losses will, of course, be the *maximum* losses, assuming that equilibrium is reached. The table shows some results for temperatures of 1500 and 2000°K, and for atmospheres of an inert gas, a rough vacuum, $pO_2 = 10^{-3}$ atmospheres, and 1 atmosphere of pure oxygen, in grams of platinum-group metal per litre of gas. (The values have been rounded to the nearest integer.)

The weight losses fo the elements were calculated by using Brewer's estimates (7) for the vapour pressures, except in the case of palladium for which results have been reported by Alcock and Hooper (8).

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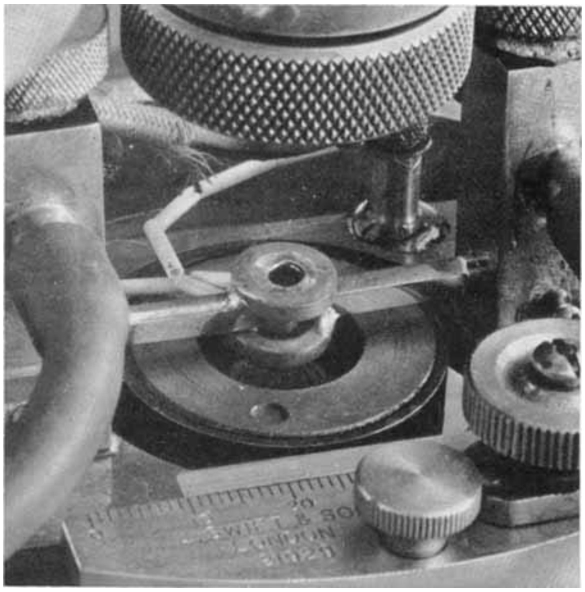
A High Temperature Research Microscope

NEW DESIGN OF PLATINUM MICRO-FURNACE

For the study of crystallisation phenomena in glass and for the construction of phase diagrams a high temperature polarising microscope is needed capable of examining specimens at temperatures up to 1400°C. A new type of micro-furnace for use in this way on a microscope stage has recently been designed by N. Murphy, of Pilkington Brothers Research Laboratories. This consists of a 3 mm diameter vertical open-ended tube in 10 per cent rhodium-platinum, partitioned about its centre by a foil diaphragm which serves as a support for a cone-shaped rhodium-platinum crucible. The current leads are of 3 mm square section rhodium-platinum. Equilibrium temperatures are attained very quickly, and can be measured accurately by means of a 0.012 mm diameter platinum thermocouple accurately located in contact with the specimen.



The platinum micro-furnace unit mounted on the stage of the microscope