of the International Scientific Series (D. Appleton & Co.). This book has already been reviewed in Science (Vol. II., 107–108), so that extended comment on the translation is not necessary. The volume presents an interesting and complete account of the aurora in all its aspects, and will prove a valuable addition to scientific libraries. We note that the title page and cover give the title as 'The Aurora Borealis,' while the headings on the even pages all through the book give it as 'The Polar Aurora.' There are several illustrations of different forms of the aurora, but we do not find any index.

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CURRENT NOTES ON ANTHROPOLOGY.

THE JEWISH PHYSICAL TYPE.

The peculiar physical type which we call 'Jewish' is as easily recognizable in the sculptures from Tello and Nippur, carved two or three thousand years before the Christian era, as it is in the satirical comic papers of our own day. The most prominent trait is the nose, which has the curve of an italic figure *6* reversed.

This is sometimes called the Semitic type, but erroneously, as the purest Semites, the Arabians of the desert, do not exhibit it. We must, therefore, seek its origin elsewhere. In an article read before the Munich Anthropological Society, printed in the *Correspondenzblatt* for January, Professor Oberhummer agrees with von Luschan in attributing it to the ancient Anatolian people, probably of Caucasic (Alarodian) affinities, residents in Armenia before the Aryan Armenians possessed the land, and whose branches were the Elamites and Susians of the south. These, by intermarriage with the Semitic invaders, impressed upon them this physical type, though not their language or culture.

This theory does not fully explain the prevalence of this type in Palestine, unless we allow a larger intermingling there of foreign blood than has been customary with historians.

ON WAMPUM RECORDS.

The last scientific contribution prepared by our late eminent colleague, Mr. Horatio Hale, is printed in the *Journal of the Anthropological Institute* for February, 1897. It is entitled 'Four Huron Wampum Records; a study of Aboriginal American History and Mnemonic Symbols.' His usual patient research and careful deduction are well exemplified in it. The manufacture of wampum, its earliest use as a form of record, and the origin and meaning of the symbols woven into the belts, are fully discussed. Much collateral information on the history of the Hurons and Iroquois and on the formation of the famous 'League' is added.

A note is appended by Professor E. B. Tylor, which reviews Mr. Hale's conclusions and suggests further lines of research relating to the subject. He argues that the wampum *belt* had its origin among the Iroquois.

The studies on this question are yet far from completeness, as wampum was merely a method of arranging beads for mnemonic symbols, a custom widely prevalent in savagery and branching in many directions.

THE OTOMIS.

According to the traditions of the Aztecs, their predecessors in Central Mexico were the Otomis, an undersized dark people, described as stupid and barbarous and speaking a tongue most cacophonous and difficult. Many thousands of them still survive on the Mexican plateau, but our actual knowledge of them is very scant.

A few years ago Judge Eustaquio Buelna published a grammar and dictionary of their language, composed by a Jesuit mis-

sionary about 1770 ('Luces del Otomi,' pp. 303). We have others, but it is one of the most valuable, and is carefully edited.

The assertion has been several times advanced by Mexican writers that there is a relationship between the Otomi and the Apache, that is, the Athapascan stock. I made a careful comparison of one hundred test words between the two groups, and sent the results to the Congress of Americanists at Stockholm, but I am informed that the paper has been lost. It showed that a sufficient number of verbal similarities exist to render either linguistic relationship or admixture probable.

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NOTES ON INORGANIC CHEMISTRY.

IN a recent number of the *Comptes Rendues* P. de Wateville describes a method of growing crystals with a transparency and luster analogous to those of cut and polished stones. The small crystal is so mounted that while growing in a saturated solution it can be continuously rotated on itself with a speed of several rotations a second. In alum crystals thus grown at 50°, dodecahedron and cube faces progressively disappear, those of the octahedron alone finally remaining. Potassium and ammonium alums, copper sulfate and sodium chlorate are said by the author to give particularly fine results.

IN the *American Chemical Journal* for April Professors Jackson and Comey, of Harvard, describe a peculiar hydrogel formed by the action of nitric acid on potassium cobalticyanid. When a strong solution of the latter salt is boiled with an equal volume of concentrated nitric acid for two hours it suddenly changes into a dark red semi solid gelatinous mass. This jelly is insoluble in acid or salt solutions, but somewhat soluble in cold or boiling water, and more so in water at 60°. This solution can be evaporated without gelatinizing, and the residue from evaporation when moistened with water decrepitates with a series of insignificant explosions to a red powder, almost insoluble in cold water, but somewhat soluble in water at 60°. The formula from analysis is $KH_2Co_3(CN)_{11},H_2O$, provisionally called monopotassium cobaltocobalticyanid. Several other salts (barium, silver and copper) of the acid were made. A similar jelly has been formed by the authors by the action of nitric acid on potassium ferricyanid. On boiling potassium ruthenium nitrosochlorid, K_2RuCl_5NO with potassium cyanid in quantity insufficient to convert it into the ruthenocyanid, the writer has obtained a similar hydrogel with almost identical properties.

ACCORDING to the recently published report of the Russian Department of Mines for 1895, the production of platinum for that year was 9,700 pounds, a decrease of 1,700 pounds from that of the year preceding. The production of all other mineral products showed a decided increase, except that of gold, which decreased slightly. The largest relative increase was in mercury, the production of which, 500 tons, was more than twice that of the previous year.

J. L. H.

SCIENTIFIC NOTES AND NEWS.

AT a meeting of the Academy of Natural Sciences of Philadelphia, held the 13th inst., the following was unanimously adopted: The Academy of Natural Sciences, of Philadelphia, has received, with profound sorrow the announcement of the death of Professor Edward Drinker Cope. It is fitting that this meeting should place on record a minute expressive of its sense of the loss sustained. The Academy witnessed the beginning and the end of his long labors. It was to its halls he came as a student in 1859 and it was to them he paid his last visit before his final illness. The lustre thrown upon the society by his researches is but a reflex of the spirit of this remarkable man, who exibited,