

" 13. Ferruginous Silicate of Manganese - -	" Lacark, 2nd Con., lot No. 2 town lot.
No. 16. Copper Ore, - - -	" N. Burgess 9th Con., lot No. 2.
" 17. Serpentine, containing Corundum -	" N. Burgess, 8th " " 2.
" 18. Magnetic Iron Ore, -	" S. Sherbrook, 3rd " " 18 & 16.
" 19. Graphite - - -	" S. Burgess, 2nd " " 3.
" 20. An unknown mineral	" Dalhousie, 5th " "
" 21. Weathered specimens of Perthite - -	" N. Burgess, 6th Con., lot No. 3.

The specimens marked 1, 2, 3, 4 have been characterized by the late Dr. Thomas Thomson, Professor of Chemistry in the University of Glasgow, as new species. Although the Doctor has been a powerful leader and contributor to chemical science for more than forty years, yet his decisions concerning these minerals have been denounced by Mr. Hunt, Chemist to the Geological survey of this province, as altogether erroneous. In the Geological report for 1847 and 1848, Mr. Hunt says that the Perthite of Dr. Thomson is "nothing more than a reddish felspar;" that from the Doctor's analysis it would appear that this mineral, unlike other felspars, contains no potassium, which is, according to him, replaced by calcium; and it was upon this chemical difference, principally, that he predicated its distinctness as a species. It has, however, been analyzed by my pupil, Mr. Hartley, in the laboratory of the survey, and the results shew that it contains both potassium and sodium, and is indeed quite similar in composition to other felspars. I have no apparatus fit for delicate analysis; but if I had and were ever so capable, would feel no small reluctance in venturing to dispute Mr. Hartley's investigations, but would be inclined to put more confidence in Doctor Thomson's statements than in Mr. Hunt's pupil. In October, 1849, I was favored with a letter and special messenger from R. Silliman, Junr., in which he says, "I propose to make some new analyses of the minerals described by Dr. Thomson as new species, and will feel particularly indebted to you for authentic specimens of them." I sent the Professor the specimens he wanted and begged that he would favor me with the results of his analysis. In his reply he says: "I am unable at present to give you my own opinions of the species; I have, however, put them into the hands of my brother-in-law, Mr. Dana, who is now preparing for the third edition of his mineralogy, to be issued next spring, and they will get justice done them." It is only lately I got a chance of seeing the third edition of Dana's Mineralogy, and do not observe that it gives any new analysis of these minerals—it refers the reader to the Canadian authorities, Mr. Hartley and Mr. Hunt, for information. I am sorry to observe in this book that even the localities of the minerals are not correct—it gives the locality of Perthite and Bytownite as being in Bathurst, and they are several miles distant from the township. Since my correspondence with Professor Silliman, I have got Mr. Logan's report for 1850 and 1851, wherein Mr. Hunt again declares Dr. Thomson's decisions incorrect, and when speaking of the Perthite, he says: *The colors of this felspar become much darker by exposure to the action of the weather, the analytical results which follow were obtained from freshly broken light colored fragments, and the mineral rendered, &c., &c.* Mr. Hunt was with me at the locality of the Perthite, examined the surface of the rock and the mineral in situ with apparent attention, and, after having done this, how he can state that this mineral becomes darker by exposure to the action of the weather is very extraordinary. Whenever the mineral is exposed to the weather, it becomes of a light color, and, in some places, bleached almost white; such light colored specimens, must be partially decomposed, and therefore unfit for giving by analysis, the several constituents of the mineral. The specimens marked 7 were taken by me from the surface of the rock where they were exposed, to the weather, and will speak for themselves. Mr. Hunt further observes that "the quantity of Potash present in, and the extensive deposit of this felspar, are such as make it worthy of attention, as an economical source of this alkali, which in proportion as wood becomes scarce, is increasing in value so much as to make its extraction from its mineral constituents a source of profit." Now, as this mineral is only to be found mixed up with a kind of granite which occupies a bit of surface no more (the proprietor of the land informs me) than four acres, these four acres must afford a very great quantity of potash indeed, or the demand must be very small, if it will yield a sufficient supply when our woods are all gone—the process of extracting the alkali, too, from the rocks, must be less expensive and less laborious than it is at present. Possibly this is not the only locality of the felspar; but I have yet to learn whether this mineral has been found in any other place. The external characters of the Perthite differ from those of other felspars, and Mr. Hunt gives it no credit for being new on this account; yet says that a mineral he found in 1847, at the grand Calumet on the Ottawa, gives by analysis the same constitution as chlorite, the principal difference being in the proportion of water, and "that the hardness completely distinguishes it from chlorite, and constitutes it a new and distinct species." Thus it seems hardness, and other external or physical

