his way up to a managership, and finally become a wealthy estanciero on his own account. But the author gives the emphatic warning that "Argentina is not a country suitable for the English of the usual emigrant class."

A relief from the monotonous ranch life was the crossing of the Andes into Chile by way of Mendoza, with excursions of several weeks towards Aconcagua and the glaciers of the headwaters of the Tupungato valley, in company of an enthusiastic exploring engineer, who finds his recreation in the climbing of difficult peaks.

The ninety-one original photographs (two of which are here reproduced by the courtesy of the publishers) are excellent representations of a multitude of scenes from lassoing gauchos, sheep-shearing, and locust-plagues, to shifting dunes amongst lagoons, glaciers, and *nieves penitentes*.

THE ERUPTION OF ETNA.

IN the last issue of NATURE (p. 368), a brief reference was made to what has proved to be a somewhat important eruption of Etna. Our knowledge of the successive phenomena is still scanty, the telegrams inserted in English newspapers being short; but, from the more lengthy accounts given in the *Corriere* of Catania, some further details may be gleaned.

The eruption was, as usual, preceded by a series of tremors interspersed with stronger shocks. At Mineo, which lies about 35 miles S.S.W. of Etna, the first movement was recorded on September 10, at 0.58 a.m., followed for more than fifteen hours by almost incessant tremors. After 4.28 p.m., however, a period of calm ensued, which for at least twenty-four hours was interrupted by only one disturbance; and, even at Linguaglossa (about ten miles north-east of the central crater), the shocks had become so infrequent and so slight that the inhabitants were no longer awakened by them.

Almost concurrently with the first tremors, black clouds of vapour and ashes were seen to rise from Etna. The first new vent was opened at 4.30 a.m. on September 10 on the northern flank of the mountain to the north-west of M. Frumento,¹ and at a height of about 9200 feet; the second, at 9.40 a.m., in the neighbourhood of M. Nero; in both cases an hour or more after pronounced shocks. From both openings there issued dense clouds, with lapilli, sand and ashes, but no lava. Later in the day, at 12.15, a third vent appeared, near M. Crozza, and a little later a fourth, near Castiglione Sicilia. After this, new vents opened in rapid succession. On September 11 there were sixteen in action, of which fourteen ejected vapour and dust, and the other two, lower down, lava. On September 13 Prof. Riccò reported that as many as 54 vents had opened in the region between M. Rosso and the craters formed in 1879. The central crater also ejected an immense quantity of ashes, which have covered the surrounding country to the depth of several inches.

During the first day there seems to have been no outflow of lava. At 1.30 a.m. on September 11, however, during a period of comparative seismic calm, a new vent opened between M. Rosso and M. Nero, at a height of about 5250 feet, with enormous emission of dust, &c., followed by a stream of lava. Five hours later another vent appeared in the same district, from which a copious stream of lava issued. The streams rapidly descended the steep slope, passed round M. Rosso and then between the lavas of 1646

¹ It should be remembered that some of the names given above are duplicated on Mount Etna. The height of the mountain in 1900 was 10,758 feet.

and 1809, thus assuring the safety of Linguaglossa. The main stream presented a front from 12 to 15 yards high, and from 500 to 600 yards wide, and advanced rapidly, sometimes at the rate of a quarter of a mile an hour. During the next two or three days, its velocity was reduced. On September 13, it had crossed the carriage road and circum-Etnean railway; the next day it had approached to within two miles of the Alcantara River, which forms the northern boundary of the volcano. On the 15th the main stream split into four subsidiary streams, and the violence of the eruption perceptibly abated. At the time of writing (September 18) the lava stream, the flow of which appeared to be checked, had made another onward movement.

C. DAVISON.

THE CENTENARY CELEBRATION OF THE UNIVERSITY OF CHRISTIANIA.

THE delegates of the foreign and national universities and of many academies of science met an enthusiastic reception at the centenary festival. The organisation was admirable throughout, and much useful assistance was given by a number of students, who acted as marshals, and by ladies who had been asked by the University authorities to help in the entertainment. The majority of the professors and students spoke English well, so that if any foreign delegate met with a difficulty—which is improbable—at least the way was made smooth for all who spoke English.

The Prime Minister, Mr. Konow, and many of the other high officials of the State associated themselves throughout with the University, so that the festival was regarded not merely as academic but also as national.

On the afternoon of Monday, September 4, a short reception was held at the University by the rector, Dr. Brögger, to welcome the delegates, who numbered about 130, and to explain the expediency of dividing us into twelve groups, according to the geographical positions of our several countries. Each group was requested to choose a spokesman, and I had the honour of being chosen to represent the British Empire.

On the evening of Monday the doctors and professors of the University invited their foreign and Norwegian guests, to the number of three or four hundred, to supper at the Grand Hotel. Before supper Prof. Morgenstjerne gave us a cordial welcome in a speech delivered in French, and afterwards we went to the dining-rooms, of which there were several, and supped in groups of skilfully chosen parties of congenial spirits.

The more formal part of the festival took place the following morning (Tuesday, September 5) at the National Theatre. Dr. Brögger presided on the stage, to which access was given by two gangways on each side of the orchestra. The King and Queen honoured the meeting with their presence; and the spectacle was brilliant with the dresses of the ladies, the academic robes, and bright uniforms.

The proceedings began with a cantata composed by Mr. Winter Hjelm, of which the words are by Björnson, entitled "Lyset" (the Light), sung by the students, both men and women, with a full orchestra. After two parts of the cantata had been given Dr. Brögger addressed the audience in German on the history of the University. The groups of delegates then presented their several addresses of congratulation, and each spokesman delivered a speech of a few minutes in length. The rest of the

cantata was then given, and this brought the meeting to an end.

