

## MEDICINE

**Fatality in Appendicitis Greatly Decreased**

► THE NUMBER of people dying from appendicitis in the United States dropped about two-fifths within the short space of three years. Between 1940 and 1943, the latest year for which data are available, the number of deaths due to this disease decreased from 9.9 to 6.1 per 100,000, a Metropolitan Life Insurance Company report shows.

A little more than a decade ago, 18,000 died each year from appendicitis. By 1943, however, the number of deaths in a much larger population had been cut to 8,100. The magnitude of this feat is realized when we consider that if the appendicitis death rate of the early 1930's prevailed today, the disease would now take about 20,000 lives a year.

The greatest improvement was experienced in Rhode Island and Maine, each of which shows a reduction of 62% in the three-year period. Although other states in the Mountain and Pacific region showed a larger relative decline than did the country as a whole, Nevada recorded a drop of only 19%. The smallest gains in reducing the mortality from appendicitis was made by the southern states, but even in this area no state recorded a reduction of less than 27% between 1940 and 1943.

The use of chemotherapy in cases complicated by peritonitis is undoubtedly responsible in large measure for this change, the report states. Part of the credit also belongs to the national educational campaign which effectively warned the public against delay in seeking medical advice and against the use of laxatives in case of abdominal pain, they state.

*Science News Letter, March 30, 1946*

## PHYSICS

**Baruch Will Fight for Atomic Energy Use**

► WHEN Bernard M. Baruch, a grand old troubleshooter of two generations and two wars, takes his place as the American member of the UNO commission on atomic energy he will be fighting for the peaceful use of one of the most powerful sources of radiation, as well as the peaceful use of science's most powerful discovery, atomic energy.

A part of his personal fortune has been presented by Mr. Baruch to the American people as a foundation for physical medicine, meaning the application of powerful radiations, as well as sunshine,

heat, baths, etc., to the curing of human ills.

So as the man, known for his sitting in the sunshine on a Washington park bench, struggles as our representative in controlling atomic energy for the world, he will be motivated by a deep-seated desire to help humanity by controlling for good the radiation that is more powerful than anything this side of the stars, even more powerful than radium.

The equivalent of tons of radium has been going unused and wasted during plutonium manufacture while the military have kept the atomic energy results under a cloak of secrecy. An array of new atomic bomb by-products, if used in research, may allow our medical men to understand more closely the nature of cancer, heart disease and a host of other human ills.

His main job will be aiding the control of human emotions and actions so that atomic energy will not be loosed upon the world with destructive intent. And as he fights this battle for peace, he and his medical advisers will undoubtedly be doing what they can to extract from the clutches of secrecy the new tools of medicine that have come out of the atom. *Science News Letter, March 30, 1946*

## PSYCHOLOGY

**Work for Older People Is Vitaly Necessary**

► JOBS SUITED to their abilities rather than public financial help is the answer to the problems of older people, believes Dr. George Lawton, director of the Old Age Counselling Center in New York.

Declaring "America cannot demobilize old age," Dr. Lawton discussed the problems of aging as a guest of Watson Davis, director of Science Service, on "Adventures in Science," heard over the network of the Columbia Broadcasting System.

Even with greater old age assistance and social security benefits, the New York psychologist reported, "the normal older person given the choice between a congenial job and an income, whether as a federal grant or on a retirement pension, would prefer to keep on working as long as physically able."

"While there is no systematic research to prove that people who work longer live longer," Dr. Lawton said, "psychological and medical men on the basis of their clinical observation believe that of two men equal in all other respects, the one who keeps on working at a job he likes and can handle, will live longer than the one that retires."

*Science News Letter, March 30, 1946*



## DENTISTRY

**Prevention of Tooth Decay May Come from Penicillin**

► WILL PENICILLIN prevent tooth decay if you scrub your teeth with it?

An answer to that question will be sought this summer in a wholesale test with human guinea pigs, by Dr. Thomas J. Hill of Western Reserve University. The test will be made on 1,000 boys in an Eastern industrial school, beginning about July 1 and continuing for a year or more. Half of the boys will use tooth powder with penicillin added, the others will use a penicillin-less powder. At the end of the period the comparative numbers of cavities in the two groups should provide a definite yes-or-no answer.

Dr. Hill was stimulated to undertake this large-scale test by apparently significant results with smaller groups. Mouths in which the penicillin powder was used daily for several months were found to be practically free from the normally swarming populations of bacteria, including an acid-favoring species or group held to be a contributing factor in tooth decay.

*Science News Letter, March 30, 1946*

## MEDICINE

**BAL Drug Successful For Treating Poisoning**

► THE DRUG, BAL (British anti-lewisite) will soon be released by the Food and Drug Administration for general distribution, Maj. Alfred Gilman of the Chemical Warfare Service has revealed. This chemical warfare material has been saving the lives of patients in Baltimore who took bichloride of mercury either by accident or with suicidal intent.

The police in Baltimore have by special arrangement been sending all such cases to the Johns Hopkins Hospital where Dr. Warfield T. Longcope and Dr. John A. Luetscher have treated 26 patients with good results.

Some recovered so rapidly under treatment with this amazing chemical that they walked out of the hospital within three or four days after taking a fatal dose of bichloride.

*Science News Letter, March 30, 1946*

# CE FIELDS

## GENERAL SCIENCE

### Four Science Service Writers Receive Awards

► FOUR SCIENCE Service editors are included in the 13 pioneer science writers who received at St. Louis the first presentations of the George Westinghouse Science Writing Awards of the American Association for the Advancement of Science.

