PUBLIC HEALTH

Scrap Food and Drug Bill, Amend Old Law, Is Urged

"AN ASTHENIC, chinless and impotent monstrosity"—that, in medical language, sums up what some 92,000 physicians think of the federal food and drug bill as it now stands.

The *Journal of the American Medical Association,* official spokesman of the medical profession, says editorially: (May 31)

"The first bill introduced has been subjected to a sort of plastic surgery which has resulted in a specimen not even resembling the original model and utterly deficient in many particulars.

"Formulas under this bill are secret and filed with the Department of Agriculture. Violations must be carried from the department into the Federal Trade Commission. The procedure is so long and wearisome and the penalties so inadequate that the forces of quackdom may ravage the sick and ailing and retire with their booty long before the processes of investigation and prosecution catch up with them."

The bill is so far from ideal that it had better be scrapped, the medical journal states, and a new beginning made when a more favorable opportunity offers.

Perhaps the best procedure would still be to amend and strengthen the original thirty-year-old pure food and drug law, concludes the *Journal,* by taking account of the need for control over advertising, the great development of the cosmetic industry, and the newer social viewpoint which demands adequate protection for the uninformed consumer.

Science News Letter, June 6, 1936

OCEANOGRAPHY

Coast Line of Long Island Giant Erosion Laboratory

THE entire ocean front of Long Island —120 miles long—has become an outdoor laboratory for the study of beach erosion.

The U. S. Beach Erosion Board, a division of the Corps of Engineering of the U. S. Army, and the Long Island State Park Commission are making the cooperative survey which will study, on the broadest possible scale, the nature and causes of beach erosion. Previously erosion and sand movement studies have been designed to aid or solve some specific situation.

Four times each year, and as soon as possible after severe storms, underwater profiles are made by the field staff. These profiles are graphs made from depth data along lines that run from the beach out to sea for distances 4,000 to 5,000 miles offshore. Taking successive studies it is possible to see how the ocean bottom is changing with time and is altered by known storm conditions.

Water samples and sand samples form another part of the project. The former are samples from which the quantity of sand in suspension can be determined and the latter consists of samples of sand composing the ocean bed.

An auxiliary study consists of current readings showing the speed and direction of currents along shore which can pile up sand in one place and remove it from another. Subsurface floats are used where the water is over two feet deep. For depths shallower than two feet surface floats and colored liquids are dropped into the water and their movement watched and measured.

Aerial photographs and borings of the bottom to determine its basic nature are also part of the program, says *Shore and Beach,* quarterly journal of the American Shore and Beach Preservation Association.

Science News Letter, June 6, 1936

GENETICS

Noted American Scientist To Direct Soviet Science

ONE of America's leading biologists, Prof. H. J. Muller, has resigned from the faculty of the University of Texas, and will become director of research in genetics in the U.S.S.R. Prof. Muller has been in Moscow for the past three years, working at the Moscow Academy of Science. His most recently published research was carried on jointly with a prominent Russian woman scientist, Dr. A. A. Prokofyeva.

Dr. Muller achieved fame among scientists in this country by his pioneer work in changing the course of evolution by bombarding the germ-cells of organisms with X-rays. In recognition of this research development, the National Academy of Sciences of the United States in 1931 elected him a member, which is one of the highest honors an American scientist can receive. Other workers in genetics, both in the United States and abroad, have since greatly extended the scope of Prof. Muller's X-ray genetics work, and practical applications are being made of it in plant and animal breeding.

Science News Letter, June 6, 1936

IN SCIENC

BOTANY

Botanist to Complete 150 Year Old Research

BOTANIZING over a gap of a century and a half, on preserved plant specimens that have crossed the ocean twice, is to be the unique task of Paul C. Standley of the Field Museum Herbarium.

Approximately, 7,000 plants, collected in Mexico while that country was still a Spanish colony, have lain untouched in the vaults of the Botanical Garden of Madrid, while wars and revolutions swept the earth above them. Through all Spain's turbulent modern history, no adequate examination of these rare specimens has been possible.

Now, because Mr. Standley has made a special study of the botany of Mexico and the Middle Americas, the Spanish authorities have entrusted him with the task of identifying and describing the specimens. The main collection will eventually be returned to Madrid, but the Field Museum will be permitted to retain some of the plants.

Science News Letter, June 6, 1936

CHEMISTRY

New Gas Treatment Saves Oranges from Molds

GREEN and blue molds, two of the most destructive enemies of oranges, lemons and other citrus fruits in storage and transit, are successfully combated by means of a new gas treatment, developed by Dr. L. J. Klotz, of the University of California Citrus Experiment Station.

The gas is nitrogen trichloride. Comparatively brief exposures to very small quantities of it have proved deadly to the mold fungi, reducing spoilage from 50 to 75 per cent. Chlorine alone is an effective control on the molds, but unfortunately it also harms the fruit.

Dr. Klotz has experimented with other chlorine compounds, notably two of chlorine with methyl-amines. These, he reports, give promising results from the technical side, but as yet are considerably more expensive than the nitrogen trichloride.

