

PSYCHIATRY

Mental Illness Battle

Veterans Administration to wage all-out chemical war against mental disease, checking on patients receiving treatment for ten years. New drugs also to be tested.

► **BATTLE PLANS** for all-out chemical warfare on mental disease are being drawn at the Veterans Administration in Washington.

Large-scale investigation of tranquilizing drugs mentioned in a carefully guarded statement from VA is only one part of the new project, SCIENCE SERVICE learned.

Search for possible chemical defects in the bodies of mental patients will be made. If such are found, drugs to counteract the defects will be sought and tested.

Already a blocking agent is being sought for the chemical just discovered in the blood of schizophrenia patients that causes schizophrenia symptoms temporarily in normal persons. First public announcement of the discovery was made only recently at the meeting of the American Psychiatric Association. (See SNL, May 19, p. 308.)

More biochemical studies are the route to prevention of mental disease, VA psychiatrists optimistically tell each other, although their public statements are far more cautious.

Tranquilizing drugs, both present and future ones, will be tested. At least 12, some not yet announced, are being subjected to careful chemical study as part of the new VA project.

Testing of these drugs, however, will not be on human guinea pigs. The drugs will not be given to patients until VA scientists are sure of their value.

Drugs other than tranquilizers will be studied. Some mental patients are all too tranquil. Others are quieted by the new drugs, but grow depressed while taking them. Stimulating drugs to use with the tranquilizers or alone will be sought and carefully studied.

One question troubling doctors now is why does reserpine, for example, depress one patient and not depress another with apparently the identical mental illness. Another vitally important question is why does chlorpromazine cause liver damage in some, but not all, patients.

VA will seek the answers by careful laboratory studies continuously carried on during use of new drugs. Tests for liver damage are now made almost every day instead of once a week in VA hospitals using chlorpromazine. If any signs develop in a patient, he is taken off the drug immediately. There is no waiting until yellow jaundice shows after weeks or months that the patient has suffered liver damage.

Patients in the VA studies will be followed for five or even ten years, to see how they fare. They will be examined not only to see

whether their mental health remained good, but to detect any other effects, good or bad, from the treatment. VA is in a unique position to do this kind of follow-up, particularly with service-connected cases.

To any who think ten years is a long time to await results of treatment, VA psychiatrists point out that mental disease has been with us since the dawn of civilization. Looked at in that light, ten years is a very short time.

The VA mental disease study will follow the general lines of the internationally famous study it made with the Armed Forces of the so-called wonder drugs for tuberculosis.

At first only a few hospitals will start on the studies. Gradually all 40 VA mental hospitals and perhaps some other VA facilities will be included. Reason for the slow

start is the need to plan carefully for a thorough-going investigation of all phases of drug and other treatment of mental patients.

The project will be directed by an executive committee headed by Dr. S. T. Ginsberg, chief of the psychiatry division at the VA central office in Washington.

Science News Letter, May 26, 1956

BIOPHYSICS

Picture of Bones Taken by Sound

► **HIGH FREQUENCY SOUND WAVES** are being used, as photographers use light, to take pictures of bones and other body parts by scientists at Polytechnic Institute of Brooklyn, Brooklyn, N. Y.

Their work brings closer the day when sound pictures of internal organs may be used to diagnose illness. Profs. William R. MacLean and Eustace E. Suckling are the Institute scientists who worked on developing the sonic camera.

It consists of a plastic tank filled with water in which the object to be viewed is suspended, crystals to direct ultrasonic beams onto the object and a sonic lens that

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BONE STRUCTURE BY SOUND—This picture shows the general bone structure of the human hand, as "photographed" by sound waves rather than light. Profs. William R. MacLean and Eustace E. Suckling of the Polytechnic Institute of Brooklyn, N. Y., produced the picture during studies of possible uses of a sonic camera. Their work shows promise for diagnosis of illness of internal organs that are transparent to X-rays.