

Abstracts from Current Literature

Physiology and Nutrition

THE SATURATION CURVE OF BENZENE IN BLOOD. J. TEISINGER and ST. SKRAMOVSKY, Arch. d. mal. profess. 8:257, 1947.

Five milliliters of blood was exposed to a mixture of air and benzene vapor at various pressures in a rotating cylinder at 37 C. for 0.5 hr. The benzene contained in the blood was carried into 0.5 ml. of nitrating mixture (equal volumes of concentrated H_2SO_4 and fuming HNO_3 , d. = 1.52) by a current of air at the rate of 0.6 L. air/hr. for 3 hr. Similarly the benzene remaining in the air of the saturation apparatus was nitrated. The amount of dinitrobenzene produced was determined polarographically. The ratio of benzene in blood to benzene in air was nearly constant over the experimental range of pressures, averaging 7.76. Benzene is somewhat more soluble in blood than in water. J. H. W. [CHEM. ABSTR.].

UNDETECTED BONE LESIONS IN WORKERS UNDER RAISED ATMOSPHERIC PRESSURE. CAVIGNEAUX, CHARLES, FUCHS and TARA, Arch. d. mal. profess. 10:359, 1949.

Radiographic examinations of 125 workers who had ceased work in compressed air were made to detect the presence of gas embolism in the bones, the epiphyses about the shoulders, hips and knees. In 38 of these men abnormalities were discovered: areas of rarefaction in some of the bones, areas of condensation in others, and in some a combination of both. It is stated that these lesions have not hitherto been described, that they are indisputably caused by gas embolism and that further investigations will be undertaken to determine the exact cause, the nature of the gas involved and the influence of the workman's environment.

CONDENSED FROM BRIT. J. INDUST. MED.

HEMOGLOBIN LEVELS OF WORKERS IN POLAND, 1948. E. PALUCH, K. MROZOWSKI and S. PODDEBNIAK, Pracovní Lékařství 2:1, 1950.

The authors carried out in the second quarter of 1948 a control determination of hemoglobin levels in workers of Łódź, Poland, following a similar investigation in the years 1946-1947. In addition to this group the determination of hemoglobin levels was carried out on a group of 4,608 persons, male and female, in a rural area in the district of Opoczyn. For the evaluation of hemoglobin a method involving alkaline hematin with a known content of iron was used. Colorimetric determinations were carried out on a Klett apparatus.

The investigations showed (1) a rise in the hemoglobin levels of all groups of workers of 16 to 26 per cent as compared with the levels found in 1946-1947; (2) a decrease in the number of anemic persons to a few per cent, compared with the previous finding of more than 50 per cent of anemic persons; (3) absolute hemoglobin levels in textile and metal workers and in farmers identical with the findings of Clegg and King for the respective groups in England in 1943.

The authors conclude that the improvement of the hemoglobin levels was achieved by reducing the extreme deficiency of foods of animal origin in the workers' diets.

ADAPTATION OF AUTHORS' SUMMARY.

Occupational Diseases and Hazards

STANNIC OXIDE PNEUMOCONIOSIS. C. C. DUNDON and J. P. HUGHES, Am. J. Roentgenol. 63:797 (June) 1950.

Dundon and Hughes present the case of a man aged 72 in whom carcinoma of the prostate was discovered.

An unusual roentgenographic chest condition consisting of uniform mottling of both lung fields by discrete, fine, dense shadows was encountered on a routine