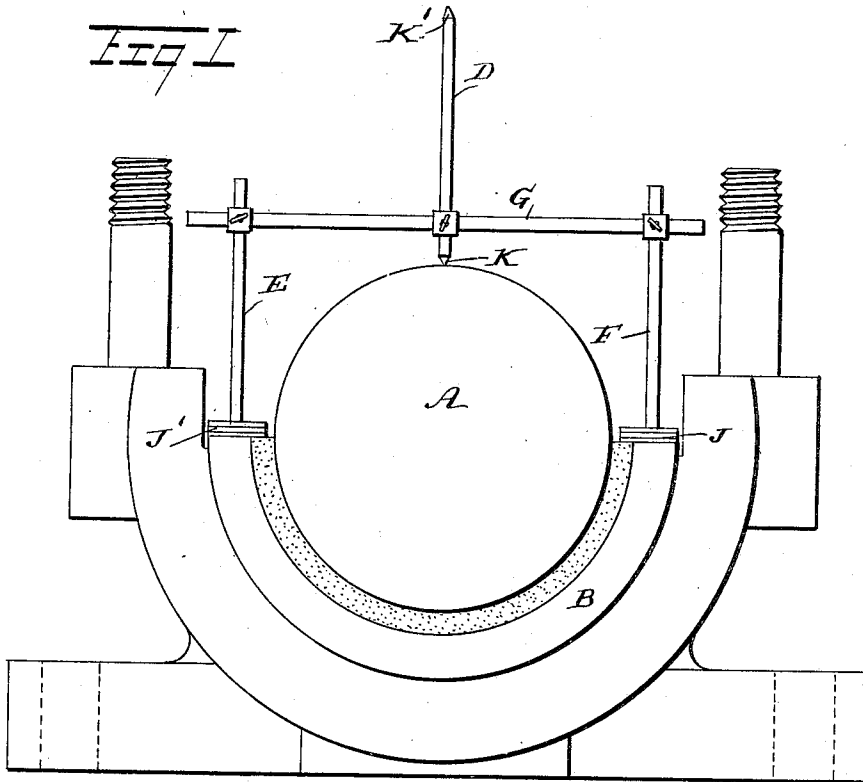
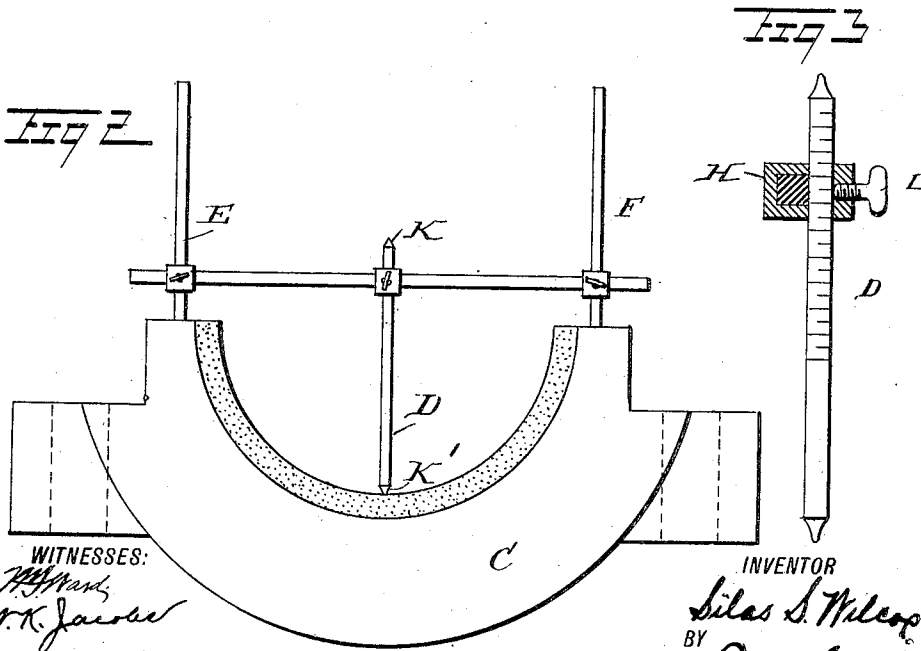


No. 889,999.

PATENTED JUNE 9, 1908.

S. S. WILCOX.
GAGE FOR ADJUSTING SHAFT BEARINGS.
APPLICATION FILED NOV. 4, 1907.



WITNESSES:
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SILAS S. WILCOX, OF SANITARIA SPRINGS, NEW YORK.

GAGE FOR ADJUSTING SHAFT-BEARINGS.

No. 889,999.

Specification of Letters Patent.

Patented June 9, 1908.

Application filed November 4, 1907. Serial No. 400,471.

To all whom it may concern:

Be it known that I, SILAS S. WILCOX, a citizen of the United States, residing at Sanitaria Springs, in the county of Broome and State of New York, have invented certain new and useful Improvements in Gages for Adjusting Shaft-Bearings, of which the following is a specification.

My invention relates to improvements in gages for adjusting shaft bearing, in which I use a combination of adjustable rods, working at right angles to each other.

