Aug. 12, 1941. G. M. FERGUSON 2,252,253

PARKING METER

Filed Feb. 27, 1940 2 Sheets-Sheet 1

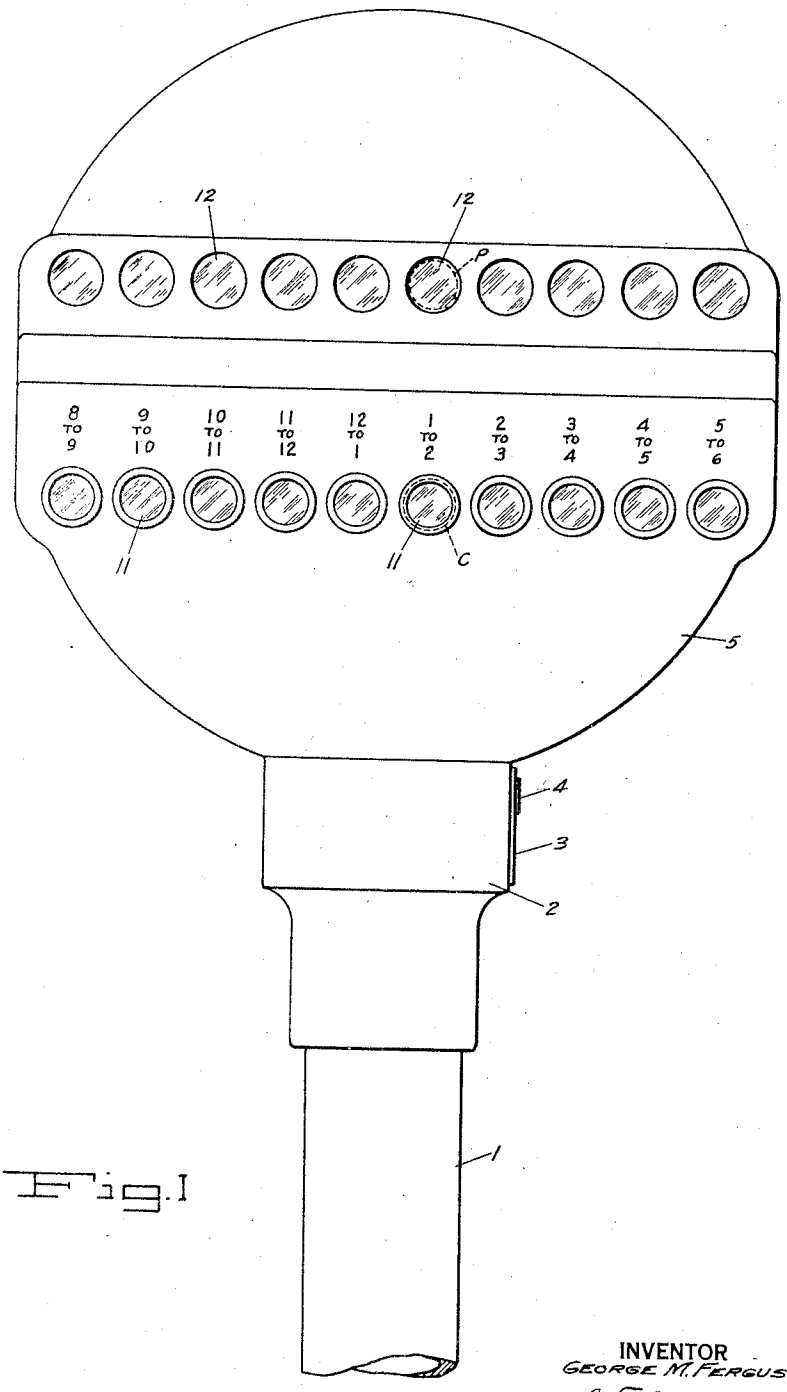


Fig. 1

INVENTOR
GEORGE M. FERGUSON
BY G. F. McDougall
ATTORNEY

Aug. 12, 1941. G. M. FERGUSON 2,252,253

PARKING METER

Filed Feb. 27, 1940 2 Sheets-Sheet 2

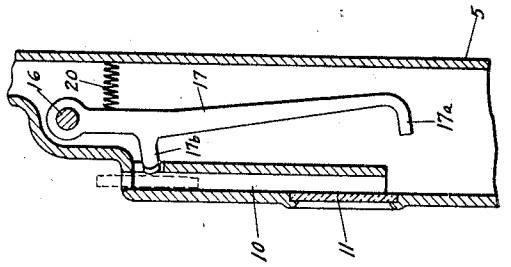


FIG. IV

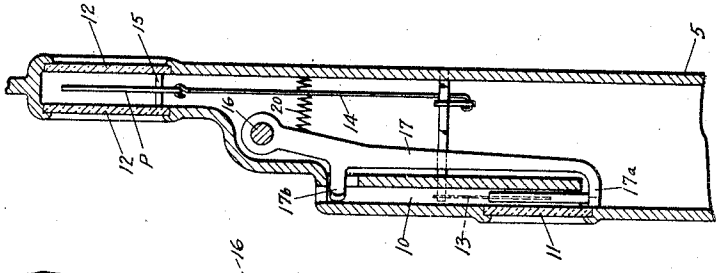


FIG. III

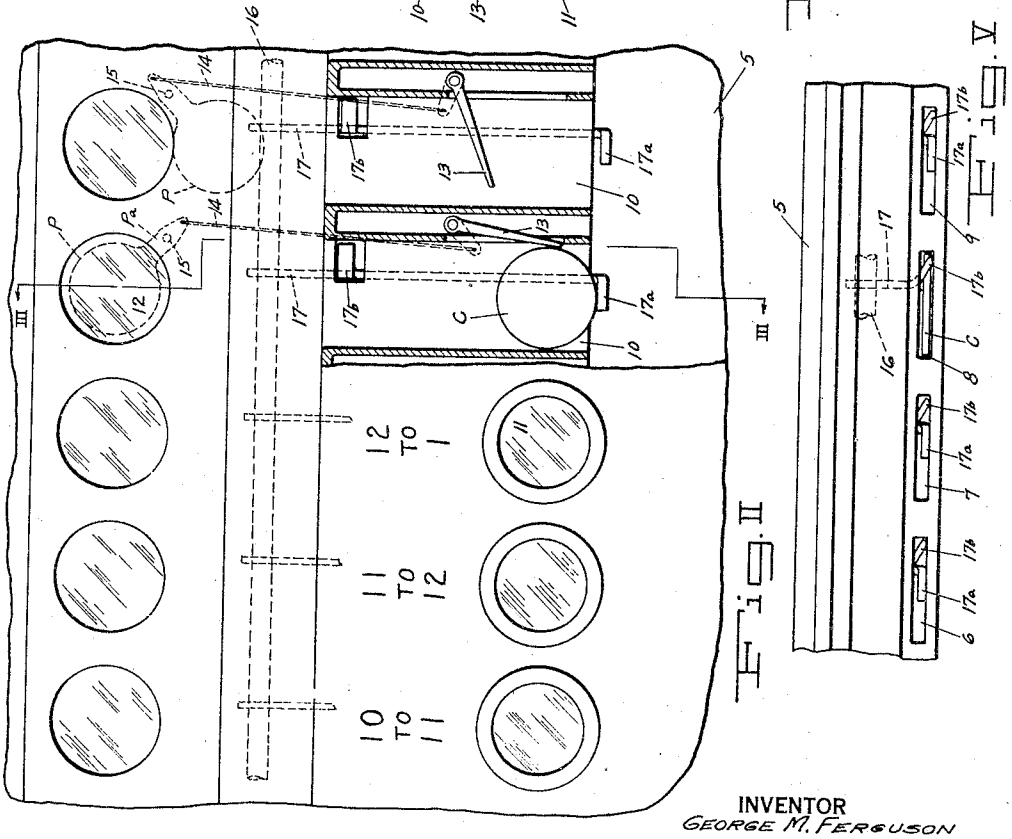


FIG. II

FIG. I

INVENTOR
GEORGE M. FERGUSON
BY G. Fleet Dougall
ATTORNEY

Patented Aug. 12, 1941 2,252,253

UNITED STATES PATENT OFFICE

2,252,253

PARKING METER

George M. Ferguson, Portland, Oreg.

Application February 27, 1940, Serial No. 321,070

4 Claims. (Cl. 194—1)

This invention relates to parking meters where the parker of a car inserts a coin which prepays his parking privilege, usually for an hour.

Parking meters are well known and in great variety but it is believed that all of them that may be considered are equipped with clockwork more or less complicated which requires frequent rewinding and not infrequently gets out of order, necessitating a trip to traffic court and an argument with the judge unless the victim submits to the customary fine of one dollar for something he was not guilty of.

The principal object of the present invention is an adequate timing parking meter that contains no clockwork whatever; hence the annoyance referred to in the preceding paragraph is eliminated.