characters (independent of chemical analysis) are quite sufficient to confer on this mineral the dignity of a new species; whilst the Perthite (notwithstanding its peculiar external and physical characters) gets no credit for these, but is condemned to the plebeian rank of common felspar. Much can be said about Mr. Hunt's treatment of the other three minerals, but I feel I am encroaching on your time and patience. You will much oblige me by giving me your opinion of the red colored mineral, No. 5, and also of No. 20.

I am, Sir, your ob'dt. servant,

JAMES WILSON.

PROF. H. CROFT,  
Corresponding Sec. Canadian Institute,  
Toronto.

### Notices of Books.

*Letters from Egypt, Ethiopia and the peninsula of Sinai, by Dr. Richard Lepsius, with extracts from his chronology of the Egyptians, with reference to the Exodus of the Israelites. Revised by the Author; Translated by Leonora and Johanna E. Horner: pp. 578, London, Henry G. Bohn, 1853.*

Egypt and Ethiopia, still lands of mystery, notwithstanding all that has been thought, said and written respecting them, are partially unveiled to us in these interesting and erudite letters, coupled with the startling fact that the discoveries of Dr. Lepsius add not less than two thousand years to the generally assumed period of man's existence on earth, and place the period of the first Manethonic Dynasty between three and four thousand years before Christ. Not less interesting is the discovery of the true position of SINAI, which has been for so many centuries hidden as it were behind a cloud.

The origin of these letters is too interesting to be passed over without recognition, and before offering any illustrations of their varied contents, we will give the account of Dr. Lepsius's object of the expedition, and the means by which it was accomplished.

The object of the scientific expedition, which the King of Prussia sent to Egypt in the year 1842, was to investigate and collect, with an historical and antiquarian view, the ancient Egyptian monuments in the Nile Valley and upon the peninsula of Sinai.—It was fitted out and sustained for more than three years by the munificence of the King, and enjoyed uninterruptedly his gracious favour and sympathy—as well as the most active and kind attention from Alexander von Humboldt, and by a rare union of fortunate circumstances—it attained the purposes they had in view as completely as could be expected.

We shall probably find space to give a more complete account of the results attained by this expedition in future numbers of the journal—let it suffice at present to present a few of the most striking.

The most important results we obtained, therefore, were in chronology and history. The Pyramid-fields of Memphis gave us a notion of the civilization of Egypt in those primitive times, which is pictorially presented to us in 400 large drawings, and will be considered in future as the first section in that portion of the history of man, capable of investigation, and must be regarded with the greatest interest.

Those earliest Dynasties of Egyptian dominion, now afford us more than a barren series of empty, lost, and doubtful names. They are not only free from every real doubt and arranged in the order and the epochs of time, which have been determined by a critical examination, but by showing us the flourishing condition of the people in those times, both in the affairs of the state, civil affairs, and in the arts they have received an intellectual and frequently a very individual historical reality. We have already mentioned the discovery of five different burial-places of the 6th Dynasty in central Egypt, and what we obtained from them. The prosperous times of the new monarchy, viz.: the period of splendour in the Thebaid as well as the Dynasties which followed, were necessarily more or less completed and verified. Even the Ptolemies, with whom we appear to be perfectly acquainted in the clear narratives of Grecian history, have come forward in a new light through the Egyptian representations and inscriptions, and their deficiencies have been filled up by persons who were hitherto considered doubtful, and were hardly mentioned by the Greeks. Lastly, on the Egyptian monuments we beheld the Roman Emperors in still greater and almost unbroken series, in their capacity of Egyptian governors, and they have been carried down since Caracalla who had hitherto been considered as the last name written in hieroglyphics, through two additional later Emperors as far as Decius, by which means the whole Egyptian monumental history has been extended for a series of years in the other direction.