

PSYCHIATRY—MEDICINE

## Oxygen Reported to Bring Mentally Ill Back to Reality

**M**ENTALLY sick patients may be brought back to the world of reality by a new treatment developed from submarine and deep-sea diving investigations. Oxygen may produce the sanity-restoring shock now accomplished in some cases by insulin, metrazol or nitrogen, Lieut. Albert R. Behnke, U. S. Navy surgeon, told the American College of Physicians in Cleveland.

Victims of heart disease and of sinus trouble may also be helped, Lieut. Behnke said, by applying what naval authorities have learned about the effects of oxygen, other gases, and pressure on the human body.

For heart disease patients oxygen treatment might be much more widely used than it now is, he said. For the sinus sufferers, he recommended positive pressure, like a trip under water in a

submarine. Small pressure chambers to achieve the effect in the nose-and-throat specialist's office might be used. Suction, used in an attempt to make breathing through stuffy noses easier, has done much harm, he believes. Instead, he advises positive pressure up to 10 pounds per square inch in the pressure chamber, followed by subsequent release of the pressure. This would provide effective ventilation and drainage with minimum injury to nasal tissues.

Physical fitness can also be measured in the pressure chamber. Such a test used in the Navy showed that only 10 to 15% of qualified submarine personnel could not tolerate pressures of two or more pounds per square inch. Among civilians, only about 50% can pass this pressure test.

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and other young rats given doses of theelin. The broken bones knit faster and in more cases in the sex-hormone treated groups than in the non-treated groups.

The number of animals in the study was small, Dr. Pollock pointed out, and more work will be needed before the findings can be permanently established.

"However," he said, "the results which followed the administration of theelin are sufficiently striking to justify publication of the preliminary report as well as to indicate that ovarian secretion appears to influence calcification and, in the case of fractures, may accelerate solid union."

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ARCHAEOLOGY

## Doubts Rome Found Economic Bluebird

**T**HE HAPPIEST era the world has ever known!

There flies an economic Bluebird of happiness worth hunting in this harried age. And no less an historian than Gibbon has given a clew where to look. People under rule of the Antonine emperors of Rome in the second century A.D. were the happiest, he declared.

But the economic historian, Prof. Tenney Frank, who recently completed his fifth and last volume of "An Economic Survey of Ancient Rome," found weak support for this lofty reputation of contented millions.

Rome was wealthy. Ruins of more handsome buildings on Italian estates are known from this era probably than from any other. Gentlemen farmers had money to spend on hunting lodges, studs

MEDICINE

## Sex Hormone Treatment May Speed Bone Knitting

**K**NITTING of broken bones, especially in elderly women, may be speeded by treatment with the female sex hormone, theelin, Dr. G. A. Pollock, of the Mayo Foundation, declared as a result of studies of the effects of theelin on broken bones in laboratory animals.

Women over 60 years of age get so-called "broken hips" with "striking" frequency, Dr. Pollock pointed out. The condition, although popularly known as a "broken hip," is actually not a break of the hip but of the neck of the thigh bone near where it is joined to the hip.

Of 23 persons with this kind of fracture who were of comparable age, 22 were women in the series Dr. Pollock studied. This fact plus others showing a change in the bones of older women suggested a relation to the cessation of ovarian function in women past 50 years. Several other scientists, Dr. Pollock found, had also noted a relation between female sex hormones and bone formation.

Theelin, the female sex hormone, was given to elderly female rats and to females from which the sex glands had

been removed, and the healing of broken bones compared in these groups with the healing of bones in similar animals that got no theelin and in young animals that were producing their own sex hor-

