[OTE.—*The application for a Patent has become void.*
This print shows the Specification as it became open to public inspection.

N° 15,644 A.D. 1914

(*Under International Convention.*)

Date claimed under Patents and Designs Act, 1907, being date of first Foreign Application (in Germany), 22nd Dec., 1913.

Date of Application (in the United Kingdom), 30th June, 1914.

At the expiration of twelve months from the date of the first Foreign Application, the provision of Section 91 (3) (a), of the Patents and Designs Act, 1907, as to inspection of Specification, became operative.

Complete Specification not accepted.

COMPLETE SPECIFICATION.

Improvements in and relating to Electric Meters.

We, H. ARON ELEKTRICITÄTSZÄHLER-FABRIK G.M.B.H., of 39, Wilmersdorfer-strasse, Charlottenburg, near Berlin, Germany, Manufacturers, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to electric meters of the multiple tariff type, in which the consumption is recorded on two or more different registering mechanisms arranged to be operative during different periods of time.

It is usual to employ separate meters for circuits supplying current for different purposes, such for instance as light and power, the current consumption in each circuit being charged at different rates for reasons which are now well-known.

In view of the fact that the times at which the operation of each meter is transferred from one registering mechanism to another do not necessarily coincide with the times of similar transfers on the other meter or meters, it has previously been necessary to employ special time operated switch mechanism for each meter thus necessitating the provision of a number of duplicate and therefore costly switch devices.

According to the present invention this disadvantage is obviated by the provision of a single switch mechanism adapted to control a number of different meters or groups of meters each of which can be arranged to effect a transfer of its operation from one registering mechanism to another at any desired times, which may be different for the different meters.

The invention is illustrated in the accompanying drawings, of which Figure 1 is a diagrammatic view illustrating the general arrangement of an apparatus constructed in accordance with the invention, the time controlled mechanism being shown in front elevation.

Figure 2 is a similar view of the same apparatus the time actuated mechanism

[*Price* 1/-]

being shown in side elevation and illustrating further details of the meter mechanisms.

Referring now to the drawings a two-rate electric meter adapted to record the consumption of energy in a lighting circuit is indicated at *g* and a similar meter for a power circuit at *h*. A time actuated switch mechanism of any preferred construction is indicated at *a* as adapted to operate a switch device *c* controlling the operation of actuating magnets *l*, l^1, for altering the rate of each meter. The switch device *c* comprises a controller drum carrying a contact member *e* adapted to engage with brushes *d* connected in the circuits of the magnets *l*, l^1, the shape of the contact member *e* being such as to energise and deenergise the magnets *l*, l^1, at the required times.

The controller drum of the switch device *c* is arranged to be rotated by means of the clock movement of the mechanism *a* through suitable gearing and a transmission spring as shown in Figure 2, the controller drum being held stationary until released at predetermined times by means of the fingers indicated at *f*. The latter are mounted on the dial *b* of the clock movement and are arranged to effect the release of the controller drum of the mechanism *c* in any suitable manner.

The operation of the device will be evident from the above description since it will be seen that the movement of the controller drum of the switch mechanism *c* to a new position permitted by the release of one of the fingers *f* at a particular time will permit one or other of the magnets *l*, l^1, to be energised or deenergised, the recording mechanism of the corresponding meter *g* or *h* being thereby adjusted so as to record the subsequent consumption of power on a different registering mechanism.

Although in the arrangement above described only two meters are indicated by way of example, it will be evident that by providing a corresponding number of brushes *d* and a corresponding form of contact segment *e* the switch device *c* can be arranged to control any desired number of meters or groups of meters.

Furthermore the switch device does not necessarily comprise a rotary controller drum as shown in the drawings, and variations in this and other respects may evidently be made without exceeding the scope of the invention.

Having now particularly described and ascertained the nature of our said invention, and in what manner the same is to be performed, we declare that what we claim is:—

1. A system of electric meters of the kind described comprising a switch device adapted to transfer the recording action from one registering mechanism to another at predetermined times which are independently adjustable for each of a number of meters, for the purpose specified.

