



### DUMB—AND NOT BEAUTIFUL

*This animal may not have worn in life that unfortunate expression, at once sad and "dumb," that the artist has given him in the restoration. But of the outlines of his body scientists are at last fairly sure, since the Field Museum of Natural History acquired a nearly complete skeleton recently in South America. The creature bears the heavy name of Homalitherium. It was the size of a smallish ox, and lived in Miocene times.*

PUBLIC HEALTH—CHEMISTRY

## Four Dread Diseases May Be Conquered By the Chemist

### Filterable Viruses Are Chemicals, Not Bacteria; Infantile Paralysis and Cancer to Be Wiped Out

A WORLD free of four dread diseases and possibly a fifth as the result of work not by physicians, but by physical chemists, was boldly pictured by Dr. The Svedberg, world-renowned Swedish Nobel prize winner.

Mankind is on the verge of discovering how to dispose of yellow fever, infantile paralysis, foot-and-mouth disease, influenza and possibly cancer, Dr. Svedberg, in the United States to lecture as the first speaker on the Swedish Tercentenary Lecture program, asserted in an interview at the Princeton Club.

Filterable viruses, organisms so small that they are invisible beneath the most powerful microscopes in existence and that they pass easily through the finest porcelain filters, are certainly the causes of the first four ills and may be the cause of the fifth.

Filterable viruses have been found, he

asserted, to be gigantic molecules of protein and not bacteria as formerly thought.

One filterable virus, that responsible for tobacco mosaic, a disease highly destructive to tobacco plants, has already been isolated and its molecules studied by means of the ultracentrifuge, which was invented by Dr. Svedberg, and similar apparatus.

The ultracentrifuge, which consists of a tiny rotor driven by a blast of hydrogen and can rotate millions of times a minute, has enabled Dr. Svedberg and his colleagues to disentangle some of the complicated reactions occurring in substances found in the body and have enabled them to secure exact information on the sizes and shapes of molecules. Such knowledge, the chemist explains, is invaluable in working out methods of treatment.

"It is obvious," he concluded, "that

we may expect soon to discover powerful weapons to fight illness and death through work along these lines."

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GENERAL SCIENCE

### "Industries Without Touch Of Science Would Never Be"

"YOU may bury our bodies where you will, our epitaphs are written in our scientific journals, our monuments are the industries which we build, which without our magic touch would never be."

The scientists of the world are speaking, in the person of Dr. Harold C. Urey, Columbia University chemist, whose discovery of heavy hydrogen won for him the Nobel prize. His confession of faith, delivered at the dedication of the Mellon Institute recently, will be affirmed by his fellow workers in the great and unselfish guild of those who puzzle out the fundamental facts of nature and of man.

To Dr. Urey science in its emotional aspects is in many ways a religion. And it is one of intense activity and not words. Says Dr. Urey:

"Money is not an object at all, but only a medium of exchange for the real objectives.

"The real purpose of our endeavors is to contribute something somewhere and at some time to the sum of human satisfaction, as man lives for a brief span of time on this continent.

"Our object is not to make jobs and dividends. These are the means to an end, mere incidentals.

"We wish to abolish drudgery, discomfort and want from the lives of men and bring them pleasure, comfort, leisure and beauty. Often we are thwarted and our efforts perverted to other ends, but in the end we will succeed."

We hear much of two classes that compose our industrial civilization: Capital and Labor. To them must be added science that creates and plans and manages. Dr. Urey as spokesman for science recognizes the essential cooperation of capital and labor with science. Upon those monuments that science is building, he hopes that capital and labor will carve their names with the same pride in their work that scientists take in theirs.

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Air raids by crows and other birds are a cause of much damage to California's almond trees.