

inland ice. At this place the ice reaches the sea. Only a few *nunataks* (summits of mountains) emerge from the ice, while there are no extensive stretches of land. A few days were spent in necessary preparations. Our boats were hauled on shore, turned upside down, and in one of them our spare ammunition was stored, in case we should be compelled to retrace our steps and winter on the east coast.

"On Aug. 15 we started inland. Our baggage was packed on five sledges, of which Sverdrup and myself dragged the heaviest one, while the others dragged one each. Every one had to drag a load of two hundred pounds, — a task which was made very difficult by the comparatively steep ascent of the ice, which was crossed by numerous deep fissures. During the first and second days we made fair progress, particularly as we slept during the day-time, and travelled at night on harder and better ice. On the third day we were overtaken by a terrible rain-storm, which detained us for three days. Then we proceeded in regular marches without meeting with any serious obstacles. The ground rose continually. The snow was hard but uneven. Thus we had proceeded for nine days in the direction of Christianshaab, the colony on the west coast which we tried to reach. Then, all of a sudden, a strong and continuous snow-storm set in. The road began to be bad, and we made slow progress. I saw, that, under these circumstances, it would take a long time to reach Christianshaab. It was near the end of August, and I expected that it would be extremely difficult to travel on the inland ice as late as September. On Aug. 27 I resolved to change my course, and to attempt to reach Godhaab. Thus we shortened the distance to be traversed; and the snow-storm, which for several days had blown right into our teeth, was more favorable to us, and helped us to drag our sledges. On the other hand, I knew that the descent from the inland ice to Godhaab would be much more difficult than at Christianshaab; but we resolved to make a boat, in case the land near Godhaab should prove too difficult.

"We were in about 67° 50' north latitude, and about forty miles distant from Godhaab Fiord, when we changed our course. Our sledges were provided with sails, for which purpose we used pieces of cloth. For three days we travelled on in this way; then the wind calmed down. Travelling became very difficult, and we had to use snow-shoes in order to prevent sinking into the snow. The surface was level and without fissures, but the ground was rising continually. It was not until the beginning of September, when we had reached a height of nine thousand or ten thousand feet, that we had reached the top of the plateau. We were on an enormous plain, level as a floor, and like a vast frozen sea. The snow was loose and fine. Small needles of ice were falling continually, and the temperature was so low that the mercury became solid. Unfortunately, I had no alcohol thermometer to show the lowest temperature, which must have been between 40° and 50° below zero. One night the minimum next to my pillow was — 31° F. We did not suffer, however, with the cold, except during a snow-storm.

"At last, on Sept. 19, a favorable easterly wind began to blow. We tied the sledges together, set sail, and made rapid progress westward. We were descending at the same time. In the afternoon we discovered the first mountain of the west coast. At night I suddenly discovered through the falling snow a dark spot, which we approached without fear of any danger. When we were at only a few steps distance, I discovered that the dark spot was a fissure. We succeeded in stopping the sledges at a few feet distance, but thereafter we proceeded more cautiously.

"The ice grew more impassable the more closely we approached the coast. Besides this, we had to change our course, as we had entered the great glacier emptying into Godhaab Fiord. On Sept. 24, at a small lake south of Kangarsunek, we finally reached the land. Here we left part of our sledges and provisions, and went along the river Kukasik toward Ameragola, where we arrived on Sept. 26.

"Thus the inland ice was crossed; but we had to reach an inhabited place as soon as possible, as our provisions began to be exhausted. Besides this, our throats and mouths were swollen and sore by the long-continued use of pemmican. It was impossible to reach Godhaab by land, and we turned to building a small boat.

The felt floor of our tent was used as a cover of a frail frame which was built of willows and of a few poles. On Sept. 29, Sverdrup and myself started for Godhaab, while the others went to fetch the rest of our baggage from the edge of the inland ice. With great difficulty we succeeded in reaching New Herrnhut, a missionary station, on Oct. 3. After a visit to the missionary, we proceeded to Godhaab, which lies a short distance off. We were received very kindly. Two kayaks, with the necessary implements, were despatched at once to Ameragola to fetch the rest of our party. Unfortunately they were delayed by stormy weather, and we did not meet at Godhaab until Oct. 12. An attempt to return to Norway on the steamer 'Fox' from Ivigtut failed; but I must confess that I do not regret the necessity of having wintered in Greenland, as I had thus an opportunity to make a thorough acquaintance with the Greenlanders."

Thus Dr. Nansen concludes his preliminary report, which is soon to be followed by a scientific report. On April 16 the ship 'Hvidbjörnen' arrived at Godhaab, and on April 25 Dr. Nansen and his party left this place. After a brief stay at Sukkertoppen, which is situated a little more to the northward, and an unsuccessful attempt to cross the ice-pack of Davis Strait, the ship returned home. On May 19 the land of Norway was sighted, the next day Cape Skagen was reached, and on May 21 the steamer arrived at Copenhagen.

