

GENERAL SCIENCE

Top Minds at Work

Many of the scientists who worked on the atomic bomb during the war are thought to now be working on the H-bomb. The breath of the Manhattan project is in the air.

➤ MOST of the scientists who could make the super H-bomb, if it can be made, were not working on it a few months ago. It was generally agreed that only one of the top mathematical physicists, needed to plan and execute the research on paper and in the laboratory, was actually engaged in this task before President Truman announced that the United States was working on the new bomb.

Now it seems certain that many of the physicists and mathematicians, veterans of the A-bomb research, are quietly back at work on the atomic energy program. They are probably working on the hydrogen bomb project. Many of them in the years since the war continued to be consultants on various phases of the atomic energy program, but most of them were engaged in the phases of the program that were not related directly to present or eventual weapons.

While he has not appeared at any scientific meetings, it is known that the world-famous pioneer in physics, Dr. Neils Bohr of Denmark, was in the United States for some weeks, visiting at the Institute for Advanced Study at Princeton, N. J., which is directed by Dr. J. Robert Oppenheimer,

war-time head of the Los Alamos atomic bomb laboratory.

Another Princeton scientist, Dr. Eugene Wigner, has been a very active consultant to the Atomic Energy Commission. Dr. Hans Bethe of Cornell, who worked out the famous mechanism by which the sun is believed to replenish its power by conversion of mass into energy, is also more active in AEC work than he has been in the past. Dr. John A. Wheeler of Princeton has returned from a prolonged visit to France.

Work on the hydrogen bomb, particularly the theoretical considerations that are so important, would not need to be done at one of the Atomic Energy Commission's installations, but could be done by groups of top scientific minds assembled at almost any convenient place.

The temper of many top atomic scientists, particularly before it was certain that the Soviets achieved an atomic explosion last fall, was such that they were not inclined to work on the hydrogen bomb. The course of events seems to have changed their feelings in recent weeks. There is more of the atmosphere of the old Manhattan project of war-time abroad in the land.

Science News Letter, May 20, 1950

MEDICINE

Report on Antihistaminics

➤ A CONTROLLED study of antihistaminic drugs for treating colds showed these to be no more effective than pills and nasal spray without antihistaminics, Lt. Col. R. J. Hoagland, chief of medical service at the station hospital, U.S. Military Academy, West Point, N.Y., reports in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION (May 13).

Cures of head colds within 24 hours were reported by 16% of patients given antihistaminic drugs by mouth. But cures within 24 hours were also reported by 27% of patients given the pills or nasal spray looking like the antihistaminic ones but actually not containing any antihistaminic.

"Furthermore, essentially the same proportion of patients reported no benefit from either type of treatment," Col. Hoagland and associates, Capt. E. N. Deitz, Lt. P. W. Myers and Lt. H. C. Cosand, report.

The antihistaminics tried in this study were tripeleminamine hydrochloride, also known as pyribenzamine hydrochloride,

and chlorothen citrate, known also as tagathen.

Pyribenzamine given by nebulizer, or very fine spray, into the nose had about the same effect as the inert, non-antihistaminic spray.

Use of the antihistaminic drugs either in pills or in spray may decrease the irritating nasal discharge of the early stage of a cold, but, say the Army doctors, "the brief and variable duration of this phase makes a positive conclusion regarding this point difficult."

About one-third of the patients with colds are likely to recover spontaneously within 24 hours, a point which must be borne in mind in any study of a drug for colds, the doctors point out.

Even the season of the year in which remedies for colds are tested may affect the results, they suggest, recalling the finding of another scientist that colds tend to become severer as the winter progresses and that by May all medicines used resulted

in decreased reports of definite improvement.

Science News Letter, May 20, 1950

MEDICINE

Microscope Needed to See Points of Nerve-Needles

➤ NEEDLES for exploration of human nerves, with points so sharp they must be examined under a microscope, are being turned out by three doctors at Columbia University's College of Physicians and Surgeons.

The needles are really electrodes for recording or stimulating the tiny electrical impulses in the nervous system. Such wires must be extremely sharp to prevent damage to the nerve tissue. Up to now they were laborious and costly to make by special grinding techniques.

Drs. Harry Grundfest, Robert W. Sengstaken and Walter H. Oettinger of Columbia, and a U. S. Steel Corporation scientist, R. W. Gurry, use an electric current in an acid bath to point the needles. Their new method produces stainless steel needles with tips that are much finer than any hair: less than one one-hundred-thousandth of an inch in diameter.

Science News Letter, May 20, 1950

PSYCHIATRY

Society for Psychopaths Is Announced

➤ A MOTHER whose first child has been diagnosed as a "constitutional psychopath" told the American Psychiatric Association that a new Foundation has been created to aid children, teen-agers and grown-ups with this same disorder.

The Foundation for the Study and Aid of the Emotionally Unstable Personality is the name of this organization. The mother who told about it, Mrs. D. Perry Blount of Plainfield, N.J., is its president.

Constitutional psychopaths are neither mentally retarded nor insane, she pointed out. But they are so emotionally unstable that they cannot adjust at home, school, work or in the community. Their antisocial behavior fluctuates from petty annoyances to major crimes.

Information from mental hospitals, clinics, reform schools and prisons shows there are "an almost unbelievable number" of these psychopaths.

Science News Letter, May 20, 1950

On This Week's Cover

➤ USURPING the position of the bird for a unique perspective angle, the "Frog's Eye View" by Clifford Matteson, of Buffalo, N. Y., was winner of a ribbon in the 5th Chicago International Nature Photography Exhibition.

Science News Letter, May 20, 1950