Another object is a parking meter that cannot be prepaid in advance, like a slot gas meter, because municipalities will not use such meters, the purpose being relief of congestion more than revenue, which is incidental, at least in theory.

The foregoing and other objects that will be apparent from the specification constitute the purposes of the present invention, the scope of which is to be ascertained from the claims and not from the quite detailed description of the embodiment in its best form as I am now advised and which has been used to disclose the invention but not as fixing its limitations of scope.

Drawings accompany and form a part hereof, in which:

Fig. I is a front elevation of the meter. This will usually be the sidewalk side but may be the street side if desired;

Fig. II shows a portion of the structure shown in Fig. I at an enlarged scale for clarity; a part has been removed from the face, showing certain parts in section and other parts exposed in such manner that the working of the meter can be understood;

Fig. III is a section of Fig. II taken on the line III—III, Fig. II;

Fig. IV is in part the same structure shown in Fig. III foreshortened, but with a coin being inserted to show the operation of the clearing device, hereinafter explained in detail; and

Fig. V is a view of a portion of the front of the machine, projected from Fig. II, showing the coin slots and disclosing how insertion of the coin clears the machine and drops previously used coins from sight, at the same time clearing the signal which indicates prepayment of the parking fee so that a motorcycle officer can ascertain the fact while riding the street, as is customary.

