

the amount of ammunition each of these gun packages carries is still withheld by the Navy.

The new and deadly weapon was developed by the Navy, with the coopera-

tion of the Douglas Aircraft Company. Facts show that two gun packages can increase the fire power of some types of aircraft as much as 100%.

Science News Letter, June 24, 1944

PSYCHIATRY

Three-Day Schizophrenia

This combat disease has all the symptoms of ordinary schizophrenia, with hallucinations even more frequently. Disappears quickly.

► "THREE-DAY schizophrenia," a mental illness reported by medical officers in this war, was described to the meeting of the American Psychopathological Association in a report by Comdr. Francis J. Braceland and Lieut. Comdr. Howard P. Rome, medical officers of the U. S. Naval Reserve.

This new combat disease affecting young people has all the symptoms of schizophrenia, which is the most common of mental illnesses. Minds are confused. The men hear imaginary voices and see things that are not there. These hallucinations occur even more frequently than in ordinary schizophrenia. But

within three to five days, the illness disappears and the men are well again.

Rest and a nerve-quieting drug bring about "miraculous changes in very short periods of time," the Navy doctors reported.

Despite the fact that this three-day illness is brought on by combat or other trying conditions of stress, it is probable that its development depends more on the background personality than on the type of duty, the officers explained. Some individuals, it would seem, are predestined to develop this type of mental illness if or when circumstances are difficult enough to precipitate it. This dis-

ease probably occurs in civilian life but generally is not seen by a psychiatrist.

The number of cases of mental disease (psychoses) of all sorts is far below that in civilian life, the Navy doctors emphasized. Of those Navy cases who do have to go to a mental hospital, 65% are discharged from the hospital, free of symptoms at the end of three months and another 20% are discharged at the end of the next three months. This is a very high and rapid recovery rate.

Most of the men who must be discharged from the Navy for mental or emotional reasons do not have any mental disease but are merely unsuited for military service, the report states. In the group who had to be discharged for inadequacy and emotional instability, 90% would get along all right in civilian life, and whether they will ever require psychiatric treatment will depend on later events, the officers said.

Science News Letter, June 24, 1944

CHEMISTRY

Heat-Resistant Plastic Retains Strength and Shape

► A NEW heat-resistant plastic that can withstand boiling, and dry heat as high, has been announced by the Monsanto Chemical Company.

Developed by Dr. Reid Fordyce and Dr. David T. Mowry, the new plastic has already found wide use in war work, particularly radar, radio and other military electronic equipment where materials of light weight, suitable electric and great heat-resistant properties are needed. It is also being used for surgical instruments, since it can be sterilized.

Dr. Charles Allen Thomas, director of Monsanto central research laboratories, describes the new plastic as "a thermoplastic, readily moldable in standard molding machines, and combining high resistance to heat with resistance to strong, corrosive chemicals, excellent electrical insulating properties, and high rigidity and strength."

The new thermoplastic is a synthetic co-polymer containing carbon, hydrogen and nitrogen. Officers of the Monsanto Chemical Company are withholding any additional information about the new plastic, including its exact chemical composition, pending action on patents. The plastic has been given the commercial name Cerex.

After the war, a wide range of civilian applications are possible, wherever heat-resistant qualities are in demand, such as in dishes and utensils.

Science News Letter, June 24, 1944



HEAT RESISTANT—Dr. Reid Fordyce and Dr. David Mowry illustrate the advantages of the new plastic, Cerex. Here you see two combs which have been dipped into boiling water. The one on the right is of ordinary plastic, the other of Cerex.