tion of the results. This contention was supported by means of a table proving that the results arrived at by experiment agreed with those predicted by the theory. He showed that a weak solution of permanganate of potash when frozen yielded at first nothing but pure colorless ice, all the color, and hence all the salt in solution, becoming concentrated in the central unfrozen part. While seeking to establish that the same held true for the metals Mr. Neville and himself had hit on a method which he believed to be one of importance and which was shown that evening for the first time. Gold was very readily dissolved by metallic sodium, and if a solution of gold in sodium were allowed to solidify very slowly then sections cut from the solid alloy would appear perfectly uniform to the eye. If, however, the sections were placed on a photographic plate and exposed to the X-rays, on developing the plate a picture was obtained showing the actual structure of the solid alloy, the sodium being transparent to these rays, while the gold was opaque. By means of lantern slides sections were exhibited cut from sodium-gold alloys containing different percentages of gold. These sections showed that crystalline plates of sodium traversed the mass both horizontally and vertically, and that the gold, as the solution solidified, had become concentrated between the crystalline plates of sodium. The analogy between the solidification of an alloy and the solidification of an aqueous solution was thus established.

UNIVERSITY AND EDUCATIONAL NEWS.

THE will of the late Judge B. R. Shelden, of Rockford, Ill., bequeathes $100,000 to Williams College, $100,000 to the Hampton Institute and $10,000 to Rockford College.

IT is stated in the New York *Medical Record* that Dr. William H. Welch and Dr. William Osler, of the Johns Hopkins Medical School, of Baltimore, have declined the call extended to them by the University of New York, which has lately been consolidated with Bellevue Hospital.

PROFESSOR ALBERT BUSHNELL HART has been promoted to a full professorship of physics at Harvard University.

PROFESSOR W. F. EDWARDS has been elected President of the Washington University, Seattle, in the place of Dr. Mark W. Harrington.

DR. ANDR. LIPP has been appointed professor of analytical chemistry in the Polytechnic Institute at Munich. Professor Sissingle, of the Polytechnic Institute of Delft, has been called to the chair of physics in the University of Amsterdam, and Dr. George Scheffers, of Leipzig, to an assistant professorship of mathematics in the Polytechnic Institute in Darmstadt. Dr. Wülfing, docent in mineralogy at Tübingen, and Dr. Max Siegfried, docent in physiology at Leipzig, have been promoted to assistant professorships.

DISCUSSION AND CORRESPONDENCE.

THE RE-DISTRIBUTION OF TYPE-SPECIMENS IN MUSEUMS.

I CAN'T think why Mr. F. A. Lucas, in his most friendly review of my paper 'How may Museums best Retard the Advance of Science?' (SCIENCE, April 2, V., p. 543), should say: "Mr. Bather seems to use the term type a little vaguely, as one does not feel quite sure whether he means type or typical material." The term I used was 'type-specimen,' which has for me, and doubtless for Mr. Lucas, one meaning and one only. The question raised in my paper has been much discussed of late in England; permit me to put my view, which differs from that of Mr. Lucas, without satirical obscurity.

The object of museums is after all to advance and not to retard science. Take the case of a provincial museum, say at Thurso, in the extreme north of Scotland; suppose that this museum by some chance acquires a single specimen of a new Mexican beetle; suppose that some wandering 'Koleopterolog' from Germany chances on this and describes it in the *Zoologischer Anzeiger*. The specimen is now a type-specimen, "and no museum," says Mr. Lucas, "can afford to permanently part with these." But does the retention of this specimen at Thurso, in charge of some underpaid jack-of-all-trades curator, do anything