Practical Geology. For nearly twenty years he was Professor of Metallurgy in the Ordnance College at Woolwich.

His textbooks on 'Systematic mineralogy' and 'Descriptive mineralogy' were published in 1881 and 1884 respectively, and he was the author of standard works on metallurgy. A favourite hobby of his was the construction of crystal-models by the folding of paper. By his will he left a considerable sum on trust, subject to a life interest, for the encouragement of the study of mineralogical science at the Royal School of Mines.

Obituary notices have appeared in several scientific and technical journals, and a portrait is given in the Mining Journal of December 18, 1909.

### FELIX CORNU (1882-1909).

Dr. F. Cornu was born at Prague on December 26, 1882, and spending most of his boyhood in the district of the Mittelgebirge in northern Bohemia, he became a keen collector of zeolites and other minerals. In 1902 he entered the University of Vienna, graduating there in 1906, and from 1904 acting as demonstrator under Professor F. Becke. In 1907 he was appointed assistant in mineralogy in the Royal Mining School at Leoben in Styria. Never very strong, he brought on by overwork a nervous breakdown from which he only partially recovered; and he died by his own hand during the night of September 22-23, 1909.

Although not twenty-seven years of age, he had accomplished more work than many investigators do in a full life-time. His capacity for work and his versatility seem indeed to have been extraordinary. The list of his notes and papers, from 1903 till the time of his death, includes no less than eighty-five titles, and papers from his pen still continue to appear. Although some of his notes appear to be trivial and to have been hastily prepared, there are many of his papers which indicate very careful work. It would have been much better, both for the individual and for the science, had he been advised to look always to the quality as well as the quantity of *published* work. Unfortunately the keen competition for posts in these days rather offers an inducement to work of this kind.

Many of Cornu's earlier papers were on the zeolites and rocks of the Bohemian Mittelgebirge; and one of his best pieces of work was on the 'micaceous zeolites', gyrolite, zeophyllite, and a new species reyerite. He also described the existence of regular contraction fissures in zeolites. In 1907, with the aid of a travelling scholarship from the University of

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Vienna, he visited the zeolite localities of Scotland and the Faroe Islands. Later, he became interested in more general problems, one of which was the cause of the peculiar blue colour of rock-salt, and it was in this mineral that he discovered the phenomenon of piezopleochroism. More recently, he turned his whole attention, day and night, to the study of the colloidal forms of minerals, which appear to be of some importance in the products of weathering and in soils.

### HANS CHRISTIAN ALBERT HAUSWALDT.

Dr. Hans Hauswaldt, a counsellor of commerce (Kommerzienrat) of Magdeburg, died on March 27, 1909. He possessed a private laboratory well equipped with instruments, in which he obtained a large number of beautiful photographs of the optical interference-phenomena of crystals and photo-micrographs illustrating various kinds of crystalline structure. Many of these photographs were published in his work 'Interferenz-Erscheinungen an doppeltbrechenden Krystallplatten im konvergenten polarisirten Licht' (Magdeburg: J. G. Hauswaldt, 1902, 1904, and 1907), the three portfolios of which contain a total of 185 magnificent quarto plates reproduced in black and white. In a posthumous publication, in conjunction with D. Vorländer, is given a series of nineteen plates of the interference-figures shown by liquid crystals (Abh. Leop. Carol. Akad. Halle, 1909, vol. xc).

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# Crystallography, an elementary manual for the laboratory. By Professor M. EDWARD WADSWORTH. Pp. xvi [+ xx] + 299, with 25 double plates. (Philadelphia: J. J. McVey. 1909. Price \$3.00).

This book is intended to give to students of geology and mining, as well as to prospectors, an idea of the forms of crystals, which will be of assistance to them in the determination of minerals in the field or laboratory. The detailed description of the forms of the six systems commences at p. 9 with the triclinic system, and ends at p. 147 with the isometric system. The student is then taken through the whole of this again three times in the succeeding chapters headed 'Crystallographic