tries is still lower, being 1 to 1,406 in Saxony, and 1 to 1,429 in Denmark. Dr. Skrebitski's paper attracted a considerable amount of attention from the lay press, the *Novosti* remarking, "We have surpassed Europe not only in mental but in physical blindness." To any foreigner, however, who reads the Russian medical journals, the valuable original communications with which they literally teem would appear to indicate the reverse of blindness,' in the Russian scientific world at all events.

## BANCROFT'S HISTORY OF ALASKA.

The history of Alaska, up to the time of the American purchase, has two divisions into which it naturally falls,—the period of independent Russian traders, fighting and competing on every hand; and the period of organized monopoly, which succeeded that competitive anarchy. Explorations of a rude sort, the vices of the semi-civilized Cossacks, and the rage for wealth represented by sea-otter skins, went hand in hand. A myriad of petty traders, bold, energetic, lustful, and avaricious, after the return of Bering's expedition, swarmed upon the Aleutian Islands, trading, hunting and robbing the natives, occasionally being slaughtered in return.

Of this period, with the causes which led to it, and its consequences for Russia and for America, Mr. Bancroft gives an extremely full and almost interesting account. Parts of it are dramatic; but the annals of so many petty expeditions with the same object, and almost always substantially similar results, cannot but be rather monotonous. Though much of the material is of only approximate accuracy, and derived from scattered and unverifiable copies of old records long destroyed, Mr. Bancroft has given what would seem to be by far the best account extant, and one not likely to be improved upon.

Of the second period we have also a remarkably full and acceptable account of the formation, fortunes, and fate of the monopoly known as the Russian American company, and of Alexander Baranoff, the man of all others characteristic of the Russian occupation of Alaska, the Peter the Great of the territory. Of history in its widest sense, the grasp of underlying motives, — the reaction of European politics, the growth of the United States, and other large forces upon the springs which governed events on the north-west coast, — there is little: the volume is rather materials for history, than history. But it is for he Russian period a very full, and in the main

 $History\ of\ Alaska$ , 1730–1885. By Hubert Howe Bancroft. San Francisco,  $Bancroft,\ 1886.\ 8^{\circ}.$ 

sufficiently accurate, chronicle of events. Of the period succeeding the purchase (a much more difficult task) less can be said in praise. A similar division of this epoch will by its future historian be found applicable. The era of violent and unrestrained competition in this case, however, lasted only two or three years; while the monopoly which succeeded, though more confined in scope than that of the Russian company, does not differ in its essential characters, and is still in operation. The chronicle of events since 1867 is full, but by no means complete. The scientific investigations, which have been a marked feature in the recent development of the territory, are very unequally treated, and many of them pass with a bare mention; others are ignored altogether; while a disproportionate space is given to the petty affairs of the trade-monopoly above referred to. There are numerous errors of detail; and the just reprobation of misgovernment and lawlessness, which the (mostly foreign) fur-traders under American sovereignty should share with the still viler authors of the early Russian trade, seems to have been reserved for the former in unreasonable proportion. This period, however, is so much nearer the historian, so many of the actors in it are still in the active pursuit of their business, and the passions and prejudices engendered by recent rivalry are still so hot, that historical impartiality is not to be expected.

Mr. Bancroft recognizes the wealth of the territory, and gives an excellent account of its hardly touched resources, other than the fur-trade. He very justly and severely criticises the inaction of congress, which has left the territory at the mercy of law-breakers for more than fifteen years, has only recently accorded a merely nominal and almost impotent form of government, and in the past has saddled upon the inhabitants, in lieu of the law they had a right to, a succession of corrupt or inefficient petty officials. The book has an excellent index, and numerous small sketch-maps in the text. The general map of the territory is bad, out of date, and in nomenclature discrepant with itself and with text, beside containing several inexcusable and wholly original blunders.

## OCEANA.

SIR ARTHUR HELPS once said that when Lord Palmerston was forming a new ministry, not so very many years ago, he was at loss for a colonial secretary. This name and that was suggested, and thrown aside. At last the noble lord said,

Oceana; or, England and her colonies. By James Anthony Froude. New York, Scribner, 1886. 8°.

