Book Reviews

The Corner House Group—Health Department Report for the year 1964. By A. M. Coetzee, Chief Medical Officer.

The Corner House Group, previously known as the Central Mining-Rand Mines Group, comprises eight gold mines and four collieries employing currently around 63,000 and 4,500 Bantu mine workers respectively. This annual report is the fiftieth issued and marks not only the golden jubilee of the department but of its first medical officer—retired 1956—Dr. A. J. Orenstein, C.B., C.M.G., C.B.E., D.Sc., LL.D., M.D., F.R.C.P.

Early this century many of the leaders of the gold mining industry in South Africa became increasingly perturbed by the high mortality from diseases among the Bantu mine workers. It was in the region of 22 per 1,000 per year, with pneumonia, often epidemic, causing about 10 per 1,000 and acute tuberculosis six per 1,000. The Chamber of Mines invited Sir Almroth Wright, leading immunologist, and Colonel (later General) William Crawford Gorgas, chief sanitary officer for the Panama Canal area from 1904 to 1913, to visit the Witwatersrand and advise managements on how to cope with the problems. Colonel Gorgas strongly recommended the appointment of a competent medical officer to organize and control the health and medical service. Thereupon in April 1914 Dr. A. J. Orenstein (b. 1879), a young American army surgeon, who had served under Colonel Gorgas in the supervision of the workmen employed in the construction of the Panama Canal, was appointed to the office in which he continued until 1956. He became the pioneer of mining medical services in South Africa and, by reason of his work in the mines and other activities, such as director of Army Medical Services—rank Major-General—and director of the Pneumoconiosis Research Unit in Johannesburg, he achieved an international reputation as a leader in occupational health, hygiene, and research. The long list of civic, military, and professional honours attached to his name testify to this.

From its inception Dr. Orenstein based the development of the Health Department on a two-fold policy. The first was that 'while alert and receptive toward new discoveries and developments, the best possible use is made of well established and proved methods and proceedings'. The second was founded on General Gorgas's aphorism: 'Public health cannot be enforced—it must be persuaded.'

Since his retirement Dr. Orenstein has remained active. In 1959 he acted as Secretary General of the International Pneumoconiosis Conference convened at the University of Witwatersrand, Johannesburg by the South African Council for Scientific and Industrial Research. He edited (1960) the Proceedings of the

Conference. This magnificent volume and the A. J. Orenstein Hospital at Blyvooreitsicht are fitting monuments to this great pioneer of health in industry. Even more so is the advance in the health and well-being of the Bantu mine workers and their dependants as exemplified by the following table from the 1964 report:

	<i>Mortality Rates per 1,000</i>	
	1913	1964
Pneumonia	9.0	0.11
Tuberculosis	3.5	0.03
Silicosis (year 1914)	1.08	0.02
Scurvy	0.4	Nil
All diseases	21.00	1.41
Accidents at work	4.5	1.19

Concurrently there has been a corresponding improvement in morbidity rates.

Industrial medical officers in Great Britain will welcome this opportunity of saluting the achievements of Dr. Orenstein and wishing him many more years of health and activity.

Future generations will honour his name by recording it with Agricola and Paracelsus.

A. MEIKLEJOHN

Lung Function, Assessment and Application in Medicine. By J. E. Cotes. (Pp. 541; 16 figs.; 63s.) Oxford: Blackwell. 1965.

The last decade has seen a revolution in the practice of chest disease in this country, partly due to the decline of pulmonary tuberculosis and partly to the rapid increase in understanding of pulmonary function and the means of accurately measuring its component parts.

The importance of assessing pulmonary function quantitatively has been recognized not only in general medicine but in surgery, anaesthesia, and, of course, in industrial medicine, when occupational factors may lead to damage of the lungs. The small number of pulmonary function units already existing in various parts of the country are already not sufficient to meet the growing needs, and an expansion of these facilities will have to take place. The needs are varied: sometimes detailed physiological studies of the whole span of pulmonary function are necessary; at other times, the serial measurement of a limited number of tests is all that is required. The appearance of Dr. Cotes' book is timely for it will be a valuable source of information to anyone having to provide these facilities.

Its approach is different from other books in this field; its emphasis is as much on the practical as on the basic aspects of pulmonary function.

It is clearly written but anyone coming to the book