

Health of the Executive

DURING the past six years the Diagnostic Clinic of the Graduate School of Medicine, University of Pennsylvania, has carried out investigations into the health of 2,000 executives from 70 firms (Medical Affairs, University of Pennsylvania. 1, No. 3, Spring, 1960). On their first examination in the Clinic, 40 per cent of these individuals were found to have previously unrecognized disorders and only 28 per cent were diagnosed as completely healthy; the remaining 31 per cent had had previous illness which currently had an adverse effect on their physical status. Of the newly discovered disease, 57 per cent was considered potentially serious, 34 per cent was minor in importance, and 9 per cent insignificant. Disease in the serious category increased with age. In those 40 years of age or under, only 38 per cent of the newly diagnosed disease was considered serious, while in those over 60 years it rose to nearly 70 per cent. The conditions occurring in the older age groups are as susceptible to treatment as are those in younger individuals. 54 per cent of the newly discovered disease was concentrated in only 13 per cent of the group. There is thus a healthy group of 28 per cent having no disease, either new or old, and 13 per cent of the group having more than half of all the disease found. This small 'disease prone' group is being further examined.

Rugby School Natural History Society

THE report of the Rugby School Natural History Society for 1959 contains a number of articles for which the boys concerned were awarded school prizes (Pp. 24+2 plates. Rugby: Rugby School Natural History Society, 1960). One of the most interesting is by I. H. R. Thompson, who obtained a distinguished-work prize. During a period of three years, Thompson has been collecting information about the disposal of dung and carrion and, in this article, describes the part played by beetles in dung and carrion disposal. Although four-footed scavengers and maggots play the greater part in disposal of carrion, Thompson shows that *Necrophori* beetles are responsible for the elimination of considerable quantities of carrion. Almost invariably, the beetles bury the corpses by excavating the earth under it and allowing the body to sink down into the hole. During burial the fur or feathers are usually removed, but the animal is never dissected. Beetles play a much larger part in the disposal of dung than they do of carrion. Although other agents, such as flies and worms, dispose of some dung, the bulk of it is dealt with by beetles. As early as March a patch of dung will yield a quantity of the smaller dung beetles, particularly the smaller *Aphodius*; by May the larger *Geotrupes* can be found in large numbers. About this time the smaller *Aphodius* appear in numbers again.

Population in 1958

THE second part of the Registrar General's Statistical Review, which used to be called "Civil Tables", is now published under the title "Tables, Population" (pp. xi+181. London: H.M. Stationery Office, 1960. 11s. 6d. net). The contents remain unchanged, however; mortality statistics continue to be published in the medical tables, and Part 2 of the volume for 1958 deals with births, marriages and total population. There have been no major changes in the presentation of statistics compared with

previous years. Nor were there any striking new trends in the figures themselves during that period. Divorces continued to decline in numbers, new petitions filed stood at the lowest figure since 1945, when the married population was lower in absolute numbers than to-day. Live births were up by about 18,000 compared with the previous years, raising the birth-rate from 16.1 to 16.4 per thousand of the total population and the legitimate birth-rate from 111.5 to 113.9 per thousand married women of reproductive age. Births have been increasing steadily since 1955, and provisional figures for 1958 indicate that the rise has continued in that year.

Principles of the Extraction of Metals

MONOGRAPH No. 3 of the series being published by the Royal Institute of Chemistry for the guidance of teachers in schools is concerned with the application of physico-chemical principles to extraction metallurgy (Royal Institute of Chemistry Monographs for Teachers. No. 3: Principles of the Extraction of Metals. By Dr. D. J. G. Ives. Pp. vi+57. London: Royal Institute of Chemistry, 1960. 6s.). The author, Dr. D. J. G. Ives, has done a very good bit of work, and no better preparation for a prospective student of metallurgy could well be imagined. The first of the four chapters is concerned with the thermodynamical background, the reader being introduced to, or reminded of, the fundamental concepts. In the next, these are applied to pyrometallurgical processes. Chapter 3 gives a short account of the factors which govern the choice of extraction methods, and the booklet ends with a description of some typical operations such as roasting, the extraction of iron and copper and an outline of hydrometallurgy. This is an excellent introduction to the subject; the only question which can arise is whether the treatment may not be a bit too ambitious for its purpose, but this is a fault, if indeed it be one at all, which is easily remedied.

A Blood Parasite from the California Yellow-legged Frog

DURING the summer and early autumn of 1958, eleven *Rana b. boylei* were collected from Dutch Mill Creek, Sonoma County, California. Examination of the peripheral blood showed the presence of extra-cellular and intra-erythrocytic haemogregarine-like parasites (considered to be *Karyolysus sonomae*) in five of the hosts. Sections and tissue impressions of the viscera indicated that the parasite underwent schizogony in endothelial cells. Donald L. Lehmann reports that this is the first authentic report of a species of this genus to be recorded from any group but the Reptilia (*Proceedings of the American Philo-sophical Society*, 103, No. 4; August 1959). Previous reports from the Amphibia have been based upon the morphology of the parasite in the peripheral blood and were not confirmed by demonstrating the vertebrate life-cycle.

The genus *Karyolysus* was established by Labbe (1894) to include those intra-erythrocytic sporozoans capable of fragmenting the nucleus of the host-cell. Reichenow (1921) found that this lytic activity was of uncertain generic worth; he did, however, demonstrate that the parasite could be distinguished from other haemogregarine-like species on the basis of the life-cycle in the vertebrate host, where schizogony occurs in endothelial cells and the resulting mero-