

the patients also showed signs of deficient thyroid gland activity.

The patients grew from one to 2.7 inches when given the growth-stimulating hormone three to five times a week for periods varying from three to five months. The young patients had all been under observation for several months prior to treatment, during which time six of them did not grow at all, while one grew half an inch.

The Detroit physicians make a special plea for early recognition and treatment of these cases. This will materially improve the chance for successful outcome of the treatment.

Science News Letter, June 3, 1933

MEDICINE

Hayfever Caused by Molds From Dust and Ringworm

MOLDS may cause hayfever and other nasal disturbances, Drs. Harry S. Bernton and Charles Thom of Washington have discovered.

Eight cases characterized by sneezing, running or stuffy noses were caused by sensitiveness to two species of molds, these scientists found. One of the molds, *Alternaria* by name, is commonly found in dust. The other, *Trichophyton*, is a common parasite of man and animals and produces ringworm of the scalp. Contact with persons who have ringworm or are otherwise infected with these parasites may cause hayfever in a sensitive person, it appears.

Fortunately, the sensitive individuals can be desensitized by suitable treatment, which relieves the symptoms. Six of the eight patients have been under treatment long enough to show permanent relief, Drs. Bernton and Thom reported to *The Journal of Allergy*.

Allergy is the name scientists have for the condition of sensitiveness to certain proteins, found in either food, plant pollens, or such substances as horse dander, cat hair or molds.

Asthma may also be caused by molds, earlier investigations of Dr. Bernton's showed.

The hayfever due to molds may appear at any season or in any locality. It is the hayfever due to plant pollens that causes summer sneezes and discomfort. One case of mold hayfever was seen in a boy who had been troubled with this ailment for a period of eight years in the West Indies, China, Japan, the Philippine and Hawaiian Islands, California and the District of Columbia.

Science News Letter, June 3, 1933

GENETICS

Genes Declared Impotent as Major Evolutionary Factors

THE THEORY of the gene, cornerstone of the present-day science of genetics, was attacked by Prof. William E. Castle of the Bussey Institute of Harvard University, in an address before the American Society of Mammalogists.

This theory, which holds that all inherited traits and qualities are controlled by the action of separate physical units of submicroscopic size borne in the chromosomes, Prof. Castle said failed to account for many observed facts about the way animals actually transmit in heredity. And present-day concepts in genetics, he continued, give us little help with the riddle of evolution.

"No genes are known," declared Prof. Castle, "which, by mutation, would change a rabbit into something different from a rabbit, which would take it out of its genus, or class, or phylum. Such mutations do not occur, and we know nothing about the inheritance of these more general features of organization, yet inherited features they certainly are. The current theory of the gene assumes that these characters, as well as the more special known unit-characters, are influenced by chromosomal genes. But this is purely speculative. No direct evidence can be cited in its support, for no crosses can be made between animals which have and those which have not these general characteristics, and that is the only method of Mendelian analysis.

"Genetics accordingly can not solve the problem of evolution, which involves changes in organization more gen-

eral and fundamental in character—but probably slower and more gradual in becoming established—than those controlled by chromosomal genes."

Prof. Castle's special studies have been with rabbits. Of sixteen definitely traceable unit character differences in these animals, nine affect color and five the structure of the coat. Each of these effects is due to a different chromosomal gene; but gene mutations determine special and inconsequential properties, and have no effect on the rabbit as a species.

Science News Letter, June 3, 1933

BIOLOGY

Shipworms Proving Destructive to Rope

SHIPWORMS or teredos, a type of mollusks exceedingly destructive to pilings, boats and other wooden structures exposed to sea water, have developed a new and annoying appetite in Long Island Sound, Prof. W. R. Coe of Yale University reports in *Science*.

They have taken to boring in the stout ropes with which buoys and boats are moored, and have caused more than a little destruction and annoyance. Their greediness proves their own undoing, however, for as soon as they have riddled a rope to the point where it falls to pieces they are turned loose unsheltered in the sea, and so perish.

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