almost complete protection to the meter, it cannot be guaranteed to fulfil completely its function in the very worst cases of misuse, such as the mains being connected across the meter when set to a current range. It should be noted that mechanical shock to the instrument will sometimes trip the cut-out mechanism. The cut-out should be reset, using direct pressure and without twisting the button, the instrument lying face upwards. Additional protection is provided on resistance ranges by a fuse connected in the Ω and Ω ÷ 100 ranges and protective diodes connected in the Ω ÷ 100 range. A diode connected across the movement provides further protection should a.c. be applied when the instrument is connected to a d.c. range.

REPLACEMENT OF INTERNAL BATTERY, CELL AND FUSE

In the battery compartment under the instruction plate, which can be removed by means of a single DZUS fastener, is mounted a 15 V. battery and a 1½ V. cell together with a 1A fuse and a spare fuse. The batteries should be examined from time to time to ensure that the electrolyte is not leaking and damaging the instrument. This condition will generally occur only when the cells are nearly exhausted.

If it is known that the meter is going to stand unused for several months, it is preferable that these batteries should be removed to prevent possible damage.

When replacing batteries, the 1½ V. cell and the 15 V. battery must be inserted with the poles to match the markings of polarity inside the battery box.

REPLACEMENTS

1·5 V. cell, 1⅜ in. dia. × 2⅜ in., such as Ever Ready (or overseas, Berec) U.2. 15 V. battery, 1 1/32 in. × ⅝ in. × 1½ in., such as Ever Ready B.121.

WARNING

Special care must be taken when using the instrument to service television receivers or other apparatus employing capacitors of large capacitance, for the inclusion of such components in a circuit may mean that **very heavy peak currents** *may flow when the apparatus is switched on. Such surges produce a peaky wave form, and although these peaks are of only a few milli-seconds duration, they may never-the-less, puncture the instrument rectifiers.*