

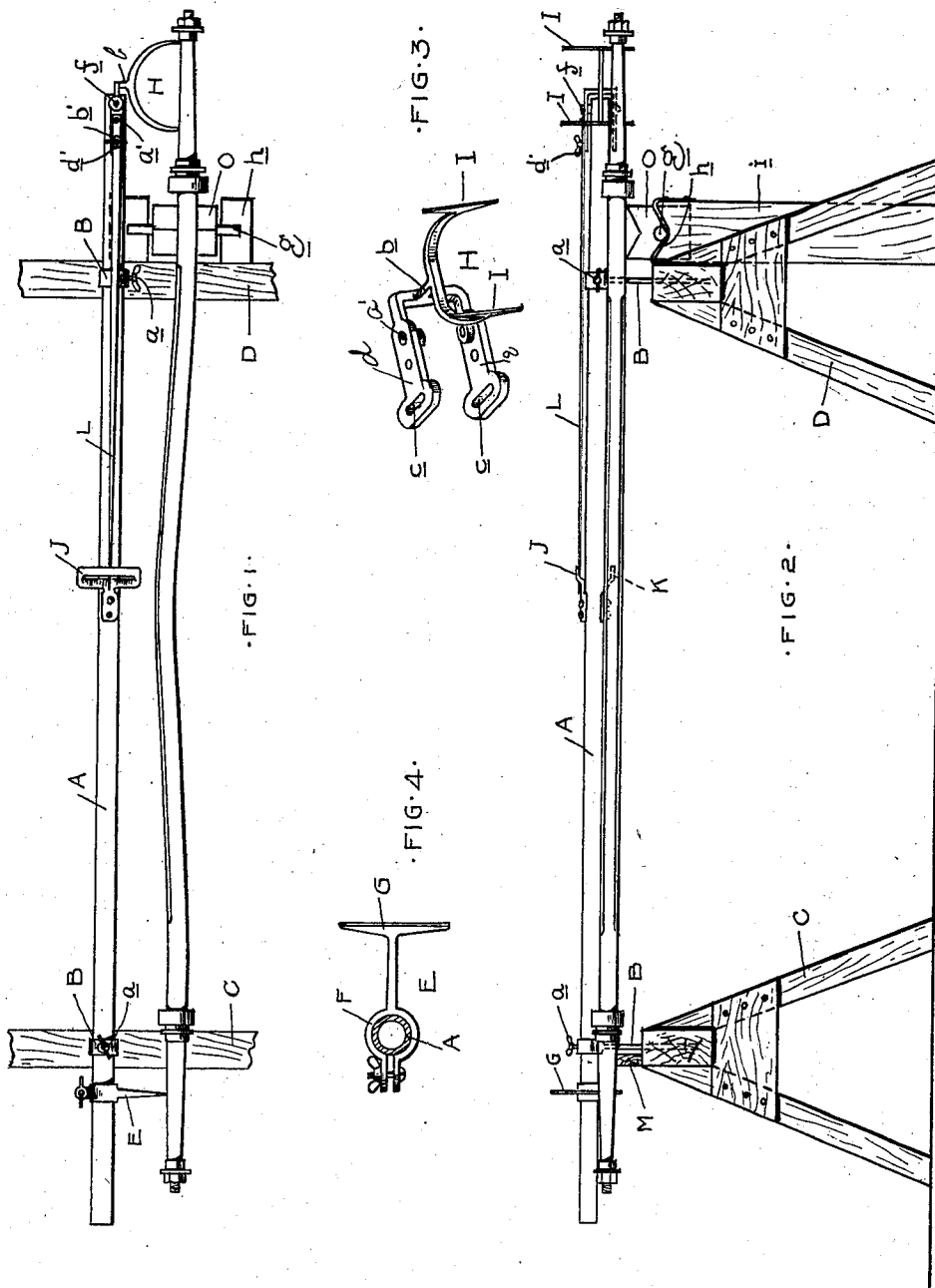
No. 747,824.

PATENTED DEC. 22, 1903.

W. E. WILT.
AXLE GAGE.

APPLICATION FILED JULY 20, 1903.

NO MODEL.



WITNESSES
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AXLE-GAGE.

SPECIFICATION forming part of Letters Patent No. 747,824, dated December 22, 1903.

Application filed July 20, 1903. Serial No. 166,339. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. WILT, a citizen of the United States, residing at Pontiac, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Axle-Gages, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to axle-gages especially designed for use in determining the bend or set to be given to vehicle-axes; and it consists in the novel and simple construction of the gage and the peculiar arrangement and combination of its parts, as will be more fully hereinafter set forth.

In the drawings, Figure 1 is a plan view of the gage. Fig. 2 is a view in side elevation thereof. Fig. 3 is a perspective view of the arched bracket forming a part of the gage, and Fig. 4 is a detached view in elevation of the contact-piece.

