

SURGERY

Plastic Pipe in Surgery

► THE OLD SURGICAL TRICK of hooking up a drainage pipe between spine and abdomen is making a comeback as a treatment for hydrocephalus, or water on the brain.

The technique of draining excess cerebrospinal fluid into a body cavity or vessel from which it can be absorbed was first practiced about the turn of the century. Doctors used all kinds of materials for the drainage tubes, but none could be tolerated by body tissues.

In 1927 the technique was abandoned, and not until 20 years later, when plastic tubing made its appearance was there any serious attempt to revive the technique.

The surgical procedure consists of tapping the fluid-filled, hollow spaces of the spine, continuous with those in the brain, and channeling the fluid to the ureter, lung cavity, abdominal cavity, jugular vein or any other appropriate site.

Dr. A. R. Taylor of Royal Victoria Hospital, Belfast, Ireland, and Dr. J. R. Milliken and P. P. Davison of the Belfast Child Guidance Clinic report that of eight

infants operated on in this manner in 1952, five survived.

Although there were some difficulties in the first years, the physical, emotional and intellectual status of the survivors are now within the normal range. Four of the children have I.Q.'s of 100 or above. The fifth child moved to Canada, and her I.Q. is not known.

Reporting in the British Medical Journal, Nov. 5, 1960, the researchers site one set of statistics for untreated hydrocephalics indicating that 54% die at an early age, 30% have I.Q.'s of more than 50 and are presumed educable, and only 6.5% have I.Q.'s over 100.

Although it is difficult to tell whether and when to operate, the researchers believe an infant's chances for normal survival are good if he lives through the postoperative period and if the drainage tube can be kept unclogged for two or three years.

At some time during this period, balance between fluid production and absorption will probably be achieved.

• Science News Letter, 78:327 November 19, 1960

MEDICINE

Eyes and Reading Ability

► IF JOHNNY CAN'T READ, it may be because his "controlling" eye is on the opposite side of the hand he uses most.

Symptoms of poor visual imagery and memory, reversals in reading and writing patterns and mirror writing are then apt to occur. Relief of these symptoms and of stuttering can be accomplished by corrective glasses or limiting hand actions to the corresponding hand.

These findings were cited as among the eye problems of children under 12 by Dr. Owen C. Dickson of the University of California Medical School, Berkeley, at the American Public Health Association meeting in San Francisco.

"Ideally," Dr. Dickson said, "all children should have the benefit of a complete eye examination before school age."

He noted that some eye defects will be so pronounced by the age of five that corrective measures may not succeed. Detection of a tumor, for example, although requiring immediate treatment, is rarely accomplished in school-age children.

Prevention of injuries to the eyes, he said, would include outlawing of B.B. guns in populated areas. Education of parents and the community about the dangers of slingshots, rubber bands, paper clips, scissors, pencils and other sharp objects in children's hands should be stressed.

"Careful handling and placement of liquid, such as cleaning fluids, paints, plant sprays, detergents, drugs and aerosol bombs can prevent many childhood eye injuries," Dr. Dickson stressed.

First aid treatment for any foreign

liquid entering the eye should be prompt irrigation with water. The eye can be held open under a faucet, or water can be poured into the eye from a glass.

Dr. Dickson said the use of ointment or eyedrops is to be discouraged because these applications may complicate later care.

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VITAL STATISTICS

Humanity to Annihilate Itself on Nov. 13, 2026

► DOOMSDAY IS SET for Friday, Nov. 13, 2026. On this date, three mathematicians have calculated, human population will approach infinity, if it grows as it has grown in the last 2,000 years, and will promptly annihilate itself.

With their calculations based on paradise-like conditions—no environmental hazards, unlimited food supply and no detrimental action between elements—the mathematicians believe their prediction of doomsday is accurate within ten years.

In studies partly supported by a grant from the National Institutes of Health, Bethesda, Md., Heinz von Foerster, Patricia M. Mora and Lawrence W. Amiot of the University of Illinois, Urbana, show that, with the proper figures, Charlemagne could have predicted doomsday accurately within 300 years.

Elizabeth I of England could have predicted the critical date within 110 years, and Napoleon within 30 years.

"Today, however, we are in a much

better position, since we are required to extrapolate our evidence only four percent beyond our last point of observation: we can predict doomsday within approximately ten years."

While the optimists consider growing population no problem because they believe food technology advances will provide for the masses, and the pessimists argue that there is a limit, the Illinois mathematicians state in *Science*, 32:129, 1960, that both are wrong.

The principle of "adequate technology" has held for 100 generations and can be expected to last at least three more. But "our great-great-grandchildren will not starve to death. They will be squeezed to death."

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AGRICULTURE

Walkie-Walkie Helps Farmers Trace Sheep

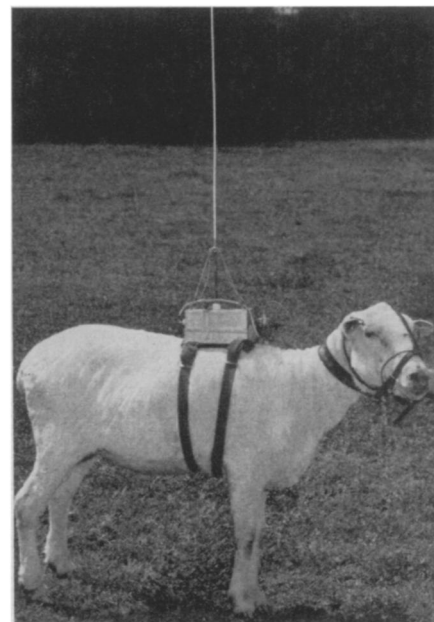
► AUSTRALIAN FARMERS, with more than 100,000,000 sheep scattered over their vast sheep stations, no longer have to worry where their flocks have strayed. The sheep tell the farmer exactly where they have gone.

A tiny radio transmitting set, developed by the Commonwealth Scientific and Industrial Research Organization, is strapped to the back of the sturdiest sheep in a flock and sends out a periodic "bleep" to be picked up by the farmer on his direction-finder set.

Since sheep always follow their leader, the farmer knows where all his sheep are at that time.

Because more than 10,000,000 of the 40,000,000 lambs born in Australia each year die in the first few months of their lives, knowledge of the whereabouts of the flocks is of vital financial interest to the farmer. The same information is equally important at shearing time.

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SHEEP "TALKS" TO FARMER