

half-day's journey" from the valleys named by Mr. Haliburton. I was favoured with interesting replies from all those to whom I had written with the single exception, very curiously, of our consul at Barcelona, a letter from whom you published, and who appears to have been Mr. Haliburton's chief authority. As to the replies I received, I need only say that they so strongly negated the assertion of there being "racial dwarfs," though admitting that there are "certains goitreux de petite taille," in the Pyrenean valleys, that I did not think it worth while to make the proposed journey. And as Mr. Haliburton repeats, in the current *Asiatic Quarterly*, the assertions made in NATURE, I feel bound to state these facts, though I may say that I quite agree with him as to the probability of a former wide distribution of dwarf races, and should have found Pyrenean dwarfs, had they been discoverable, in most interesting relations to the Ligurian giants, whose caves I had been exploring at Baoussé—the "Red Rocks" of Grimaldi.

Athenæum Club, July 10.

J. S. STUART-GLENNIE.

#### THE NOTTINGHAM MEETING OF THE BRITISH ASSOCIATION.

THE forthcoming meeting of the British Association in Nottingham recalls the year 1866, when the present Mr. Justice Grove presided over the meeting in the town, and delivered his epoch-making address. Although this was the only meeting held in Nottingham, national conferences and associations of all kinds are constantly gathering in this very convenient, healthy, and picturesque centre; the inhabitants are therefore accustomed to the entertainment of guests. The public buildings will also be found to offer special facilities for the usual work of the British Association.

The University College, a large building almost central in position, has naturally been allotted to the meeting of the various sections. The lecture-theatres and classrooms of the College provide accommodation for all the sections with the exception of two, and these will gather in commodious rooms in the immediate vicinity.

The various laboratories of the College are to be devoted to the exhibition of scientific apparatus and diagrams, some of which will be used during the meeting for the illustration of papers in the sections; and since these laboratories are very convenient for the purpose and are in direct communication with the sectional meeting-rooms, it is hoped that authors of papers will be induced to bestow special attention to the illustration of their papers, as the illustrative matter will be permanently on view throughout the meeting.

The Corporation of Nottingham not only grants the use of the University College, but also gives permission for the Castle Museum to be used for the conversaziones, and throws open the Exchange as a luncheon hall, with smoking-room and ladies' room as adjuncts. The large luncheon room thus provided will be supplemented by another large and convenient room in the University College.

The large hall at the Mechanics' Institution will be fitted as the reception-room with all the usual conveniences, the Albert Hall being reserved for the popular lectures, the president's address, and for a special concert to be given on Saturday evening by the Sacred Harmonic Society of the town.

It will be found on reference to a local map that not only are these various buildings easy to find, but that they lie most conveniently within range of one another, the extreme distance not exceeding a walk of five minutes.

The inhabitants of Nottingham are quite alive to the duties of hospitality, and not only will the officials and working members of the Association receive entertainment in private houses, but the clubs of the town are also throwing open their doors with one consent. A list of hotel and lodging accommodation is nearly ready for issue.

The local excursions include visits to the Dukeries, Charnwood Forest, Lincoln, Belvoir Castle, and Derbyshire; and, in connection with these visits, hospitality has been offered by the Duke of Portland, the Duke of Newcastle, the Duke of Rutland, and the Bishop of Southwell. Many other offers of hospitality are expected. Important works in the town and neighbourhood will also be open for inspection.

The local programme and excursion handbooks are in an advanced stage of preparation. These will serve as guides to the public buildings used for the meetings and indicate the hotels and lodgings, and the routes followed in the various excursions; they will also give information concerning the natural history of the district.

The work of the local committee would be greatly facilitated if all those who intend to be present or to take part in the meeting would communicate with the local secretaries, Guildhall, Nottingham, as soon as possible.

Without unduly anticipating the information which will be found in the local programme and publications, enough has been said to indicate that the local committee are actively preparing for the reception and entertainment of the members of the Association; and it is proposed next week to give some statement of the more serious work which will engage the attention of the general meeting and of the sections.

FRANK CLOWES.

