

# Clock and Locator

ELECTRICITY  
AND HOROLOGY  
IN ALLIANCE

**W**ALL clocks of normal appearance that do additional duty as staff locators are installed in the new building of D. H. Evans and Co., Ltd., now under construction in Oxford Street, London, W.1.

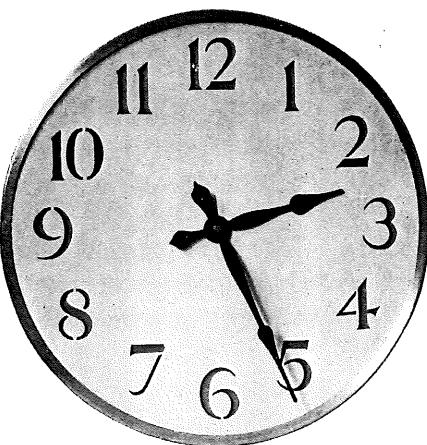
Made by Instanta Electric, Ltd., of 1-3 St. Paul's Churchyard, they are a notable application of the Instasig system invented by Mr. F. Tidbury Beer, whose brother, Mr. G. Tidbury Beer, is managing director of the company.

Each clock has a circular dial cellulosed in a light colour, and as the figures are cut out and have dark coloured glass behind, they appear much darker than their surroundings—normally. But behind the dial are twelve compartments of equal size, corresponding to the twelve figures, and in each of these is a separately wired and controllable electric light bulb, which can be lighted to give a signal.

By using the hour numerals from 1 to 9 and the 0 of 10, it is possible to light up not only single figures such as 4 or 7, but also such combinations as 396, lighting three numbers consecutively in the right order.

To each person or group of persons whom it may be necessary to call to some point, a number is allotted; and when this number is lighted on the clock dial they know that they are wanted, go to the nearest intercommunication telephone, and report to the telephone operator, who also has charge of the light signalling system, and switches the number off when it has brought a response.

It is unlikely that anybody will fail to notice his number when it appears, as



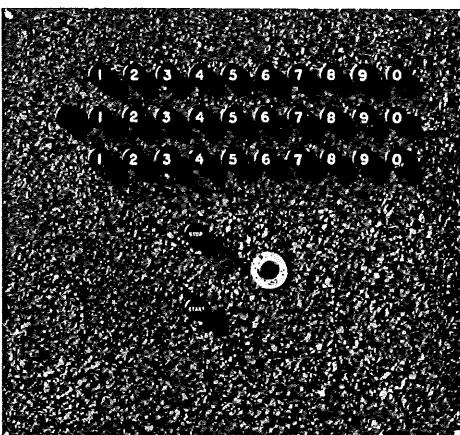
It Looks Normal—  
until a figure  
lights up

the light is intermittent and its movement readily catches the eye. Also, there is little risk of number 247 (for example) confusing his number with 724, as the former would appear as 2-4-7-pause-2-4-7-pause-2-4-7 and the latter as 7-2-4-pause-7-2-4-pause-7-2-4.

Moreover, should the operator switch off the signal while a number is incomplete—say, after the 7 of 724—it automatically completes itself, so that if anyone whose number is 7 notices it he will not think he is the person wanted.

The panel that the operator sees is of steel, crackle finished, with three rows of black keys numbered 0-9, a reset button, stop and start buttons and a red tell-tale light that shows when a number is being signalled.

Behind the panel, at the lower end of each key, is a spring-operated



What the Operator Sees:  
Instasig System Switchboard

# Personnel In One

INSTALLATION  
FOR FAMOUS  
LONDON STORE

contact. When the key is depressed this bridges a pair of contacts mounted on busbars which, in turn, are connected to mercury switches mounted in three rocker cradles above a common camshaft, which is driven through a clutch and silent reduction gearing by a mains-operated fractional horse-power motor.

When it is started (by pressing the "start" key), the clutch automatically engages the camshaft, causing three cams to rock the mercury switches in sequence, thus giving the signal required.

This repeats automatically, at a standard rate of 16 times a minute, till it is cancelled.

To connect the switchboard to each clock in the system, the makers recommend the use of a cable in which the separate leads are each wrapped in a numbered tape.

In a building where the personnel is not numerous, considerable expense is saved by wiring only two or three figures—such as 3, 6, 9, which are all a good distance apart—instead of wiring ten. It does not need a skilled mathematician to see that even with three figures a large number of combinations is obtainable.

At each point where a clock is to be fitted there is a socket to take the plug for the leads to its movement, while the wires to lamps are fed in direct from the mains. They are connected to lamp-holders which are mounted on a metal chassis, and this is fastened to the wall with four or six screws according to size.

That is one unit: the clock is completed by another, which may

described as the dial assembly. This consists of the dial proper, with hands and their driving mechanism, and also the twelve transparent-fronted and opaque-sided compartments corresponding to the dial numerals.

This unit is held in place by spring clips of a patented type; before they are pressed home, the lead from the movement is plugged into its socket. The compartments on the dial assembly fit over the lampholders on the chassis assembly, and so the wiring is complete.

#### ADAPTABILITY

The clock movement itself does not call for special comment, as it is unconnected with the signalling mechanism and has only to be a reliable timekeeper, its type being of little importance. The Instasig system has already been installed with synchronous clocks (hence the inclusion of this article in their section of WCM); with master clock systems such as Synchronome and International; with an electrically-wound weight-driven master-clock.

