No. 826,392.

PATENTED JULY 17, 1906.

A. F. WALLBILLICH.

GAGE.

APPLICATION FILED OCT. 7, 1905.

Fig. 1.

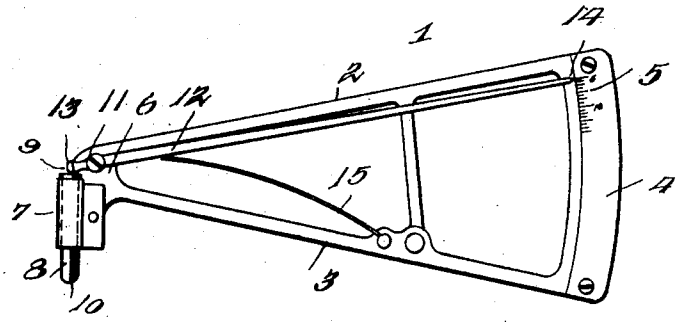


Fig. 2.

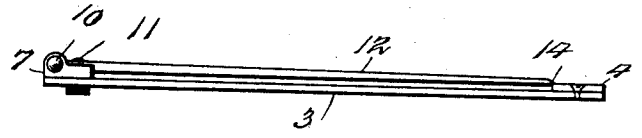
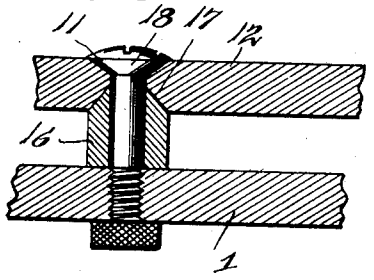


Fig. 3.



Witnesses

Frank B. Hoffman.

F. D. Emore

Inventor

Anthony F. Wallblich

By Victor J. Evans

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ANTHONY F. WALLBILLICH, OF PRINCE BAY, NEW YORK.

GAGE.

No. 826,392. Specification of Letters Patent. Patented July 17, 1906.

Application filed October 7, 1905. Serial No. 281,800.

To all whom it may concern:

Be it known that I, ANTHONY F. WALLBILLICH, a citizen of the United States, residing at Prince Bay, Staten Island, in the county of Richmond and State of New York, have invented new and useful Improvements in Gages, of which the following is a specification.

This invention relates to gages designed especially for testing various classes of work, and has for its objects to produce a comparatively simple inexpensive device of this character which may be readily installed for use, one wherein variations in the thickness of the work will be positively and accurately indicated, and one in which the gage member or needle will respond readily to the variations in the work.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of a gage embodying the invention. Fig. 2 is a top plan view of the same. Fig. 3 is an enlarged detail section taken on a line centrally of the needle-pivoting member.

Referring to the drawings, 1 designates a frame or bracket, preferably of substantially segmental form, as shown, and presenting upper and lower members or bars 2 and 3, arranged to diverge from their front to their rear ends and connected at the latter by means of an arcuate portion or web 4, provided on one of its side faces with a graduated scale or dial 5, said bars being joined at their front ends by a portion or web 6, to which is riveted or otherwise secured a normally vertical tubular bearing member or sleeve 7, in which is arranged for free sliding movement a work-engaging element or bolt 8, provided at its upper end with a head 9 and having its lower work-engaging end rounded, as at 10.

Pivoted to the frame 1 and on a horizontal bolt or axle 11 is a gage member or needle 12, provided at its forward end with a rounded contact portion 13, adapted to bear upon the head 9 and having its rear end sharpened at 14 to present a pointer for coöperation with the dial 5, there being fixed at one end to the frame member 3 a leaf-spring 15, adapted to bear at its other or web end beneath the needle 12 for maintaining the latter in normal position.

Arranged loosely on the pivoting member 11 is a bearing member or sleeve 16, having a conical end 17 seated in a correspondingly-shaped bearing-opening in the needle 12, there being formed on the head of the member 11 a conical bearing-face 18, which enters a similarly-formed bearing-opening in the adjacent face of the needle, the conical bearing-faces 17 and 18, which are oppositely disposed, being adapted for coöperation to form an antifriction-bearing for the needle, whereby the latter will move freely and respond readily to the movements of the member 8.

In practice the frame 1 is attached in any appropriate manner to the framework of a machine on which the device is to be used, with the member 8 in position for the work to pass beneath its rounded end 10, it being apparent that as the work passes beneath said member the latter will be moved upwardly and will, owing to contact of head 9 with the bearing portion 13 of the needle, move the latter against the action of spring 15 for causing the pointer 14 to travel over the dial 5 and indicate thereon the thickness of the work. It is to be particularly observed that under variations in thickness of the material passing beneath the member 8 the latter will be moved and that the needle 12 will respond readily to such movement for disclosing such variations on the scale 5, thus to properly and accurately gage the thickness of the work, it being apparent that reverse movement of the needle is effected automatically by the spring 15.

From the foregoing it is apparent that I produce a simple device admirably adapted for the attainment of the ends in view, it being understood that minor changes in the details herein set forth may be resorted to without departing from the spirit of the invention.

Having thus fully described my invention, what I claim as new is—

In a work-gage, a frame including a graduated portion, a pivoting member fixed in the frame and having a conical head, a bearing-sleeve arranged on the pivoting member and having a conical portion arranged opposite said head, a needle pivoted on said pivoting member and having oppositely-disposed conical recesses designed to receive said head

and conical portion, a spring for holding the needle in normal position, a sleeve connected with the frame, and a work-engaging member slidably arranged in the sleeve and adapted for contact with the forward end of the needle to move the same against the action of the spring over the graduated portion.

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

ANTHONY F. WALLBILLICH.

Witnesses:
WILLIAM J. EATON,
JESSE G. WINANT.