

equal 5 minus the deviate read from one of these tables; and above 50 per cent. kill 5 plus the corresponding deviate. For convenience, these corrected probits are shown in Table I for the same percentage kills as before.

C. I. BLISS

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### WHO'S WHO IN THE BERI-BERI VITAMIN FIELD

I HAVE been surprised and somewhat overwhelmed by the amount of publicity which our recent work on the antineuritic vitamin has had. The press has perhaps naturally ignored a great deal of other work of equal or greater importance. In the April 6 issue of the *World-Telegram* there was an editorial, the over-emphasis of which upon my own achievement I have attempted to correct by writing the editor of that newspaper along the following lines:

Your editorial of April 6th on the beri-beri vitamin is one of a gratifying series of newspaper recognitions of the work of our group, Mr. R. E. Waterman, Mr. John C. Keresztesy, Miss Marion Ammerman and myself. As is probably inevitable, popular taste for a hero being what it is, the press articles have generally accorded me an over-generous share of the credit, to the detriment of this group of loyal collaborators. I wish here publicly to record their substantial part in the undertaking and our debt to Dr. W. H. Eddy of Teachers College whose interest and influence has been indispensable to success.

But I am especially concerned about your comment in that editorial on the work of Eijkman. His was an achievement of first rank. Without the experimental production of the disease in animals progress would have been impossible. While it may seem obvious now that the disease can be produced by feeding animals on polished rice, it was not obvious then. Indeed the disease he produced was not generally accepted as beri-beri for fifteen years after Eijkman's first paper. During this time his conclusions had to be reinforced by supplementary work of Pol, Grijns, Fraser, Strong, Vedder, Andrews and a score or more of others.

Notable names in the subsequent developments include Casimer Funk, a Pole, who while working in London first correctly guessed the general nature of the curative substance, Seidell of Washington, D. C., who invented the use of fullers' earth for adsorbing the vitamin, and Jansen and Donath who working in Eijkman's former laboratory in Java, first isolated small amounts of the substance and described it. Peters of Oxford, England,

Ohdake of Japan, Windaus of Germany have also made important advances. I could, however, fill a column of your paper with the names of those who in various ways and in many lands have added their bits to the beri-beri vitamin problem.

Science is international. Science at its best is also a fraternity. As in other fields of endeavor, we must recognize that in reaching for our objectives we stand on the shoulders of our predecessors and companions.

R. R. WILLIAMS

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### "WHEN THE SKY RAINS STONE"

IN the issue of *The Literary Digest* for March 17 there appears an article under the caption, "When the Sky Rains Stone." The article is presented under the name of the present writer. The facts are that the article was written by a professional magazine writer after an interview and was not seen by the present writer until its appearance on March 17.

Unfortunately the article does not in every instance present the views of the man whose name it bears. He wishes to use this opportunity for disclaiming its authorship.

H. H. NININGER

DENVER, COLORADO

MARCH 28, 1934

### WHO PAYS REPARATIONS?

From time to time, in the columns of this and other journals, gentle voices of protest have been raised against the prices for scientific books charged by the German publishers. I would like to draw particular attention to the latest flagrant example of "gouging the public."

We are informed that the most recent "supplement" volume to "Beilstein" can be supplied to us at the modest price of \$60.55! Since, unfortunately, "Beilstein" still remains the bible of the organic chemist, since these "supplement" volumes come out ever so often, and since one must, after all, keep up-to-date, why not charge any fancy price that you want to charge? Apparently, so argue the Germans.

We in the department of chemistry at the college have decided not to get any further volumes until the Germans cut down these "reparation payments."

BENJAMIN HARROW

CITY COLLEGE, COLLEGE OF

THE CITY OF NEW YORK

## REPORTS

### GRAVITY STATIONS ON THE NILE DELTA

IN a report on the geodetic work accomplished in Egypt for the years 1930 to 1933, which was presented at the meeting of the International Geodetic Associa-

tion held in Lisbon, Portugal, in September, 1933, is a brief account of the gravity survey that was made over the Nile Delta.

