

the build-up of electrostatic voltages and in surveying rapidly the electrification produced at various stages in the processing of a material.

The five papers will be fully published elsewhere in due course.

## CENTENARY OF KING'S COLLEGE (LONDON) ENGINEERING SOCIETY

THE Engineering Society of King's College, London, celebrated the centenary of its foundation during March 5-8. It is thus one of the oldest institutions of its kind in Great Britain, for its first meeting was preceded by only six days by the inauguration of the Institution of Mechanical Engineers. The oldest engineering institution in Great Britain, the Civil Engineers, was formed in 1818 and received its Royal Charter in 1828; the Société des Ingénieurs Civils de France was not formed until 1848.

The celebrations opened on March 5 with a thanksgiving service in the College chapel, conducted by the chaplain, the Rev. S. H. Evans, which was addressed by the Very Rev. W. R. Matthews, Dean of St. Paul's, himself a fellow of the College. This was followed by an address "King's College Engineering Society 1847-1947", delivered by Prof. S. J. Davies in the Great Hall.

Prof. Davies began by reading the resolution passed by the eleven original members on February 2, 1847: "Resolved that a Society be formed under the sanction of the Principal and with the patronage of the Professors of King's College, London, to be called the King's College Engineering Society, and that its object be to take in the various scientific and engineering periodicals of the day and that it be hereafter extended to the reading of original papers, giving prizes . . ."

By the end of 1847 nine papers, on subjects ranging from the Niagara Falls to the solution of algebraic equations, and from daguerreotype to coal gas, had been read. The practice of electing every term a committee and officers from the students was also established.

It is interesting to note that both Prof. Wheatstone, well known for his work on electric communications, and who held the chair of experimental philosophy, and Prof. Daniell, known by his hygrometer and the Daniell cell, who held the chair of chemistry, were among the early teachers in the Department. The subjects taken covered the very wide range of engineering, applied science and architecture. The development of the undergraduate studies has been towards specialization in civil, electrical and mechanical engineering, architecture being discontinued in 1912 and metallurgy in 1918.

There has been a remarkable continuity in the progress of the Society. Apart from the First World War, there have been only two short interruptions. The first was when a Mr. Gilbert moved an amendment, to a proposition dissolving the Society, to form a "Shakespearean and Dramatic Society". This was none other than W. S. Gilbert, of Gilbert and Sullivan fame. This break lasted only two years, however, and the Society was restored to health.

As stated before, one of the objects of the Society is to provide an opportunity for members to read papers of engineering and allied interest. In the last hundred years, more than 1,100 papers have been read, an average of eleven a year. The practice of awarding prizes for papers was instituted in 1871, and

it has been the practice to award two prizes every year since. A third prize, to commemorate the services to the Society of the late Prof. Ernest Wilson, to be awarded for the year's best paper, was established in 1932.

Many former students and members of the Society have risen to eminence in their profession; of eighty-two presidents of the Institution of Civil Engineers, ten have been King's 'engineers'. There have been occasions when King's 'engineers' have achieved fame in other fields; W. S. Gilbert and C. K. Bird, or "Fougasse", of *Punch*, are notable examples.

In concluding his history of the Society, Prof. Davies mentioned the *King's Engineer*, which has been published annually under the joint auspices of the Society and of the Engineering Branch of the Old Students' Association.

Prof. Davies ended his address with some remarks on engineering training in general. In particular, he compared the size of technical schools in Britain with those in Germany; he believes that better results are obtained when the engineering faculty continues as a numerically small unit within the larger body of a college.

## DEW IN PALESTINE

AN account has been received from Mr. S. Duvdevani, of the Palestine Meteorological Service, of an optical method of estimation of dew which he has developed at the Dew Research Station, Pardess Hanna Agricultural School, Karkur, Palestine. The need was felt for a much quicker and less costly method than that of direct weighing of the dew collected on a standard surface, so that a network of voluntary observing stations could be organised for a country-wide study of the amount of dew in the different seasons. In a dry climate such as that of Palestine, the success of certain crops is largely dependent upon the amount of dew, and the justification for measurements with apparatus not likely to give a high degree of accuracy, in which the personal factor may be rather prominent, is obvious. Agriculturists clearly wish to know primarily where the regions of most abundant dew at the seasons when this is most important are to be found. They care comparatively little about small errors in the absolute values of the figures for the amount of dew.

The optical method arrived at after ten years of study consists in exposing a standard wooden block, called the dew-gauge, at a standard height in the open, from sunset to sunrise. Dew is estimated by reference to a standard atlas of photographs, with which the size, form and distribution of the drops on the gauge is compared. Calibration was based on a preliminary study of the measured weights of dew for various types of drop distribution recorded on life-size photographs of the gauge, a selection of which is doubtless reproduced in the atlas.

A specimen Quarterly Dew Statement published by the Palestine Meteorological Service shows that in 1946 the totals for June varied more than those for April, ranging from about 7 mm. at Ramot Ha Shavim to practically nil at Jericho. If the year was not a very unusual one meteorologically, the conclusion to be reached is that, in the Rift Valley, crops get very little assistance from dew between April and June, even when there are many clear nights, and that coastal and hill country get dew on a scale unknown in the cloudy climate of England.

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