

MEDICINE

Ruptured Appendix Relief

ACTH and cortisone, famous for relief they give to arthritis patients, now found to help severe peritonitis. Surgery should not be delayed after treatment.

► THE HORMONES famous for relief they bring in arthritis, ACTH and cortisone, are helping some patients with severe and widespread peritonitis, Dr. Laurance W. Kinsell of Highland-Alameda County Hospital, Oakland, Calif., reported at the meeting in New York of the U. S. and Canadian Chapters of the International College of Surgeons.

The peritonitis patients suffered this life-threatening condition after ruptures of an appendix, stomach ulcers, gallbladders and other organs. (Peritonitis is an inflammation of the peritoneum, membrane lining the walls of the abdomen.)

Use of the hormones is based, Dr. Kinsell said, on the known ability of them to check inflammatory processes in general and on their non-specific antitoxic effect in a variety of severe toxemias, or poisonings.

"If the decision is made to administer the hormones to a patient prior to surgery, it is mandatory that surgery be performed as soon as the patient's condition has improved

sufficiently," he warned. "Otherwise, one may be deceived by the apparent well being of the patient as the result of hormonal therapy, and postpone definitive treatment until the optimal time for operation has passed.

"In the case of generalized peritonitis particularly, it seems probable that hormonal therapy, if properly used, can minimize mortality and morbidity, and will permit of relatively early surgery in instances where such treatment otherwise would be postponed for a prolonged period.

"Hormonal therapy should rarely be continued for more than four days after surgery. As in the case of patients receiving ACTH and cortisone, suitable dietary and other measures must be used. These include: 1. adequate intake of protein and calories; 2. restriction of sodium; 3. addition of large amounts of potassium; 4. continuation of antibiotics for at least three days after hormone therapy has been discontinued."

Science News Letter, September 26, 1953

INVENTION

Tank-Like Shoe Permits Walking on Water

► SOME DAY an enemy may stare in saucer-eyed astonishment as U. S. Army Engineers walk around on water while building bridges for trucks to use.

The soldiers will not be endowed with a mysterious supernatural power. Instead they may be wearing the "water shoe" patented by Ludwig A. Geiger of New York City.

A single water shoe is designed to support the weight of the wearer so the soldier does not sink while he is taking a step forward.

According to the inventor, the shoes can be made in many designs. One style resembles a deep rectangular dish that has inflatable walls. Air is trapped inside the inverted dish as each step is taken. This air, along with the air in the inflated walls, buoys the soldier.

A modified version of this style features a paddlewheel that twirls each time a step is taken. A different style resembles an over-sized shoe, its high top fitting snugly around the calf of the soldier's leg to seal out water.

Inventor Geiger assigned his patent, No. 2,651,790, to Gerald L. Geiger of Washington, D. C.

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BIOLOGY

Test Crater Lake Water For Clues to Green Color

► WHY THE water is colored "apple green" in the recently discovered round crater lake in northern Labrador is being investigated by scientists at the Royal Ontario Museum in Toronto.

Dr. Victor Ben Meen, director of the Museum, explained that there are at least three reasons for the peculiar green color and turbid appearance in an area where the surrounding lakes are deep blue and clear. Algae, tiny, one-celled plants; melting of glaciers carrying ground-up rocks; and the metallic element, nickel, dissolved in the water could cause the "apple green" color.

The round lake, 185 yards across, is believed to have been carved out of the northern wilderness by the crash of a mammoth meteorite 3,000 to 15,000 years ago. It is a possible "baby brother" to the giant Chubb crater in northern Quebec, which has a diameter of over two miles.

The peculiar round lake was first spotted on a photograph taken by Col. Arthur F. Merewether of the U. S. Air Force. Dr. Meen and Dr. Jacques Rousseau, director of the Montreal Botanical Garden, figured out the approximate location of the lake from their personal knowledge of the Arctic, then flew to the general area to try to spot it.

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HEALTH RESEARCH LABORATORY—*This new laboratory of the University of California at Los Alamos, N. M., is now completed after six years of planning and construction. It cost \$1,870,000 of Atomic Energy Commission funds and will be concerned with combatting the health hazards of radioactive or toxic materials in or near atomic plants.*