as this appeared to be was a phenomenon entirely unexpected. Then the great chemists of Europe set to work on platinum and its distinctive properties".

The platinum reached them in small quantities, begged from their acquaintances in Spain, to which country it continued to be sent as an interesting curiosity. A quantity obtained by the Swedish jurist Rudenskjold formed the basis of the well-known work of Scheffer, published in 1752. An even more important series of researches, because much more comprehensive, had already begun in England at the hands of Dr. William Lewis, but he was unable to extend his work to its full scope until the beginning of 1754 when he obtained 100 ounces of platinum from the Spanish ambassador in London. A further quantity of this London metal went to Professor Euler in Berlin who passed it on to A. S. Marggraf for his research on the subject. The French then came in and, after the publication of the pamphlet *La Platine* in Paris in 1758, Macquer and Baumé obtained a pound of platinum from the Spanish botanist Ortega and carried out their work upon it. In this way, the more important facts about platinum were firmly established by 1760.

The concluding part of Mr McDonald's article will be published in the next issue of 'Platinum Metals Review'

References

1 J. Juan and A. de Ulloa .. .. Relacion historica del viage a la America Meridional hecho de orden de S. Mag, 2 vols. Madrid 1748. Vol. 2, Book 6, Chapter 10, p. 606

2 M. L. .. .. *Observations sur la Physique*, (Rozier), 1785, **27**, 362–373

3 W. Lewis .. .. Commercium Philosophico-technicum, London, 1763, pp. 607–8

4 P. Bergsøe .. .. The Metallurgy and Technology of Gold and Platinum among the pre-Columbian Indians. Copenhagen 1937 (in Danish). Summary in *Nature*, 1936, **137**, 29

5 E. P. C. Meyer .. .. .. *Science* (II), 1932, **75**, 438

6 W. Watson .. .. *Phil. Trans.*, 1751, **46**, 584–596

7 D. J. Krunitz .. .. *Hamburgisches Magazin*, 1759, **22**, 273–284

8 A. Rochon .. .. *Phil. Mag.* (I), 1798–9, **2**, 19–27, 170–177

Measurement of Surface Moisture

In the study of metallic corrosion much use is made of specimens exposed at outdoor research stations, but wide variations in the results observed can often be attributed to differences in climatic conditions. Obviously a major factor in corrosion is the persistence of free or even of absorbed moisture on the surfaces of the exposed specimens, and the interpretation of exposure data from a number of locations would be made very much more reliable if an instrument could be developed to record the period of time in which a specimen is actually corroding due to the presence of moisture.

The need for such a device was recently realised by the ASTM Committee on Corrosion of Non-Ferrous Metals, and an offer to undertake its development was made by P. J. Sereda of the Division of Building Research, National Research Council, Ottawa. Two progress reports have now been published describing the investigations leading to a successful means of measurement of time-of-wetness (*ASTM Bulletin*, No. 228, February 1958, p. 53, and No. 238, May 1959, p. 61).

The method adopted, based on a suggestion by F. L. LaQue, involves the measurement of the potential developed between a corroding metal specimen and a platinum electrode placed in immediate proximity, surface moisture serving as the electrolyte. Preliminary trials have proved promising, and an attempt is being made to develop a field instrument in which periods of wetness would be indicated by a time recorder.