#### THE GREAT DROUGHT OF 1893.

THE draught of 1893 will unquestionably take its place among the recorded events of history, if regard be had to its intensity, the length of time during which it has lasted, and the wide extent of the earth's surface it has overspread. Treating the British Islands as a whole, the drought may be considered as embracing by much the greater part of the country for the fifteen weeks beginning with March 5. But while copious rains have fallen during the past few weeks in many places, it may be regarded as continued to near the present time in many of the more important agricultural districts in the south.

The drought was most severely felt in the southern division of England, and least in the north of Scotland. Over Scotland, England, and Ireland it increased in intensity, with pretty uniform regularity, from north to south. Thus the deficiency in percentages from the average rainfall of that portion of the year was 30 at Lairg and 59 in Berwickshire; 59 at Penrith, and 90 at Dungeness and Falmouth, and 38 at Londonderry and 67 at Waterford. The least deficiency at any of the stations of the *Weekly Weather Report* was 1 at Glencarron, in Ross-shire, and the greatest at Dungeness and Falmouth, as stated above. At Glencarron the amount of the rainfall was 16·91 inches, whereas it was only 0·60 inch at Dungeness, 0·77 inch in London, 0·92 inch in Scilly, and 0·94 inch at Falmouth. At places south of a line drawn from Cambridge to Scilly less than a fourth part of the average rainfall of these fifteen weeks was collected, and consequently over this large district the effects of the drought have been most disastrous to agriculture and horticulture, the hay crop, for example, being in many places a complete failure. It was altogether a unique experience, in travelling in June from London to Scotland, to mark the great and steady improvement in the condition of the crops in the northward journey.

During the period the type of weather prevailing was eminently anticyclonic, with the appearance, ever and anon, in localities more or less restricted, of small satellite cyclones with their attendant thunderstorms and rains. Hence the remarkably sporadic character of much of the rainfall, of which the most remarkable in-

stance was a rainfall of 1.19 inch at Parsonstown on June 10 and no rain whatever at any other of the telegraph stations of the Meteorological Office in this country. Heavy local rains of this type, with downpours of an inch or upwards, were recorded on May 17, 18, 20, and 21, and June 10. It is also to be noted that many thunderstorms occurred during the period unaccompanied with rain, just as happened generally in the east of Scotland in June 1887, on the day of the Queen's Jubilee; and frequently large drops of rain fell, quite insufficient even to wet the ground, and scattered over narrow paths of inconsiderable length. Very heavy rains occurred over the eastern districts of Scotland, practically terminating the drought there, on June 22 and 23, when on these two days 4.20 inches fell at the North Esk Reservoir on the Pentland Hills, 3.32 inches at Roslin, 2.21 inches at Aberdeen, 2.06 inches at Logie Coldstone, near Ballater, and nearly two inches at many places, whilst generally in the west little and at many places no rain fell at all.

Temperature was phenomenally and almost continuously high in March, April, May, and June, specially as regards the first three of these months. Thus, for London the mean of the three months was  $4^{\circ}3$  above the mean of the previous 130 years; and in Edinburgh  $3^{\circ}3$ . The only springs since 1763 with a mean temperature exceeding that of 1893 were for London, 1811 and 1794, which were respectively  $5^{\circ}2$  and  $4^{\circ}3$  above the average; and for Edinburgh, 1779 and 1781, which exceeded the mean by  $4^{\circ}0$  and  $3^{\circ}8$ . It is highly interesting to note that large as these figures are, the Ben Nevis figures far exceed them, the mean temperature at this high-level observatory for March, April, and May last being  $6^{\circ}6$  above the mean of these months, a result due to the prevailing anticyclones, which so frequently are attended there with abnormally high temperatures.

The drought has also extended over nearly the whole of Europe, large portions of Canada, the United States, and other parts of the globe. In the north of Italy no living person recollects to have seen the Italian Lakes so low, and the southern Alps so greatly denuded of their snow covering. It is estimated that over the wheat-growing countries of the world this valuable crop will be to no inconsiderable extent under the average. On the other hand, in other parts of the world the rainfall has been exceptionally heavy, and followed with widespread disastrous floods, as in the cotton districts of the United States, and in Queensland.

