

## News and Views

Sir Napier Shaw, F.R.S.

THE Council of the Royal Meteorological Society has made the *Quarterly Journal of the Royal Meteorological Society* of April 1934 a special "Shaw Number", in honour of Sir Napier Shaw's eightieth birthday. Sir Napier Shaw has done a great deal to educate English people to a recognition of the practical importance of meteorology. Under the title "The March of Meteorology" he has contributed to his own number of the *Journal* a valuable collection of random recollections. This contribution is, besides being much else, an inner history of the evolution of the Meteorological Office during a period of about thirty years which followed his first connexion with official meteorology. One of Sir Napier's greatest personal contributions to meteorology has been connected with the thermodynamical theory built up around the idea of the Carnot cycle—a conception of an ideal heat engine often despised by students of engineering as being of no conceivable practical significance. In his "Manual of Meteorology", the general circulation of the atmosphere receives masterly treatment with the aid of this cycle and of the special diagrammatic framework with temperature and entropy as abscissæ and ordinates which he has named the 'tephigram'. Although the full harvest from these ideas is perhaps still to come, they have thrown light on many atmospheric processes previously only very imperfectly understood. Another important contribution, and one that greatly advanced weather forecasting with the aid of synoptic charts, was the "Life History of Surface Air Currents" (1906). This was the joint work of Sir Napier and his personal assistant, R. G. K. Lempfert. This study, in his own words, "began the analysis of the motion of the air of a cyclonic depression into distinct currents which has been so fruitful in the hands of the Norwegian meteorologists". By the writing of these reminiscences at the age of eighty, Sir Napier Shaw shows the staying power characteristic of so many eminent scientific workers who became prominent in a period when the troubles of civilisation were less all-pervading, and he reveals in them the broad outlook more common in a less specialised age.

#### Weather Observations

A SUPPLEMENTARY contribution to the same number of the *Quarterly Journal of the Meteorological Society* by Col. E. Gold follows Sir Napier's with the title "Incidents in the March, 1906-1914". This deals with a number of aspects of the work of the Meteorological Office not touched on by Sir Napier, among which may be mentioned the important contributions to the relationship between barometric pressure gradient and wind force, and to radiation in the atmosphere, made by the writer himself, and to the perhaps even more important pioneer investigations of G. I. Taylor in the subject of atmospheric turbulence, carried out during his tenure of the Schuster readership at Cambridge. It was

during those years that the weather observations made at the health resorts were brought under official control, with the result that a reasonable degree of intercomparability has ever since existed in the tabular weather summaries published in most of the morning and evening newspapers, whereas formerly observers had almost unlimited opportunity for creating a false impression of the amount of sunshine to be expected by visitors favouring their own locality. The vexed question of the most suitable units to be used in British meteorology is also touched upon, a question that does not admit of easy solution seeing that the units that satisfy the meteorologist and are intelligible to the ordinary citizen of France and Germany, are not popular with those who, through not having been educated in natural science are unfamiliar with the c.g.s. system and the centigrade thermometer.

#### Water Supplies and Emergency Legislation

THE letter from Vice-Adm. Sir Percy Douglas, chairman of the British Association Research Committee on Inland Water Survey, which appeared in the *Times* of June 14, is an opportune reminder that something more than merely emergency measures to meet the present water shortage is necessary, if the administration of water supplies in Great Britain is to be placed on a sound and satisfactory basis. There may be in the popular mind a tendency to regard the recent appointment of an expert committee to advise the Ministry of Health on measures for dealing with the effects of the present drought as the sum total of all that is possible or due to be done in order to avert disagreeable and even disastrous consequences at any future time. But, as was pointed out in a leading article on the subject in *NATURE* of April 28, the root cause of the trouble lies much deeper, and will remain untouched by such superficial and temporary relief expedients as may present themselves for adoption during the existing crisis. In contradistinction to the practice prevailing in leading countries abroad, there is at present in Great Britain no official body charged with the duty of ascertaining available sources of supply and of gauging their extent and capacity, still less of supervising their distribution to the general advantage of the community. The necessity for a thorough investigation of the position in regard to both surface and underground yields is abundantly evident, and it would be foolish to disguise the fact, as Admiral Douglas so strongly emphasises, that "before it is possible to allocate the water supplies of the country an intensive and fully complete survey of the resources available is indispensable, and, however well-planned the present emergency measures may be, the need for a systematic national survey remains".

#### British Science Guild

THE annual report of the Council of Management for the British Science Guild, 1933-34, presented at the annual general meeting on June 12, refers to the