2. A system of electric meters of the kind claimed in Claim 1, comprising a time actuated mechanism adapted to operate a switch device controlling the circuits of actuating magnets for the registering mechanisms of each meter of the system, for the purpose specified.

3. A system of electric meters of the kind specified in Claims 1 and 2, in which the switch device is constituted by a controller drum provided with a contact member the shape of which corresponds to the desired variation in the recording action of the meters, for the purpose specified.

4. A system of electric meters of the kind specified in Claims 1 and 2 in which the switch device is arranged to be released by means of an arm or finger adjustably mounted on the dial of the time actuating mechanisms operating the switch device.

5. A system of electric meters, constructed, arranged, and operating substantially as described with reference to the figures of the accompanying drawings.

Dated this 30th day of June, 1914.

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65, Victoria Street, Westminster, S.W.

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Fig. 1.

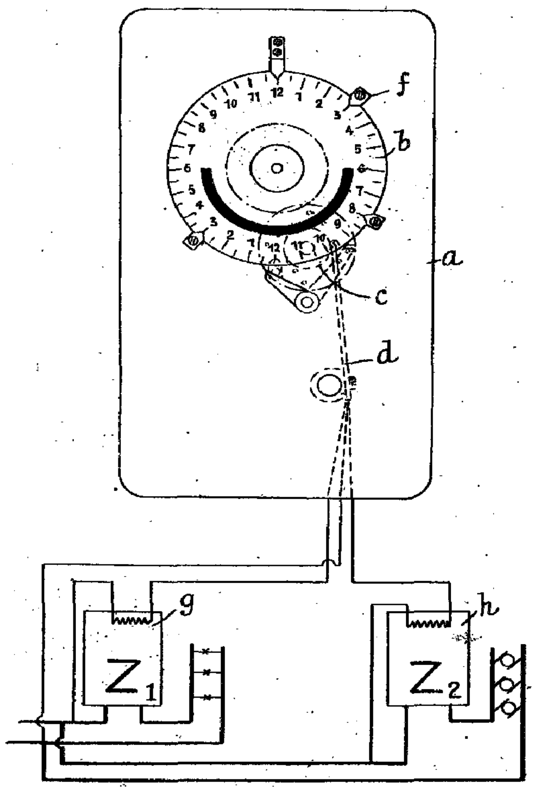
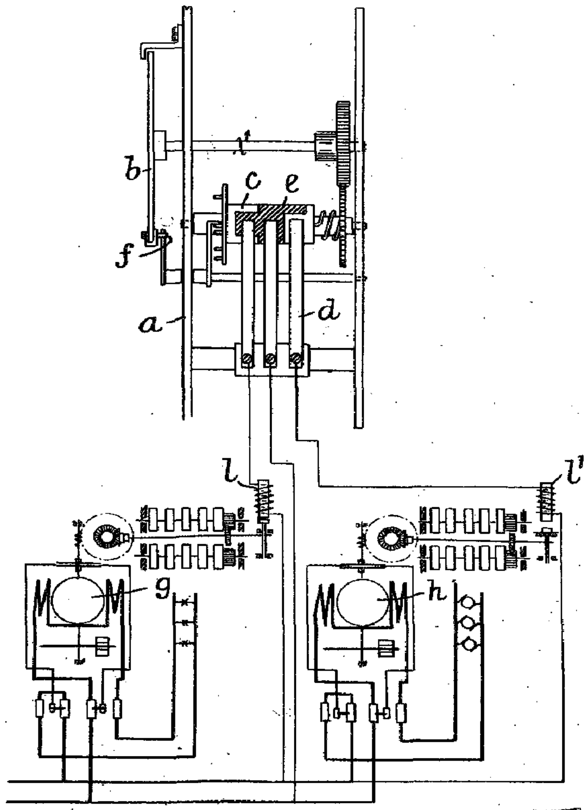


Fig. 2.



