

SURGERY

Sound Beam Stops Pain

High frequency sound beamed into the brain compares favorably with lobotomy operations for relief of severe pain. The beam is shot through one-inch skull opening.

► **HIGH FREQUENCY**, high intensity sound has been beamed into human brains through one-inch openings in the skull in medicine's latest attempt to relieve intractable pain from cancer and to restore sanity to disordered minds.

The results in 27 patients compare favorably with those from lobotomy operations, Dr. P. Lindstrom of the University of Pittsburgh Medical School and the Veterans Hospital, Pittsburgh, reported at the meeting of the American Psychiatric Association in St. Louis.

Most of the patients with severe pain had relief, though not always complete.

In lobotomy operations, part of the frontal lobes of the brain is destroyed surgically. The skull opening for the sound treatment is a "comparatively minor surgical procedure done under local anesthesia," Dr. Lindstrom pointed out. The brain is not opened or punctured.

Further advantage of the sound treatment, he said, is the absence of such complications as mental deterioration, hemorrhages and convulsions which may follow lobotomy operations.

Motion pictures are giving psychiatrists new understanding of patients with catatonic schizophrenia. In this very severe form of mental illness, the patients remain

speechless and motionless, as if turned to stone. Such patients make up a large percentage of the schizophrenics who fill the chronic wards of our mental hospitals.

These patients, however withdrawn they may seem, remain vigilant, watching closely all that goes on around them, Drs. Erwin W. Straus and Richard M. Griffith of the Veterans Administration Hospital, Lexington, Ky., reported from their study of motion pictures of such patients.

If a ball is thrown to such a patient he will catch it, warm up to the game, move vigorously and even skilfully, only to relapse to his rigid, petrified state when the play is stopped.

Drugs thought effective in "awakening" these patients from their stupor are narcotic drugs that reduce the stupor by stupefying. This means, the doctors pointed out, that the stupor is not lethargy, but just the opposite.

The apparent reversibility of catatonic stupor, such as when the patient catches the ball thrown at him, serves as a warning not to overrate impressive but actually minor changes in the patient's behavior. He may come out of his stony stupor and behave quite differently, but underneath he is still a schizophrenic, a sick person needing more treatment.

Science News Letter, May 15, 1954

METEOROLOGY

Cold War Speculation

► A **DROP** of as little as three degrees in the average summer temperature in Russia, continued over a period of time, could do more to win the cold war than all the fighting of isolated "police actions" at odd corners of the world.

This was the speculation among some meteorologists who attended the American Geophysical Union meetings in Washington.

Looking back about 40 years, they suggest that the political upheavals and the great expansion of Russia were deeply influenced by a rise in average temperatures in the summer.

The average may go up only a degree or part of a degree every three or five years. Nevertheless, such a continual rise must have immediately changed people's behavior.

An increase in the average temperature over a month's period usually means that there are one or two particularly warm spells, rather than a steady but small rise.

Thus, in the springtime, farmers stir out of their winter lethargy sooner, and they are weather-inspired to do more work and to do it sooner.

A rise in winter temperatures would not make much difference. For when an average thermometer reading is zero, three degrees above or three degrees below zero has little, if any, effect upon human activity.

The increasing average summer temperatures are real. They result from a worldwide warming trend that is now quite well established.

Not only thermometer readings but receding glaciers indicate the warm-up. If a little Ice Age, starting now with a cold summer, would only set in, its effects would be felt within a few years.

There is no known way, however, to influence temperatures artificially on a large scale. As a matter of fact, one great mystery scientists still have to solve is the cause or causes of the previous Ice Ages.

Science News Letter, May 15, 1954

• RADIO

Saturday, May 22, 1954, 3:15-3:30 p.m. EDT
"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS Station.

Jasper H. Kane, vice president in charge of research and development, Chas. Pfizer & Co., Inc., manufacturing chemists, will discuss "Chemical Progress."

HEMATOLOGY

Discover New, Rare RH Blood Antibody

► **DISCOVERY** OF a new, rare Rh blood factor is announced by Drs. F. Stratton and P. H. Renton of the University of Manchester and the Manchester Blood Transfusion Service in the *British Medical Journal* (April 24).

They call the new factor Rh antibody, anti-Cx. Its rarity is shown by the fact that out of blood samples taken at random from 3,931 persons and tested for this Rh antibody, only four positive results were obtained.

This particular Rh factor is a family one, being inherited as a Mendelian dominant character. It was discovered when the third baby of a family developed typical jaundice and Rh kind of blood destruction after birth. The mother had previously had one normal boy baby who is alive and well, and one baby stillborn. The third baby who had the Rh blood trouble recovered after several blood transfusions and when six weeks old was in good health.

Discovery of the rare new Rh factor was due to two things, the doctors state in their report: 1. The baby's sickness which was severe enough so there was no doubt about the diagnosis; 2. The custom in the Manchester laboratory of making direct tests between the husband's blood cells and the mother's blood serum in cases with a suspicious history, and in which usual methods of testing the mother's serum with standard blood cells do not show any antibodies.

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PSYCHOLOGY

Diet May Cause Feeling That Things Are Crawling

► **WHEN** A patient comes to the doctor with the delusion that invisible insects are crawling on his skin, look into his eating habits, Dr. Irma Aleshire of Iowa City, Iowa, advises.

Poor eating habits were found on questioning the only patients with this delusion Dr. Aleshire has seen in the past 11 years. Correction of the eating habits cured their affliction, Dr. Aleshire states in the *Journal of the American Medical Association* (May 1).

One of the patients had pellagra and was demented. The others presumably were in an earlier stage of nutritional deficiency and had less serious mental disorder.

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