

as well later find expression in rape or sex murder.

"There is no such thing as a trivial sex offense any more than there is a trivial hallucination or a trivial delusion," declared Dr. Lind.

Not all sex offenders are mentally unbalanced, however, Dr. Lind warned. Alcohol is responsible for many an indiscreet act on the part of a person who may be perfectly normal when he is sober. It would be silly to commit such a person to a mental hospital if his drinking is merely an incident and not habitual alcoholism. Sex offenses are sometimes committed by young boys who are temporarily unbalanced because of their youth and lack of self control or because of some acute strain on their sanity. Such cases deserve understanding treatment as dictated by the particular circumstances.

Prison Not Beneficial

Prison is not the place for these boys or for any sex offenders. Prisons are the gathering places for men who already have very low moral standards and perverted minds. To throw a sexually unstable person into such company would probably increase his difficulties; to release him after a term in such a school would result in exposing the public to greatly increased danger.

Although no other mental disease ofers such a hopeless outlook as that of the sexually abnormal, Dr. Lind believes that medical science could help such cases if only they could be reached long before the stage when the patient appears in court charged with a serious offense.

Mental clinics in the schools, where children could be examined for the beginnings of these and other mental abnormalities as they are now looked over for dental defects or bad eyesight, might result in a great reduction in crime of future years and add to human happiness in a way that no statistics could reveal, Dr. Lind said.

Science News Letter, September 4, 1937

A new South American weevil has started destroying crops in a small area in Alabama and Florida, and is being urgently investigated by government entomologists.

Sea island cotton is having a comeback success in Florida, due to better methods of culture and insect control than were possible when the crop was wrecked by boll weevils 20 years ago.

MEDICINE

Veterans' Administration Operates 5 Cancer Hospitals

Government Surgeons Mobilized to Combat Increase of Disease Among Ex-Soldiers; Hines Clinic Largest in World

By GENERAL FRANK T. HINES
Administrator of Veterans' Affairs

BECAUSE of the increased morbidity and mortality incidence of cancer in the general population and because steps are being taken by the Federal Government to establish a Cancer Institute in Washington, D. C., for the study of the cause and nature of cancer and to develop improved methods of treatment, it has occurred to me that the public might be interested in learning what the Veterans' Administration has accomplished during the past few years in its effort to control and treat cancer in veterans.

This disease is appearing in veterans at an accelerating rate the same as obtains in the civil population. The present rate of monthly admissions and readmissions for cancer in Veterans' Administration facilities is about 380. A total of approximately 700 veterans with can-

cer are being treated in the facilities of the Veterans' Administration at all times. Most of these patients are being cared for in the special tumor clinics which have been established at certain of the facilities of the Administration.

Several years ago it became apparent that the disease was increasing in incidence in veterans, and that special facilities would have to be provided for their hospitalization. Accordingly, a tumor clinic was established at Hines, Ill. This, by the way, is the largest cancer clinic in the world, and is one of the best equipped institutions of its kind. In addition five auxiliary tumor clinics were established at strategic geographical points. These are located at Veterans' Administration Facilities, Portland, Ore., Los Angeles, Calif., Bronx, N. Y., Washington, D. C., and Atlanta, Ga. At each of the tumor clinics there is available high voltage X-ray equipment, and a



G H Q OF CANCER FIGHT

Chief of the tumor clinics that care for veterans suffering from cancer is located at the U. S. Veterans' Administration Facility at Hines, Ill. This particular clinic is said to be the largest of its kind in the world. The giant hospital building, partially seen in the foreground of the airplane view, is a half mile long. Other buildings include research laboratory, staff and nurses' homes and administration quarters.



TREATMENT

Powerful gamma rays from a radium "bomb" penetrate the body tissues to kill deep-seated cancer cells which threaten life. Hines Hospital owns three grams of precious radium, valued at \$25,000 at current prices.

sufficient quantity of radium to take care of the needs of the veterans applying for treatment. There are all told approximately 3.9 grams of radium and eleven high voltage X-ray machines in the tumor clinics of the Veterans' Administration.

At Hines, Ill., the Administration has a radium emanation plant for producing radium gas or radon. Approximately one gram of radium is in solution, and, by means of the emanation equipment, sufficient radon gas is manufactured for the treatment of all cancer patients at Hines. In addition there are two grams of radium in an apparatus known as the "radium bomb." This apparatus is used for applying radium element in such conditions as cancer of the intestines, larynx, and tonsils.