"I suppose I must take the thing myself. Come up stairs with me, Helps, when the council is over. We will look at the maps, and you shall show me where these places are." It occurred to Mr. Froude that it would be a good thing not merely to find out where the colonies were, but to make a tour among them, to talk to their leading men, see their countries and what they were doing there, learn their feelings, and correct whatever erroneous impressions he himself shared in common with his countrymen. He sailed for Melbourne in the beginning of December, 1884, in the new steamship Australasian; and on the 16th of May, 1885, he landed at Liverpool from the decks of the Etruria, on her first return vogage from New York. In this volume the events of that trip around the world are most charmingly narrated.

His first encounter, however, was with an inhabitant of an island much nearer Downing Street than New Zealand. He thus narrates the incident: "I saw an Irishman in the unmistakable national costume, the coat-seams gaping, the trousers in holes at the knees, the battered hat, the humorous glimmering in the eyes. I made acquaintance with him, gave him a pipe and some tobacco, for he had lost his own, and tempted him to talk." The man, who had probably never heard of Mr. Froude or his books, opened his heart to him. After describing how the Manx men had come down and taken all the herring in his neighborhood (for it seems that he was a fisherman), he went on: "And then there was the bit of land"—here he paused a moment, and then continued, "Thim banks was the ruin of me. I had rather had to do with the worst landlord that ever was in Ireland than with thim banks. There is no mercy in them. They'll have the skin from off your back." Poor fellow! No sooner had he got fixity of tenure than he had borrowed money on the strength of it, and the result was emigration to the antipodes. "How many hundreds of thousands of his countrymen will travel the same road?" queries our author.

A few hours only were devoted to the Cape of Good Hope; for Mr. Froude had sojourned there ten years before, and had seen all of the misgovernment of that colony that he desired. Adelaide was merely glanced at, but a long and interesting visit was paid to Melbourne and Sydney. A trip was taken to Ballarat, Bendigo, and other points in the interior of Victoria. Everywhere he was well treated, and everywhere he saw nothing to blame and much to praise. He was in a land where patriotism was not "a sentiment to be laughed at—not, as Johnson defined it, 'the last refuge of a scoundrel,' but an active passion." He predicts a glorious future

for Australia. People wrote to him afterwards that he had purposely been shown the bright side of things, "that we let ourselves be flattered, be deluded, etc. Very likely. There was mud as well as gold in the alluvial mines. The manager pointed out the gold to us, and left the mud unpointed out. The question was not of the mud at all, but of the quality and quantity of the gold. If there is gold, and much of it, that is the point. The mud may be taken for granted." dangerous method of investigation, one would say, and a method the pursuing of which has destroyed much of our faith in Mr. Froude's deductions.

He next passed over to New Zealand, this time in an American steamer. But though the captain and the steamer were American, the crew was not. Indeed, our author, puzzled to make out what they were, asked the captain how he had picked them up. "I make a rule," the captain replied. "to take no English, no Scotch, no Irish, no Americans. They go ashore in harbor, get drunk, get into prison, give me nothing but trouble. It is the same with them all, my people and yours equally." He preferred Danes, Norwegians, Germans, Swedes, and Chinamen. It took five days to make the voyage from Sydney to Auckland. Then followed a month mainly devoted to sightseeing in the wonderful volcanic interior of the North Island, This part of the book is well illustrated, and we remember no better description of the last retreat of the Maori. In fact, it makes one wish that the author had devoted more of his time to descriptive writing, and less to historical dissertations.

From Auckland he voyaged to San Francisco via Honolulu. It is always pleasant to hear one's country and countrymen praised, and Mr. Froude has been by no means stingy of praise when speaking of us. "The Americans," he declares. "are the English reproduced in a new sphere. What they have done, we can do. The Americans are a generation before us in the growth of democracy, and events have proved that democracy does not mean disunion." But all the desirable results were not brought about by the spirit portraved in the following sentence. He has been speaking of the scheme for a real imperial parliament (something akin to our congress) to take charge of the 'foreign and colonial policy' of a federated British empire, - Oceana, - and says, "Of all the amateur propositions hitherto brought forward, this of a federal parliament is the most chimerical and absurd." Why? it may be asked. Because the English house of commons is omnipotent, is the reply. "Who is to persuade it to abdicate half its functions, and construct a superior

authority which would reduce it to the level of a municipal board?" It may be safe to say, that, until the English house of commons does consent to divide its authority with some kind of a legislative body in which the Englishmen who happen to live in Canada and Australia shall have a voice, every scheme for an 'Oceana' will prove 'chimerical and absurd.'

