

fatal disease of new babies born to mothers with Rh negative blood.

Tyrosinase, which turns potatoes black, and another chemical in urethane, were reported to have some benefit in treatment of leukemia.

New synthetic pain-relieving drug known variously as amidone, dolophine and 10820, was reported two to four times as effective as morphine, but also capable of causing addiction.

A morphine derivative, metopon, found less addicting than morphine, was made available for pain relief in cancer patients only and under restrictions to prevent its misuse.

Ten-year survey of male sex habits was reported.

A new operation and a special instrument were devised for freeing one of the heart's valves of binding scar tissues.

Blood-shunting operation in which the great cardiac vein was made to do the work of the heart's artery was developed for relief of coronary thrombosis and sclerosis.

Isolation of two more blood fractions, an iron-copper carrying chemical and another which separates as a mercury salt, was announced.

Two anti-influenza chemicals LL47 and apple pectin, effective in laboratory experiments, were reported.

New inroads against tooth decay include: rhubarb mixed with lemon juice to protect teeth against the acid's erosive action; plan for mass control of caries at the source by adding glycerol aldehyde (simple, tasteless chemical) to all sugar at the refineries to check fermentation and acid formation from sugar as eaten; tryptophane, an amino acid, as a possible decay preventive; treatment of children's teeth twice a year with sodium fluoride.

Remedy for intestinal paralysis was found in a poisonous war gas, di-isopropylfluorophosphate (DFP).

Vitamin C and the amino acid, histidine, given together to cause release of histamine in the body were announced as effective treatment for serious conditions, including gangrene, in which blood circulation is impaired.

Improved treatment for infantile paralysis followed discovery that bulbar poliomyelitis takes five different forms, each requiring specific treatment.

First direct observation of protein synthesis outside the animal body, of importance in cancer study, was achieved with radioactive sulfur.

Body chemical called histamine was found to transform certain cells of the body from their resting state into active germ-eaters.

Antimalarial 100 times as powerful as quinine was extracted from the leaves and roots of a Chinese plant, *Dichroa febrifuga*.

PAB, used in ridding livestock of parasitic worms, had a sulfa-like action against the exceedingly minute germs called Brucella; chemical from mold found in soil of cattle inclosure showed promise as remedy for undulant fever.

Malaria germs were grown outside a human or animal body, offering a new technique for testing antimalarial drugs.

A dual photoelectric device clipped to the ear aided infantile paralysis patients by giving doctors an actual and continuous measurement of the oxygen in the blood.

Cyanine dyes and chemicals called piperazines were announced as promising for treat-



**ELECTRIC RESPONSE**—Dr. Lorrin A. Riggs, psychologist at Brown University, measures the electric current on the eye of his co-worker, E. Parker Johnson, by means of an electrode inserted in a contact lens. In this way it is possible to measure the eye's visual sensitivity. (See SNL, Nov. 29.)

ment of the tropical disease, filariasis.

One type of hardening of the arteries, atherosclerosis, was reported linked with the physical state of fat in the blood.

The anti-war gas chemical, BAL, was found effective in overcoming gold poisoning in arthritis patients getting gold salts treatment and also lead poisoning.

One of the nitrogen mustard war gases brought improvement in the incurable chronic disease, Boeck's sarcoid, but cannot yet be classed as a cure for the condition.

Quick antidote to the occasional hemorrhagic effect of heparin, anti-blood clot chemical, was discovered in protamine, a fish-protein chemical.

Blood chemical, hemin, was found to prolong insulin's action.

New fat hormone produced by the adrenal glands was discovered responsible for moving fat from liver reserves during starvation.

Peacetime national blood program for collection and distribution without charge of blood, plasma and blood fractions used to treat and prevent disease was announced by the American Red Cross.

An official long range research program on the after-effects of the atom bomb among Japanese was started.

A dye, toluidine blue, was found effective in laboratory tests in controlling the bleeding of radiation sickness.

New atomic danger, plutonium poisoning or "plutonism," was found to cause greying hair, liver damage and bone cancer in laboratory animals; treatment with a harmless metal, zirconium, to displace the poisonous element was reported effective.

Radioactive sex hormone was made for the first time by using carbon 14 from the atomic pile to prepare synthetic male hormone.

Radioactive germs and radioactive penicillin were prepared so that scientists could trace both the germs and the drug through the body and determine, if possible, how the body's immune mechanisms work.

A new drug, dibenamine, and pentobarbital may avert death from shock following severe bleeding, it was reported.

Patients with liver disease and abdominal dropsy were reported to have increased amounts of an anti-diuretic substance in the blood.

A fat mobilizing substance or hormone was discovered in the urinary excretion of fasting animals.

Para-aminosalicylic acid, PAS for short, proved effective in checking tuberculosis in guinea pigs, and clinical trials were started.

Microwaves, such as used in radar, were introduced as medical agents better than diathermy for heating internal tissues.

The Nobel prize in medicine and physiology was awarded to Dr. Carl F. Cori and his wife, Dr. Gerty T. Cori, Washington University School of Medicine, St. Louis, for their discovery of what happens to sugar and starch in the body, and to Dr. Bernardo A. Houssay, of Buenos Aires, for his discovery of the relation between the pancreas and the pituitary gland.

#### PSYCHOLOGY AND PSYCHIATRY

### Hypnotizing Drug Used for Relief of Morbid Fear

PENTOTHAL, hypnotizing drug that helped soldiers recover from combat-induced mental sickness, was used for rapid relief of a civilian from his morbid fear of closed spaces.