

OBITUARIES

Prof. Charles Barrois, For.Mem.R.S.

AMONG French geologists whose names are well known in England, that of Charles Barrois stands high with those of the great pioneers and leaders of geology which France has produced. For this there are many reasons, for not only were his scientific attainments of the highest order, but also he was always a staunch Anglophile and he had made himself known in his early days by his outstanding work in England itself.

Charles Barrois was the son of one of the great industrial families of the north of France, and it was natural that he should continue in the family business. As a young man he had always taken a great interest in geology, and when he came to England to study English methods of manufacture and become a fluent linguist, he found that his interests lay much more in geology than in the mills, with the result that he spent all his spare time studying his hobby.

About this time, at the age of twenty, Barrois decided to devote himself to science, and in 1871 he joined Prof. Jules Gosselet at the University of Lille in the newly formed Geological Department. Five years later he was granted a doctorate of science at the Sorbonne for his work on the Upper Cretaceous strata of England and Ireland. In this great work he showed that the palæontological zones recently established in France could be applied equally well in Britain. This work forms the basis on which all the subsequent zonal work on the Upper Cretaceous in Britain has been built.

About this time, Barrois was attached as a *collaborateur principal* to the Service de la Carte Géologique. The area which fell to him to investigate was the highly complex area of the Armorican Massif. His name appears on many of the sheets of the geological maps of Normandy and Brittany. Besides the maps themselves he wrote numerous papers, some descriptive and some of considerable theoretical importance, based on his studies of this highly complex area. Although essentially a stratigrapher, he wrote on such problems as the emplacement of granites and general petrographical problems. In the later years of his life he frequently returned to this area to revise his earlier maps.

It is natural that since his university was in the neighbourhood of the coalfields of the Nord and Pas-de-Calais, Barrois should have joined Gosselet in applying his geological knowledge to the problems of that complex field. As knowledge accumulated and the correlation of the various beds and seams was established, the structure of the field was elucidated. These studies led to the founding of the Musée houiller de l'Université de Lille in 1908, with models of many of the chief collieries made on plates

of glass giving a wonderful three-dimensional picture of the extraordinary complex structures revealed in the process of mining.

In 1919, Barrois, with Prof. P. Pruvost, his pupil and successor to the chair of geology at Lille, carried the knowledge learned in the north of France to a study of the coalfields of Lorraine and the Sarre. In 1902 he succeeded Gosselet as head of the Geological Department.

Besides the work in France and England, Barrois worked in Spain and was a well-known member of numerous geological excursions and congresses in many parts of the world.

During the War of 1914-18, Barrois felt it his duty to remain with his collections in Lille and spent four years there under the German occupation. During this period his old master, Gosselet, died; now again under the shadow of war, Lille has lost another of its great geologists.

Prof. Barrois received many honours. In France he was

created Chevalier of the Legion of Honour at the age of thirty-seven and in 1923 was promoted to Commander. He was elected to the Paris Academy of Sciences in 1904 and became its president in 1927. Outside France he was also honoured; he was a foreign member of the Royal Societies of London and Edinburgh, and he was senior foreign fellow of the Geological Society of London, receiving its highest award, the Wollaston Medal, in 1901. He was foreign member of many societies and academies, of the United States, Belgium, Spain and Germany, and he was also a member of the Pontifical Academy.

Barrois died at the age of ninety-one on November 5, 1939, in Normandy, but was buried at Lille, where the funeral service, conducted by the Cardinal Archbishop of Lille, was held in his parish church of Saint-Maurice-des-champs, a suburb of Lille.



REPRODUCTION (FULL SIZE) OF A MEDAL STRUCK IN 1924 BY THE SOCIÉTÉ DE L'INDUSTRIE MINÉRALE (DISTRICT DU NORD) TO COMMEMORATE THE PROMOTION OF ITS PRESIDENT TO BE COMMANDER OF THE LEGION OF HONOUR.