

morphological problems. Some of these specimens were obtained in prenatal stages and are expected to be especially valuable in comparative embryology.

Dr. Carpenter is still in Siam and will remain there until the rainy season sets in in July, but the rest of the group have now gone to British North Borneo to study orang-utans, gibbons and proboscis monkeys. Members of this group are Prof. Adolph H. Schultz of the Johns Hopkins University, Sherwood H. Washburn of Cambridge, J. A. Griswold of the Harvard Museum, Andrew Wylie of Washington, and John T. Coolidge of Milton, Mass., the party's photographer. Various members will later visit Java and Sumatra.

Cooperatively financed by the Carnegie Institution, the Milton and Sheldon funds of Harvard, the Columbia University Council for Research in the Social Sciences, and from several private donations, the studies are expected to provide a much-needed control for laboratory observations made of these animals.

Science News Letter, June 19, 1937

From Page 391

coming rare as a result of inspection and testing of dairy cattle and the pasteurizing and boiling of all milk.

Aid to Singers

The "vitaly important" role of the throat specialist in the training of a singer was described by Dr. Robert F. Ridpath of Philadelphia. Dr. Ridpath urged fellow throat specialists to make a special study of the art of voice cultivation. A great many "vocal tragedies" could be avoided by the informed physician, Dr. Ridpath said.

Most singing teachers try to make sopranos of all girls, he pointed out, and tenors of all men. The character of the voice, however, is determined by anatomical features that no amount of training can change, Dr. Ridpath declared. Among these are the size, shape and length of the vocal cords and especially the time of adolescence. The tenor matures early; his larynx (voice box) grows quickly and the vocal cords are short. Similarly, the earlier adolescence comes in the girl the shorter her vocal cords and the higher her voice is pitched.

The tenor and soprano are short, Dr. Ridpath pointed out. Baritones, bassos and contraltos are of large build and tall.

The general health of the singer is important and the physician should

watch this as well as the voice producing apparatus. Loss of sweetness of tone, development of a tremolo, hoarseness and shrillness are danger signals and their neglect may lead to vocal ruin.

"By periodic examinations the physician can see and sometimes forestall such conditions as inflammation of the cords, vocal nodules, relaxation of the cords and other ills that afflict singers," Dr. Ridpath concluded. "That the physician is finally called on to treat the pathological condition is to be deplored because the mischief may be beyond repair—the mechanism being permanently damaged."

Hospital Insurance Opposed

Group hospital insurance, now in effect in many parts of the country, is a first step toward state medicine. This warning appeared in a report of the association's bureau of medical economics, which has been studying this and other related problems. The danger, according to the report, lies in the fact that hospital contracts under these insurance plans cannot be limited to essential hospital services but must include medical services, such as anesthesia, clinical laboratory diagnostic tests, X-rays and radium treatments and physical therapy.

While the general public may not see danger in state medicine, the report points out two other dangers in group hospital plans that are easily seen to concern the man in the street. One is that group hospitalization is actually a form of insurance coverage, "yet actuarial data on which to base sound premium rates are not available."

The second danger is that group hospitalization plans are getting away from the original altruistic purpose of assisting persons of limited means to secure necessary hospital service and are being used as devices to fill vacant hospital beds and augment hospital income.

A post-payment plan for those really unable to pay their hospital bills, instead of the insurance prepayment plans, was recommended by the bureau. Medical societies in some communities have developed this kind of plan with an administration cost of about 10 per cent., it was explained, whereas the administration of group hospitalization plans costs from 12 to 40 per cent.

Science News Letter, June 19, 1937

There are over 400 kinds of lilacs growing in the grounds of the Arnold Arboretum, of Harvard University.

Aztec Indians of Mexico knew the poisonous black widow spider, and used an oil extracted from it in medicines.

PHYSIOLOGY

Two New Gland Hormones Affecting Sex Discovered

TWO NEW hormones, one of which brings maturity to sexually underdeveloped boys, were announced to the Association for the Study of Internal Secretions at Atlantic City.

The adrenal glands produce the new hormones, discovered by Drs. F. M. Pottinger, Jr., and D. G. Simonsen of Monrovia, Calif.

The maturing effect was discovered accidentally in the treatment of nine boys suffering from asthma. The California doctors gave an adrenal gland extract to these lads to relieve their asthma and unexpectedly found that after treatments of from three months to a year, the boys, who had all been underdeveloped sexually, all matured.

The new hormone also had a remarkable effect on a sixteen-year-old mentally retarded boy whose sexual development "was that of a new-born baby." After one month's treatment this boy's development had increased several times the original, and the boy had made a marked advance in his mental condition.

The other hormone, when tried in rats, made males more virile but caused the sex glands of females to shrink and waste away.

Cortin Helps Chronic Tiredness

Patients suffering from chronic tiredness, weakness, low blood pressure, vague digestive troubles, and minor but persistent nervous complaints were very much improved by treatment with another adrenal gland hormone, Drs. E. S. Gordon, M. S. Kimble, and E. L. Sevringhaus of the University of Wisconsin Medical School reported. The addition of from two to four teaspoonfuls of table salt to the daily diet added to the improvement brought about by the hormone treatment.

The hormone used for these patients is the recently discovered cortical hormone, sometimes called cortin, which makes life possible for Addison's disease patients, as insulin does for diabetics. The Wisconsin scientists emphasized that their work showed that other patients besides those suffering from Addison's disease are benefited and enabled to lead useful lives when given this hormone treatment.

Science News Letter, June 19, 1937

The amount of steel in use in the United States is over a billion tons, for the first time in the country's history.