All of the tumor clinics just mentioned have on duty cancer specialists who have had special training and experience in the diagnosis and scientific treatment of the disease. In addition outstanding consultants are available at the tumor clinics to cooperate with the full-time medical officers in the treatment of cancer cases. They include such cancer specialists as Drs. James Ewing, Frank E. Adair, Max Cutler, Edwin Merritt, and a number of other men well known in the field of cancer.

Each tumor clinic is so organized that every patient is given the benefit

of consultation by a group of experts and consultants, inasmuch as no single physician is competent to treat cancer, but the combined efforts of the surgeon, the radiotherapist, the pathologist, physicist, and other specialists are needed to decide upon the diagnosis and treat-

ment in each case. It would seem, therefore, that the tumor clinics of the Veteran's Administration are fully equipped and competently manned for the diagnosis and treatment of this disease.

The Veterans' Administration has not been content with (Turn to Page 159)

PSYCHOLOGY

Over-Anxious Parents May be Cause of Children's Stuttering

STUTTERING may sometimes be caused by oversolicitude of anxious parents who apply the label "stuttering" to the normal repetition of words and sounds in ordinary baby talk. This statement and the implied warning were made by Dr. Wendell Johnson, of the University of Iowa's Speech Clinic, in a report to the newly organized American Association of Applied and Professional Psychology at Minneapolis recently.

Nearly fifty little children, most of whom are under five years old, have been studied by Dr. Johnson in an attempt to learn how stuttering starts, and what causes it. In health and also psychological and sociological factors, the group turned out to be a normal, ordinary bunch of children. A few had troubles of one sort or another and something like 25 per cent had shifted from left- to right-handedness or done so partially, but for the most part there was nothing out of the ordinary.

Sound Repetition Usual

For nearly all the youngsters (90 per cent) the "stuttering" began with an occasional and effortless repetition of sounds or with prolonged pauses and interjected "Ah's." Later these were accompanied by tension, grimaces, and emotion. As a rule the "stuttering" occurred when the child was thwarted, humiliated, undecided, or rebuked, Dr. Johnson found.

Such repetitions of sound are not peculiar to the so-called stutterers, but are common among practically all young children Dr. Johnson emphasized. But in the case of these particular youngsters, the label "stuttering," or "defective" was tagged onto them, perhaps merely because their parents were peculiarly sensitive to the hesitating speech. The children themselves then began to think of their speech as "stuttering" and

this in turn led to additional embarrassment and additional stuttering.

Thus the development of stuttering appears to be a spiral process, Dr. Johnson concludes. An originally normal hesitation, because of the attention called to it, leading to more hesitation, and it in turn to more, practically indefinitely.

Serious criticism of the new style of psychological examinations calling for a short answer or the mere underlining of words or choice of a printed correct answer was presented to the meeting by Dr. F. L. Wells, of a Boston, Mass., psychological laboratory.

Various types of mental tests were themselves put to a test by Dr. Wells, who gave them to two groups of individuals, one of which included men superior in economic efficiency, while the other contained those lacking in this important ability.

Conventional intelligence and personality tests fail to make any distinction between the two groups, Dr. Wells found. The superiority of the one group is, however, disclosed by those testing procedures which place a higher premium on "vision" or "imagination."

Why is it that men and women bothered with psychological problems may consult physicians, classroom teachers, eye specialists, ministers, social workers, and even WPA workers, but not psychologists?

That question was raised by Dr. Marné Groff, consulting psychologist of Kansas City, Mo. Dr. Groff believes it is because people do not know of the services that a competent, professionally trained psychologist can offer, because of lack of professional organization of the psychologists and lack of cooperation with physicians and because the profession has been injured by those calling themselves psychologists but who are really quacks or persons lacking real professional training.

From Page 151

the routine diagnosis and treatment of cancer, but has allocated funds for the conduct of scientific research. A Cancer Research Unit was established at the Hines Facility a number of years ago and is now in operation. The personnel of this unit has been conducting scientific investigation to ascertain the cause, the best means for early diagnosis, and the best type of treatment of cancer.

At the present time clinical research studies are being conducted by the research subdivision of central office, and the personnel of the tumor research unit on gastric cancer and intrathoracic tumors. Studies are also being conducted at the Research Unit, Hines, Ill., on cancer of the skin and the larynx.

In addition to the clinical studies, research work is being done to show the relationship of certain of the endocrine secretions to the cause of cancer. Assay methods are used to determine the quantity of the endocrine secretions as an early diagnostic test and also for the purpose of ascertaining the effect of treatment on certain types of cancer.

