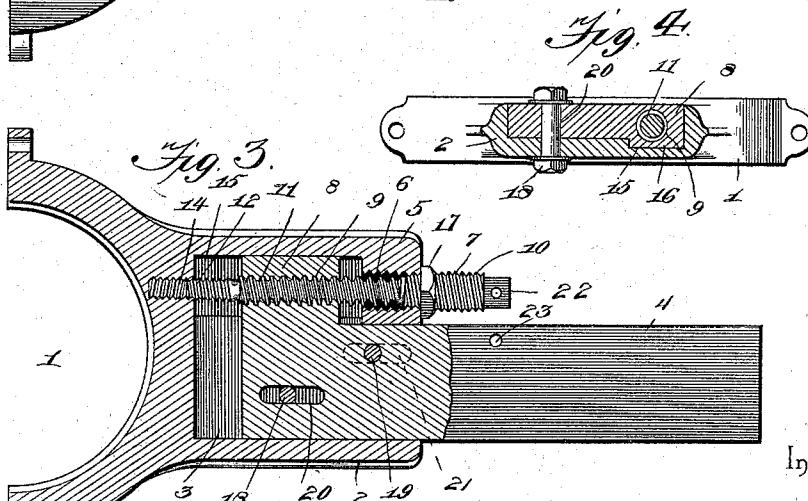
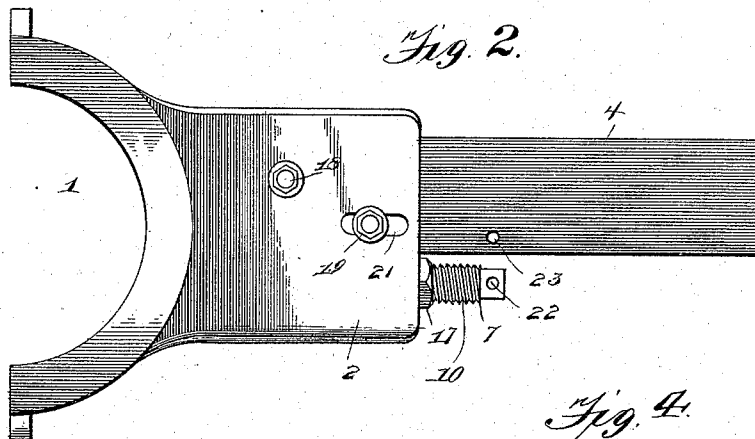
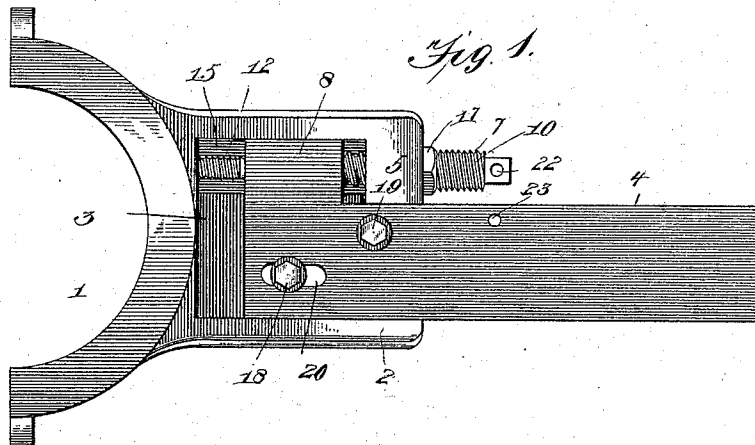


(No Model.)

W. N. REAZOR.
ECCENTRIC.

No. 552,547.

Patented Jan. 7, 1896.



Witnesses

John C. Shaw
J. F. Riley

By *his* Attorneys,

William N. Reazor,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

WILLIAM N. REAZOR, OF FREELAND, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO CHARLES SCHERTZINGER, OF SAME PLACE.

ECCENTRIC.

SPECIFICATION forming part of Letters Patent No. 552,547, dated January 7, 1896.

Application filed October 30, 1895. Serial No. 567,450. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. REAZOR, a citizen of the United States, residing at Freeland, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Eccentric, of which the following is a specification.

The invention relates to improvements in eccentrics.

10 The object of the present invention is to improve the construction of the connection between the eccentric-rod and the eccentric strap or yoke, and to provide simple, inexpensive and efficient means for enabling the
15 eccentric-rod to be accurately and rapidly adjusted without necessitating its removal from a locomotive or engine.

20 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

25 In the drawings, Figure 1 is a plan view of a portion of an eccentric-rod and an eccentric strap or yoke constructed in accordance with this invention. Fig. 2 is a reverse plan view. Fig. 3 is a longitudinal sectional view. Fig. 4 is a transverse sectional view.

