of making his students feel they were listening to one who spoke from living contact with a living world. In addition to his teaching duties, Prof. Pennington had charge of the University Farm. When he commenced his work at Reading in 1908 he set himself the task of grading up a herd of dairy shorthorn cattle that would be eligible for registration in Coates' herd book, and at the same time of establishing a herd of cows on the University Farm free from tuberculosis and of good milking type. This he accomplished several years before his retirement, and the herd remains as a record of achievement on the present University Farm. The herd of dairy shorthorns at the National Institute for Research in Dairying was founded largely on cattle of Pennington's breeding.

Though neither an orator nor debater, Prof. Pennington spoke with a sincerity of conviction and a directness of purpose that commanded attention. He loved what was best in literature and art, and gathered together a surprising amount of knowledge and information on many and varied subjects. He was absolutely devoid of pretentiousness or seeking after effect. Pennington carried into everyday life a dignity of thought and conduct that unconsciously raised the tone of those about him.

<div align="right">J. S. L. WALDIE.</div>

Count Robert de Montessus de Ballore

ROBERT FERNAND BERNARD DE MONTESSUS DE BALLORE, whose death occurred towards the end of 1936, was born at Lyons on May 20, 1870. He belonged to one of the oldest families of Burgundy. His mother was a great-granddaughter of Philibert de Commerson, the botanist of the Bougainville expedition, his uncle Ferdinand de Montessus was known as an ornithologist, and his elder brother Fernand was a distinguished seismologist who founded an observatory at Santiago in Chile. For a time Robert de Montessus contemplated a military career, but in his late twenties he made up his mind that such a life was incompatible with a streak of independence in his character, and he began to study mathematics at the Sorbonne. In 1903, while still preparing a dissertation for his doctorate, he was invited to Lille by his friend Robert d'Adhémar, himself a distinguished mathematician, and there he was appointed professor of general mathematics in the Faculty of Science.

Robert de Montessus worked in many fields. Algebra owes to him a fundamental simplification in the use of Sturm's theorem, based on the method of successive approximations ; his process is one for evaluating, to an arbitrary degree of accuracy, the real roots of numerical equations, transcendental as well as algebraic. The theory of elliptic functions attracted his attention, and he was stimulated by Halphen's pioneering work to obtain beautiful theorems on the representation, the singularities, and the classification, of algebraic skew curves ; he studied carefully the twisted quartic of the first kind, that is, the curve of intersection of two quadrics, showing in detail as Halphen had shown in general terms that the current co-ordinates on this curve are expressible as elliptic functions of a single parameter.

In an important memoir on algebraic continued fractions, which was crowned by the Academy of Sciences, de Montessus presented a body of results constituting great advances in this difficult theory. Starting from a certain fraction which is convergent throughout the whole plane, except possibly on the rectilinear segment joining two points if the function represented by the fraction has two singularities, he deduced that analytic continuation by means of a continued fraction is not impeded by poles, or by algebraic or logarithmic singularities.

In his later years, de Montessus devoted much attention to the theory of probability, which he proposed to found on Bernoulli's theorem, regarded as an experimental fact. He tried also to find a satisfactory theory of correlation which should be applicable when the number of observations is small, and he developed some ingenious ideas on weighted probabilities.

About twenty years ago, de Montessus undertook the publication of the "Index Generalis", an annual reference work now well known throughout the scientific world and of inestimable value to every investigator. It is hard to conjecture the number of practical difficulties which de Montessus had to overcome in organizing this immense mass of data on the universities and learned societies of the world ; the scientific qualities of which he had given evidence elsewhere came to his aid here.

In 1931, during a mission to Central Europe on behalf of the French Government, de Montessus gave courses of lectures on various branches of mathematics in Warsaw, Cracow, Lwow, Budapest, Vienna and other universities.

Robert de Montessus, has left the memory of a modest and conscientious scholar, an upright man, and a firm friend.   HENRI VILLAT.

WE are indebted to Mr. E. Mather for the information that the early training of his father, Prof. Mather, was that of an engineer, not that of a carpenter as stated in the obituary notice in NATURE of July 17. Prof. Mather came from a family of engineers. We also learn that, during the Great War, Prof. Mather devoted much time to the invention and development of a device for giving warning of the approach of enemy aircraft.

WE regret to announce the following deaths :

Prof. P. E. Brown, head of the Department of Agronomy in the Iowa State College, known for his work in soil science, on July 8, aged fifty-one years.

Lieut.-Colonel E. G. Ffrench, known for his researches in tropical medicine, especially dermatology, on July 25.

Prof. D. M. Lewis, emeritus professor of physics in the University College of Wales, Aberystwyth, on July 28, aged eighty-five years.

Prof. J. Wilhelm Michaelsen, head of the Department of Natural History in the Hamburg Museum an authority on the Oligochæta, on February 18, aged seventy-six years.