Societies and Centenaries

STUDY of the history of those societies whose interests are in the main scientific and literary would form a task pleasant enough and, in all conscience, comprehensive enough for a student of the development of scientific thought. Even if we restricted ourselves to a study of our own national societies, the field would be sufficiently wide to tax the energies of a single worker. A start has been made. Weld (the works of Sprat, Birch and Thomson can scarcely be termed histories) has traced the origins and the varied fortunes of the Royal Society from the struggling days when its unlucky secretaries were threatened with "Books of Fishes" in lieu of sterling payments, to the more settled generations just preceding our own; we wait and hope for a worthy successor to Bence Jones's account of the Royal Institution; Dr. Howarth has told us the fascinating story of the growth of the British Association; and, under his editorial guidance, the Association has published a history of London's contributions to science which contains a valuable but necessarily brief account of the principal London scientific societies.

The great provincial societies have not lacked their historians, although there is here room for an account which shall synthesise these remarkable activities, shall give us a co-ordinated account of cognate societies of lesser repute, and show us what an important part has been played in the past and is still being played by societies such as the Manchester Literary and Philosophical Society and the sister societies in Leeds, York and Newcastle. To the Manchester society, for example, falls the signal honour of publication of the first estimate of an absolute molecular magnitude, for it was, I believe, to that Society that Joule communicated his calculation of the root mean square velocity of a molecule of hydrogen at standard temperature and pressure (the value he gave was 6,055 ft. per second ; Childs' tables give 6,037 ft. per second).

In connexion with such societies, it is in the nature of things that our own generation should have witnessed a flood of jubilees and single, sesqui- and bi-centenaries; and it is to the credit of the societies concerned that they should hasten to give to the world some account of their origins and growth, the celebrations becoming something more than an occasion for a series of such gargantuan feastings as are permitted to a post-War world. But there are other societies, some still in existence, some vanished and gone, of which we know little beyond their names, carent quia vate sacro. Of some, indeed, we may find a record in rare volumes and obscure appendixes, but here again we could

wish for a modern synthesis of their activities which should place in its proper perspective the not uninteresting story of their growth and decay.

What of that Society for Philosophical Experiments and Conversation the minutes of which for the year 1794 are printed for T. Cadell, Junior, and W. Davies (successors to Mr. Cadell) in the Strand-a society which was instituted in London on January 25, 1794, at the house of Dr. Higgins, and held weekly meetings during the session of Parliament under the chairmanship of Field Marshal Conway-the "Didactic Experimenter" being Dr. Bryan Higgins ? What of that Birmingham group of which Priestley, Watt, Boulton, Darwin, Galton and Wedgwood were distinguished members-a group which met at dinner monthly "calling ourselves the Lunar Society, because the time of our meeting was near the full moon, in order to have the benefit of its light in returning home"? Like the famous x club of a century later, its existence depended on those members who called it into being, and Watt was probably the last surviving member. De Morgan gives us a fascinating glimpse of that artisan mathematical society which flourished in Spitalfields for well over a century, a society in which every man had "his pipe, his pot and his problem"; in which, by the constitution of the society, it was "the duty of every member if he be asked any mathematical or philosophical question by another member, to instruct him in the plainest and easiest manner he is able". The society's existence extended over some one hundred and thirty years, and when, about 1845, its membership had declined to nineteen, the society, with its library. was absorbed by the Royal Astronomical Society. Some of its books, duplicates of those possessed by the Royal Astronomical Society, are to be found in the library of the Physical Society. In its mature years, the society was live and lively. Tempers ran high at times, and we read that "if any member shall so far forget himself and the respect due to the Society as in the warmth of debate to threaten or offer personal violence to any other member, he shall be liable to immediate expulsion, or to pay such fine as the majority of members shall decide".

