DISCUSSION.

Dr. H. Borns asked what precautions had been taken to prevent oxidation of the specimens during the prolonged heating. Popularly aluminium was supposed not to oxidize in air, even when heated, and not to be attacked by nitric acid. It was, of course, understood that aluminium became covered with a protective film of oxide. Could not that film influence the very slight change in the corrodibility by nitric acid? **Dr. Seligman** did not suggest any allotropic modifications of aluminium, but **Dr. Brislee** did. It seemed to the speaker that allotropy was too readily suggested sometimes. Analyses were as a rule given showing the purity of the original metal; but analyses of the modified metal, which had undergone various chemical treatments, were frequently missing.

Mr. Percy Williams, in reply, pointed out that the present communication was not burdened with experimental details, which were fully described in the main Paper, the present note dealing with only one small section of the subject. With regard to the point raised by **Dr. Borns**, it was an invariable practice, before making determinations of the rate of dissolution, to remove any oxide film, other than that which normally exists upon an aluminium surface, by treatment with a warm 5 per cent. solution of caustic soda followed by a brief immersion in dilute nitric acid. In this manner a chemically clean, uniform, and perfectly definite surface was obtained. Moreover, during each determination a number of weighings were made at definite intervals, the final result obtained after certain initial irregularities have disappeared being taken as the true value. Under these conditions it does not appear probable that any superficial alteration of the aluminium surface due to heating, handling, etc., has any influence on the final value obtained for the rate of dissolution.