

Raynaud's Disease Overcome

Medicine

Medicine appears to have won another trench in its war against disease with the achievement of the surgical control of Raynaud's disease, just reported by Dr. A. W. Adson and Dr. G. E. Brown of the Mayo Clinic. Raynaud's disease is painful, disabling and distressing to the patient, often ending in amputation of feet or hands. It has been compared to frostbite.

Everyone knows what frostbite is; that the supply of blood to a frost-bitten area is interrupted; that if the injury is severe enough the frost-bitten tissue is not nourished, dies and becomes gangrenous. Raynaud's disease is not frostbite. It is much more severe and it is not so definitely related to cold. However, the condition it produces looks and feels to the patient who has it something as frostbite looks and feels. Until recently, treatment for Raynaud's disease has been unsatisfactory. "The complete surgical control of Raynaud's disease would seem to be accomplished", Dr. Adson and Dr. Brown have now announced. They

say "seem to be" and they use the word "control" rather than "cure". Genuine medical investigators do not claim too much too quickly.

However, building on the foundations laid by other investigators, these two physicians in their attack on Raynaud's disease have directed their attention to the autonomic or sympathetic nervous system. This is the nervous system which works without any thought on our part. It helps to control our digestion, our heart beat and the tension of the walls of our blood vessels.

These scientists found ways of removing small portions of this nervous system that lie in the back, behind the abdominal organs and in the upper part of the chest. When the right portions are removed, the tightness, or spasticity, of the affected blood vessels is relieved. This relief seems to be permanent, which gives rise to the hope that scientific medicine and surgery have conquered Raynaud's disease.

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Drug Store Lunch O. K.

Pharmacy

The drug store lunch counter is seen to have a scientific justification in the growing union of foods and drugs as medical material with which to treat or ward off disease, said Dr. Wilbur L. Scoville on the occasion of his receiving the Remington Medal of the American Pharmaceutical Association. This medal represents the highest award in the profession of pharmacy, and was bestowed on Dr. Scoville in recognition of his outstanding accomplishments as chairman of the National Formulary Committee.

"The presence of the lunch counter in the drug store, which the old-time pharmacist views with misgivings, may be a real step in advance," declared Dr. Scoville. "The old *Materia Medica* was a list of mineral substances, vegetable drugs and a few animal bodies which have an influence upon diseased conditions. The new *Materia Medica* includes not only these but all foods, light, heat and even wind. The function of the last has not yet been made plain, but it will be an interesting study."

The physician now prescribes proper diet, fresh air, and sunshine along with and often in place of pills

and powders. Vitamins and minerals are found in foods, together with blood-regenerating properties far beyond those of the old-time tonics. The distinction between foods and drugs is thus becoming less pronounced, Dr. Scoville finds.

The National Formulary is a book of standards for pharmaceutical formulas in use by physicians and pharmacists. It derives its legal standing and official authority by virtue of the Federal Food and Drugs Act. It was originated by the American Pharmaceutical Association over forty years ago and is revised every ten years by a committee chosen by the Association.

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To avoid disputes as to authorship of their paintings, artists in France are having their pictures registered, and filing data sufficient to establish identity of the pictures.

Traces of at least nine fossil forests, one above the other and representing 12,000 years of growth, are exposed in a cross-section of Specimen Ridge in Yellowstone National Park.

X-Rays and Evolution

Biology

Irradiation with X-Rays probably never will be employed to develop favorable mutations and thereby speed up evolution, in the opinion of Dr. Halsey J. Bagg of the Memorial Hospital, New York. Dr. Bagg has expressed this belief in a communication to the New York Academy of Sciences.

He described his experiments in exposing rats and mice to X-rays, showing a variety of deformities which had been produced, including the elimination of one kidney in the first generation and the total absence of kidneys in the second generation after exposure. The rodent offspring with no kidneys lived about one hour after birth.

Dr. Bagg said he has seen no favorable variations as a result of exposure to X-rays and concluded that exposure of the germ plasma in human beings to irradiation should be carefully guarded against.

Dr. Charles Packard of the Crocker Institute of Cancer Research, New York, read a paper describing his experiments to determine whether irradiation affected rapidly growing tissues to a greater extent than normally growing tissues. His experiments dealt with mitosis or cell division process in the early stages of development of fruit-fly eggs.

Batches of approximately 1,000 *Drosophila* eggs each were examined at temperatures of 13 degrees, 23 degrees and 28 degrees Centigrade. At the first temperature mitosis was observed to occur every 50 minutes, at the second every 20 minutes and at the last every 12 minutes. The results of exposure to X-rays in all instances was approximately the same, the variation being not more than 3 per cent., Dr. Packard reported.

When exposed to irradiation for five minutes about 25 per cent. of the eggs died, when exposed for ten minutes about 50 per cent. died, for fifteen minutes about 65 per cent. died, and for twenty minutes about 75 per cent. died. He concluded that the theory that protoplasm is sensitive to irradiation according to the rate at which cell division takes place was not supported by his experiments.

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A new device attached to a front door lock switches off the hall light inside the house when you lock the door, and lights the light when you unlock the door.