

for them to have obtained much, if any, general knowledge or culture, that it is of the utmost importance that this want should be remedied, so that they may return, if possible, stocked with a few ideas, as well as provided with a certificate of a certain proficiency in literature and science."*

At present the various lecture-rooms are scattered over the town. But this will soon be a thing of the past, as the new college is on the point of completion. It is a large building in the classical style, consisting of a centre, with a colonnaded front and two wings. The whole is handsomely decorated with heavy mouldings and pilasters. I cannot help recording my regret that some more natural building was not designed; with so many beautiful types of African buildings, there could be no difficulty in finding models. No doubt, however, the new building, which contains, among other lecture-rooms, a large laboratory, will admirably fulfil the practical ends for which it is intended.

Stellenbosch is affiliated to the Edinburgh Univer-

sity, which gives Stellenbosch students (of whom there are large numbers studying medicine) certain privileges. Not only has it a larger number of students than any of the other colleges, but owing to the fact that it is in a small town, the college and the theological seminary together give quite a scholastic tone to the whole society. The professors are the leading spirits of the place, and the interests of the college are paramount. Indeed, it is the only place in South Africa where there is anything like University life in our English sense of the word—I mean the many-sided social training which is got by mixing with fellow-students from all parts and of all sorts.

As I sat under the shade of the oak-trees and listened to the murmur of the brook that ran by my side, I thought here was a fit seat of learning for South Africa. Its oak avenues and pleasant country lanes, with their flower-covered hedgerows, and its quaint buildings seemed to give it that beauty and repose which is so justly associated with a genuine seat of learning.

W. B. W.

AT A SOIRÉE OF THE ROYAL SOCIETY.



FROM its history and standing the Royal Society of London is unquestionably the chief scientific body in these islands. It has all the dignity of a State institution as well as the lustre of a famous past; and, in the minds of many, to have the privilege of writing "F.R.S."

after one's name is to have gained the blue ribbon of science. Like other great associations, it began in a very humble way.

During the year 1645—just two hundred and forty-one years ago—a small band of friends were wont to meet in Dr. Goddard's lodgings, Wood Street, London, to talk over the various observations of natural things which had been made, in a curious and philosophical spirit. The notion of holding these meetings is said to have been suggested by one Theodore Haak; and Dr. Goddard's lodgings were selected because he had an assistant working there who was skilled in grinding glasses. Subsequently the meeting-place was removed to Oxford, and after that to Gresham College, London, where after the Wednesday lecture of Mr. Christopher Wren, the celebrated architect, the colleagues met in the classroom to carry on their discussions, from which all political and theological topics were excluded. This was in the year 1659, the year of the troubles with King Charles II., and the philosophers, despite their harmless attitude in politics, were obliged to give

up their meeting-place, which was turned into a soldiers' barrack.

Next year, after the Restoration, the meetings were, however, resumed on November 28th, in Mr. Rooke's room, Gresham College, and Mr. Ball's room in the Temple. Forty members were enrolled, including the Hon. Robert Boyle ("the Father of Chemistry, and brother of the Earl of Cork"), Sir Kenelme Digby, Mr. Evelyn, of the "Diary," Mr. Christopher Wren, Dr. Cowley, and Dr. Wallis.

At the meeting on December 5th, Sir Robert Moray announced the welcome news that his Majesty King Charles II. had been pleased to signify his approbation of the young society, and their objects. The king afterwards took further interest in their proceedings, and it is his Majesty's picture which holds the place of honour in their meeting-hall at Burlington House to-day.

It is curious to read some of the minutes of the young society. Thus Mr. Pope was deputed to "procure the experiment of breaking pebbles with the hand;" and later on Mr. Wilde agreed to "show the stone kindled by wetting."

