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C. E. A. GOLNER

2,674,047

ADJUSTABLE PLUG GAUGE

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Fig. 1

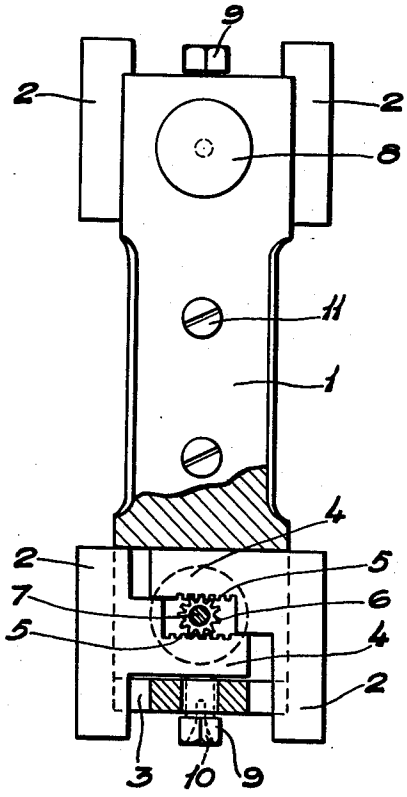
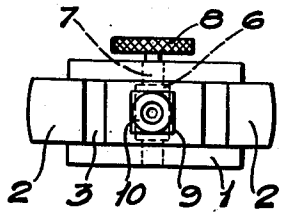


Fig. 2



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ADJUSTABLE PLUG GAUGE

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1 Claim. (Cl. 33—178)

1

This invention relates to plug gauges of the type provided with jaws, which are adjustable in grooves at both ends of the gauge for being set to the maximum and minimum values of the tolerance zone. The gauge according to the invention is substantially characterized by a spur gear, which is provided in the respective groove and fixed on a rotatable shaft or made integral with the same, and which engages straight rack teeth on the jaw portions extending into the grooves. The jaws should be lockable in the adjusted position by means of a screw placed centrally or approximately so at each end of the gauge. Further essential features of the invention will appear from the following description.

An embodiment of the invention is illustrated by way of example in the accompanying drawing, in which

Fig. 1 is a side view of the gauge, partly in section, and

Fig. 2 is an end view.

In the drawing, the numeral 1 designates the gauge body with its four jaws 2, the latter being arranged in pairs and guided in grooves 3 provided in the respective end portions of the body. Each jaw 2 is substantially L- or T-shaped and the jaw shanks 4 extending into the grooves 3 are equipped with teeth 5 at the sides facing each other. Said teeth are in mesh with a gear 6 made integral with a rotatable shaft 7 or secured to the same, the latter having a knurled head 8 or the like at one end to facilitate the turning of the shaft 7 and thus also the gear 6.

Safe locking of the jaws 2 in the position to which they have been adjusted is secured by the provision of screws 9 at the ends of the gauge body 1. Said screws have centering bores 10 arranged centrally of the jaws 2, and this makes it easier to place the gauge for instance in a grinding machine for a possible re-grinding of the jaws.

The special construction of the jaws 2 with the inwardly directed and overlapping shanks 4 secures a very good and reliable guidance of the jaws in the gauge and thus gives the latter a very great amount of exactness.

2

The gauge body is preferably made in two parts united by screws, bolts or the like 11. However, the body may also be made indivisible, but in such case special arrangements must be made, for instance for the insertion of the gear 6.

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

A plug gauge with elongate body and two cooperating jaws provided at an end portion of said body, said jaws being adjustable transversely to said gauge body by means of a gear engaging with spaced, parallelly disposed rack-shaped inner edge portions of the jaws, characterized in that the jaws consist of a substantially L-shaped body and a substantially T-shaped body, said jaw bodies, which are interconnected via said gear and are slidable in a side recess in said body end portion, having side portions provided with edges of the same length and paralleling each other in the longitudinal direction of said gauge body, the transverse portion of said L-shaped jaw body contacting the inner edge of said recess and the stem of said T-shaped jaw body contacting the opposite edge of said recess, the side portions of said two jaws thus forming an outer free U-shaped part ending approximately at said gauge body end, there being a bolt threaded through said end in the longitudinal direction of said gauge body for the purpose of locking the jaws in any position to which they have been adjusted.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,187,658	Sauerhering	June 20, 1916
1,440,441	Blood	Jan. 2, 1923
1,859,063	Aldeborgh	May 17, 1932
2,035,082	Markwick	Mar. 24, 1936
2,093,639	Markwick	Sept. 21, 1937
2,199,052	Lee	Apr. 30, 1940

FOREIGN PATENTS

Number	Country	Date
35 224	Norway	Aug. 20, 1923