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P. RIEGGER

TAXIMETERS OF THE TYPE USED IN PUBLIC CONVEYANCES

Filed Dec. 14, 1940

Serial No. 370,154

3 Sheets-Sheet 1

Fig.1

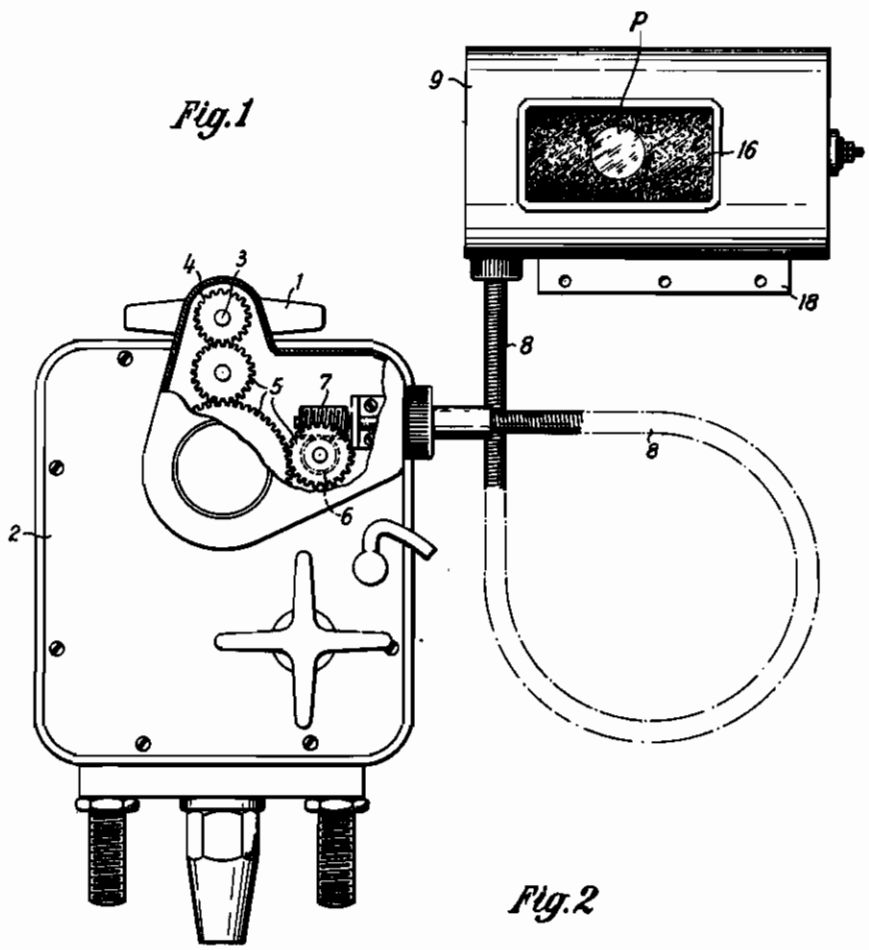

Fig.2

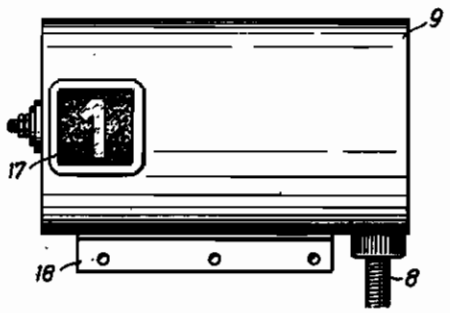

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Fig. 3

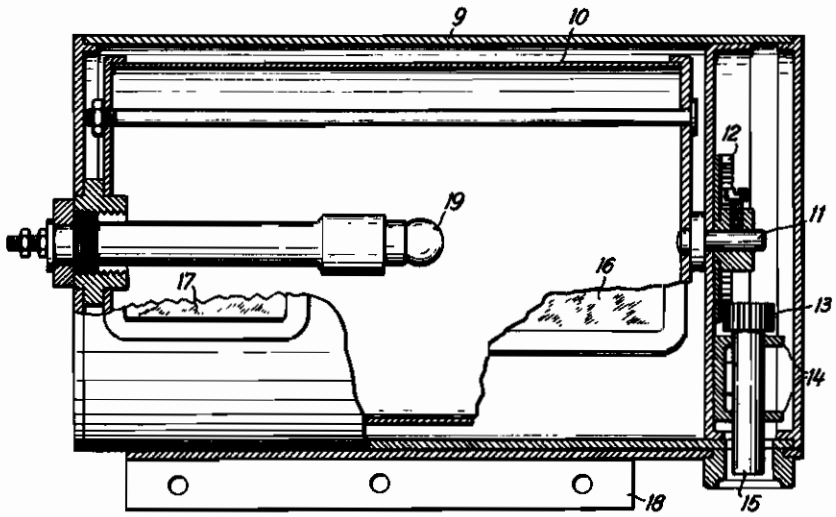


Fig. 4

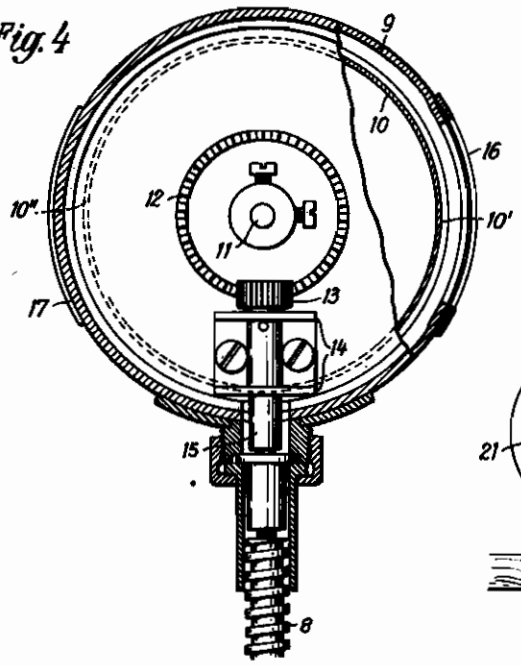
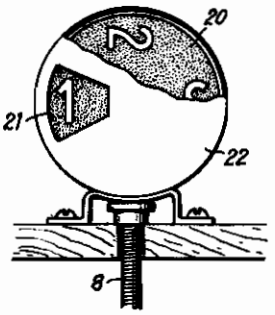


Fig. 5



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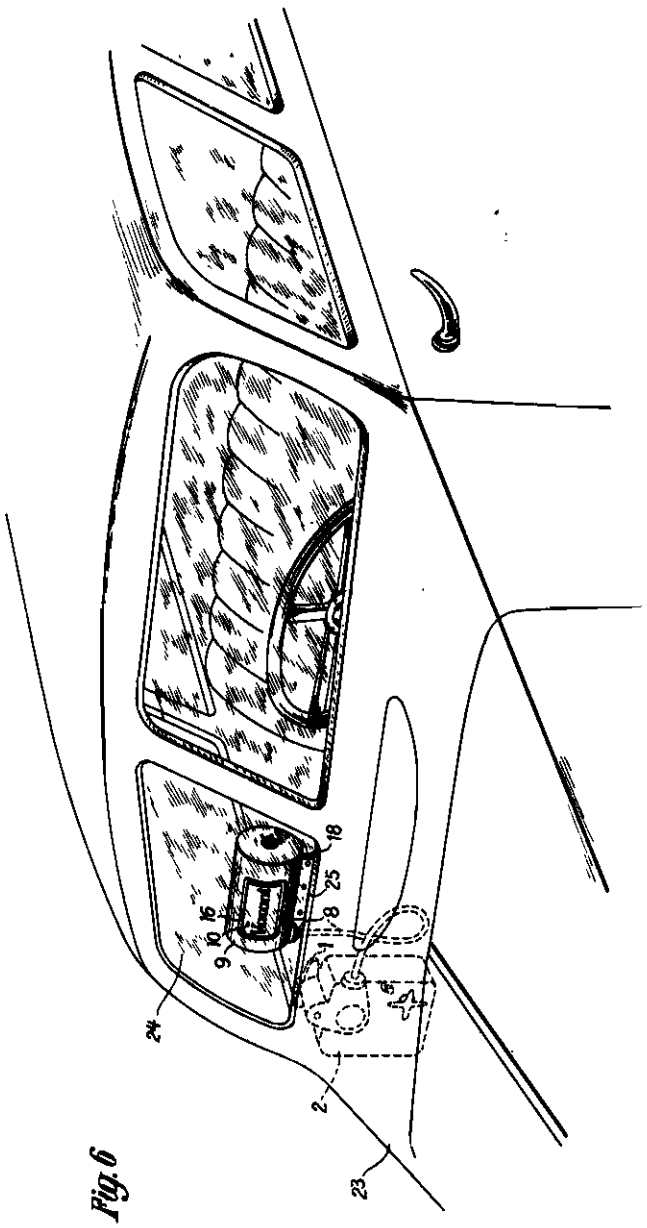

Fig. 6

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ALIEN PROPERTY CUSTODIAN

TAXIMETERS OF THE TYPE USED IN PUBLIC CONVEYANCES

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Application filed December 14, 1940

This invention relates to improvements in taximeters of the type used in public conveyances, such as taxicabs, for the purpose of registering the fare and indicating whether the conveyance is "hired" or "vacant".

It already has been suggested to provide means in taximeters of the type referred to for mounting the portion of the device indicating whether the taxicab is "hired" or "vacant", at a conspicuous point of the craft separately from the fare registering device, and to provide electrical connecting means between the separate indicator and the fare registering device, for simultaneously operating the indicator and the fare registering device to adjust either of two positions, i. e. "hired" or "vacant".

