Substance B when injected or given per os causes marked and lasting increases in blood sugar so that we have produced hyperglycemia and glucosuria in normal rabbits at six doses of 0.2 mg. of substance per day. The substance B causes a high-grade dilution of the blood with enormous retention of water and if one takes that dilution into account blood sugar increases amounted to over 800 per cent. The rabbits eventually died, and we are investigating the pathological changes, especially in the pancreas, on which a report will follow later. As the substance B was found in insulin and the latter hormone in a number of organs and therefore probably in food and as it acts per os one naturally suspects that this substance may have something to do with the causation of at least certain forms of diabetes.

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QUOTATIONS

"NARCOSAN" AND DRUG ADDICTION

NEWSPAPERS throughout the country holding membership in the North American Newspaper Alliance carried a story, December 15, concerning the discovery by "Dr." A. S. Horovitz of a new remedy for drug addiction known as "narcosan." Since his arrival on these shores in 1913, Horovitz has been continuously identified with attempts to promulgate cures for all sorts of disorders by mixtures of lipoids and vegetable substances of the nature of non-specific proteins. Included in his records are the Horovitz-Beebe "cure" for cancer, the Merrell proteogens for the cure of practically everything and more recently "narcosan," originally brought out about 1920 under the name of "lipoidal substances." Horovitz's present effort to promote "narcosan" as a cure for narcotic addiction is supported by a clinical investigation by Drs. Alexander Lambert, ex-president of the American Medical Association, and Frederick Tilney, one of the editors of the *Archives of Neurology and Psychiatry*. The paper by these investigators appears in the *New York Medical Journal and Record* for the week of December 17. This paper was rejected by the *Journal* of the American Medical Association because the Council of Pharmacy and Chemistry rejected the product known as "lipoidal substances" in 1921, because up to the present time the product has not been resubmitted and is apparently still of unestablished composition, and because the clinical investigations are not set forth in such a manner as to indicate even ordinary controls, such as might have been secured by treating an equal number of patients with the non-specific proteins alone. Furthermore, on their admittance into the hospital, the patients were given a cathartic mixture consisting of seven ingredients, including some of those in the compound vegetable cathartic pill and a few others. Nevertheless, the paper was promptly accepted by the *New York Medical Journal and Record*, and simultaneously with its appearance in that periodical, a complete statement, highly exaggerated, was issued by the North American Newspaper Alliance. This statement appeared in three parts: the first, an account of the Lambert clinical investigations; the second, life stories of some of the patients, and the third, a highly sensational account of the life of A. S. Horovitz, omitting, however, all the points in his record to which reference has been made earlier in this comment. As soon as it was learned in the headquarters office that the newspaper publicity mentioned had been released by the North American Newspaper Alliance, a statement was given to the Associated Press defining the position of the American Medical Association headquarters office in this matter. Perhaps time will reveal sufficient basis in the Horovitz discovery to warrant its acceptance; possibly the clinical investigations made by Drs. Lambert and Tilney have been strictly accurate and scientific; maybe something actually worth while will come from this attempt to control drug addiction. Nevertheless, there is a method which has been repeatedly defined by the American Medical Association as the safe and scientific method of introducing a new proprietary. The American Medical Association has established a council which will act promptly in passing on the claims made for such products and on their worthiness.—*Journal* of the American Medical Association.

SCIENTIFIC BOOKS

Colloid and Capillary Chemistry. By HERBERT FREUNDLICH. Translated from the third German edition by H. Stafford Hatfield. New York, E. P. Dutton and Company, 1926. 886 pages, 156 figures.

THIS monumental work has hitherto been available only in the original German, but its value as a classic has long called for a translation. At first it was styled "Kapillarchemie," and capillary chemistry still receives a great deal of attention from the author. However, colloidally dispersed systems cover more than half the pages of this book.

The physicist will enjoy the author's treatment of the interfaces liquid-gas, liquid-liquid, solid-gas, solid-solid and also the chapters on capillary-electrical phenomena and the properties of interfacial layers. Nor will he be disappointed with the attention given to membrane equilibria and the osmotic pressure of lyophilic sols.

The biologist will find much to attract him and so will the industrialist, as well as the regular colloid chemist.

