEHEAD, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Micrometer-Gages, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to what is known as a micrometer gage or caliper, which is a device for making fine and accurate measurements.

The object of my invention is to provide a micrometer-gage which will be especially adapted to measure the diameters of screws—that is, the diameter of the screw-shank plus the height of the screw-thread or volute.

To the aforesaid purpose my invention consists, essentially, in the combination, in a micrometer-gage, of a countersunk or notched bed on the anvil with the projecting or tapering end piece on the co-operating micrometer-screw, and, further, of other details of construction, all as hereinafter fully described and claimed.

In order that my invention may be fully understood, I have illustrated in the accompanying drawings, and will proceed to describe the best form thereof so far devised by me, with the knowledge that such form may be variously modified without, however, making a substantial departure from the spirit of the invention.

In the accompanying drawings, Figure 1 is a broad side view of my improved micrometer-gage; and Fig. 2 is a view of the same, taken at right angles thereto. Fig. 3 is an enlarged longitudinal sectional view of the gage with the micrometer-screw broken off and a portion of a screw mounted in the gage for measurement.

In the said drawings like numbers designate corresponding parts throughout.

Referring to the drawings, the number 4 designates the frame of the gage or caliper, at one end of which is mounted the ordinary micrometer-screw, 5, which is designed to co-operate with the ordinary adjustable anvil, 6, situated in the other arm of the frame opposite the screw 5.

My invention consists in providing the anvil 6 with the removable bed 7, which is formed with the notched or countersunk face 8, at the base of which is formed the slot 9, for catching the dirt from the notch. The bed 7 is provided with the stem 10, which is removably and securely inserted in the axial bore 11 of the anvil, and the bed may be removed from the anvil by pushing upon the end of the stem 10 through the open end of the bore 11. I further provide the micrometer-screw 5 with the conical-shaped end piece or jaw, 12, formed with the smooth shank 13, which is detachably mounted on the screw by driving the shank into the socket 16 in the screw, as clearly shown in Fig. 2.

Different sized beds 7 and end pieces or tips, 12, are to be used for the different sizes of screws, the angles of the bed and co-operating tip being adapted to the angle of the screw-thread. When the tip 12 is seated in the notch of the bed, the gage will read zero.

In order to measure the diameter of a screw, as 14, the screw is placed in the gage with the thread 15 thereof seated in the notch or fork 8 of the bed, then the micrometer-screw 5 is screwed down until the conical end 12 takes snugly in between the threads 15, and this reading will give the true diameter of the screw, the diameter being the diameter of the screw-shank plus the height of the thread.

In cutting screws I am at all times enabled to quickly ascertain the trueness of the die by gaging the screw cut thereby and comparing the reading with the known reading of the standard screw.

It is to be observed that my invention contemplates the making of the anvil in one piece having a recessed or countersunk face, and therefore the claim for a countersunk bed co-operating with the micrometer-screw comprises such construction.

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

1. In a micrometer-gage, the anvil thereof formed with a countersunk face to receive the screw-thread, and the micrometer-screw formed with a projecting face to take in between the screw-threads, as and for the purpose herein described.

2. The combination, as hereinbefore set forth,

with the gage provided with an anvil having a detachable bed formed with a countersunk face to receive the screw-thread, of the micrometer-screw provided with a detachable end 5 piece having a conical face, substantially as described.

3. In a micrometer-gage, the notched or countersunk bed to receive the screw-thread and the taper end to take in between the diametrically-opposite threads of the screw, as 10 described.

4. The combination, with the frame 4, of the

micrometer-screw 5, provided with the conical or tapering end piece, 12, removably secured to the screw, and the adjustable anvil 6, provided with the removable bed 7, formed with the notch 8, substantially as described. 15

5. In a micrometer-gage, the bed 7, formed with the notch or recess 8, and the slot 9, as described.

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