The writers for Science Service being thus honored are: Watson Davis, Frank Thone, Jane Stafford and Marjorie Van de Water.

Watson Davis is director of Science Service and inaugurated its newspaper service in 1921, Dr. Frank Thone is editor in biology and has been on the staff since 1924. Miss Jane Stafford has been medical editor since 1928 and Miss Marjorie Van de Water, psychology editor, has been on the staff since 1929.

Science Service has ten science editors, the largest science news staff of any press association.

Other science writers to receive the award are: Howard W. Blakeslee, Associated Press; David Dietz, Scripps-Howard Newspapers; Thomas R. Henry, *Washington Star*; Waldemar Kaempfert, *New York Times*; Gobind Behari Lal, *American Weekly*; William L. Laurence, *New York Times*; Herbert B. Nichols, *Christian Science Monitor*; John J. O'Neill, *New York Herald Tribune*; Robert D. Potter, *American Weekly*.

*Science News Letter, March 30, 1946*

## METEOROLOGY

### Structure of Meteorites May Be Clue to Their Past

► INTERNAL structure of iron meteorites may give clues to the past life of these visitors from space that crash into the earth's atmosphere, state E. P. Henderson and S. H. Perry of the U. S. National Museum.

Although many more stone than iron meteorites have been seen to fall as shooting stars, more irons are on exhibit in museums because they are the more easily identified. Iron meteorites are composed chiefly of iron and nickel, with small amounts of cobalt, phosphorus, sulfur and other elements.

After intensively studying an iron meteorite found a few years ago in Ohio,

Mr. Henderson and Mr. Perry believe that when iron meteorites of almost identical composition differ in structure, it is a sign that the conditions through which they have passed are quite different. Heat, together with the length of time the mass remains at a high temperature, is probably responsible for this.

The iron-nickel alloy known as taenite occurs in most iron meteorites. It is rarely possible to separate pure taenite in sufficient quantities to analyze it, but the structure of the New Westville iron permitted the mechanical separation of enough for analysis. Taenite varies in chemical composition, and it is believed that the higher the percentage of nickel contained, the lower the temperature at which the taenite was formed. The taenite in the New Westville iron contained 26.13% nickel.

Working out the complete history of a meteorite from the study of its internal patterns is not simple. The two scientists plan to continue their present investigations until many meteorites have been analyzed and metallographically studied, then heat-treat these specimens under controlled conditions to determine what significant changes take place. Eventually they hope that the internal structure may be understood sufficiently to give a brief autobiography of each meteorite.

*Science News Letter, March 30, 1946*

## AERONAUTICS

### Wartime Aircraft Secrets May Be Discussed

► WARTIME SECRETS in aircraft engineering are expected to be discussed at the National Aeronautic meeting of the Society of Automotive Engineers to be held April 3 to 5 in New York. Aeronautical engineers will have their first opportunity since the war for unrestricted technical review of wartime developments in commercial, military and private flying.

An opportunity will be given the engineers, also, to inspect certain German achievements in aviation with equipment on display loaned by the U. S. Army and Navy. They may see, in addition, the operation of Fido, the fog dispersal operation which enabled Allied warplanes to operate from British bases in Europe's thickest weather. American aircraft powerplants will be on display, particularly the General Electric I-40 jet propulsion engine. The engineers will inspect airline maintenance engineering and operation at LaGuardia Field and make airline flights over other airports.

*Science News Letter, March 30, 1946*

## METALLURGY

### Circular Home of Light Metal Under Production

► A CIRCULAR home of aluminum, with side walls and partitions suspended from a concealed central steel mast, has been displayed in model form. It is a Fuller house, developed from the original "Dymaxion" design by R. Buckminster Fuller in 1929. Its construction and use are now claimed to be practical because of the developments in light metals during the war and the use of techniques in mass-production that came with the construction of giant airplanes. It will be produced by the Beech Aircraft Corporation of Wichita, Kans.

This new Dymaxion is constructed of aluminum, stainless steel, and plastic. It has 1017 square feet of floor space and includes a combined living and dining room, two bedrooms, completely equipped kitchen, two complete bathrooms, and an entrance hall. A heating and air-conditioning equipment comes with the house. The price, erected and ready for use, is \$6,500.

This \$6,500 price includes the kitchen equipment in which is a cooking range, refrigerator, dishwasher, sink, washing machine and drier, and a waste disposal unit. With its ventilating system the inside air can be changed in six minutes. The exterior requires no painting. The building can withstand 180-mile hurricanes.

The house weighs only four tons, one-tenth the weight of conventional frame houses. In the condition in which it is shipped from the factory, it can be erected on its foundation, after it reaches its site, in two days by an eight-man crew.

*Science News Letter, March 30, 1946*

## ENGINEERING

### Lamme Medal Awarded David C. Prince

► THE 1945 LAMME medal of the American Institute of Electrical Engineers will be presented at the summer session of the Institute in Detroit, June 24, to David C. Prince of the General Electric Company, it is announced at the headquarters of the Institute.

The award to Mr. Prince is made for his distinguished work in the development of high-voltage switching equipment and electronic converters. The medal is an annual award established through a bequest of Benjamin Garver Lamme, who for 21 years before his death in 1924 was chief engineer of the Westinghouse Electric Corporation.

*Science News Letter, March 30, 1946*