The objects of my invention are, first, to provide an accurate and simple method for adjusting shaft bearings; and, second, to provide an adjustable device suited to measure various sizes of bearings and which will at the same time give accurate measurements for the purpose of adjusting properly the bearing to the shaft. I attain these objects by the mechanism illustrated in the accompanying drawing; in which

Figure 1 is an elevation of an ordinary journal box with the cap removed, showing the application of my invention. Fig. 2, is a similar view of the journal box cap. Fig. 3, is an enlarged view in vertical section of a part of my invention.

Similar letters refer to similar parts throughout the several views.

A represents a shaft resting in an ordinary journal B with the journal box cap C removed.

My device consists among other things of the three vertical rods D, E, and F; and the longitudinal rod G, as shown in Fig. 1. The horizontal rod G is held in connection with the vertical rods D, E, and F by means of the metal sockets H which socket has two openings for the purpose of each holding a separate rod—one opening horizontal and the other vertical and through which sockets pass respectively the rods D, E, F and G; said metal socket has in it a thumb screw I for the purpose of gripping the rods and holding them firmly at any given point; and by this means and support the rods can be adjusted from one position to another, at the same time always keeping the rods D, E and F at right angles with the rod G; the perpendicular rods D, E and F may have upon them a series or graduated marks, as indicated in Fig. 3.

In operation I first remove from the journal box B the cap C covering the shaft A; I then so slide the rods E and F along the hori-

zontal rod G until they can rest upon the packing surface on each side of the shaft,—J and J', as shown in Fig. 1; I then, having located and adjusted the said vertical rods, so adjust the third rod or center vertical rod D that it stands at or in a vertical position over the center line of the shaft A, as shown in Fig. 1; then I raise or lower said vertical rod D until it comes in contact with the surface of the shaft A, with its point K. I then, by means of the nut screw I fasten the rod D firmly in its position in conjunction with the horizontal rod G; having all the rods thus firmly connected and in position I apply the united rods to the inverted journal cap C as shown in Fig. 2—the two upright or vertical rods E and F, now inverted, their inverted ends now rest on the shoulders of the box cap C as shown in Fig. 2, while the end K of the vertical rod D projects downward into the lowest point of the interior of the journal cap, now inverted; and the space between the end K' of the inverted rod and the inner surface of the journal cap will exactly measure the thickness of packing to be applied at the union of the bearings, in order to have them properly adjusted to the shaft; the rods D, E and F are of equal length; having ascertained the exact space at the journal union to be thus adjusted I apply such additional packing at J and J' as will properly adjust the bearing.

Having thus described my invention, what I claim as new and for which I desire Letters Patent, is as follows:

1. In a gage for adjusting shaft bearings—the combination of a horizontal rod two vertical adjustable rods in adjustment with said horizontal rod—the means of adjustment being metal sockets with horizontal and vertical openings, so that the vertical rods may pass by the horizontal rod; said sockets having thumb screws for the purpose of tightening against the rods so adjustably positioned, and holding them at any fixed point as they pass one another; a third vertical rod adjustable vertically or horizontally along the horizontal rod and means for holding said third vertical rod in an adjusted position over the shaft, so that its lower point end will rest upon the outer surface of the shaft.

2. In a gage for adjusting shaft bearings, the horizontal rod three vertical rods of equal length having adjustable connection with said horizontal rod, and so connected as to be firmly secured at any given point along

the horizontal rod, said horizontal rod capable of being raised or lowered to any given point along the perpendicular rods, and means to there fasten it in firm connection
5 with the perpendicular rods so as to be at right angles with said rods; said horizontal rod mounting upon it adjustably, the middle vertical rod of equal length with the other vertical rods, which vertical rod is capable
10 of being raised or lowered, or moved laterally to any given position and capable of there being firmly secured and held in position to the surface of the shaft resting in the bearings and of the center line of said shaft resting
15 in its bearings, and capable of being so positioned that the lower end of said vertical rod will rest upon the surface of the shaft mentioned.

3. In a gage for adjusting shaft bearings a
20 horizontal rod, two rods of equal length having on their surface graduation scale marks, each of said rods having adjustable connection with said horizontal rod, at right angles thereto, and while thus held vertically,
25 capable of being moved to any given point along the horizontal rod, said horizontal rod

being movable up or down said vertical rods while in connection with them, and there firmly secured in said adjusted position at right angles with said vertical rods and a
30 third vertical rod, said horizontal rod having adjustable connection with said third vertical rod connected in a similar manner as the two rods first mentioned; said rods all being
35 so positioned and held in connection with each other that the third vertical rod can be raised or lowered over the center line of the shaft resting in the bearings and there rest
upon the surface of the shaft; said rods all so
40 united when being inverted and placed over the box cap inverted, the two vertical rods will rest upon the shoulders of the box cap, and the third or central vertical rod will extend down into the inverted box cap, and indicate the amount of adjustment necessary
45 between the bearings and said shaft.

In testimony whereof I have affixed my signature, in presence of two witnesses.

SILAS S. WILCOX.

Witnesses:

W. T. WARD,
WILLIAM K. JACOBS.