

MEDICINE

High Frequency Currents New Aid in Cataract Removal

Artificial Ripening Makes Removal Easier and More Certain; Fever Treatments Found Successful

ARTIFICIAL ripening of cataracts of the eye, making their removal easier and more certain, can be safely achieved with the aid of high frequency electric currents, Dr. Albert L. Brown of Cincinnati reported at the American Congress of Physical Therapy in New York City.

The heat due to resistance of the tissues to the high frequency currents apparently toughens the capsule, Dr. Brown explained, and if the capsule should rupture during the operation, the surgeon still has the advantage of extracting a mature cataract.

This new development promises to aid cataract removal, but Dr. Brown emphasized caution until the value of the procedure has been well established.

Fever Machine Better

PATIENTS with the mental disease, parietic dementia, tragic sequel of syphilis, stand a much better chance of recovery when given fever treatments by machine instead of by malaria germs.

The percentage of patients who get well is about 20% greater after a full treatment of the machine-induced fever combined with medicine than from malaria inoculation, Dr. A. E. Bennett, of Omaha, Nebr., reported. His figures were based on a review of five years' experience with the combined artificial fever and medical treatment at the University of Nebraska College of Medicine and Hastings, Nebr., State Hospital. Drs. Juul C. Nielsen of Hastings, A. H. Fechner of Lincoln and Paul T. Cash of Omaha assisted in the survey.

Until the Viennese physician, Wagner Jauregg, introduced the malaria treatment of this ailment, results of treating the disease were unsatisfactory, Dr. Bennett pointed out. The malaria treatment consists in injecting malaria germs, which produce a high fever that in many cases restores the patient to sanity. In the last 10 years, other methods of inducing high fever, such as the fever machines that make use of short radio waves, have been introduced.

The advantage of these methods over malaria-induced fever is that the fever can be controlled, whereas in malarial fever the patient may either not get enough or may get more than he can withstand. The latter is a danger particularly in the case of elderly patients or those with high blood pressure, or inflammation of the aorta, the big artery leading from the heart.

Arthritis Helped

THIS same kind of artificial fever treatment has been tried in patients suffering from atrophic arthritis. The treatment relieves but does not cure the arthritis, according to a report by Drs. Walter M. Solomon and Robert M. Stecher of Western Reserve University School of Medicine. Out of a group of 114 patients, most of whom had suffered with severe arthritis for many years, 75% noticed substantial relief from pain and stiffness lasting for from several days to several weeks. "Not a single patient seems to have been cured as a result of fever therapy nor was the disease substantially arrested," the Cleveland doctors reported. "As treatments were continued, the period of relief was prolonged so that the interval between treatments could be lengthened without deleterious effects."

Since the specific nature of the disease is not known, all doctors can do is to relieve symptoms of the arthritis, and this relief, Drs. Solomon and Stecher suggest, apparently can be given to a large proportion of patients by artificial fever treatments.

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PSYCHIATRY

Physicians Urged to Avoid Idea of "Legal Insanity"

AS ILLOGICAL as the dual standard for sex morality, and clung to as tenaciously, is the dual conception of insanity—legal insanity and medical insanity."

Medical men and legal experts alike

● RADIO

Dr. Abel Wolman, of the Johns Hopkins University, chief engineer of the Maryland State Health Department, will be the guest scientist on "Adventures in Science" with Miss Jane Stafford, of Science Service, over the coast to coast network of the Columbia Broadcasting System, Monday, October 16, 4:30 p.m., EST, 3:30 CST, 2:30 MST, 1:30 PST. Listen in on your local station. Listen in each Monday.

deplore the "battle of experts" that too often occurs when a criminal claims innocence by reason of insanity. Yet again and again physicians are called upon to answer the question "Is he *legally* insane?"

Physicians know that a man cannot be insane medically and sane legally any more than he can have tuberculosis medically but be sound legally. Such a distinction recalls the Mikado's Poobah who had a different opinion for each of the many offices he held.

"Did the defendant know the nature and quality of the act and if he did, did he know that it was wrong?" This question is put over and over to physician witnesses. Physicians do not make diagnoses in such terms.

Physicians called into court as expert witnesses are urged to stick to their medicine and leave legal quibbles to lawyers, in a communication to the *American Journal of Orthopsychiatry* prepared by Dr. Gregory Zilboorg, New York psychiatrist.

"The question of responsibility we shall discard without qualms," he said. "This is not a medical question. As psychiatrists we have thoughts of our own on the subject; if insanity is a disease and the law itself considers insanity a disease, we think that man is no more responsible for his mental disease than for his gastric ulcer or brain tumor. But these views are of no import to the Court for, according to the law, not we doctors but the jury is the sole judge of the defendant's responsibility and if we are

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asked to answer questions as to responsibility, we, as doctors, should consider ourselves incompetent to answer. . . .

