

naming them, Dr. Seaborg said, speaking as guest of Watson Davis, director of Science Service, on the "Adventures in Science" radio program over the nationwide network of the Columbia Broadcasting System. Dr. Seaborg indi-

cated that he might shortly name element 95, at least.

He has already received many suggestions for naming the new chemical babies.

Science News Letter, December 29, 1945

MEDICINE

Cleft Abdomen Baby Lives

Prompt operation in which silk stitches were used to pull together gradually the sides of the opening, saves life of baby boy.

➤ IN RICHMOND, Va., in July, 1942, a baby boy was born with the rare, usually fatal condition of cleft abdomen. His liver, gallbladder, stomach, colon and small intestines pushed through a five-inch wide opening that extended from the lower end of the breastbone to the navel.

Today, he is a normal three and a half year old child, one of the six babies recorded in medical history who have survived being born with this defect. His case was reported by Dr. Frank S. Johns, of the Johnston-Willis Hospital in Richmond, at the meeting of the Southern Surgical Association.

Prompt, efficient operation to repair the defect plus careful handling by the obstetrician, Dr. M. Pierce Rucker, when the baby was born, saved his life.

Dr. Rucker noticed the defect as the baby was born. He took care that the thin membrane covering the organs that pushed through the cleft was not broken. Compresses wet with salt solution were placed over the cleft abdomen and the baby was sent immediately to the surgical department.

Within a half hour after his birth, the baby was under ether and Dr. Johns was carefully pulling together with silk stitches the upper and lower ends of the cleft. He had first tried to force the liver, stomach and other organs gently back into what should have been their normal position.

At every such attempt, however, the baby would stop breathing. Finally, he put in the silk stitches and gradually pulled the sides of the opening together, leaving the unbroken membrane as a permanent overall covering. In the center, where the cleft had been almost five inches wide, a space about an inch wide was left open.

Adhesive strips were placed over the entire length of the wound, a dressing put on, and the baby returned to the

nursery. The entire strapping was kept on for about six weeks or until there was complete granulation under it.

On the fifth day after the operation, the baby was put to the breast. He had previously been given lactose feedings and diluted breast milk as well as injections of normal salt solution and, later, of plasma from his father's blood.

When 13 days old he went home from the hospital, weighing six pounds five ounces, a satisfactory gain over his birth weight of five pounds eleven and three-fourths ounces.

The first known case of cleft abdomen was reported in 1557. Dr. Johns found reports of 87 cases altogether. Of these 58 were stillborn monstrosities. In 20 cases the baby was living at birth and normal except for the abdominal defect, but no attempt was made to repair it and these children all died. In nine, including the present case, attempts were made to repair the defect but only six of the babies survived.

The condition, which has the technical name of gastroschisis, is believed to be a structural abnormality and not one of growth. It originates in the embryo. If there is not enough liquor in which the embryo normally floats freely, or if the embryo or its sac is sticky, the embryo and the sac become united and that part of the embryo cannot develop normally.

This theory is believed to explain not only abdominal cleft but other abnormalities with which babies are sometimes born. Pressure from tumors in the mother's abdomen or deformities of the uterus are other possible causes of congenital abnormalities and monstrosities.

Science News Letter, December 29, 1945

Brazil nuts, shaped like segments of an orange, grow a dozen or more in a pod; this accounts for their shape.



LAST TRIP—The roadable autogiro, developed by the Pitcairn Autogiro Company ten years ago makes its last trip down North Capitol Street on its way to the Smithsonian Institution. CAA photograph.

BIOCHEMISTRY

Acid of 1080 Found in South African Plant

➤ NATURE ANTICIPATED man in manufacturing the stuff that makes the new super-ratbane, 1080, the deadliest thing that has yet hit the rodent world. Long before American chemists made a synthetic combination of sodium with fluoroacetic acid, which is the basis of 1080, a poisonous plant in South Africa was producing the same acid in its living tissues. Not only that, but the natives had found out that they could use the plant to poison rats.

The plant, which bears the Boer-Dutch name "gifblaar" (poison-blister), was analyzed for its poisonous principle by a South African scientist, Dr. J. S. C. Marais. He found that its toxicity was due to fluoroacetic acid, and suggested that this acid and its chemical relatives might be a source of valuable poisons and insecticides. American scientists, working under wartime pressure, made an independent discovery of the value of the same acid and its compounds without knowing of the previous work.

The botanical name of the poison-producing plant is *Dichapetalum cymosum*. It is a kind of second cousin to the euphorbias, most of which are also poisonous.

Science News Letter, December 29, 1945