

MEDICINE

Confused With Heart Ills

Attacks of pain spreading to heart, shoulder and arm found to be due in some cases to rupture of disk between vertebrae of neck.

► "AN UNDETERMINED number of patients" believed to have heart trouble, arthritis of the upper spine, bursitis, neuritis of the brachial plexus, and two other less familiar ailments probably are suffering from a rupture of one of the disks of fibrocartilage between the vertebrae in the neck. This is the opinion of Dr. R. Eustace Semmes, of Memphis, and Major Francis Murphey, Medical Corps, Army of the United States.

They report finding this condition in 11 patients. In seven, the diagnosis was verified at the time of surgical operation to relieve it. The other four have not yet been operated on. Details of the cases and operation appear in the *Journal of the American Medical Association*. (April 10)

Each of the first four patients seen had had numerous cricks in the neck off and on for months or years. Then came a sudden, disabling attack of pain which spread to the heart, shoulder blade and down the arm. In one case the attack came when the patient's neck was jerked suddenly while driving his car. In an-

other, it came as the patient bent to tie his shoe. Each patient, along with the disabling attack of pain, had difficulty in breathing and a sense of impending death. One of them turned blue.

Each patient, two of whom were physicians, thought he had a heart attack, either coronary thrombosis or angina pectoris. The pain in the heart wore off, after a few days or weeks, but that in the shoulder and arm got worse. Moving the neck, sneezing, coughing and straining made the pain worse. The index and middle fingers were numb and weak and the arm cold in some of the cases.

Heart trouble, in spite of the suggestive symptoms, and various other ailments were ruled out by examination, and "unilateral rupture of the sixth cervical intervertebral disk with compression of the seventh cervical nerve root" was suspected. At operation under local anesthetic, the suspected seat of the trouble in the neck region of the spine was exposed to view and gentle pressure applied to the nerve root. This pressure caused the

typical pain the patient had been suffering, and the ruptured disk was found immediately below the affected nerve root. Compression of the nerve root as a result of the rupture had been causing the pain. When the pressure was removed by the operation, the pain was completely relieved in two of the first three patients and considerably relieved in the third.

As the condition becomes more widely recognized, many patients with less intense pain will probably be seen. If the pain is not disabling, more conservative treatment than the spinal operation will probably help such patients, the doctors suggest.

Science News Letter, April 17, 1943

CHEMISTRY

Garden of Poles Planted To Test Preservatives

► VICTORY GARDENS of poles are being planted at the Bell Telephone Laboratories. These miniature telephone poles, however, are not expected to grow, but are being used for experimental purposes to select substitute materials for war-scarce preservatives.

Before planting, the stick specimens, which are cut from seasoned boards of mature southern pine, are impregnated under pressure with creosote or other preservatives. This is done in a sealed steel cylinder where a cycle of changing pressures controls the amount of preservative retained.

Before and after treatment, the sticks are weighed to determine the amount of preservative retained. Then they are planted to a depth of several inches in "gardens" where different climatic conditions prevail, and are inspected periodically for decay. From the rate of decay in these samples is determined the effectiveness of the various preservatives and varying pressures used.

Science News Letter, April 17, 1943

● RADIO

Saturday, April 24, 1:30 p.m., EWT

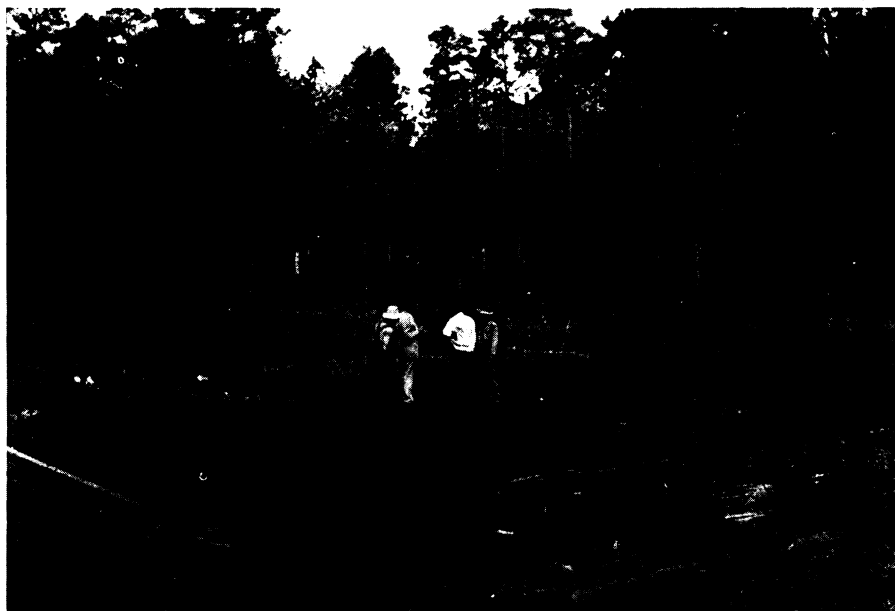
"Adventures in Science" with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. Kirtley F. Mather, professor of geology, Harvard University, and national president of the American Association of Scientific Workers will give one of a series of three talks on Science From Shipboard.

Monday, April 19, 9:15 a.m., EWT; 2:30 p.m., CWT; 9:30 a.m., MWT; and 1:30 p.m., PWT

Science at Work, School of the Air of the Americas over the Columbia Broadcasting System, presented in cooperation with the National Education Association, Science Service and Science Clubs of America.

"Unfinished Business" will be the subject of the program.



POLE GARDEN—Planted not for growth but to measure decay, these poles form a novel sort of victory garden for the Bell Telephone Company.