So much for societies dead and gone; the centenary of the Royal Statistical Society, the circumstances of the origin of which are of special interest in view of the happenings of to-day, has been marked by the production of a history of the Society*. At the Cambridge meeting of the

* Annals of the Royal Statistical Society, 1834-1934. Pp. : 308+8 plates. (London: Royal Statistical Society, 1934.) n.p. Pp. xii+ British Association in 1833, a group of enthusiasts formed, somewhat irregularly, a new statistical section. The presence of Quetelet had something to do with its formation, and the new section was recognised by those in authority, although it can scarcely be said to have received their blessing. The president, Adam Sedgwick, delivered himself of some good advice in the rotund style of the day, informing the culprits that because of the irregular circumstances of its formation he would not read the report of this "self-formed Section", and reminding his hearers that "the things with which the Association had to do were the laws and properties of matter and with those alone". Statistical inquiries might be admitted so long as they dealt with "matters of fact, with mere abstractions and with numerical results. . . . These inquiries, however... touched the mainsprings of passion and feeling . . . they blended themselves with the generalizations of political science; but when they entered on these higher generalizations that moment they were dissevered from the objects of the Association and must be abandoned by it if it meant not to desert the secure ground which it had now taken. . . . The daemon of Discord would find his way into their Eden of Philosophy."

As the historians of the Society remark, there was more to the same effect. It is small wonder that the Statistical Section resolved that "a more permanent body was necessary to carry out the views and wishes of the Section and it was agreed to establish a Statistical Society in London". Hence arose that public meeting of "Noblemen and Gentlemen" at 21 Regent Street, on March 15, 1834, which marked the beginning of the long and honourable career of what is now known as the Royal Statistical Society.

The annals of its development, as recounted in the scholarly pages of the centenary volume, are absorbing, if unexciting. The progress of the Society is traced with admirable clarity from these modest beginnings to a stage at which, amid a host of other activities, it is playing an important part in forwarding the application of statistical methods to various problems of industry, and the accounts of the work of those eminent statisticians who have cherished the interests of the Society in the past are associated with pleasant little sketches of their personalities which add a living interest to the picture. Perhaps the one trivial criticism, if criticism it may be termed, which can be brought against a wholly delightful volume, is that there are scarcely enough of these touches. We could wish that a president of the Statistical Society could be found who should say of a dull paper, as the venerable Dalton announced in an audible undertone from the rostrum of the Manchester Literary and Philosophical Society, "Well, this is a varra interesting paper for those that take any interest in it".

The Council of the Society, and the distinguished authors of the centenary volume, Dr. Bonar and Mr. Macrosty, are to be congratulated on the issue of a volume that must form a norm for all future writers faced with a similar task.

Allan Ferguson.

Science and State Regulation of the Sea Fisheries

O^N September 22, 1863, a Royal Commission commenced inquiries into the Sea Fisheries of the United Kingdom of Great Britain and Ireland. Prof. T. H. Huxley and his fellow commissioners visited eighty-six places, examining methods of fishing in use and interrogating witnesses. Their Report, published in 1866, was a masterly summary of the situation, embodying courageous recommendations in accordance with a declared legislative principle. The first recommendation was as follows:

"We advise that all Acts of Parliament which profess to regulate, or restrict, the modes of fishing pursued in the open sea be repealed; and that unrestricted freedom of fishing be permitted hereafter."

And the principle :

"... that (apart from the restrictions prescribed by international law, or by special treaties) the produce of the Sea is the property of the people in common; and that methods of fishing are fitting subjects for legislation, only so far as such legislation can be shown to be necessary to secure the greatest possible advantage to the whole nation from the Sea Fisheries; either by suppressing wasteful and uselessly destructive modes of fishing; or by removing legislative obstacles in the way of improved modes of fishing; or by preserving peace and order among fishermen."

Broadly speaking, the great deep-sea fisheries of the present day have been developed under that "unrestricted freedom of fishing" advocated by the 1863 Commission, without let or hindrance in the form of national or international regulation. The passing into law of the Sea-Fishing Industry Act of 1933, therefore, by granting State control over fishing operations, marked the end of nearly seventy years of free fishing by British vessels in the high seas.

By this Act, the British Government has acquired powers to regulate and restrict the fishing of British vessels whereby fishing grounds, times of fishing, fishing gear, quantities of fish to be landed and their quality—all of these being matters over