It is an important object of the invention to provide connecting means, which permit adjustment of the indicator to more than two positions, for indicating the tariff registered by the taximeter, so as to readily enable the police or the inspectors of the operating company as well as the passenger to ascertain whether the prescribed tariff has been switched in.

With these and further objects in view, as may become apparent from the within disclosures, the invention consists not only in the structures herein pointed out and illustrated by the drawings, but includes further structures coming within the scope of what hereinafter may be claimed.

The character of the invention, however, may be best understood by reference to certain of its structural forms, as illustrated by the accompanying drawings in which:

Fig. 1 is a rear elevation of the fare registering device and the indicator, as viewed from a point outside the car.

Fig. 2 is an elevation showing the side of the indicator facing the driver or the passenger in the car, respectively.

Fig. 3 is an elevation, partly in an axial section, of the indicator, on a larger scale.

Fig. 4 is a cross sectional view of the same indicator, on a similar scale as Fig. 3.

Fig. 5 is a side view, showing a modification.

Fig. 6 is a perspective view showing one mode of mounting the device in the taxicab.

Similar characters of reference denote similar parts in the different views.

As here shown, I provide a mechanical transmission gear, preferably including a flexible shaft, between the switching lever of the fare registering device and the indicator, for controlling the indicator in accordance with the various "vacant" and "hired" positions of the switching lever corresponding to the tariff applying at that time. These mechanical transmitting means permit the adjustment of the indicator, for instance, to tariff "1", tariff "2" or tariff "3", by simple, robust and reliable means. Moreover, where the indications of the indicator have to be changed in accordance with alterations of the tariff regulations, this may be effected by merely interchanging the indicating member, for instance, a drum member bearing the various indications and mounted to turn in a housing, while it is not required to exchange the gear system itself. For example, if the switching lever of the fare registering device has four positions, the circumference of the indicator drum will be divided into four equal parts.

Referring now to the drawings in greater detail, the fare registering device **2** is provided with a switching lever **1**, which serves to switch off the driving gear of the device ("vacant" position) or to switch in any one of a number of tariffs. By turning the lever **2**, a pinion **4** on the lever shaft **3** is rotated, transmitting its rotation, through intermediate gears **5**, to a worm wheel **6** meshing with a worm **7**. The worm **7** in turn is operatively connected with a flexible shaft **8** arranged between the fare registering device **2** and the indicator **9**, whereby the switching motion is transmitted from the switching lever **1** through the gears and flexible shaft to a gear system within the indicator casing **9**.

As will be noted from Figs. 3 and 4, a drum or cylinder **10** is turnably mounted in the cylindrical indicator casing **9**, on a shaft **11**, a face wheel **12** of which meshes with a pinion **13**. The shaft **15** of the pinion is supported in a bearing **14** and operatively connected to the flexible shaft **8**. Thus, the switching motions of the handle **1** are mechanically and positively transmitted to the drum **10** which may be moved into different positions in its casing **9** under control of the lever **1**.

The casing **9** is formed with diametrically opposed apertures **16** and **17** which may be closed by transparent glass plates or the like. The casing may be secured by means of its holder bar **18** in the interior of the car **23**, Fig. 6, at the lower frame portion **25** of the wind guard **24**, the larger window **16** of the indicator **9** thus being visible from the outside, while the smaller window **17** faces the inside of the car.

The various characters ("vacant", tariff "1", tariff "2", tariff "3") are provided on the drum **10** in duplicate, on diametrically opposed points **10'** and **10''** thereof, as best seen on Fig. 4, for simultaneous display through the opposite windows

16 and 17. Therefore, if the drum by suitable adjustment of the switch lever 1 is adjusted, e. g., to "tariff 1", the character "tariff 1" or simply "1" will appear at the forward window 16 as well as at the rearwardly and inwardly directed window 17. For the sake of clarity, the tariff positions may be indicated in the large window 16 by points *p* rather than by figures.

It is desirable to make the hollow cylinder 10 bearing the characters to be displayed from a transparent material so that the characters to be indicated may be illuminated by an electric bulb 18 centrally disposed within the drum 10.

By way of alternative, the drum 10 may be replaced by a rotary disc 20, Fig. 5, disposed in a casing 22 behind opposite windows 21 thereof, and bearing the characters "1", "2", "3" etc. on its opposite faces. The gear system between the flexible shaft 8 and the disc 20 in this case may be arranged in the same manner as indicated in Figs. 3 and 4, except that the longitudinal drum 10 is to be substituted by the flat disc 20, the axis of rotation of which will be directed parallel to the longitudinal axis of the car contrary to the axis of rotation of the drum 10, being disposed transversely in the car according to the arrangement shown in Fig. 6.

The method and apparatus of the present invention have been described in detail with reference to specific embodiments. It is to be understood, however, that the invention is not limited by such specific reference but is broader in scope and capable of other embodiments than those specifically described and illustrated in the drawing.

PAUL RIEGGER.