

## MEDICINE

**Medics Back to Gold Treatment for Arthritis**

➤ PHYSICIANS are gradually swinging back to the "gold standard" for the treatment of rheumatoid arthritis.

The ancient gold treatment fell into disuse with the coming of the modern so-called "wonder drugs."

The first recorded use of gold as a medicinal agent occurred in China in 2500 B.C. but it was not until 1929 that the gold salt treatment became widespread as a treatment for the little understood but painful disease known as rheumatoid arthritis.

Then, with the discovery of the steroid compounds in the early '50's gold took a back seat as physicians bet heavily on the new drugs. For the patient suffering from mild or moderate arthritis it was a poor bet, Dr. L. Maxwell Lockie, School of Medicine, University of Buffalo, told SCIENCE SERVICE. Dr. Lockie presented his exhibit of gold salt therapy at the clinical meeting of the American Medical Association in Minneapolis.

Physicians are now beginning to swing full around to this old standard treatment, the specialist said. The patient does not suffer from side effects such as those caused by steroid drugs. If the patient does not improve, at least he does not get worse, Dr. Lockie pointed out in support of the gold salt therapy.

The secret of the successful use and response of the patient to gold salt therapy consists of Dr. Lockie's simple routine, one that he insists patients follow religiously. It includes complete bed rest for the first

three weeks, physical therapy, gold shots in doses adjusted to the needs of the individual, exercises and posture instructions.

Dr. Lockie has administered gold salt shots plus the prescribed program to 369 patients. Some 566 control patients received no gold therapy. A comparison of the results of treatment in these two groups yielded the 93% effectiveness of gold salt as a medicinal agent in the treatment of rheumatoid arthritis.

"It is our opinion that the clinical effectiveness of gold therapy is even greater than the statistical evidence indicates as long as a course of treatment giving more than 500 milligrams is employed," Dr. Lockie concluded.

Science News Letter, February 21, 1959

## SEISMOLOGY

**Seismograph Jiggles Cured by New Device**

➤ MAN-MADE "quakes" are no longer interfering with natural earthquake records in Arizona.

The U. S. Coast and Geodetic Survey has announced that one of its scientists has devised a system which overcomes jiggles in its Arizona seismograph caused by traffic vibrations in nearby Tucson and by blasting in a quarry two miles away.

The sensing component of the seismograph was transplanted on the site of a Federal prison camp at Mount Lemon 15 miles from the rumbling traffic. Data there are picked up and automatically transmitted by frequency-modulated (FM) radio to the recording device back in the original observatory near Tucson.

Science News Letter, February 21, 1959

## ANTHROPOLOGY

**Find Cro-Magnon Skull And Limestone Carving**

➤ THE SKULL of an 18-year-old Cro-Magnon girl and a "Venus" limestone carving have been found in archaeological excavations near the farming village of Les Eyzies in southwestern France, Harvard University reported.

The 21,000-year-old skull was found beneath a rock in the Proto-Magdalenian layer of the excavation site. Its significance lies in the fact that it is the only specimen which bridges the gap between the Solutrean (about 19,000 years ago) and the Upper Perigordian (about 22,000 years ago) Stone Age periods.

The skull is essentially modern in form, but has certain primitive features, such as a rocker-like jaw and slanted eye orbits.

The "Venus" carving is in bas-relief on a limestone block. It depicts a nude woman.

Such carvings are known as "Venuses" because most of them are of women whose arms are partly missing. They have been associated with some sort of fertility cult, although there is no direct evidence to support this.

Science News Letter, February 21, 1959

## BIOLOGY

**Electromagnetism Separates Cells**

➤ BETTER METHODS of isolating cancer cells from normal cells may result from a new technique in breaking down a mixture of different kinds of cells in suspension by the use of electromagnetism.

Dr. Alexander Kolin and Raymond T. Kado, biophysicists at the University of California at Los Angeles Medical School, have succeeded in separating red blood cells, plant spores and sea urchin eggs within about two minutes into three distinct layers.

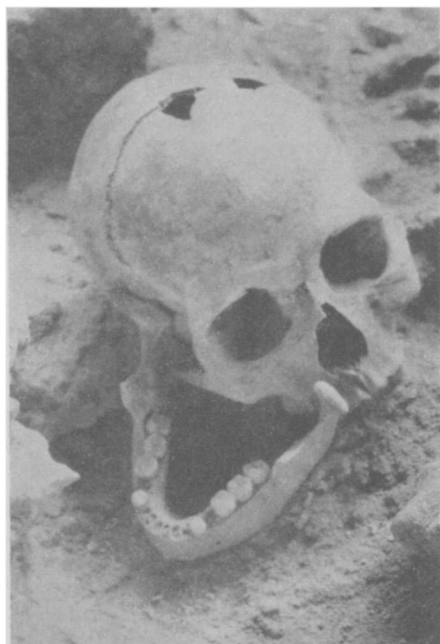
This principle is called electromagneto-phoresis and substitutes an electromagnetic field for a gravitational or centrifugal field. It separates particles according to differences in electrical conductivity instead of density.

The cells are suspended in an electrically conductive fluid through which a current is passed. Simultaneously a magnetic field is maintained throughout the fluid at right angles to the current. The different types of cells then migrate at different speeds in the same or opposite directions and are thus separated.

Current centrifugation methods of separating cells and cell debris suspended in fluids are limited by the fact that the densities of these biological materials differ but little from each other and from the density of the suspension fluid, the investigators point out. The effective electrical conductivities of cells vary widely, sometimes by two or three orders of magnitude.

Thus utilization of electromagnetic techniques may prove a superior method of separating cells.

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**CRO-MAGNON SKULL**—This skull of a young girl was uncovered in southwestern France. This discovery is the first in this archaeologically rich region since 1934.



**"VENUS" CARVING**—This bas-relief carving on a limestone block about nine inches long was carved by a Stone Age craftsman about 22,000 years ago.