

the experimental value of the last three or four figures? The specific gravity of each species relative to water is given as usual, so that the reference to hydrogen is only an additional torment for the learner. We doubt too the wisdom of explaining specific and atomic heats, and giving lists of their values. Isomorphism and pseudomorphism are hopelessly confused and interchanged on p. 20, while the illustrative formula is quite unintelligible. The adjusting apparatus of the ungraduated goniometer is, as usual in text-books, wrongly disposed for use. We have noticed several mistakes of fact and errors of printing; but the book is neat in style, and perhaps will not do much harm.

The Prospector's Handbook. By J. W. Anderson, M.A., F.R.G.S. 8vo, pp. 132. (London: Crosby Lockwood and Co., 1886.)

THE author, after traversing the mineral fields of New Zealand, New Caledonia, New Mexico, and Colorado, feels convinced that some simple guide or handbook for the use of prospectors as well as travellers is a desideratum, and the present volume is the outcome of this conviction. It contains a number of notes or paragraphs upon subjects incidental to metallic mining, which are distributed into chapters under the different heads of prospecting, rocks, blowpipe-testing, character of minerals, metals, and metallic ores, other useful minerals and ores, composition of various rocks, testing by the wet process, assay of ores, and surveying; to which are added an appendix of tables and a glossary of terms. As the whole text is contained in rather more than a hundred pages, not very closely printed, it will be easily understood that no one of the numerous subjects included in the author's programme is very thoroughly treated. The best part of the book is the introductory chapter on prospecting, which contains some useful generalisations on mineral deposits and the search for them, which, however, are more likely to be of use to the "tender-foot" than to the prospector properly so called. It would seem, however, that this is what the author has in contemplation, as, from some remarks on p. 9, he appears to consider prospectors and miners as two different classes of men, and evidently has no very favourable opinion of the latter. Our own experience points in the opposite direction and leads us to regard typical prospectors as representing the highest and most intelligent class of operative miners. Unfortunately it is difficult to keep them on regular mining works except during the winter time, when the mountain regions are inaccessible.

The remainder of the book is of very little value. The descriptions of minerals are short, without being clear, and in many cases far from accurate. Thus, the composition of galena is stated to be "80 per cent. of lead, the rest sulphur"; malachite is said to contain 70 per cent. of copper, and silicate of zinc about 67 per cent. of zinc. All of these statements are incorrect, and it is not easy to see why they have been made, as no more space would have been required to give the composition corresponding to the theoretical constitution.

The sections on assaying and analysis are not likely to be required by the prospector in the field, and are too vague to be of much use to sedentary students. A description of the methods adopted in sampling gold and silver-bearing vein-stuff in the Western States and Territories of America would have been of interest, but we find no notice of this or any analogous practice followed elsewhere.

The glossary at the end contains several curious definitions, many of which, however, are reproduced from previously published works. The description of the term "tribute" more properly applies to dues or royalty rents as understood in this country. It may be that the author's definition applies to some local foreign usage, but this is not stated.

H. B.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]

[The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to insure the appearance even of communications containing interesting and novel facts.]

Hereditary Stature

PERMIT me to correct one word in my memoir on "Hereditary Stature" in the last number of NATURE (p. 297, col. 1, line 6 from bottom), which should read "seven" on an average. I should be glad at the same time to amplify the passage in which it occurs, as follows:—

The chance that the stature of the son will at least rival the stature of the father, is not uniform; it varies with the height of the father. When he is of mediocre stature, that is, 5 feet 8½ inches, out of every 100 sons born to a group of fathers of that height, 50 will be taller and 50 will be shorter than their fathers (the practically impossible case of absolute equality being neglected). Here then the chance of which we are speaking = 50 per cent. When the father is tall, the chance in question diminishes; when he is very tall, say 6 feet 5 inches, the chance is reduced to seven per thousand. The following table shows the probabilities in various cases. Columns A contain the height of the fathers, Columns B show how many per cent. of the sons will rival or surpass the height of their fathers:—

A		B		A		B		A		B	
ft.	in.	per cent.	ft.	in.	per cent.	ft.	in.	per cent.	ft.	in.	per cent.
5	8½	50	6	0	15	6	4	1·4	6	5	0·7
5	9	42	6	1	9	6	6	0·3	6	6	0·3
5	10	31	6	2	5						
5	11	22	6	3	3						

FRANCIS GALTON

Deposits of the Nile Delta

TWO communications from Sir William Dawson, published in NATURE of January 7 and 28 (pp. 221, 298), appear to call for a short notice from me. The report on the above subject which I read before the Royal Society on November 19, 1885, and of which an abstract appeared in NATURE of December 10, ought not to be referred to as "the report of the Delta Committee of the Royal Society." The origin of this report was as follows:—As there was no other geological laboratory available for the examination of the samples of delta-deposits sent home by Col. Maitland than the one connected with the Normal School of Science and Royal School of Mines, the other members of the Delta Committee requested me to undertake the microscopical and chemical investigation of the specimens. In preparing my report on them I was struck by the remarkable and unexpected characters which they presented, and I ventured to suggest a mode of accounting for them. When my report was submitted to the Committee I was requested to lay it before the Society; and, it would seem quite superfluous to add, neither the Committee nor the Society thereby accepted any responsibility for the views which I expressed in the report.

As Sir William Dawson lies under a manifest disadvantage in attempting to criticise a report which he has not seen, it will not be necessary to enter at length upon the subject of his communications. If I understand the first of these aright, he takes the opportunity in it of withdrawing his untenable assertion that "at a depth of 30 or 40 feet the alluvial mud rests on desert sand" in favour of the *totally different* statement that "the modern Nile mud" lies on "a Pleistocene or Isthmian deposit." In the absence of any palaeontological evidence I can offer no opinion as to the truth of this latter view; but it is certain that the deposits above and below the limit mentioned are of precisely similar mineral characters. With respect to the second communication, I need only add that when its author has the opportunity of reading the report in question, he will find that the very obvious considerations to which he refers have been by no means lost sight of.

JOHN W. JUDD

Stone Implements and Changes of Level in the Nile Basin

I INCLOSE a letter from my brother at Wady Halfa. The scrapers sent home are all made out of flat oval pebbles of