"Official psychiatry would perform the greatest service to law and medicine if it would decree that any expert psychiatric testimony admitting the existence of legal insanity and accepting the concept of legal responsibility is not in accordance with the basic tradition of the profession and automatically and officially disqualifies the expert in the eyes of the profession itself."

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MILITARY SCIENCE

Hitler's Danzig Threat May Have Meant Air Power

WHEN Hitler in his Danzig speech threatened the use of some means still unleashed against the Allies, interpreted by some commentators to mean that Germany may have some new horror up its scientific sleeves, he probably was referring only to his air power that has not come into use on a scale much larger than practiced in Spain and China.

There is extreme skepticism over the existence of any new weapon comparable to poison gas sprung upon French and British in the last World War by Germany. Poison gas is significantly unused so far in the present war. What are the possibilities?

Death rays, that perennial scare completely unconfirmed, are defeated by the good old inverse square law. The power of radiation varies and lessens with the square of the distance.

Germs are not practicable. They are too dangerous, since germs know no boundaries and there are too many natural germs anyway. Any terrible new gas is discounted by chemists; mustard gas is bad enough as it is.

Atomic energy? The original research was done in Germany, but physicists are extremely skeptical that it has been achieved.

Rockets, liquid oxygen bombs, other variations of explosive bombs are discounted.

Newest weapon in this war—radio propaganda, is one against which an immunity is being built up in human minds. Men are learning not to believe anything.

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Delaware is the first state to pass a law requiring dentists to spend a year as interns before practising as full fledged professionals.

MEDICINE

Animal Glands Transplanted Give Hope In Addison's Disease

Death of Student During Examination Is Attributed To Taking "Pep Pills," A. M. A. Journal Learns

HOPE that gland transplants from either animals or other human beings can provide sufferers from dread Addison's disease with new and functioning adrenal cortex tissues, restoring them to relative health, is held out by an editorial in the *Journal of the American Medical Association*. (Sept. 9)

Caused by a deficiency in the secretion of the adrenal cortex, located above the kidney, Addison's disease has been combatted by injections of the hormone, and more recently by the implantation under the skin of pellets of the chemically synthesized hormone forming "artificial glands."

The fact that the Soviet physician, Dr. E. M. Auslender, has transplanted animal glands into 14 patients with more or less permanent results in mild cases and improvements lasting 5 to 6 months in severe cases, "seems to offer some hope of amelioration and to justify further trial," to the *A.M.A. Journal*.

Five years ago Drs. Edwin Beer and B. S. Oppenheimer of Mt. Sinai Hospital, New York, reported successful transplantation of a human gland with apparent complete recovery of the patient. The glands, whether human or animal, are placed in pockets under the skin.

The death of a Purdue University student last January while writing a college examination was attributed in part by the coroner, Dr. Lowell C. Smith, to use of "pep pills" made of amphetamine sulfate. In a report to the *A.M.A. Journal*, Dr. Smith tells how the student, identified as E. J. S., aged 25, collapsed in the class room after having taken pep pills before a series of examinations.

The use of amphetamine sulfate is "probably more common than one would think," Dr. Smith declared. Severe collapse following its use has been reported, but no fatalities have hitherto been reported in the medical literature.

Weather conditions, particularly rapid changes, which increase the severity of asthma produced experimentally in guinea pigs in German research, suggests to the *A.M.A. Journal* that closer study of the weather may help medical therapy.

A Chicago fireman who complained of asthma after every fire has added wood smoke to the list of asthma causes, Drs. Ben Z. Rappaport and Rudolph Hecht of Chicago, report.

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BOTANY

Rare Hawaiian Plant Flourishes in Volcano

See Front Cover

THE RARE silversword plant of the Hawaiian Islands, which grows mainly in the great extinct volcanic crater of Haleakala, in that section of Hawaii National Park located on the island of Maui, apparently is holding its own, according to John D. Coffman, of the National Park Service.

For many years it was feared that this plant was in danger of extermination as a result of destruction of its seeds by insects. National Park Service experts made studies of conditions and experimented in protecting the plant at vital periods. Apparently the results were successful, as a recent count showed a larger number of silverswords in the crater than had been reported for some time.

Recently the National Park Service, through Territorial Forester C. S. Judd of Honolulu, forwarded seeds of the silversword plant to Felixstowe, England, at the request of a British plant enthusiast.

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