In London, the total amount of rain that fell during the 110 days from March 4 to June 22 was 0.77 inch. Mr. Symons, our best authority on the question of droughts, enumerates eight droughts which have been recorded during the present century. Of these the longest continued was 105 days, from March 11 to June 23, 1844; and thus the drought of the present year is the greatest in the British Islands authenticated by meteorological records.

#### NICOLAS IVANOVICH LOBATCHEFSKY.

NICOLAS IVANOVICH LOBATCHEFSKY, the founder of Non-Euclidean Geometry, was born on November 2, 1793.

A student, and subsequently professor at Kasan, the Physico-Mathematical Society of that interesting University have determined to celebrate the centenary of his birth by founding an International prize for Mathematical, and in particular, for Geometrical work bearing upon the late-born but remarkable branch of mathematical science and philosophy which owes its existence to Lobatchefsky's genius and has earned for him the title of the Copernicus of Geometry.

A committee including the names of Tchebyche, Poincaré, Hermite, Darboux, Klein, Sophus Lie, Linde-

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mann, Cayley, Beltrami, Newcomb, Mittag-Leffler, and over a hundred other notabilities of the mathematical world in both hemispheres, has been appointed to assist in carrying out the plan.

At this time of day it would be superfluous to dilate on the pre-eminent claims to honourable recognition of one who has played a principal part in reconstituting the basis of geometrical thought and realised his ideas in a series of memoirs with a thoroughness and precision which Gauss in 1846 characterised as the work of "a true geometer."

Any English mathematician (and it is to be hoped there will be many) desirous of co-operating in erecting this monument (if it may be so called) to the memory of a great scientific reformer, may do so by forwarding a subscription addressed to Prof. Vassilief, President of the Physico-Mathematical Society, University of Kasan.

#### NOTES.

WE greatly regret to record the death of Dr. John Rae, F.R.S., at the age of eighty-one. It was he who, in 1854, collected relics of the ill-fated Franklin expedition in the *Errebus* and *Terror*.

AMONG the Civil List pensions granted during the year ending June 20, 1893, we note one of £75 to Mrs. Dittmar, in consideration of the services to chemical science rendered by her late husband, Prof. William Dittmar, F.R.S., and one of £50 to Mrs. T. Wolstenholme, in consideration of the merits of her husband, the late Rev. Joseph Wolstenholme, as a mathematician, and of her straitened circumstances.

FOR the convenience of those who wish to be present at the Rothamsted celebration on Saturday next, a special train will leave St. Pancras for Harpenden at 2.2 p.m., returning at 5 p.m. In connection with the celebrations at Rothamsted, it is interesting to recall the circumstance that in the early part of the present century the signal services rendered by Francis, Duke of Bedford, to the theory and practice of agriculture were recognised by the erection, in Russell Square, of a colossal statue to his memory. The scheme, in the first instance, was initiated by Sir Joseph Banks, then president of the Royal Society, the first meeting on the subject being held at his house in Soho Square. Subscriptions were solicited from the various agricultural societies existing at the time, and from private individuals, and these flowed in with many expressions of approval of the object in view. The statue and its pedestal, the latter emblematical of the art of husbandry, were designed by Richard Westmacott, who received the sum of £6000 for the work, each subscriber receiving an engraving of the design. An inscription records that the statue to the Duke was erected by his fellow labourers in the field of agricultural improvement in gratitude for his unwearied endeavours to improve the theory and practice of agriculture.

THE French Association for the Advancement of Science will hold its annual meeting from August 3 to August 13, at Besancon, under the presidency of Dr. Bouchard. The subjects for discussion in different sections are the mechanical traction of tramways, the local records from which a forecast of the weather at a given place can be made, the rôle of humus, works of commerce, and the administrative measures necessary to prevent the use of unfit articles of food.

THE death is announced of Mr. Walter White, who for upwards of forty years served the Royal Society, first in the capacity of clerk and afterwards of assistant secretary and Librarian. Mr. White retired from the latter post in 1885, and