In the drawings (Fig. I), 1 is a standard securely attached to a base member not shown. It will contain a coin receptacle portion 2, within which a coin box not shown will rest in position to receive coins from the meter as the machine is cleared. The coin box is made accessible by the removable door panel 3, secured by the lock 4.

A head 5 surmounts the coin receptacle portion 2 and is provided with a plurality of coin slots such as 6, 7, 8 and 9 in Fig. V.

Directly beneath each slot will be a flat coin chute 10, at the bottom of which is a transparency 11 behind which the coin comes to rest and through which its authenticity may, in general, be ascertained. This is shown in Fig. I, where the slot marked "1 to 2" shows the coin through the transparency; while another window 12, directly above, of which there is one for each slot, shows a paid signal such as a green disc. This signal is raised by contact of the coin, on its way to temporary rest at the bottom of the chute 10, with the long end of the bell-crank lever 13.

This action is clearly shown at the right hand end of Fig. II where the bell crank lever 13, at the righ' awaiting a coin is extended part way across the chute 10 and the same kind of a lever in the next chute to the left of the one first mentioned has been forced downwardly by the weight of the coin, in this case marked "C".

The movement of this bell crank lever pulls the wire 14 and raises the prepaid signal, in this case indicated by P, so that it will show through the window 12 as in Fig. I. There will be registering windows on both sides of the instrument, or instead of windows a rectangular pane of glass or other transparency may be used, though windows are preferred. The operation of the signal is plain from the drawings but it may further be said that the signal P will be a distinctive element, easy to see and is shown provided with an arm Pa pivoted on the pivot 15, and the signal P is of sufficiently greater weight than the long arm of the bell crank 13 that it will return the assembly to the position shown in dotted outline, Fig. III, at right, when the coin is cleared.

I will now describe the coin clearing device. A shaft 16 is rotatably mounted in suitable bearings at both sides of the inner part of the head 5 in such manner that it is somewhat above and behind the upper terminus or entrance of the coin chutes 10 and normal to their axes. Coin

levers 17 are made rigid with this shaft, equal in number to the coin chutes employed and so fashioned as by a coin lug 17*a* at the bottom that the coin lug forms an effective temporary coin holder for the corresponding coin chute 16 and also it will be equipped with a cam lug 17*b* (see Fig. V) so that insertion of a coin will rock the shaft 18 with which it is made rigid. This of course rocks the shaft and therefore the duplicates of the lever 17 not touched by a coin at that time. Each lever 17 is biased to closed position, that shown in Fig. III as diagrammatically indicated by the compression spring 20, hence any coins held by their parts 17*a* will drop, clearing the machine. The last coin used at evening will be cleared by the first one used the following day as will at once be clear.

Usually parking periods for which users are required to insert coins are of one hour duration, from 8 a. m. to 6 p. m.; hence I have shown the appropriate number of slots and coin handling devices, each of which is equipped with devices like those described. Though they are detailed only in part, the rest will be understood to be present.

Just as one can tell the time from a clock as far as he can see the vague outline of the hands, so also will one recognize the proper place to expect a valid prepaid signal to be in sight.

Proper rules for use can be enacted and posted on the machines by lettering below the coin transparencies or on other convenient surfaces.

Having disclosed my invention so that any one skilled in the art to which it belongs, may make and use it, what I claim as new and desire to secure by Letters Patent, is:

1. In a parking meter, a head, means for supporting the head above a street at easily visible elevation, a plurality of coin slots in side by side relationship in said head, coin chutes below said slots, signaling means operable upon insertion of a coin into a slot that are effective to indicate the slot wherein it was inserted, a transparency through which an inserted coin may be seen after insertion, means for temporarily holding said coin on view, and other means operable upon the insertion of the coin in a slot effective to drop all coins previously inserted and on view to a point of storage.

2. A parking meter comprising in combination, a head member, structures effective to support said head in accessible position, a plurality of coin slots in side by side relationship in said head, coin receiving chutes disposed to receive coins from said slots, a coin rest at the lower end of each chute that supports a coin in position visible from the outside of the head, a signal means normally invisible that is made operative by passage of a coin through a chute to indicate its presence therein and means operable by forcing a coin into a slot that are effective to drop a coin that may be in an adjacent slot.

3. A parking meter comprising a head member, a plurality of coin slots placed according to plan in said head to indicate time periods of use, coin receiving means below each slot effective to retain the coin on view until another coin is inserted in a slot and means made operative by forcing a coin into a slot to drop from view all coins previously inserted in any slot.

4. The combination as claimed in claim 3 and including a signal to indicate the presence of a coin in a particular coin receiving means, that is made operative by a coin therein and which becomes inoperative at once when the coin is dropped.

GEORGE M. FERGUSON.