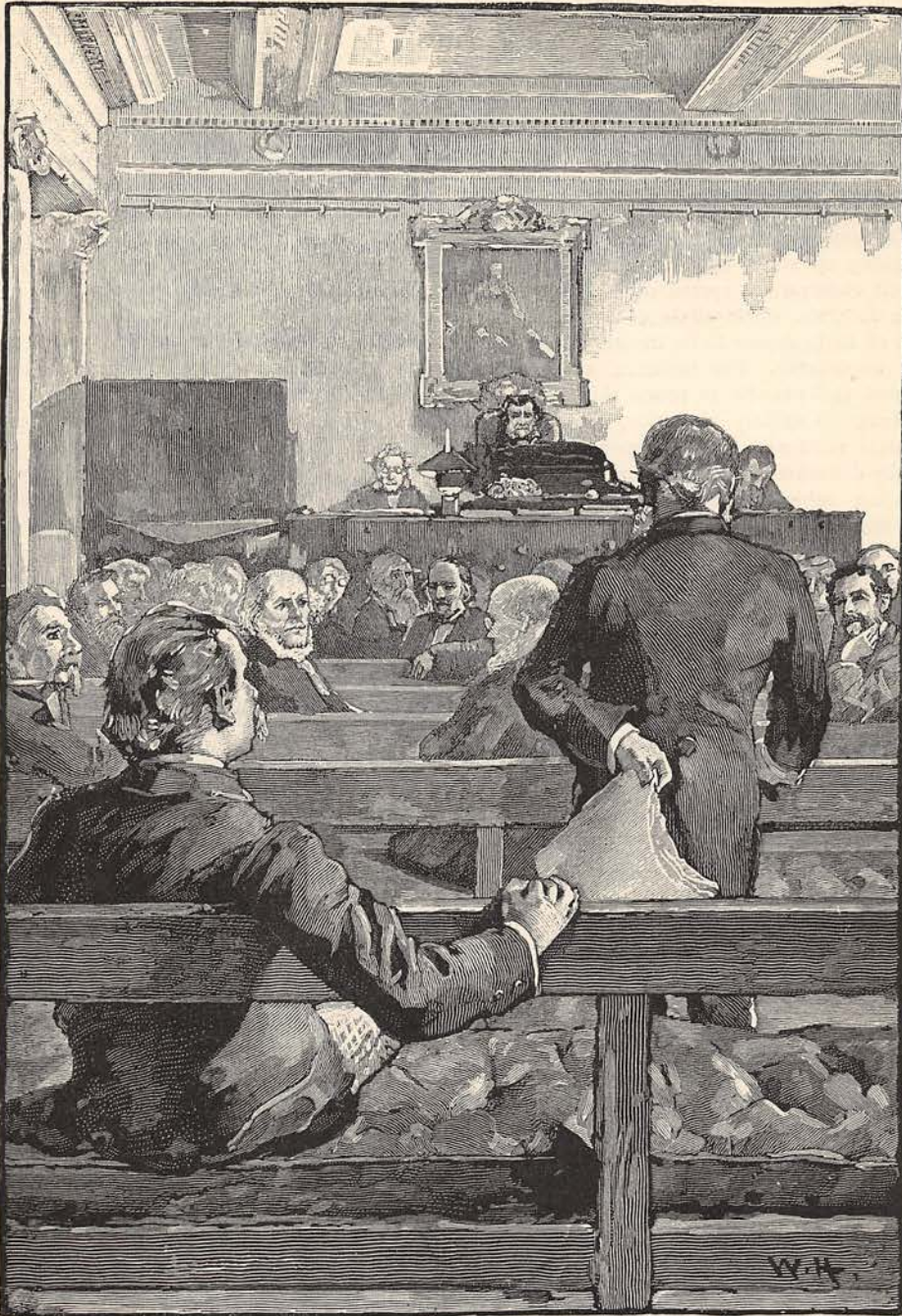
Again: "The Duke of Buckingham promised to bring to the society a piece of a unicorn's horn."

This remarkable substance was afterwards made the subject of an interesting experiment, for we read that (on July 24th) "A circle was made with powder of unicorn's horn, and a spider set in the middle of it; but it immediately ran out."

"Sir John Findis' piece of an incombustible hat-band was produced." (Query, asbestos?)

"Mr. Croune was desired to inquire into the manufacture of hats."

* Supplement to Annual Report of the Superintendent-General of Education, 1884, p. 19.



A MEETING OF THE ROYAL SOCIETY.

Also: "Sir Kenelme Digby related that the calcinated powder of toads reverberated, being applied in bags upon the stomach of a pestiferate body, cures it by several applications."

On another occasion: "Sir Gilbert Talbot's experiments of the sympathetic powder were ordered to be registered."

Vegetable life also came in for its share of study.

Among others, Dr. Clarke made some "observations on the humble and sensible plants, in Mr. Chiffin's garden in St. James's Park, made August 9th, 1661;" and Col. Tuke "brought in his history of the rained seeds, and some ivy berries, the kernels of which were the same that were reported to have fallen down from the sky in Warwickshire, Shropshire, etc."

