trick, however, Dr. Wolfe allowed the other two to learn from the experienced apes, and they picked it up much more easily.

The chimpanzees will also use the chips and slot machines for other purposes than to secure food, it was found. A yellow chip placed in the proper machine buys the opportunity to play with the experimenter, and a blue chip properly spent entitles the ape to leave the experimental room and go back to its living quarters. The use of the blue chip was learned with greater ease than any of the others, Dr. Wolfe said, and it was selected in preference to all the others by one animal who was anxious to get away from a disliked camera man.

The apes will not play the machines just for the entertainment of seeing them work, however. A brass check which can be inserted in the machines but buys no reward is discarded by the animals as soon as they learn that it is a "plug nickel."

Science News Letter, June 3, 1933

GEOLOGY

New Mineral Shines Like Raven's Wing

CORVUSITE, or ravenstone, is the name which has been given to a newly-discovered mineral from Utah, which has the iridescent luster of a raven's wing. Its scientific name is in reference to the Latin word for a raven or crow, *corvus*. The mineral was investigated by Edward P. Henderson and Frank L. Hess of the Smithsonian staff.

The new mineral contains a high percentage of the rare metal vanadium. It was found in close proximity to the carnotite deposits which constitute the chief source of radium in the United States. Intimately associated with the corvusite deposits are the petrified remains of ancient trees, but what connection these may have had with its formation is not known as yet.

A second newly discovered mineral reported by the Smithsonian Institution scientists is a black, pitchy substance which, however, has a true crystalline structure. It is rich in the now widely used metallic element chromium, and is found on the bark of petrified trees.

The first specimens were called to the attention of geologists by J. L. Riland, a veteran newspaperman of Meeker, Colo., and the mineral has been named rilandite in his honor.

Science News Letter, June 3, 1933

MEDICINE

Medical Research Conquering Diseases of Past Middle Life

Advances in Physiology Are Overcoming Chronic Ills Made Ravaging by Life-Extending Success of Bacteriology

A BRIGHT hope has awakened in the hearts of informed physicians and laboratory investigators that the next years will witness a great acceleration in the control of the chronic diseases of past middle life, those ills which now take increasing tolls due to the life-extending success of bacteriology in controlling the infectious diseases of early life and the dangers of surgery.

That eminent leader in medical research, Dr. Simon Flexner, Director of the Rockefeller Institute for Medical Research, analyzes the present status of the triumphs of experimental medicine in a communication to the current *Scientific Monthly*.

Pasteur, Lister and Koch provided the scientific foundation for present day bacteriologly and operative surgery. They ushered in the era of experimental study of such diseases as tuberculosis, typhoid fever, diphtheria and epidemic meningitis.

Bacteriology and aseptic surgery have written their triumphs into the tables of mortality among infants, children, and adolescents, Dr. Flexner observes, and "in a period of time not too long deferred have led to an increase in the individual expectation of life in the culturally advanced countries of at least twelve years."

Now the science of physiology has had its foundations laid, precisely as the science of bacteriology had to be developed in the earlier years. Dr. Flexner tells us that marked progress in the control of disease has been resumed along this new line. Physiologists have disclosed the functions of the ductless glands of the body. These glands are essential to the maintenance of health and their derangement is responsible for serious and fatal diseases as age advances. It is because of the discoveries regarding the nature of the thyroid, adrenal and pituitary glands and of certain secondary but similar essential activities of other organs such as the pancreas and liver, Dr. Flexner tells us, that increased control is being achieved of certain diseases of past middle life, among which diabetes and pernicious anemia may be singled out for mention. Considerable progress has been made but Dr. Flexner predicts still greater achievements will be made if the growth of science continues unimpeded.

While there is just cause for rejoicing at the achievements, Dr. Flexner warns that there are hard problems immediately ahead to which answers, at least sufficient answers, have not yet been obtained. Cancer, Bright's disease, and diseases of the heart and blood vessels are seriously prevalent and destructive. There is no lack of effort being made to reach a fuller understanding of their nature, origin and control. Dr. Flexner believes that progress is being made.

"The ultimate goal seems, however, still distant," he writes. "There is but one way, I submit, to bring that goal within reasonable hope of being reached finally and that is by continued, unremitting, unobstructed study by the experimental method."

Science News Letter, June 3, 1933

PHYSICS—PSYCHOLOGY

Telephone Message Between Crickets

A TELEPHONE message from a male cricket to a responsive female was described by Dr. R. T. Beatty of the Admiralty Research Laboratory in a recent lecture on the sense of hearing in animals.

In nature, the male cricket rubs his wing casings together for his song, and the female hops toward him in answer to the call. Although it was known that a cricket possesses hearing apparatus in its forelegs, this experiment was devised to prove that other factors of smell, vision or vibration are not involved in the response to sounds. Accordingly the male was invited to chirp into the 'phone. When the call was made, the female cricket rose into the air and settled down beside the receiver.

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