In the evening the King and Queen received all the delegates at the castle, and said a few gracious words to each guest.

On Wednesday (September 6) the second formal meeting took place in the handsome new Aula of the University. This hall is not so large as the National Theatre, where the meeting had taken place on the previous day, so that it was only possible to admit national and foreign delegates, but other entertainments were provided by the committee of ladies.

The proceedings on this occasion consisted of instrumental and vocal music, and of a short address by Prof. Stang on the work of the University. The rector then explained that in the honorary degrees which were to be conferred, the claims of mathematics and astronomy were purposely excluded, because degrees in these branches of science had been conferred only a few years ago, on the occasion of the Abel Festival, I myself having then received a degree.

The heads of faculties then presented the names of the several doctors in the various departments of learning to the rector. It may be interesting to note that of the five speeches two were in English, two in German, and one in French. The degrees were then conferred by the rector on the new doctors, of whom but few were actually present. It may here suffice to say that the new British doctors were Prof. Sanday, Prof. Alfred Marshall, Sir Frederick Pollock, Sir Thomas Barlow, Sir John Bradford, Sir William Osler, Prof. Sayce, Dr. Henry Sweet, Sir James Dewar, Principal Miers, Sir John Murray, Sir William Ramsay, Prof. Sollas, and Sir Joseph Thomson.

In the evening the Municipality of Christiania entertained the delegates at dinner in the municipal buildings.

On the following morning a number of parties were taken round the museums, and the two old Viking ships naturally attracted much attention. In the afternoon the Videnskabs Selskabet—the national academy of science—gave a party in the garden attached to their fine house. This home of science was presented to the society not long ago by two Norwegian ladies, whose names, unfortunately, I omitted to take down. As the weather was glorious, this was one of the pleasantest of our many entertainments.

In the afternoon Prof. Birkeland gave a lecture in French on the phenomena attending the discharge of electricity through rarefied gas, with the application of his ideas to cosmogony on the largest scale. The lecture was of great interest; but it contained so much that was new, at least to me, that I will not venture to give a detailed account of his results. I understand that he is now sending a paper on the subject to the *Comptes rendus*.

The festival at Christiania terminated with a brilliant gala performance at the theatre of three acts of Björnson's "Mary Stuart," in the presence of the King and Queen.

On the following morning (Friday, September 8) a large number of the delegates, accompanied by ladies and their Norwegian hosts, left Christiania for Bergen in a special train put at their disposal by the Government. The line affords scenery of great beauty, and is a monument of the triumph of the engineers over enormous difficulties, for we climbed to the height of 4000 feet, and reached the region of snow and glaciers. The weather had been magnificent on the eastern side of the mountains, but we were in heavy rain as we descended the wonderful gorges of the western side. It had been supposed by most of us that the arrival at Bergen would be the real end to the hospitality shown

to us; but in this we were mistaken. Every house in Bergen was illuminated in our honour, so that we ran into a city of light, and, notwithstanding the heavy rain, the streets were densely crowded in the neighbourhood of the station. On Saturday and Sunday it was fine again, and thus we learned that Bergen is not a city of eternal rain.

On Saturday a visit to the museum and to the marine biological station had been organised, followed by a drive through the romantic hills which surround the town. In the late afternoon the municipality, as represented by the President and by the first Burgo-master (for in Norway there are two Mayors for each city), invited us to a dinner, at which there were many excellent speeches. Finally, we were invited to the theatre, where a comedy by Björnson was admirably acted. This play, entitled "Geography and Love," was perhaps chosen to teach men of science that they ought not to become intolerable nuisances to their wives.

On Sunday morning the special train returned to Christiania, somewhat emptied by the departure by sea of some delegates, who were bound for St. Andrews.

It is notoriously difficult to judge of places and institutions in their holiday dress, but I am sure that all the visitors must have carried away an impression of great activity in the study of literature and science on the part both of the professors and students; and what I have written will have shown how great was the hospitality extended to us during this crowded week.

G. H. DARWIN.

CELEBRATION OF THE FIVE-HUNDREDTH ANNIVERSARY OF THE FOUNDATION OF THE UNIVERSITY OF ST. ANDREWS.

CELEBRATIONS there have been in St. Andrews from very early times, more especially when its ancient chapels and monasteries were in full activity, and still more when its splendid cathedral, the largest and finest in Scotland (yet so ruthlessly destroyed by the Reformers) lent its countenance to the ceremonies. The present, however, surpasses them all save in the absence of the King, who so often favoured the city and the University up to the time of Charles II. Thus, to confine the remarks to academic life, great were the rejoicings on February 14, 1413, when Henry Ogilvie, M.A., the bearer of the papal Bull of the cultured Benedict III. endowing the young University with its important privileges, entered the city. Bells sounded from the steeples, a solemn convocation of the clergy was held in the refectory of the Priory, and a procession to the high altar of the cathedral was made by the whole assembly in rich canonicals, "whilst 400 clerks, besides novices and lay brothers and an immense number of spectators, bowed down before the high altar in gratitude and adoration."¹ After high mass the day was devoted to mirth and festivity. Such was a fitting baptism to a university which owed its beginning more to the impulse of learned men to teach than to public or private endowments. No special buildings at first existed, the masters opening pedagogies in various parts of the town, the larger meetings in churches or in the refectory of the Priory so recently and so judiciously restored by the late Lord Bute.

Now, after the lapse of five centuries of an almost unbroken continuity in academic life, the University again engages in festivity and rejoicing. During its long and chequered career it has surmounted numerous trials and difficulties—such as the turmoil of revo-

¹ Tytler, "Hist. Scot."