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E FIELDS

MEDICINE

Urge New Specialty In Medicine of Future

NEED for evolution of a new specialty, that of medical sociology, was pointed out by Dr. R. R. Spencer, U. S. Public Health Service, at the meeting of the National Conference of Social Work at Atlantic City.

Physicians, social workers and public health nurses would meet in this field which Dr. Spencer termed a "borderland science." They would study the relation of social conditions to health and disease, and work out measures, both medical and social, for improving health. Dr. Spencer compared this new specialty with such established ones as radiation-genetics and economic entomology.

Dr. Spencer heads the newly organized office of public health education in the scientific research division of the U. S. Public Health Service.

Science News Letter, June 6, 1936

MEDICINE

Aid Found for Sufferers From Bleeder's Disease

AN EXTRACT which has proved useful in treating hemophilia, the hereditary bleeder's disease, sometimes called the curse of the Hapsburgs, was reported by Drs. R. Cannon Eley and Charles F. McKhann of Boston at the meeting of the American Academy of Pediatrics.

The extract is a brown, turbid material obtained from the placenta, the same maternal tissue from which Dr. McKhann obtained a substance effective in controlling measles.

This new extract differs from the one for measles, however. It helps hemophilia patients because it makes their blood clot faster. In bleeder's disease the patients are in danger of bleeding to death from even a small cut because their blood clots so slowly.

The new extract has been given to 18 patients, Dr. Eley reported. In 14 of them the blood from the veins, following treatment, clotted as rapidly as that of normal persons. The extract has been of more help in children than in adults.

It is given by mouth, usually at midnight or in the morning before breakfast, and ice-cold alkaline carbonated water is given before and after the dose of placental extract. The patient is not allowed to eat anything for several hours afterward.

The exact dose and frequency of treatment has to be determined for each patient, it appears from Dr. Eley's report. Besides its use in hemophilia, the placental extract has proved useful in checking hemorrhage after mastoid and adenoid operations and certain procedures in plastic surgery. In these cases the extract is applied to the bleeding wound instead of being given by mouth.

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ASTRONOMY

Chance in Million Another Planet Will Damage Earth

THE CHANCES were only about one in a million that the famous baby planet, Anteros, would strike an inhabited portion of the earth when it made an unprecedented close approach of 1,200,000 miles to the earth last Feb. 7.

Astronomers and laymen can be reassured by the calculations Prof. C. H. Smiley and Ward Crowley of Brown University reported (*Science*, May 8) which provide an antidote to the "sad stories of what might have happened if the planet had struck the earth."

Only sixteen of a million bodies coming to within a million miles will strike the earth, their figures show, and about 73 per cent will fall in oceans or seas and 23 per cent in sparsely inhabited territory. Thus only one in a million is likely to do damage.

It is impossible to predict just where the little planet is going and when it will return to the earth's neighborhood, because it will be pulled about by other planets as well as the sun. If the sun were its sole gravitational attraction it would come back close to earth in 1938. But the Brown University scientists counsel: "Don't worry too much about your safety on earth."

Suppose the little planet, about the size of a small earthly mountain, did hit. It is fortunate that it is moving around the sun in the same general direction as the earth and would not hit head-on. With a rear-end collision the relative speed would be only 4 miles a second (14,400 miles per hour) instead of the 40 miles per second (144,000 miles per hour) for a real head-on conflict.

Science News Letter, June 6, 1936

ARCHAEOLOGY

Oregon Forests Believed Inhabited 15,000 B. C.

TWO stone knives, hidden deep, have come to light and are pronounced evidence that man roamed forests of Oregon over 17,000 years ago.

Estimate of the age when the knives were made by human hands and used in the American wilderness has been reached by Dr. L. S. Cressman, professor of anthropology at the University of Oregon.

Dr. Cressman made excavations at the spot where the knives were found by U. S. Reclamation Bureau survey workers. No additional objects have been found, he reports, but the examination satisfies him that the stone knives were not buried from above, but belonged to the stratum of earth which came in time to be covered by two feet of pumice and three feet of yellow soil and gravel.

"The knives are made of obsidian which has become highly devitrified," says Dr. Cressman's report. "They show a primitive quality of workmanship roughly approximating late Mousterian of early Aurignacian."

In Europe, this type of Stone Age culture prevailed 35,000 to 50,000 years ago, when man hunted cave bears, wild horses, and woolly rhinoceros. In America, Dr. Cressman emphasizes, even if the implements were exactly of the European types, they would not necessarily be equally old. He concludes that "an estimate of 15,000 and more years before Christ might not be far wrong."

Science News Letter, June 6, 1936

METEOROLOGY

Drought Shifts as Dust Bowl Turns to Mud Bowl

DROUGHT has shifted suddenly from Southwest to Southeast, as rains have turned the famous "dust bowl" to a mud bowl, but have failed to fall in a wide area extending from central Virginia to central Alabama, where moisture is now badly needed.

This shift in the season's precipitation crisis was disclosed by the U. S. Weather Bureau's weekly crop weather survey. Except for a few restricted areas in extreme western Texas and where Kansas and Colorado touch corners, the Southwestern drought has been "completely relieved," and with it the danger of widespread dust storms.

Science News Letter, June 6, 1936