SIXTEENTH ANNUAL REPORT OF THE BOARD OF HEALTH OF NEW HAVEN.

IN this report the efficient health-officer, Dr. S. W. Williston, presents in concise form the influences which have conspired to bring about a comparatively high death-rate in the city, — higher than in any year since 1881, though distinctly less than the average in the preceding years. This increase has been chiefly due to zymotic diseases, one-fourth of all the deaths being due to preventable causes. The mortality from diphtheria and membranous croup was nearly twice that of 1887; that from measles and diarrhoeal diseases was also high. From small-pox there were two deaths during the year. The history of these cases is both interesting and instructive, and emphasizes the necessity for a correct diagnosis in this disease. The first case was that of an engineer who contracted the disease in New York City. He had been vaccinated early in life, and thus escaped with varioloid, not more than thirty or forty pustules appearing on his body. His wife, attending him, was in due time taken with the same form of the disease. Both cases were treated for measles, both had had measles previously, and both had been vaccinated in childhood. The family living on the floor below, consisting of Mr. D., his wife, and child, had never been vaccinated, save Mr. D. The wife was first to contract the disease, having nursed the second patient. She died of confluent small-pox. The daughter, six years of age, contracted the disease from her mother, but so soon that vaccination after the recognition of the disease did not suffice to prevent its occurrence, of which she died. A middle-aged lady, a relative, called in to nurse Mrs. D., was vaccinated for the first time six days after exposure. The vaccination formed a typical pustule, but did not prevent the occurrence of the disease in a mild form. The disease was confined to the one house; and all those thrown in contact with the cases, who had been properly vaccinated, escaped. The two who had never been vaccinated died. One who was first effectively vaccinated six days after exposure, had it in a mild form. The two who had not been vaccinated since childhood had a light varioloid. In commenting on this case, Dr. Williston says, "And yet, I am sorry to say, in the light of such evidence, that has been so often repeated, there are physicians in New Haven to-day who do not believe in vaccination!"

The history of typhoid-fever in New Haven during the year is of special interest with reference to the localities in which this disease appeared. In recent years in Brooklyn this fever has seemed to be especially virulent in the better portions of the city, and to be practically absent from those sections in which the sanitary conditions are inferior; so much so, that it has become a popular impression in that city that typhoid-fever is a disease of the rich and well-to-do, and not of the poor. This was not true of New Haven

during 1888. Of the total cases, 210 in number, one-third occurred in the seventh ward, whose population is one-tenth of the entire city. Dr. Williston states that this ward is known to be in poor sanitary condition. The greatest factor in the mortality of the city was pulmonary consumption, which caused 217 deaths; next comes pneumonia, with 142. From infantile diarrhoea there were 137 deaths; from old age, 50; cancer, 40; and typhoid-fever, 38.

NOTES AND NEWS.

THE meeting of the Society of Microscopists will be held at Buffalo, N.Y., beginning on Aug. 21. Professor T. J. Burrill, Champaign, Ill., is the secretary.

— The peasant proprietors in Russia, says a writer in the *Nineteenth Century*, can neither pay the money owing to the government for their land, nor even the state and communal taxes, and are flogged by hundreds for non-payment. In one district of Novgorod, fifteen hundred peasants were thus condemned in 1887. Five hundred and fifty had already been flogged, when the inspector interceded for the remainder. Widespread famine is found over a great part of the country. Usurers, the bane of peasant proprietors in all countries, are in possession of the situation. The Koulaks and Jew "Mir-eaters" supply money on mortgage, then foreclose, and, when the land is in their possession, get the work done for nothing as interest. These bondage laborers, as they are called, are in fact slaves, and are nearly starved, while the small pieces of land are often re-united into considerable estates, and their new owners consider they have only rights, and no duties. Meantime, as forced labor is at an end, and free labor is of the worst possible kind, the old land-owners can get nothing done. They have tried to employ machines, bought by borrowing from the banks, and are now unable to repay the money. The upper class has been ruined, with no advantage to the peasant.