Studying Causes

Then, too, experimental work is being conducted on animals in the production of cancer by the external application of carcinogenic (cancer-producing) substances, and methods are being applied for facilitating the production of cancer and for inhibiting cancer growth, in the hope that the nature of cancer production and ways of inhibiting cancer growth may be discovered.

Cancer specialists tell us that the treatment of cancer varies, depending upon the type and site of the tumor. Whether deep X-ray therapy, radium, or surgery is the treatment of choice depends upon the kind of cancer, its location, the duration of the disease, and other considerations. Then, too, cancer is best treated in special hospitals in which the necessary equipment and highly trained specialists are available.

Finally, the matter of cancer education is receiving attention by the professional and technical personnel, and the administrative officers of the Veterans' Administration. The physicians of the Veterans' Administration are being instructed in the manner of, as well as the necessity for, the early diagnosis of malignant disease, the necessity for the eradication of precancerous conditions, the importance of referring suspicious cases of malignancy to a Veterans' Administration cancer clinic, etc.

The administrative officers as well as the physicians of the Veterans' Administration are disseminating information to veterans on the importance of the early diagnosis of cancer; the need for periodic health examinations to discover the disease in the early stages; and the necessity for consulting a physician and undergoing appropriate treatment.

It is believed that all of the activities just enumerated have resulted in an efficient cancer organization which is leading to a more effective control of the malignant disease in the veterans' group and is resulting in the prolonging and saving of many lives.

Science News Letter, September 4, 1937

BOTANY—MEDICINE

Common Fungus Spores Among Allergy Causes

HAY FEVER, asthma, and other allergic diseases may be traceable to the spores, or propagating cells, of common fungi that cause plant diseases, as well as to their present known causes such as ragweed and other pollens, dusts or feathers, hair, and other protein substances. This possibility has been investigated by O. C. Durham, botanist of the Abbott Laboratories.

Mr. Durham has used the same technique and apparatus for collecting air-borne spores that is commonly used in the study of air-borne pollens. There are many kinds of fungus spores in the air: wheat rust, corn smut, molds, mildews, etc.; but for convenience he has started with a study of only one kind of plant-disease spore, that of the fungus known as *Alternaria*.

The spores of this fungus have been found as numerous as the pollen grains of the ragweeds, or even more so. However, they are much smaller than ragweed pollen grains.

Skin tests with fungus spores have shown that some of them are capable of causing irritation in sensitive persons. *Alternaria* spores appear to be most active among all the fungal dusts. Spore extracts of a number of species are now being prepared for therapeutic use, as pollen extracts have been used for some time.

Numerous other plants below the rank of seed-plants are known to be quantity producers of spores. Especially prominent are mosses, ferns, and horsetail or scouring-rush. However, it has not been learned as yet whether or not these spores are capable of producing hay fever or any of the other allergies.

Science News Letter, September 4, 1937

AVIATION

Story of the Zeppelin Told By Capt. Lehmann

THE recent disaster of the Hindenburg by the burning of its own hydrogen and the discussions over the advisability of leasing, to Germany, the helium necessary to inflate the new Zeppelin now nearing completion in Germany, make most timely the new book "Zeppelin" by Captain Ernst A. Lehmann (Longmans Green & Company).

"Zeppelin" was almost completed when Capt. Lehmann staggered from the Hindenburg's blazing hulk at Lakehurst to die shortly from his serious burns. His book is a chat with a dead hero about the origins, history and future of lighter-than-air craft.

Capt. Lehmann commanded zeppelins in the days just before the world war and in all made nearly 1,100 flights in dirigibles. He had bombed London, using maps with great red circles on them which represented forbidden bombing territory; forbidden by order of the Kaiser because of the presence in these areas of the British royal family.

Hovering Over Revolutions

He made flights to South America on which his craft had to hover aloft waiting for a minor revolution to end on the ground below, before new supplies of hydrogen could be obtained for the return trip.

For those people who think of the dirigible as a "fair weather" form of air transport the World War flights will be illuminating. Germany had no weather forecaster west of Belgium and nearly a third of the flights over England were made in the face of unknown weather.

Commander Charles E. Rosendahl, U. S. N., close friend of Capt. Lehmann and American observer on some of the Graf Zeppelin's most noted flights, writes the preface and the last chapter which tell the story of the Hindenburg's tragic end. Sabotage as a possible cause for the disaster cannot yet be ruled out, concludes the American expert.

Science News Letter, September 4, 1937

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