

1 and 2), putting the nuclear charge proportional to the atomic weight, found values, however, showing, not constancy, but systematic deviation from (mean values) 3.825 for Cu to 3.25 for Au. If now in these values the number M of the place each element occupies in Mendeléeff's series is taken instead of A, the atomic weight, we get a real constant (18.7 ± 0.3); hence the hypothesis proposed holds good for Mendeléeff's series, but the nuclear charge is not equal to half the atomic weight. Should thus the mass of the atom consist for by far the greatest part of α particles, then the nucleus too must contain electrons to compensate this extra charge.

Table of the Ratio of the Scattering per Atom Divided by A^2 Compared with that Divided by M^2 .

	I.	II.	Mean	Mean $\times 5.4$	Mean $\times \frac{A^2}{M^2}$	M
Cu	3.7	3.95	3.825	20.6	18.5	29
Ag	3.6	3.4	3.5	18.9	18.4	47
Sn	3.3	3.4	3.35	18.1	19.0	50
Pt	3.2	3.4	3.3	17.8	18.6	82
Au	3.4	3.1	3.25	17.5	18.4	83

Mean ... 3.44 ... 3.45 ... 3.445 ... 18.6 ... 18.6

A. VAN DER BROEK.

Gorssel, Holland, November 10.

The Stone Implements of the Tasmanians.

IN reply to Mr. J. P. Johnson's letter on Tasmanian stone implements in NATURE of November 13, attention may be directed to the paper read by M. Exsteens before the International Prehistoric Congress at Geneva last year, and destined to appear in vol. ii. of the *Compte-rendu*. It seems that the common opinion in Europe as to the culture represented by these relics of a recently extinct race was based principally on rejects from a large collection; and an inspection of the better worked specimens is sufficient to upset their eolithic origin in favour of a later stage, viz. Le Moustier-Aurignac, which is precisely Mr. Johnson's view. In 1906 the Rev. C. Wilkinson and Mr. Anthony presented a small but typical series of that character to the British Museum.

REGINALD A. SMITH.

Society of Antiquaries of London,
Burlington House, W., November 18.

Museum Glass.

IN connection with a work I am writing on "The History of Anatomy," I have been induced to trace the rise of the anatomical museum, and this appears to have depended to a larger extent than one would have suspected on the price of spirit and museum jars. In the second half of the eighteenth century John Hunter was using about 5000 museum jars for his spirit preparations. It would be interesting to learn whether these were made specially to his order, as I suspect, which firm he dealt with, and how much he was charged. Perhaps some old-established glass manufacturers can give me some isolated or continuous records of the prices of circular and rectangular glass jars used in museum work, and also the period when they were first manufactured in the ordinary course of business routine. From 1750 to 1850 is the period of most importance.

F. J. COLE.

University College, Reading, November 15.

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CAPTAIN SCOTT'S LAST EXPEDITION.¹

CAPTAIN SCOTT'S last journal has the deep interest of one of the most tragic documents in the history of exploration, for the fate of his party on its return from its magnificent and successful journey will surround his name with the romance that immortalises those of Franklin and of Burke and Wills. The human interest of Captain Scott's journals is greater than the geographical, for his route by the Beardmore Glacier was the same as that of Shackleton to one hundred miles from the Pole, and the remainder of the route was over a plateau with no special features of interest apart from its position. The reader therefore naturally hurries through the accounts of the voyage out, the landing on the middle of the western coast of Ross Island, the depôt laying in the first season, the happy life at the winter quarters, and the reports of enthusiastic scientific investigation by the staff. He will read with pleasure the eulogies of Dr. Wilson and the tributes to the capacity and enterprise of all the members of the expedition; and he may note, too, that Captain Scott started greatly preferring ponies to dogs, and that the old *Discovery* hut was used as an intermediate station on the way to the Barrier; the remarks that it was cold is not surprising, since half its heating apparatus had been left in New Zealand, and the insulating material on which its warmth depended was not inserted.

The Southern Party, with its various supporting parties, started between October 24 and November 3, with sledges drawn by motors, ponies, and dogs; and this part of the narrative inevitably recalls the old maxim against mixed transport. The transport was, however, gradually unified by the failure of the motors and the shooting of the ponies, the flesh of which was used as food, mainly for the dogs. After the fateful return of the dogs from the lower end of the Beardmore Glacier on December 12, the journey was continued with man-hauled sledges, with the aid of two supporting parties, which returned later. Eighteen miles from the Pole came the discovery of a camp and many dog tracks, followed by finding Amundsen's tent and letters, which have given conclusive evidence that both parties reached their goal.

The interest increases in the story of the return march, maintained with heroic persistence in spite of the ever-growing difficulties and weakness, which led to the final tragedy only eleven miles from the ample store of food and fuel at One Ton Depôt. There is no direct statement as to the real cause of the disaster. Dr. Wilson's diary may be expected to contain more explicit evidence; but though various extracts from Dr. Wilson's diary are quoted on comparatively unimportant details, there is none regarding the main problem. The

¹ "Scott's Last Expedition." In 2 vols. Vol. i., Being the Journals of Captain R. F. Scott, R.N., C.V.O. Pp. xxvi+633+plates. Vol. ii., Being the Reports of the Journeys and the Scientific Work undertaken by Dr. E. A. Wilson and the Surviving Members of the Expedition. Pp. xv+534+plates. Arranged by Leonard Huxley. With a Preface by Sir Clements R. Markham, K.C.B., F.R.S. (London: Smith, Elder and Co., 1913.) Price 42s. net.