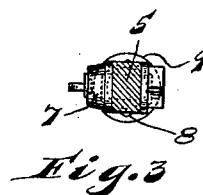
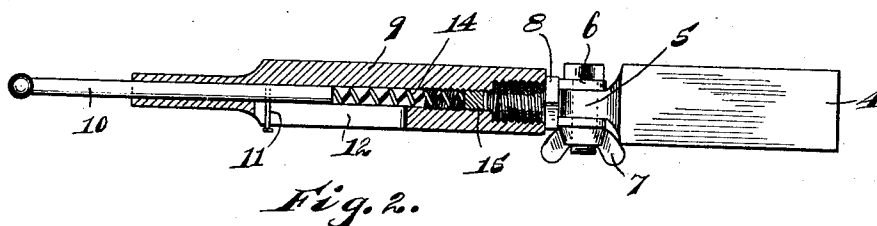


1,313,086.



INVENTOR.
Samuel E. Handley,
 BY *Joshua R. Hottel,*
 HIS ATTORNEY.

UNITED STATES PATENT OFFICE.

SAMUEL E. HANDLEY, OF CHICAGO, ILLINOIS.

MACHINIST'S TESTING DEVICE.

1,313,086.

Specification of Letters Patent.

Patented Aug. 12, 1919.

Application filed October 16, 1917. Serial No. 196,807.

To all whom it may concern:

Be it known that I, SAMUEL E. HANDLEY, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Machinists' Testing Devices, of which the following is a specification.

My invention relates to improvements in machinists' testing tools of the type designed for use especially in connection with lathe work, and has for its object the production of a testing device of this character which will be of durable and economical construction, and through the medium of which, the accuracy or evenness of lathe work may be readily and expeditiously tested.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a side elevation of a testing device embodying the invention, showing the same secured in a conventional lathe tool post,

Fig. 2, a central longitudinal section of the device, and

Fig. 3, a section taken on line 3—3 of Fig. 1.

The preferred form of construction as illustrated in the drawings comprises a base member 4 in the form of a rectangular block which is adapted for insertion in the tool post A of a conventional lathe, said base member being adapted for fastening to the tool post by means of the post screw B in the usual manner. The front end of the base member 4 is formed with a lug or reduced portion 5 to which is pivotally connected the rearward bifurcated end of a connecting element 6. The member 6 is locked in positions of pivotal adjustment, relative to the member 4, by means of a thumb nut 7. The member 6 is formed with a hexagonal portion 8 to adapt the same for engagement by a wrench to facilitate rotation of the same.

The forward threaded end of member 6 engages in the rearward threaded end of an elongated tubular socket member 9, in the front end of which is slidably mounted the rearward end of a work-engaging member 10.

Projecting laterally from the rearward end portion of member 10 is a pin or indicator 11 which passes loosely through an elongated longitudinally extending slot 12 formed in member 9. Provided upon the outer surface of member 9, for coöperation with the indicator 11, is a series of graduations 13, the arrangement of said graduations being preferably such that a zero graduation is arranged at the center with the graduations numbered or scaled in each direction from said zero mark, as clearly seen in Fig. 1. Said graduations may indicate fractions of an inch or any other measurement desired. Said member 10 is normally held at its outer terminal of movement by means of a helical compression spring 14 which is interposed between the rearward end of said member and a screw plug 15 threaded in the rearward end portion of member 9. The arrangement is such that the tension of the spring 14 may be readily and easily adjusted by simply adjusting the position of plug 15 in the member 9. Access may be gained to said plug for this purpose by simply disconnecting the member 9 from the member 6. The outer end of said plug is provided with a screw driver slot, as seen, in order to permit of the employment of a screw driver in adjusting the same.

In using the device, the member 4 is first fastened in the tool post of the lathe, as seen. The member 9 is then pivotally adjusted to effect engagement of the exposed end of member 10 with the work to be tested. The tool post is then adjusted toward or from the work in order to position the member 10 at such a place that the indicator 11 will register with the zero graduation on the member 9. Upon rotation of the work, it will be seen that any unevenness or irregularity therein will be indicated by the shifting of the indicator one way or the other from the zero graduation. The graduations at either side of the zero will indicate the amount of variation. When it is desired to test face plate work or a surface disposed at right angles to the axis of rotation of the work in the lathe, the base member 4 will be shifted in the tool post so that the pivotal axis will be vertical instead of horizontal. When this is done, the member 9 of the device may be swung around at right angles to the member 4 so that the exposed end of member 10 will be disposed perpendicular to the surface to be tested.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. A testing device of the class described comprising a base member adapted for fastening to an anchoring element; a socket member pivotally connected with said base member; means for locking said socket member in positions of pivotal adjustment relative to said base member; and a spring pressed work-engaging member slidably

mounted in said socket member, substantially as described.

2. A testing device of the class described, comprising a base member adapted for fastening to an anchoring element; a socket member; interlocking pivotally connected lugs on said parts permitting of pivotal adjustment of said socket member; means for locking said socket member in positions of pivotal adjustment relative to said base member; and a spring-pressed work engaging member slidably mounted in said socket member, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses:

SAMUEL E. HANDLEY.

Witnesses:

JOSHUA R. H. POTTS,
MILDRED E. ANDERSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."