

the blood serum of convalescent influenza patients, but the serum taken from patients during their acute illness does not protect the mice against the disease. This latter finding, Drs. Francis and Magill state, seems to "show quite definitely that the virus is the causative agent of the human disease."

PROSPECT of obtaining "heavy" water which will allow large scale experiments with this rare and relatively new liquid was presented to the American Chemical Society. Dr. D. S. Cryder, of Pennsylvania State College, told how heavy hydrogen can be concentrated by distillation of ordinary steam. About a trillion pounds of steam are generated annually by the U. S. power and light industry and the 2,000,000 pounds of the now-expensive liquid would result if only one per cent. of this steam had its heavy water extracted. Dr. Cryder predicted that the new Penn State method would allow production of heavy water at less than \$2 a gram, ten cents a drop, the present lowest price quoted by Norway where cheap electricity is available. The present method of concentrating deuterium-rich water is by electrolysis. Water with its hydrogen of the double-weight variety—deuterium to chemists—is useful in tracing chemical reactions which may lead to new chemical knowledge of great value to industry.

CAVIAR may be a delicacy to most people, but to children of Soviet Russia it may become a tasty substitute for cod-liver oil because, like the fish oil, it is rich in anti-rickets vitamin D. A daily dose of two teaspoons of caviar was prescribed for one month to a group of 20

babies suffering from rickets. Seventeen of the babies were completely cured by this epicurean treatment, according to a report made by Professor M. Lepsky. Caviar from sturgeon and carp-like fish was used in this experiment. The caviar of various fishes differs but slightly in composition, however, so it is possible that other kinds of caviar may prove equally effective as a cod-liver oil substitute.

CONCLUSIVE fossil evidence that an arm of the sea covered central New Hampshire for a period of from fifty to a hundred million years longer than geologists have previously believed has been found by Professor Marland P. Billings, of Harvard University, and Dr. Arthur B. Cleaves, of Lafayette College, Pennsylvania. Several hundred specimens of fifteen species of fossils positively identified as belonging to the lower Devonian epoch have been found by the two scientists in the vicinity of Littleton, northwest of the White Mountains and about ninety miles inland from the Atlantic coast. It had not been previously known that the sea in this period extended into New Hampshire, although its extension into other areas at that time had been ascertained. Fossils of the Silurian period, believed to have begun about 400 million years ago and to have continued until the Devonian epoch, have previously been found in this area and told science that the sea was there at that time, but until the present discovery, no fossils satisfactorily identified as Devonian had been found in the region. Consequently the continuance of the sea in that area for fifty million additional years was unknown.

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