30 Like numerals of reference indicate corresponding parts in all the figures of the drawings.

35 1 designates an eccentric strap or yoke, having an arm or extension 2, and provided therein with a rectangular recess 3, receiving the adjacent end of an eccentric-rod 4, which is capable of adjustment longitudinally of the recess 3 to lengthen or shorten it as desired. The eccentric yoke or strap is provided at one
40 side of the recess 3, at the outer end of the arm or extension 2, with a lug 5, having a threaded opening 6, receiving a longitudinally-disposed adjusting-screw 7, which, intermediate of its ends, engages a lug 8 of the eccentric-rod 4. The lug 8 is provided with
45 a threaded opening 9 arranged in alignment with that of the lug 5, and these lugs 5 and 8 may be formed integral with the strap and the eccentric-rod, or may be constructed separate and suitably secured to those parts, as
50 desired.

The adjusting-screw 7 has a squared or

polygonal outer end to adapt it to receive a wrench, and is provided adjacent to its outer end with threads 10, and it has a reduced intermediate threaded portion 11, which engages
55 the threaded opening of the lug 8, and the inner end 12 of the screw has a further reduction, and is threaded and engages a threaded socket or opening 14 of the strap at the inner end of the recess 3. The threaded end portions 10 and 12 have the same number of
60 threads to the inch, so that the adjusting-screw is capable of longitudinal movement in the threaded openings of the strap or yoke, and the threads of the intermediate or central
65 portion of the screw are different from the end portions, and as the adjusting-screw is rotated the eccentric-rod is drawn inward or outward, according to the direction in which
70 the screw is turned. These threads may be of any desired pitch and number to the inch, and it will be apparent that they enable a very fine and accurate adjustment of the eccentric-rod to be obtained, and the screw obviates the necessity of entirely removing the
75 eccentric-rod from a locomotive or engine and conveying the same to the shop and increasing or diminishing the length by the application of heat and the like.

80 At the bottom of the recess 3, adjacent to the longitudinal screw, is provided a channel 15, and the lower or inner face of the lug 8 is rabbeted or recessed at 16 to enable it to fit in the channel and to conform to the configuration of the recess. When the lug 5 is
85 constructed separate from the arm of the strap, its lower or inner face will be correspondingly rabbeted or recessed.

90 A jam-nut 17 is arranged on the threaded outer portion of the adjusting-screw and is adapted to be screwed up tight against the lug 5 after the adjusting-screw has been set, and bolts 18 and 19 pass through the connecting-rod and the arm of the strap or yoke and are tightened after the parts are properly
95 adjusted. In order to accommodate the screws or bolts 18 and 19 to the adjustment of the eccentric-rod, the latter is provided adjacent to the bolt 18 with a longitudinal slot 20, and the strap is provided adjacent to the other
100 bolt 19 with a corresponding slot 21.

The outer end of the adjusting-screw is pro-

vided with a perforation 22, and the eccentric-rod is provided with a perforation 23, arranged adjacent to the perforation 22, and these perforations are adapted to receive the wire of a master mechanic's seal after the parts have been properly adjusted, to serve as a guard to prevent an engineer or other person from changing the position of the adjusting-screw.

10 It will be seen that the eccentric-rod may be readily adjusted longitudinally to control the action of the valves of an engine and to position the same properly, and that the connection obviates the necessity of removing the eccentric-rod from an engine to lengthen or shorten it. It will also be apparent that the connection is strong and durable, and that the parts are rigidly held in their adjustment.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any advantages of the invention.

What I claim is—

1. In a device of the class described, the combination of an eccentric strap or yoke provided with an arm or extension, an eccentric rod arranged to slide thereon to lengthen or shorten it, and a longitudinal adjusting screw mounted on the arm or extension of the yoke or strap, and connected with the eccentric rod and adapted to slide the same on the arm or extension and to secure the rod in its adjustment, substantially as described.

2. In a device of the class described, the combination of a strap or yoke provided with an extension and having threaded openings at the inner and outer ends of the extension, a longitudinal adjusting screw arranged in the said threaded openings, and an eccentric rod arranged on the extension of the strap or yoke and having a threaded opening receiv-

ing the adjusting screw between the ends of the same, said eccentric rod being capable of sliding on the extension when the screw is rotated, substantially as described.

3. In a device of the class described, the combination of a strap or yoke having an extension and provided therein with a recess and having a threaded opening or socket at the inner end thereof, a lug arranged at the outer end of the recess and having a threaded recess, and an eccentric rod arranged in said recess and adapted to slide on the extension and provided with a lug having a threaded perforation receiving the central portion of a screw, substantially as described.

4. In a device of the class described, the combination of a strap or yoke having an extension and provided therein with a recess and having a threaded opening or socket at the inner end thereof, a lug arranged at the outer end of the extension, an adjusting screw having an outer threaded portion 10 to screw into the said lug and provided with a central reduced threaded portion 11, and having a second reduction at its inner end and threaded thereat and screwing into the opening or socket, an eccentric rod arranged in the recess of the extension, and provided with a lug having a threaded perforation or opening receiving the central threaded portion of the screw, a jam nut arranged on the outer threaded portion of the screw, and bolts passing through the eccentric rod and the extension, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM N. REAZOR.

Witnesses:

AMANDUS OSWALD,
JAMES G. BOHLIN.