## MINOR BOOK NOTICES.

New theories of matter and force. By William Barlow. London, Sampson Low & Co., 1885. 8°.

Most theorists, in seeking to escape from the difficulties in the way of an adequate conception of the luminiferous ether, would hesitate to embrace a theory which involved either the denial of the conservation of matter or the acceptance of the emission theory of light; and yet the author of 'New theories of matter and force' has no craven fear of either or both of these conclusions. Ordinary matter, he conceives, is a mixture of two hypothetical ethers in a highly condensed state. The properties of these ethers are peculiar. Both have inertia, and, when unrestrained, expand indefinitely like gases. One is more compressible than the other, and cohesion in each is proportioned to the density. To avoid all appearance of action at a distance, this cohesion is not supposed to be an attraction, but rather a clinging-together of contiguous particles. This seems to require these ethers to be continuous; but this is no serious embarrassment to our author, who finds no difficulty in reconciling perfect continuity of substance with any desired degree of compressibility. Owing to the diminution of the cohesion with the density, these ethers have the remarkable property that the expansive force increases as the volume becomes greater. By means of these two ethers we have the fundamental machinery for the complete explanation of matter, gravitation, light, heat, and electricity. The greater part of the book is devoted to the application of the theory throughout the whole realm of physics, supplementary hypotheses being courageously introduced when necessary. The main phenomena of light are explained by a combination of the wave and emission theories, as interpreted in the light of two ethers. It is much to be regretted that the author, before publishing his theory, did not subject it to a scrutiny at least as rigid as that which led him to reject the accepted views. The scientific imagination has an important use when stimulated by knowledge and guided by reason; but before we lightly cast aside those theories which are the result of the most profound

thought, not of one mind, but of many, and which have been slowly elaborating during patient years, and set up in their stead our own brief conceits, we may well pause and consider.

The determination of rock-forming minerals. By Dr. EUGEN HUSSAK, Translated by Dr. E. G. Smith. New York, Wiley, 1886. 16°.

This is a work of which we cannot speak favorably. Dr. Smith's evident lack of acquaintance, both theoretical and practical, with the subject, has compelled him to make a close literal translation from the original; and, as would be expected, numerous errors have thus crept in, in addition to the many in the original. The whole spirit of the German language is such that close translations of technical works are rarely happy in their results -- certainly never, except when one is most thoroughly familiar with both the language and the subject under consideration. It is very much to be doubted whether Dr. Smith possesses either of these qualifications; otherwise he would never have made such errors as 'the entrance face of the light' (eintrittsfläche) for 'plane of incidence,' and 'shell-formed' (schalenförmig) for 'zonal.'

Along Alaska's great river. By Frederick Schwatka. New York, Cassell, 1885. 8°.

This excellently illustrated volume describes the journey of Lieutenant Schwatka's exploringparty from Portland, Ore., through the beautiful inland passage along the north-west coast of America, as far as Sitka in Alaska, thence overland to the head waters of the Yukon River, which was explored with considerable accuracy by his expedition as far as Fort Yukon. Schwatka's raft-journey down the Yukon, and his explorations in that region, have been often referred to in these columns. Capt. C. W. Raymond, of the engineer corps of the army, had surveyed and charted the Yukon River from Fort Yukon to its mouth, about a thousand miles, as early as 1869, and Schwatka pays a deserved tribute to the accuracy of that officer's work. In fact, the large chart of reference accompanying the volume appears to be a reduced copy of Raymond's chart, which is said to be the best in existence of that part of the great river. It is to be regretted that Schwatka's time for this exploration was limited to one short summer, and that his arrival at St. Michael's had to be so arranged as to anticipate the departure of the last vessel going south from that point in the fall. Otherwise it is almost certain that he would have explored a much wider region, thus adding much to our knowledge of that almost unknown American territory.