— The thirty-eighth meeting of the American Association for the Advancement of Science will be held at Toronto, Ont., beginning on Tuesday, Aug. 27, 1889, at noon, by a meeting of the council at the Queen's Hotel, where will be the hotel headquarters of the association. On Wednesday, Aug. 28, the first general session of the meeting will begin at ten o'clock in the forenoon in the Convocation Hall, University Buildings. After the adjournment of the general session, the several sections will organize. In the afternoon the vice-presidents will give their addresses before their respective sections; and in the evening there will be a general session, when the retiring president, Major J. W. Powell, will deliver his address. The sessions will continue until the Tuesday evening following, and on Wednesday morning, Sept. 4, a meeting of the council will be held. Saturday, Aug. 31, will be given to excursions. The meeting will close with excursions extending to Sept. 7. The general sessions and the meetings of the sections will be held in the University Buildings, where also will be the offices of the local committee and of the permanent secretary during the meeting. Board and lodging for members and their families may be had at moderate rates in several hotels and boarding-houses within easy reach of the place of meeting; and, as the local committee will provide a lunch, members will not be obliged to return to their lodgings during the heat of the day. In the evening, when not otherwise engaged, it is expected that the members of the association and of the local committee will meet socially in the reception-rooms at the hotel. A special circular in relation to railroads, hotels, excursions, and other matters, will be issued by the local committee, and members who are about changing their address for the summer should notify the local secretary at once. It can now be stated, however, that arrangements have been made by Mr. Dudley and the special committee on transportation by which members and their families will be, in general, able to obtain return tickets for one-third the regular rate, provided members are particular in complying with the conditions of the agreements with the passenger agents of the several railroad associations, which will be given in detail in the local committee circular. Without obtaining such a certificate as will be described in the local committee circular, to be countersigned at the meeting, the reduced rate for return ticket cannot be secured. For all matters pertain-

ing to membership, papers, and business of the association, address the permanent secretary at Salem, Mass., up to Aug. 22. From Aug. 22 until Sept. 9, his address will be A.A.A.S., Toronto, Ont. Members remitting back assessments before Aug. 22 will receive their receipts and volumes of "Proceedings" at once from Salem; those paying by mail after that date (and not present at Toronto) must not expect their receipts and volumes until after the meeting. The Cleveland volume of "Proceedings" will be sent during this month to all members who have paid the assessment for that meeting. The assessment receipt for the Toronto meeting must be shown at the time of registering, in order to obtain the association badge, which entitles the member to the privileges of the meeting. If members pay the assessment for the Toronto meeting in advance, and remember to take the assessment receipt to Toronto, they will save standing in the crowd before the secretary's desk, and can register at once on arrival after the opening of the register on Aug. 27. Under the rule which took effect in 1884, members have the privilege of registering members of their families (not including men over twenty-one years of age) by paying the sum of three dollars for each individual to be registered. These associate members will receive badges entitling them to all the privileges extended to members generally by the local committee. Special information relating to any of the sections will be furnished by their officers. Arrangements have been made for a discussion in Section B on the "Relative Merits of the Dynamometric and Magnetic Methods of obtaining Absolute Measurements of Electric Currents." Professor Thomas Gray of the Rose Polytechnic Institute will open the discussion with a paper on the subject, and he will exhibit one or more of Sir William Thomson's most recent forms of electric balance. Arrangements have been made by the local committee for the proper care and exhibition of instruments and specimens, for the details of which, and for all other local matters, members should address the local secretary. In anticipation of the circular to be issued by the local committee, it is only necessary here to give the names of Charles Carpmal, Esq., president of the committee; and of Professor James Loudon, local secretary, Toronto, Ont. Members of the association arriving in Toronto before the meeting should call for information at the temporary office of the local secretary, near the Union Railway Station.

— The Entomological Club of the American Association will meet at 9 A.M., Aug. 28, in the room of Section F, University Buildings, where members of the club will register, and obtain the club badge. Members of the club intending to contribute papers will send titles to the president, Mr. James Fletcher, Government Experimental Farms, Ottawa, Can. The Botanical Club will hold a meeting, as usual, on Tuesday, Aug. 27, in the room of Section F, University Buildings. Communications should be sent to the president, Professor T. J. Burrill, Champaign, Ill., or to the secretary, Douglas H. Campbell, 91 Alfred Street, Detroit, Mich. The Society for the Promotion of Agricultural Science will hold its tenth annual meeting in Toronto, beginning on Monday evening, Aug. 26, in the room assigned to Section I in the University Buildings, and continuing on Tuesday. For further information address Professor W. R. Lazenby, secretary, Ohio State University, Columbus, O. The American Geological Society will hold its meeting in Toronto on Aug. 28 and 29. Professor James Hall, Albany, N.Y., is the president; and Professor J. J. Stevenson, University of City of New York, secretary.

— Mr. Samuel Butler concludes a whimsical article in the May number of the *Universal Review* — an article which he hopes may give his readers absolutely no food whatever for reflection — with words which, though themselves whimsical, are not without their salt of truth, and might perhaps frustrate the very hope which he expresses. "I have sometimes thought," he says, "that, after all, the main use of a classical education consists in the check it gives to originality, and the way in which it prevents an inconvenient number of people from using their own eyes. That we will not be at the trouble of looking at things for ourselves if we can get any one to tell us what we ought to see, goes without saying; and it is the business of schools and universities to assist us in this respect. The theory of evolution teaches that any power not worked at