

### The Royal Polytechnic Society, Cornwall.

AMONGST the oldest of provincial societies, the Royal Cornwall Polytechnic Society, which has its headquarters at Falmouth, is one of those which has adapted itself to the changing times and continues to serve the interests of Cornwall in many ways. Instituted nearly a century ago for the sole purpose of holding exhibitions to encourage workmen and students and to give them the opportunity of showing their work, the annual exhibition and the summer meeting, held simultaneously, continue one of the Society's main activities. The scope of the exhibition held in July 1930 at Penzance is especially referred to in the ninety-seventh Annual Report of the Society, which records that the exhibition was visited by more than 6000 persons.

The Report also refers to the work of the Falmouth Meteorological Observatory, the Cornwall Rainfall Association with more than fifty observers in the county, and gives reports of the papers read at the summer meeting and some interesting biographical notes. Among these is a sketch of the career of the president, Dr. J. H. Rowe, of Bradford. Born in Hayle in 1870, Dr. Rowe graduated in medicine at Aberdeen and in 1899 began to practise in Bradford, where he has held the presidencies of the Bradford Literary Club, the Bradford Scientific Association, and the Bradford Historical and Antiquarian Society. He is, however, as well known in Cornwall as in Yorkshire and possesses a unique collection of books, pamphlets, portraits, and documents relating to Cornwall, and his presidential address of last year to the Polytechnic Society was a review of the work of Cornish inventors.

In this address, Dr. Rowe said that from a study of the records of some 350 inventors of Cornwall who previous to the year 1890 had invented objects of use or had taken out patents, he could not help drawing the reasonable inference that Cornwall in the past had had more than the average share of clever men. Among those to whom he referred more particularly, were Robert Were Fox, inventor of the dipping-needle; Davy, whose safety-lamp had been the means of preventing countless accidents; Trengrouse, inventor of the unsinkable lifeboat, the cork jacket, and the rocket life-saving apparatus, who spent his fortune of £3500 on his inventions, and died a poor man; Loam, inventor of the man-engine for raising miners from great depths; Trevithick, whose work was "brilliant, meteoric, sensational, but never-

theless effective"; Woolf, improver of the steam engine; Husband, whose pneumatic stamper for crushing minerals was first tried at Hayle Foundry in 1870; the Hornblowers, whose work is dealt with in a separate paper by Mr. R. Jenkins; Gurney, who invented the Bude Light and built steam carriages; the Tangye brothers; Rosevear, who in 1889 made the first wrist watch; and William Christophers, pattern-maker of Hayle, who is said to have invented the spliced cricket bat and to have shown it to Lillywhite, through whom the invention became universally adopted.

Two of the papers included in the Report deal with Cornish copper and tin mining. The first, on "Tributers—their Uses and Abuses", is by Mr. A. K. H. Jenkin, and the second, on "Abandoned Cornish Mines", is by Mr. E. W. Newton, the secretary of the Society. A tributer is a miner who, in lieu of an ordinary weekly or monthly wage, agrees to work for a percentage of the total value of the ores he sends to the surface, after paying the cost of all the tools and materials necessary for winning the same. The tributary system is of great antiquity and if tributers were properly encouraged they might continue even yet to stimulate Cornish mining. If recognition of their work is not made now, however, another decade or so and the race of men capable of rendering such services will have gone.

Mr. Newton's paper deals with the history of the Gwennap mines, which once employed many thousands of miners and from which many fortunes were made. The ores consisted of minerals rich in copper, such as native copper, oxides, arseniates, and grey sulphides. Connected with the Gwennap mines was the great County adit, begun nearly 170 years ago, "the finest and most extensive mining engineering feat carried out in Cornwall". Of the value of the mines Mr. Newton gives many particulars: South Wheal Jewel distributed £400,000 in profits in ten years; Wheal Virgin in 1757 produced copper ores in five weeks which sold for £15,000, at a working expense of £200; in 1806 Wheal Damsel was making a profit of £36,000 a year. The most fascinating mining adventure was the Wherry Mine, the shaft of which was off the coast near Penzance, 700 feet beyond high-water mark. The tin ore was very rich, and it is said, "1 cwt. of white tin was obtained from a sack of ore". An American vessel breaking loose from her moorings demolished the works and the mine came to an end.

### Crabs and Lobsters on the Coasts of Britain.

AN Interdepartmental Committee appointed by the Minister of Agriculture and Fisheries and the Secretary of State for Scotland to inquire into the Crab and Lobster Fisheries was set up in 1925 to examine the present position of crab and lobster protection in Great Britain. Its report, which has recently been published (London: H.M. Stationery Office, 1930; 1s. 6d. net), is based on statistics of landings and information as to the catching power employed in these fisheries. The scope of the inquiry was restricted to the eastern and southern coasts of England and the western coast south of the Bristol Channel and the Isle of Man. The Committee had also under consideration information as to the state of the fishing in various localities in England, and from the fishery districts in Scotland, with local reports on the crab fisheries in 1923. These constitute a valuable basis for comparison with further data, taken together with landing statistics. It is recommended that similar

inquiries into the catching power employed be held in 1932.

Investigations were undertaken by the Fisheries Department of the Ministry of Agriculture and Fisheries, with the co-operation of the local fisheries committees of England and Wales, to collect data with regard to size, sex, and condition of crabs. The object was to obtain definite information as to the immediate proportional loss which would result in various districts as a consequence of the introduction of measures intended to give further protection, such as increasing the minimum size at which crabs may be legally taken, prohibiting the use of undersized and soft crabs for bait, or the imposition of a close season where there is not one at the present time. After careful consideration, it was decided not to recommend the introduction of further statutory protective measures in respect of the crab fishery, as there is no falling off in the yields compared with