A.D. 1914. JUNE 30, No. 15,644.
COMPLETE SPECIFICATION OF H. ARON. ELEKTRICITATSZAHLERFABRIK GES.

Fig. 1.

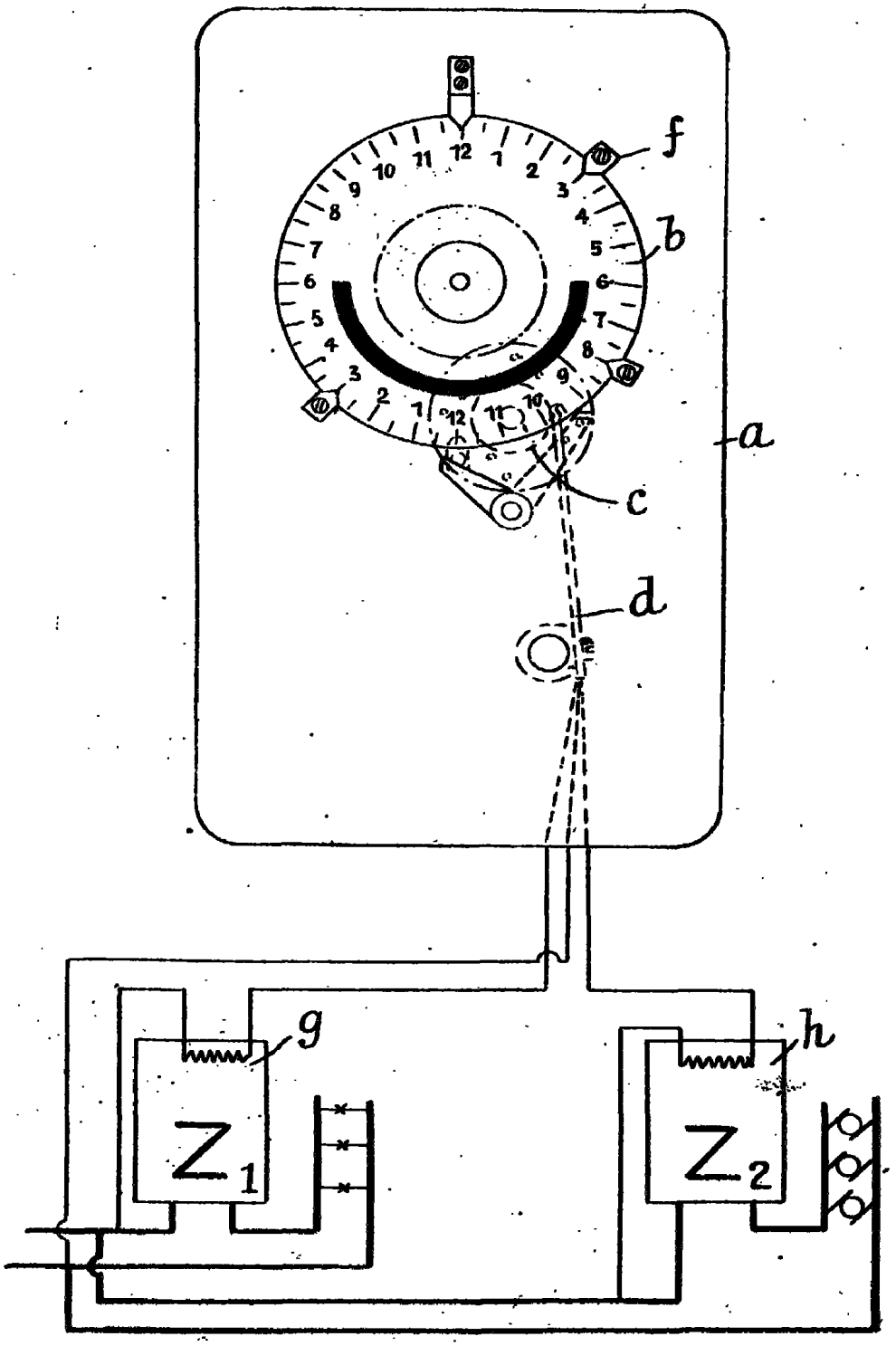
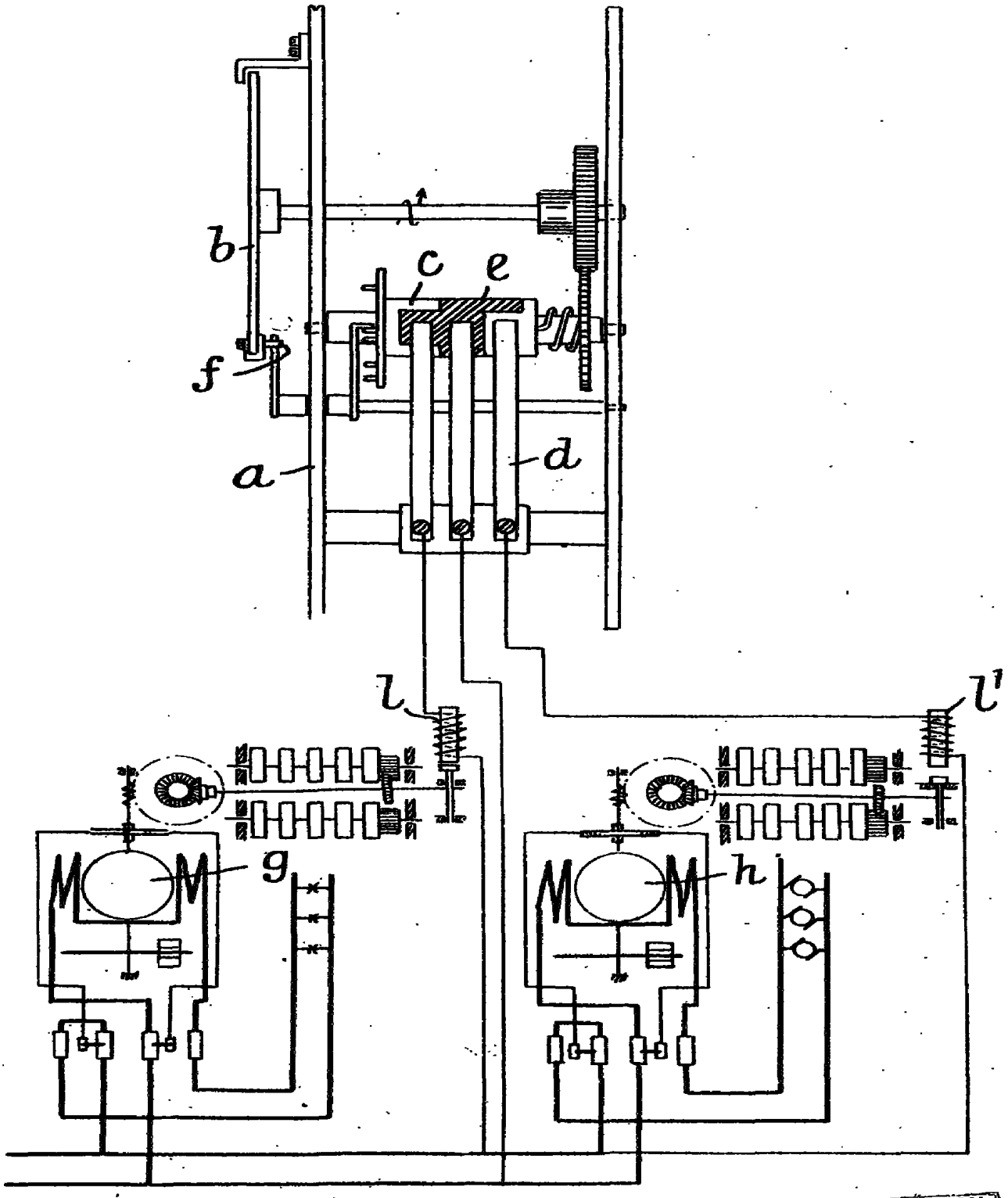


Fig. 2.



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