

38''·8. This is an increase on the results of the preceding quarter both in the number and height of prominences. Two elaborate plates are included in the *Memorie*, indicating the prominences observed at Rome and Palermo from September to December 1886.

#### GEOGRAPHICAL NOTES.

THE following news was received a few days ago at St. Petersburg from Colonel Roborovski, the present chief of the late M. Prjevalsky's projected expedition. They crossed the Tian-Shan by the Barskaun and Bedel Passes, and reached the Taushkandaria. Then they crossed the Kara-teke chain, and when they were on the banks of the Yarkend river, they found out that the Kashgar-daria no longer reaches the Yarkend-daria, but is lost in the irrigation canals of Maral-bash. They followed the Yarkend river, which rolls a mass of muddy water between quite flat banks, covered for some 15 to 30 miles on both sides of the river, by thickets of *Populus euphratica*, *Populus prunosa*, tamarisks, *Halostachus* shrubs, and rushes. Sand deserts spread on both sides,—towards the west to Kashgar, and eastwards to Lob-nor. Many ruins of old cities are met with in the deserts which are never visited by the natives. In the thickets of shrubs which fringe them there are numbers of tigers and wild boars, while amidst the *barbhans* of the deserts the wild camels are freely grazing. From Yarkend, the expedition went south, towards the hilly tracts, where it stayed for a month, and then it moved towards Kotan, whence Colonel Roborovski wrote on October 7. He proposed to winter at Niya, and to search for a pass to Tibet across the border-ridge to which Prjevalsky gave the name of "Russian Ridge." If they succeed they will spend next summer in Tibet.

In a lecture lately delivered before the Geographical Society of Bremen, Prof. Kuekenthal, of Jena, gave some account of his researches in King Charles Land. Geologically, these islands belong to Spitzbergen, and not, as was formerly supposed, to Francis Joseph Land. During his stay of nearly three months, Prof. Kuekenthal thoroughly investigated this remote district, which is almost unapproachable, the surrounding seas being densely packed with icebergs. The islands are almost entirely without vegetation; only a few mosses struggle for existence on the clay soil. Numerous walrus skeletons are thrown up by the sea. Game is plentiful; Prof. Kuekenthal shot 14 bears (besides bringing back two live specimens), 39 walruses, and as many seals. Many insects and crustaceans were obtained from the land lakes.

#### THE ANNIVERSARY OF THE ROYAL SOCIETY.

THE President, after giving an account of the scientific work of many Fellows deceased during the past year, addressed the Society as follows:—

On account of the great importance of Joule's labours, both directly, in the advancement of science, and indirectly, through the knowledge thus acquired, in enabling improvements to be made in the practical application of science for industrial purposes, it has been suggested that it might be desirable to raise some public memorial to him, and the Council has appointed a Committee to consider the question.

I have referred, and that very briefly, to some only of the Fellows whom we have lost during the past year, but fuller details both of them, of other Fellows whom we have lost, and of our recently deceased Foreign Members, will be found in the obituary notices which appear from time to time in the Proceedings, according as they are received from the Fellows who have kindly undertaken to draw them up.

Of those who last year were on our list of Foreign Members, we have since lost one who was truly a veteran in science. More than three years have elapsed since the celebration of the centenary of the birth of M. Chevreul, and two more recurrences of his birthday came round before he was called away. He will be known for his researches on the contrast of colours. But his great work was that by which he cleared up the constitution of the fixed oils and fats, and established the theory of

saponification. Few scientific men still surviving were even born when this important research was commenced—a research in the course of which he laid the foundation of the method now universally followed in the study of organic compounds, by showing that an ultimate analysis by itself alone is quite insufficient, and that it is necessary to study the substances obtained by the action of reagents on that primarily presented for investigation.

There is one whose name, though he was not a Fellow, I cannot pass by in silence on the present occasion. I refer to Thomas Jodrell Phillips Jodrell, who died early in September, in his eighty-second year. About the time of the publication of the reports of the Duke of Devonshire's Commission, the subject of the endowment of research was much talked of, and Mr. Jodrell placed the sum of £6000 in the hands of the Society for the purpose of making an experiment to see how far the progress of science might be promoted by enabling persons to engage in research who might not otherwise be in a condition to do so. But before any scheme for the purpose was matured, the Government Grant for the promotion of scientific research was started, under the administration of Lord John Russell, then Prime Minister. This rendered it superfluous to carry out Mr. Jodrell's original intention, but he still left the money in the hands of the Society, directing that, subject to any appropriation of the money that he might make, with the approval of the Royal Society, during his lifetime, the capital should, immediately upon his death, be incorporated with the Donation Fund, and that in the meantime the income thereof should be received by the Royal Society. Of the capital, £1000 was several years ago assigned to a fund for the reduction of the annual payments to be made by future Fellows, and the remaining £5000 has now, of course, been added to the Wollaston Donation Fund. By the Fee Reduction Fund the annual payment of ordinary Fellows elected subsequently to the time of the change was made £3 instead of £4, and the entrance fee abolished. As to the Donation Fund, a very wide discretion was, by the terms of the original foundation, left in the hands of the Council as to the way in which they should employ it in the interest of science.

Since the Croonian Foundation for lectures was put on its present footing, it has been made the means of securing for us the advantage of a lecture delivered before the Society by distinguished foreign men of science. In the present year our Foreign Member, M. Pasteur, was invited to deliver the lecture. Unfortunately, the state of his health would not allow him to deliver it himself, but at one time he hoped that he would have been able to be present at its delivery. It was ultimately arranged that his fellow-labourer at the Pasteur Institute, Dr. Roux, should deliver the Croonian Lecture in his stead; and several of the Fellows have heard his lucid account, first of the discoveries of M. Pasteur in relation to diseases brought about by microscopic organisms, and then further researches of his own in the same field.

In addressing the Fellows at the anniversary last year, I mentioned that Commandant Desforges had kindly offered to compare that portion of Sir George Schuckburgh's scale, with reference to which the length of the seconds pendulum had been determined by Kater and Sabine, with the French standard metre; and as the ratio of this to the English standard yard was accurately known, the length of the pendulum, as determined by these accurate observers, would thus for the first time be brought into relation with the English yard by direct comparison with accurately compared measures of length. The comparison was shortly afterwards executed, and the scale, which, of course, was very carefully packed for its journey to Paris and back, has long since been replaced in the apartments of the Society. This highly desirable comparison occupied but a few days in its execution; which affords one example of the scientific advantages derivable under an international agreement, from the establishment of the Bureau des Poids et Mesures. Our own country, which for some years held aloof from the Convention, forming the sole exception to the general agreement among nations of importance, joined it some years ago; and we thus have the privilege of availing ourselves, as occasion may arise, of the appliances at the office in Paris for such comparisons of measures of length or weight.

The services of Mr. Arthur Soper, as a special assistant, have been retained during the past session, with advantage to the library. He has completed the much-needed shelf catalogue, and the re-arrangement of the books where necessary. In the course of this work the volumes of a purely literary character