

executive of one of our important health departments, information upon the incidence of tuberculosis in his state for the past decade. In his reply he stated, among other things, that recently there had been a very marked and quite inexplicable decline in the tuberculosis death rate. The statement struck me as singular, for it is difficult to conceive of a sudden, conspicuous decline in the death rate of a disease of the nature of tuberculosis, without a reasonable explanation for it. A very brief search for an explanation soon revealed the fact that the experience of the particular health officer to whom I had written was not peculiar to his state, but was demonstrable for practically all our registration states, as well as for the most of our larger centers of urban population.

If one will chart by years the mortality rates for tuberculosis for a period covering the past fifteen or twenty years, for almost any of our states or cities that keep correct records and that have been active in the suppression of tuberculosis, it will be seen that in the main there was a steady decline until 1917 and 1918. During 1918 and 1919 there was a sharp upward trend to the curve, followed in a year, or at most two years, by a marked downward direction of the curve—much steeper in its descent than that preceding 1917-1918. With a number of such charts before one, the reason for the recent decrease in the death rates from tuberculosis becomes obvious. The pandemic of influenza of 1918-19 carried off, in a brief period, a large number of tuberculosis subjects that would otherwise have lived on and their deaths been so distributed through later years as not materially to have disturbed the uniform downward direction of the tuberculosis curve that preceded the period of the great pandemic.

From the standpoint of results, advantageous to the race alone, and disregarding all humane considerations, this may be viewed as the beneficent influence of a great plague. The least resistant of the population succumbed, those more resistant and physically better fitted to survive, did so. The human material thus left is probably the most promising that has existed for generations, in so far as the permanent lessening of tuberculosis among it

is concerned; and we can expect that the curve for tuberculosis death rates in the future will be for a time much more sharply downward than ever before, and that its average level for a number of coming years will be much lower than that preceding the epidemic of influenza, providing, of course, there is no abatement of those widespread activities that have been so instrumental in lessening the incidence of the disease in the past.

For the anti-tuberculosis worker, the present appears to offer a golden opportunity.

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OLD GLACIATION IN THE CORDILLERAN REGION

TO THE EDITOR OF SCIENCE: The communication by Thomas Large on the above subject in the September 22 issue of SCIENCE prompts me to write that in 1916 I found till with striated boulders and pebbles in the brickyard near the normal school at Cheney, Washington, beyond the limits here reported by Large. I brought this matter to the notice of the Geological Society of America at the Albany meeting in December, 1916, and the following brief statement concerning it appears in the proceedings of that meeting (*Bull. Geol. Soc. America*, Vol. 28, p. 143):

In northern Washington the occurrence of a very old drift, probably Kanas, was established by the discovery of till and striated stones on a high divide southwest of Spokane, in the vicinity of Cheney. Boulders had been observed in this region, and the possibility of glaciation had been suggested by M. R. Campbell in the Northern Pacific Guide Book.

FRANK LEVERETT

ANN ARBOR, MICHIGAN,
SEPTEMBER 25, 1922

SOME SIMILARITIES BETWEEN THE GEOLOGY OF CALIFORNIA AND PARTS OF THE DUTCH EAST INDIES

IF we compare the Sierra Nevada with the Malay Peninsula, the Coast Range with the Barisan Mountains of West Sumatra and the great valley of California with the plains of East-Sumatra, it is obvious that the topograph-

ical similarities are attended with geological ones. In the Malay Peninsula as well as in the Sierra Nevada granitic rocks of about the same Mesozoic age have a great extension. The original cover of these rocks has disappeared during the succeeding periods by long erosion and the erosion products fill up the geosynclinal basins of East-Sumatra and the valley of California, which both are characterized by important oil deposits of Tertiary age. And to the west young mountain ranges, in which strong earth movements still continue, have separated the geosynclinal basins from the ocean.

In the Dutch East Indies important transversal and diagonal fractures occur near the bending points of the horizontal projection of the geanticlinal axes. In the western mountains of North America striking examples of the same kind are found. Several depressions of the geanticlinal axes along which transcontinental railroads cross the mountain ranges, can be compared with straits near the bending points of the East Indian rows of islands. For instance, the traveler, who approaches the Sierra Nevada from the desert region on the Santa Fé route, can reach the Pacific coast along transversal and diagonal fractures, which exist near the bending points between the Sierra Nevada and the San Bernardino range.

H. A. BROUWER

DELFT, HOLLAND,
SEPTEMBER, 1922

RELIEF FOR RUSSIAN SCIENTIFIC MEN

THE "Friends of Russian Scientists," an organization sponsored by a hundred professors and social workers in and around Boston, for the purpose of raising contributions to be known as the Gorki Fund for the Relief of Russian Scientists, has just received the following letter from Maxim Gorki:

In reply to your letter let me make the following statement: "The House of Scientists" in Petrograd is a charitable organization for mutual benefit, founded by Petrograd professors. I have the honor to be its chairman. The full name of the organization is "Committee for the Betterment of the Condition of Scientists" (Kommissia Ulutschenia Bita Utschenich—abbreviated: KUBU). Address: C. Oldenburg, Member of the

Academy, House of Scientists, 27 Millionaia, Petrograd.

The "House of Scientists" brings together all the scientific workers of Petrograd—there are about 3,000 of them, and together with their families they comprise about 12,000 souls. They are undergoing great privation, and are in particular need of sugar, flour and fats.

Most of the scientists are men of middle or advanced age, enfeebled by years of undernourishment and the numerous worries of present day life in Russia.

A ten dollar "A. R. A." parcel is a great help. The work of the American Relief Administration with Hoover at the head is one of the most brilliant pages in the history of the United States.

It seems to me that there is no need to describe in great detail the extent of misery among the scientists.

Do make every possible effort to sustain at least ten of these precious lives—precious in the broad sense of serving all mankind, the work of science being truly international and universal.

I wish you success in your good work!

M. GORKI

Steringsford, Sept. 1, 1922.

A large section of the American public, which has perhaps grown callous to the continued appeals for relief funds, has cherished the notion that the emergency in Russia is over. Gorki's letter shows that this is not true. Moreover, in a recent communication to the treasurer of the Gorki Fund, Mr. Herbert Hoover says:

There is no question of the need of the Russian intellectuals—they as a class have suffered more than any other class in the Russian debacle. Any funds raised for the relief of these people will contribute to a most worthy undertaking.

If the scientists and educators . . . will contribute to the support of their colleagues in Russia, we know of no more worthy cause to which they can lend their support.

Contributions are being received by Professor H. W. L. Dana, treasurer of the Gorki Fund, 105 Brattle Street, Cambridge, Mass. They are being transmitted to the Petrograd "House of Scientists," the non-partisan body of which H. G. Wells and others have written with enthusiasm, and are in turn distributed to the Russian scientific workers most in need. It may be added that the sums received here for this purpose are forwarded in full to Russia,