Many geologists have felt that the earth's crust is

strong enough to hold up the mass of sedimentary materials that are deposited at the mouths of great rivers. Others, especially geodesists and geophysicists, are of the opinion that the earth's crust is pressed downward by the accumulated sediments. The data for gravity stations established near the mouth of the Mississippi River indicate that the delta material for that river has pressed down the crust and that the crustal block below the delta is in approximate isostatic equilibrium. This is indicated by the small gravity anomalies based upon the isostatic theory.

It is of interest that four gravity stations were established in the spring of 1932 on the Nile Delta. The stations are:

Station	Latitude North	$\gamma_0$	Correction for height	Correction for isostasy and topography
Port Said ...	31° 15'	979.428	0	+ .006
Ismailia .....	30° 36'	979.375	0	- .003
Mansura .....	31° 03'	979.412	-1	+ .007
Damietta ...	31° 26'	979.441	0	+ .012

The isostatic anomalies at these stations are as follows:

Station	$\gamma$ (corrected)	$g$ (observed)	$g - \gamma$
Port Said ...	979.434	979.448	+ .014 gal
Ismailia .....	979.372	979.369	- .003 gal
Mansura .....	979.418	979.400	- .018 gal
Damietta .....	979.453	979.472	+ .019 gal

The average of these anomalies is very close to zero, thus indicating that the crust beneath the delta must have been pushed down by the sediments unless the crust was subnormal in mass before the formation of the delta. In any event, since the anomalies are both positive and negative there is no indication that the crustal block involved is far from being in equilibrium.

It is hoped that additional gravity stations may be established on the Nile Delta in order to have further light thrown on this important subject of crustal equilibrium. It would be particularly desirable that the new stations furnish data from which one might determine the extent of the areas having positive and negative anomalies.

It would be of the greatest importance to geological and geophysical investigation if intensive gravity

surveys could be made over the deltas of all the great rivers of the world. It is hoped that this work may be undertaken by the countries involved when normal economic conditions return.

W. BOWIE

### AWARDS OF THE GUGGENHEIM FOUNDATION

ANNOUNCEMENT of the tenth annual fellowship awards by the trustees of the John Simon Guggenheim Memorial Foundation brings the total grants of the foundation to assist American scholars and artists to carry on research and creative work to more than \$1,200,000 and the total number of fellowships awarded to 577. The names of forty Americans are on this year's list of awards. Another series of grants to Latin-American scholars will be made in June.

The foundation was established in 1925 by former United States Senator Simon Guggenheim and Mrs. Guggenheim as a memorial to a son, and its capital fund is wholly their gift. All its income is used to assist scholars and artists from the United States and certain Latin-American countries to carry on research and creative work for a period of time with complete freedom from competing interests. In making the awards, the foundation has no restrictions of race, color or creed. Men and women, married or unmarried, are eligible on equal terms. The stipends, normally \$2,000 a year, are adjusted to meet the needs of the individual fellows. The periods for which the fellowships are granted vary with the necessities of the work that they have in hand. Heretofore the fellowships, which are tenable under the freest possible conditions, have been granted only for work abroad, but this year provision also is made to permit some fellows to work in the United States.

The committee of selection was composed of President Frank Aydelotte, of Swarthmore College, *chairman*; Dean Guy Stanton Ford, of the University of Minnesota; Professor Marjorie Nicolson, of Smith College; Dean Charles B. Lipman, of the University of California, and Professor E. B. Wilson, of the Harvard School of Public Health.

In fields of the physical sciences, the following grants have been made:

Dr. Robert B. Brode, professor of physics, University of California. *Project*: Research in the field of collisions of electrons with atoms, chiefly at the Cavendish Laboratory of the University of Cambridge, England.

Dr. Frank H. Spedding, instructor in chemistry, University of California. *Project*: Studies of solids at low temperatures with particular emphasis on their line-like absorption spectra, their magnetic susceptibilities, their electrical conductivities and the relations between these, in European laboratories.