

enhanced demand is coupled with a restricted supply in an uncontrolled market. Owing to the effects of the war the Russian output, which is normally about 95 per cent. of the world's supply, was reduced to about one-quarter, and at the same time platinum was in greatly increased demand for various purposes arising out of the war, such as the contact-process for producing strong sulphuric acid, aeroplane engines, etc. The result has been that the price of refined platinum in New York rose to more than 20*l.* the troy oz.—*i.e.* five times the value of gold weight for weight. Both the high price and the difficulty of obtaining supplies have led to the introduction of various substitutes, such as "palau," a gold-iridium alloy, which has proved very effective for laboratory use; "rhotanium," a gold-palladium alloy, which is satisfactory for all chemical purposes except for use with hot concentrated nitric acid or as electrolytic anodes, and is even better than platinum as a setting for jewels; and "amaloy," an alloy of nickel, chromium, tungsten, etc., which is highly resistant to acid and atmospheric corrosion, and very serviceable in dental work and for surgical instruments. Tungsten appears to have displaced platinum as the material for the targets of X-ray tubes.

PROF. G. A. LEBOUR.

BY the death, on February 7, of Prof. Lebour, the scientific world loses a prominent and interesting figure. Born in 1847 and educated at the Royal School of Mines, he served from 1867 to 1873 on the Geological Survey. He was lecturer in geological surveying at the University of Durham College of Science (later, Armstrong College) in Newcastle from 1873 to 1879, and succeeded Page as professor of geology in that institution. This position he occupied until his death, so that for forty-five years he was connected with the college, and for thirty-nine years occupied the chair of geology. In 1904 he received the Murchison medal of the Geological Society, and in the same year was elected vice-principal of Armstrong College.

The transference of heat through the crust of the earth occupied Lebour's attention early and led to measurements of underground temperature in northern coal-pits, and also, in conjunction with Herschel, to the determination of the thermal conductivities of a great number of rocks. This work, issued in a series of B.A. reports from 1873 to 1881, is well known, and many of the data obtained are accepted as standard.

Lebour's name will always be associated with the geology of Northumberland and Durham. Besides his official maps, he brought out in 1877 an excellent geological map of the county of Northumberland, which is the embodiment of much strenuous, clear-sighted labour. He was joint author with Topley of a widely quoted paper on the Great Whin Sill, which may be said to have definitely established its intrusive character. The stratigraphical relations of the carboniferous

rocks form the subject of many papers, in which the divisions of the system and the description and correlation of the important limestones, etc., are set forth with admirable lucidity. The economic aspects of the subject find expression in papers on the Redesdale Ironstones and the coals of the Bernician series, especially those associated with the Little Limestone. The future importance of these coals, which occur in rocks below the coal measures proper, is strongly insisted upon, and the lapse of forty years has but added strength to the views then brought forward. Of many papers relating to the geology of Durham may be noted those dealing with the classification of the salt-measures, the breccia-filled fissures in the magnesian limestone (aptly termed by him *breccia-gastes*), and the marl slate and yellow sands.

Lebour wrote one book, the "Handbook to the Geology and Natural History of Northumberland and Durham," of which three editions have appeared (1878-1889). It is a very effective monument to his life-work in the two counties, and has the remarkable merit of increasing in value the more it is used.

This brief narration of work accomplished gives, however, no true estimate of Lebour's scientific activity and influence. He was a many-sided man, of wonderful fluency, both in the written and spoken word, and a born teacher. His papers are models of clearness and skilful arrangement of material; they are written in flawless English, and they often display that sense of humour which was one of his notable characteristics. These same qualities were, if possible, accentuated in his lectures. He inspired a great band of workers, who have carried his methods and enthusiasm to the four quarters of the globe, and he was ever ready to help, by his sage advice, those whose steps he had directed towards scientific paths. J. A. S.

DR. JOHN McCRAE.

THE death of Lt.-Col. John McCrae at the early age of forty-four is a sad loss to the Canadian Army Medical Corps and to the profession at large. Dr. McCrae belonged to the type of modern physician in whom the study of disease is based on a thorough training in biology. A pupil of Ramsay Wright and of A. B. Macallum at the University of Toronto, he began his academic career as fellow in biology, and afterwards went to McGill as fellow in pathology. Associated with Prof. Adami at the Royal Victoria Hospital, Montreal, he became known as a popular teacher and a keen investigator of problems in clinical medicine. He was the joint author with Dr. Adami of the well-known "Text-book of Pathology." Always keenly interested in military matters, he joined his old battery at the outbreak of the Boer War, and in 1902 gained his majority and was given command. It is to be hoped that the valuable notes and sketches of his South African campaigns may be published. In the present war he served with the Canadian Artillery,