In construction the gage comprises a main section or bar, preferably tubular in form, (designated by the reference-letter A.) This, as shown, is supported in tubular standards B, which are mounted upon a suitable support, in this instance saw-horses C and D. The standards described are driven within the supports, and the bar is held in place within the tubular bearings by means of thumb-screws *a*.

Upon one end of the main bar described is the contact-piece E, consisting of a clamp F and a contact-section proper, G. This piece is adjustably arranged upon the bar end and is held in different positions of adjustment by the clamp, as shown. The section G of the contact-piece projects outwardly from the bar and forms a bearing against which one end of the axle contacts, as will be hereinafter set forth. Upon the opposite end of the bar is pivoted an arched bracket H, the furcations thereof carrying at their extremities vertical pieces I, which bear against the axle-spindle in the same manner as the contact-piece E. The bracket is provided with a shank *b*, to which is connected a yoke *c*, the parallel members *d* and *e* of which engage upon opposite sides of the bar end and are pivoted thereto by a suitable bolt *f*.

J represents a graduated plate extending transversely of and rigidly attached to the main bar at approximately its center. K represents a similar plate similarly arranged upon the opposite side of the bar and in alignment with the plate or scale J.

L is a pointer adapted to be connected to either of the parallel members *d* or *e* of the arched bracket and to swing over one of the transverse scales described. The connections for the pointer consist, preferably, of a detachable pivot *a'*, a bolt *b'*, extending through the member, and a slotted plate *c'* upon said member, and a winged or thumb nut *d'* for the bolt. As thus constructed the pointer may be readily detached from one member and transferred to the other for the purpose hereinafter set forth, and by means of the bolt and winged nut the pointer may be shifted to compensate for axes of different taper.

A plate M is arranged upon the support C and forms a bearing upon which one of the axle-spindles may be placed during the operation of setting.

O represents an arched anvil-block mounted for rocking movement in proximity to the arched bracket and forms a support for the other end of the axle. The block, as shown, is provided with trunnions *g*, which are mounted in bearings *h* upon uprights *i*, secured to the support in any suitable manner.

To determine the set of the axle, the latter is arranged by the operator on the plate M and the rocking anvil, with the spindles in contact with the contact-piece E and the arched bracket. Both members or furcations of the arched bracket will bear against the spindle, and if the axle is in proper form or has the desired set the pointer will extend over the center of the scale, which may be designated by any proper mark, as "0." Should the pointer project upon either side of this mark, showing the set was not correct, the operator without removing the axle by striking the latter over the arch on the anvil-block may make the necessary change in the taper of the bar to produce the desired set.

It will be obvious from the construction of the gage that the operator is not compelled to support the latter during the operation of setting and that if any changes are necessary

to be made in the form of the axle to obtain the desired set they are effected without removing the axle from its supports. Attention is also directed to the fact that the gage is so constructed that it may be used by either a right or left handed person. In the drawings the gage is in readiness for operation by a right-handed person. It may be readily changed by removing the main section or bar from the uprights and turning it end for end with the bottom side of the bar up. This will necessitate merely the changing of the pointer from one side of the bar to the other, where it may be connected to the complementary member of the yoke-piece and will swing over the complementary graduated plate or scale.

What I claim as my invention is—

1. In an axle-gage, the combination with a support, of a main section or bar rigidly mounted thereon, a contact-piece adjustably arranged upon one end of said section, an arched bracket member pivoted to the opposite end, a transverse scale upon the main bar intermediate its ends, a pointer connected to the bracket and extending in operative relation to the scale, an adjusting means for the pointer including a transversely-arranged guideway on the bracket, and means on the pointer engaging the guideway.

2. In an axle-gage, the combination with a support, of a main bar rigidly mounted thereon and carrying at its opposite ends a contact-piece and an arched bracket respectively, and an arched anvil-block mounted for rocking movement in proximity to the bar and forming a support for the axle.

3. In an axle-gage, the combination with a support, of a main bar rigidly mounted thereon carrying at its opposite ends a contact-piece and an arched bracket respectively, an axle-support adjacent to the bar-support, and an arched anvil-block journaled in bearings in said auxiliary support in proximity to the bracket, for rocking movement.

4. In an axle-gage, the combination with a support, of a main bar rigidly mounted thereon, a contact-piece upon one end of said bar, an arched bracket pivoted to the opposite end and carrying parallel members extending upon opposite sides of the bar, graduated plates upon and extending transversely of the bar at a point near its center, and a pointer adapted to be detachably and adjustably connected to either of the parallel members for the purpose described.

5. In an axle-gage, the combination with a support, of a bar mounted thereupon, a contact-piece at one end of said bar, an arched bracket pivoted to the opposite end, an extension on said bracket extending in line with said bar, and having a transversely-arranged slot at its free end, a graduated plate upon the bar and a pointer having means whereby it may be detachably and adjustably secured to the slotted portion of the bracket extension.

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

WILLIAM E. WILT.

Witnesses:

JOSEPH E. SAWYER,
J. A. FREDENBURGH.