



TEST OF A GUN IS IN THE SHOOTING

America may not be turning plow shares into swords, but here at the Erie, Pa., General Electric plant, 75-millimeter pack howitzers are being turned out on an assembly line by men and machines formerly devoted to making electric motors for street cars. Final test of this "blitz" weapon is the firing of three rounds of primers in empty shell cases to check the breech mechanism.

MEDICINE

Vitallium Plates Used To Repair Skull Defects

Alloy of Chromium, Nickel and Cobalt, First Proposed For Dental Use, Makes the Strongest Repair Known

MANY a soldier came home from the last World War with a metal plate in his head where a piece of skull had been shot away or so crushed that it had to be removed. Soldiers and civilians similarly injured in the present war will have their skull defects repaired with vitallium plates, it appears from a report by Dr. Fred W. Geib, of Rochester, N. Y. (*Journal, American Medical Association*, July 5.)

Vitallium, an alloy of chromium, nickel and cobalt at first proposed for dental use, "makes the strongest and least complicated plastic repair of the skull known," Dr. Geib declares in his report.

"It is rigid, stronger than bone, non-corrosive and inexpensive and requires a much less complicated cranioplastic

operation than any in use at the present time. The patient can be back at work on heavy duty within three weeks after the operation."

Dr. Geib's patients were not wounded soldiers but civilians, one of whom had osteomyelitis of the skull following industrial injury. The other two had brain hemorrhages which caused such pressure that pieces of skull had to be removed to save their lives. Grafts of bone from the patient's ribs and cartilage have recently been used to replace the missing skull piece in such cases. Metal plates have proved unsatisfactory and have been abandoned.

The vitallium plate which Dr. Geib recommends is cast according to a pattern of the defect in the patient's skull. Slots are cut into it from the outer edge,

so that it can be bent to fit the skull. Lugs extend over the edges of the skull and the plate is screwed into the skull through holes in these lugs. The plate for Dr. Geib's fourth patient was made, by the Austenal Laboratories, within two days. The operation of inserting the plate and fastening it to the skull takes about one hour.

The soft tissues beneath the skull grow up around the vitallium plate and through the slots in it, completely incorporating it in a soft, gelatin-like covering. No harmful conditions in either skull, plate, or tissues under it have been found in any of the patients, the first of whom has now had his plate in place for two years. After the death of one of the patients from another condition, his skull was carefully examined and the findings showed how the tissue had incorporated the vitallium plate and was holding it firmly in position as if it were part of the tissue itself.

Vitallium has been used within the last three years in other types of bone surgery by two other groups of surgeons.

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VITAL STATISTICS

Suicide Called Major U. S. Social Problem

WITH 18,000 suicide deaths a year, and probably 100,000 more suicides that fail, self-destruction is a major social and medical problem in the United States, declares a statistician of the Metropolitan Life Insurance Company.

More women than men attempt suicide, but men are three times as successful at it as women. Partly explaining this "striking sex difference" is the fact that almost three-fourths of the women use poisoning, which is "the least efficient method." It is not yet known whether women pick less effective methods because they are less determined to die, or whether they choose methods most accessible to them, or methods that seem less violent.

"It is a melancholy thought," says this statistician, "that considerably more than 100,000 people in this country each year find life so hopeless and cheerless that death seems preferable."

Charging that the effort by social and medical agencies to prevent suicide has hardly been in proportion to the size of the problem, he advocates a well-organized and concerted program to lessen needless loss of life.

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