The makers themselves recommend a master clock system for installations of more than a dozen clocks, and synchronous motors for smaller jobs.

Adaptability is, indeed, the keynote of the whole system: not only in the method of timekeeping but also in many other respects. For example, the rate of signalling can be altered; the switchboard can be horizontal or vertical; the clocks can be recessed or mounted in the usual way.

#### GERMAN MANUFACTURERS, BRITISH WHOLESALERS

(Continued from p. 115)

Mr. Frank Burnett (John Satchwell and Co., Ltd.)

Mr. E. A. Pringle (Robert Pringle and Sons (London), Ltd.)

Mr. E. A. Richard (Richard and Co., Ltd.)

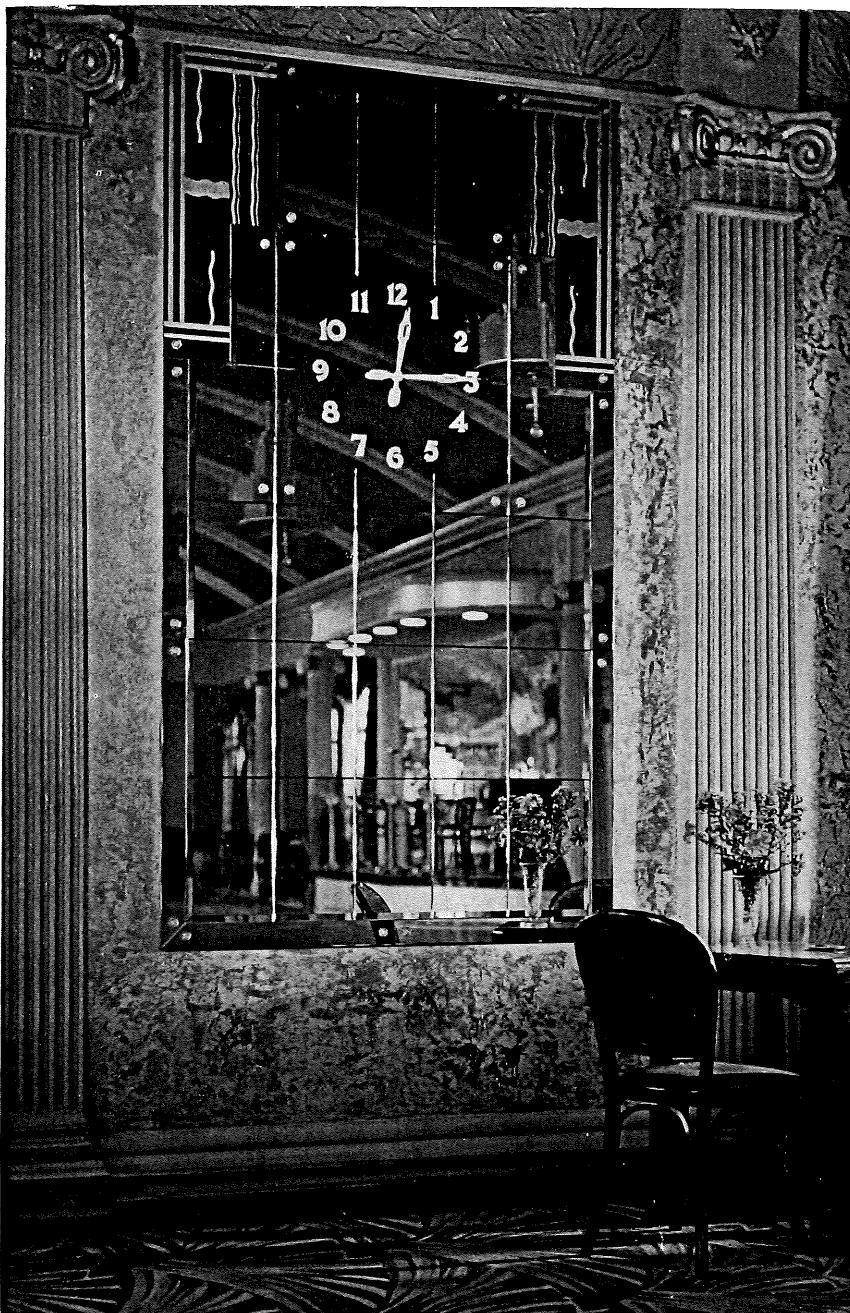
Mr. J. J. Stockall (Stockall, Marples and Co., Ltd.)

accompanied by Mr. W. J. Hawker (Assistant Secretary to the Association).

The Conference was held on April 30th at Bad Dürkheim, Baden.

#### THE VIGOUR OF YOUTH

Although the London and Provincial Clock Wholesalers Association has been formed only a few months, it has already done useful



Synchronous clock with numerals sand-blasted on mirror, in Kimbell's Café, Southsea. Builders: F. J. Privett, Ltd. Glasswork by James Clark and Son, Ltd., Scoresby Street, Blackfriars Road, London, S.E.1, by whose courtesy this picture is reproduced

work on behalf of the clock trade in this country.

Its main object is to secure the distribution of clocks to legitimate wholesale and retail channels, and it already has the full support of the majority of British manufacturers in this object.

The Association sent a circular letter from its office at 10 Staple Inn, Holborn, London, W.C.1, to all recognised clock wholesalers in Great Britain, urging them to become members and setting out what had been achieved at the Bad Dürkheim conference.