Naturally the author of the famous Freundlich adsorption formula would present an exhaustive treatment of adsorption, and this is justifiable, for adsorption is the backbone of colloid chemistry. The opposing arguments of Langmuir and Polanyi as to the thickness of adsorbed films, monomolecular or polymolecular, are given fully and fairly.

The author's clear thinking is illustrated by the following statement: "In comparing different adsorbents we must remember that the amount adsorbed, which is referred to unit weight of adsorbent, does not permit of any proper comparison. It includes two quantities which must be separated: first the *actual specific adsorptive power,* that is, the amount adsorbed per square centimeter of surface; and secondly, the *specific surface area,* that is, the extent of the surface of 1 gram of adsorbent."

It is interesting to note (p. 726) that, in using Debye and Scherrer's method of X-ray study of gels, fibers, etc., it is best to arrange ramie in parallel threads.

In discussing membranes and surface films Freundlich insists that semi-permeability can not be a question of a pure sieve action. "With a sieve action one should be able to arrange the membranes in a series in the order of their permeability. But this is by no means the case; a membrane particularly impermeable to the majority of substances may be more permeable to some substances than is a membrane which is otherwise, in general, permeable."

Enzymes receive extensive treatment under the topic, "The Kinetics of Reactions accelerated by Enzymes." Following this is a discussion of the "Inhibition of Biological Processes by Capillary-active Substances."

It is rather surprising to learn (p. 825) that precipitates of the hydroxides of aluminum and ferric iron formed rapidly by addition of ammonia to the corresponding salt solutions are amorphous, while the micellae of Al_2O_3 and Fe_2O_3 sols, formed slowly by hydrolysis, are crystalline (shown by Debye and Scherrer's methods).

On page 837 the author puts the brakes on Loeb's too-enthusiastic, too-general application of Donnan's equilibrium theory.

The thousands of references given in this great treatise add much to its value. But if one is overwhelmed by the 883 pages one can take refuge in Freundlich's little "Elements of Colloidal Chemistry."

HARRY N. HOLMES

OBERLIN COLLEGE

Deep Sea Fishing in New Zealand: Tales of the Angler's ElDorado, New Zealand. By ZANE GREY. New York, Harper Brothers.

MR. ZANE GREY, "the Izaak Walton of the open sea," the leading deep sea angler of the world, has opened a new field, an "Angler's ElDorado," in his experiences in and about the Bay of Islands, on the North Island of New Zealand. This body of water is a fair rival of Santa Catalina, Cape San Lucas and Southern Florida; three great centers of tuna, sailfish and marlins, which Mr. Grey has already explored.

Besides its thrilling interest to anglers, it has much of value to the ichthyologist in its excellent plates and accounts of distribution and habits. All these fishes (some reaching 1,400 pounds) are too large for bottling and only now and then can individuals be properly preserved and mounted. Most studies of them must be made through photographs.

The two species especially treated and figured by Mr. Grey in this work belong both to the genus *Makaira* or "Marlin-spike-fishes." One of these has been very lately named *Makaira zelandica* by Jordan and Evermann, on photographs from the Bay of Islandi, the other, as Mr. Grey asserts, is still unnamed and is called by him "the black marlin" to distinguish it from the striped marlin or *zelandica.* It is closely related to the huge "black marlin" (*Makaira marlina*) of the west coast of Mexico, but its fins are still lower and the spear shorter. In Jordan and Evermann's recent memoir on "The Giant Mackerel-like Fishes" of the world, the New Zealand "black marlin" is provisionally identified with the marlin of South Africa, *Makaira herscheli.* But this species has longer fins and a longer spear.

The generic *Makaira* must be used for the "marlin-spike-fishes," which differ from the sailfishes, *Istiophorus,* in the very low dorsal. *Tetrapturus,* the spearfishes, a third genus, is intermediate, having a low dorsal also, but with the posterior spines relatively elevated, almost as long as those in front. No species of *Tetrapturus* is known from America, but species occur in the Mediterranean, in Hawaii and in Japan.

DAVID STARR JORDAN

SCIENTIFIC APPARATUS AND LABORATORY METHODS

"A F S," A NEW RESIN OF HIGH REFRACTIVE INDEX FOR MOUNTING MICROSCOPIC OBJECTS

A LARGE percentage of objects mounted on glass slides for examination through the microscope depend