

The results generally confirm and extend the theory of Tomashov and of Stern on the mechanism of the action of platinum metal additions. Experimentally, Tomashov has recently reported (4) full confirmation of the Stern school's findings concerning titanium. A further publication by Greene and his

colleagues on the effect of noble metal additions on high chromium alloys is promised. All in all, the principle of noble metal additions for increasing the acid resistance of easily passivated metals appears to be now very well established and worthy of extended practical trial.

References

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|---|---|---|
| 1 | T. P. Hoar | <i>Platinum Metals Rev.</i> , 1958, 2 , 117 |
| 2 | T. P. Hoar | <i>Platinum Metals Rev.</i> , 1960, 4 , 59 |
| 3 | N. D. Greene, C. R. Bishop and M. Stern | Paper presented to Electrochem. Soc., Detroit, October 1961 |
| 4 | N. D. Tomashov | Lecture to Gordon Conference on Corrosion, August 1960 |

Miniature Moving Coil Relay

IRIDIUM-PLATINUM CONTACT ASSEMBLY

In order to take the fullest possible advantage of the extremely limited operating power available, moving-coil construction is employed for very high sensitivity relays. The type S.115 relay by Sangamo Weston Limited is an example of miniature moving-coil construction, the unit measuring only $51 \times 19.5 \times 21.5$ mm. It can be wound to operate on a current of only 50 microamp.

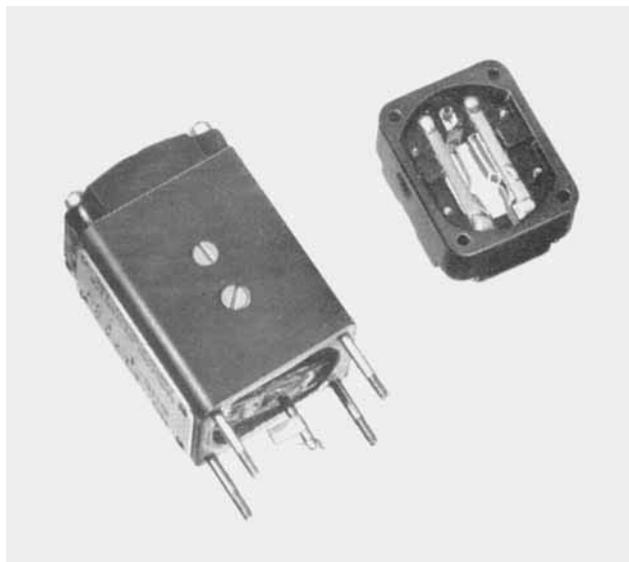
The contact arrangement comprises a blade of 20 per cent iridium-platinum attached to the lower end of the moving coil, this moving between the two dimpled iridium-platinum strip contacts in the base assembly shown on the right of the illustration.

The hairspring of the relay

normally keeps the blade in the central or "off" position.

Provided that spark-quenching is employed, the contacts will handle powers of up to one watt, a.c. or d.c. (substantially non-inductive) and provided that the circuit voltage does not exceed 50 or the circuit current 100 microamp.

Iridium-platinum provides the combination of hardness and complete freedom from tarnish that is essential in this application.



A sensitive moving-coil relay of miniature construction by Sangamo Weston Ltd. Both fixed and moving contacts are in 20 per cent iridium-platinum.