These examples serve to show how little true science,

as we know it, was current in those days; and also the true inquiring spirit of the members, who took up any matter that seemed to call for explanation. Their earnestness is likewise exemplified in Mr. Powle's very liberal offer to the Society, "to employ himself in the country, about anything which they should direct him to." Let us trust that Mr. Powle was duly despatched, like Pickwick, to the country.

These early members of the Royal Society were, indeed, as Newton afterwards described himself, like children picking up shells upon the great shore of Truth. Their observations spread over a wide field, however; in fact, the whole circle of the sciences; and if some of them appear to be trivial, others were of the first importance. For instance, experiments were instituted at Teneriffe to prove the weight of the atmosphere. Capillary attraction, the recoil of guns, chemical reactions, and astronomical effects were carefully discussed. As the members settled to their work, the subjects treated of became more serious and important, as the minutes of their meetings curiously show. The "sympathetic powders," the crushed vipers, and divining rods of the earlier days were left behind for weightier matters; and the proceedings of the Society assumed more and more that classic character which they have borne so long. At last the illustrious Newton, with his theory of universal gravitation, gave an enormous impetus to their researches.

Since Newton's day, Michael Faraday, Davy, Thomson, and many others have added glory to the Royal Society; and at their ordinary meetings, or their annual soirées, some of the most eminent *savants* of the day are to be met. These meetings are held on Thursdays during the winter, in the Society's rooms, Burlington House, at three in the afternoon; because it was found that wits were clearer then than after dinner in the evening. The after-dinner mind is not quite capable of grasping the lively molecule.

The visitor to one of these meetings is ushered into an ante-chamber where tea and coffee are provided for his refection, before the business of the day begins, as well as after it has ended. This is a custom which has been imitated by some other learned societies—notably the Linnean.

The meeting-hall is a large sombre chamber, hung with dark oil paintings of dead immortal worthies, such as Huyghens, Newton, and Priestley. At the farther end sits the President on an antique high-backed chair, with a secretary on either side, and the great mace of King Charles lying in state before his desk. The ordinary Fellows sit on benches across the body of the hall.

A grave and impressive dignity presides over the assembly. If it is trying for a new member of Parliament to address the House, it is almost equally trying for a young Fellow to take part in a discussion here. The papers are on subjects which would be

a sealed book to the original members of the Society; their very names would sound like Cherokee to Evelyn and Mr. Powle, supposing the latter to have returned from the country. They are even unintelligible to all except those Fellows who are specialists in the particular science they belong to. For example, there may be a mathematical paper "On the Invariants and Covariants of Quantities," or an electrical one "On the Determination of Magnetic Susceptivity." A renowned palæontologist (the very man who is popularly supposed to build the skeleton of an extinct animal from its tooth) will perhaps discourse on some new "missing link," to wit, the Thylacolea, or flesh-eating marsupial of New South Wales; or a well-known geologist will communicate a paper by somebody else "On the Occurrence of Pterygotis and a Limuloid in certain Flagstones." If the lay visitor escapes the seductive subject of vortex-rings, and the dissipation of energy, he may consider himself lucky; and will probably not regret the mysteries of "orthogonal and isothermal surfaces," or the "forces experienced by inductively ferro-magnetised or dia-magnetised non-crystalline substances." Science has taken such gigantic strides of late years that it has almost coined a language of its own.

There are two annual soirées, or conversaciones, of the Royal Society, one being known familiarly as the "ladies' night." These gatherings are attended by the Fellows and their friends, together with a sprinkling of distinguished guests, such as foreign *savants*—a Helmholtz or a Pasteur—ambassadors from other Powers, a few presidents of other societies, a famous general or two, and occasionally a royal personage.

The guests are received by the President, and disperse themselves about the halls of the Society, which are brilliantly illuminated for the occasion by some new system of electric lighting. Numerous tables are covered with scientific apparatus illustrating recent inventions, the telephone, the microphone, the photophone, or something newer still. Nor are the exhibits confined to physical instruments, but extend over the whole range of science. Novelty, of course, is a desideratum, and especially some novelty of the year which has just elapsed. Illuminated microscopes stand ready to reveal their splendid secrets; some rare orchid from the tropical forest hangs its alien blossoms in the heated air; meteoric stones from Russia, and even corroded jewels from the site of Troy, may perhaps be seen there, along with fossil scorpions from the Silurian rocks, or tiny crystals of a new element, and microbes from the snows of Norway.

There is a little licence as regards the range of exhibits; and perhaps it is as well, for some of the experiments might lack interest to other visitors than men of science. As it is, the soirées are in general most successful gatherings, and form a relaxation in the scientific year.

