

conditions of rats that have had an excess of ergosterol, while *cholesterol* sclerosis is clearly bettered. We need only point to the studies of Evans and Lepkovsky (*Jour. Biol. Chem.*, 1932, 96, 157), to indicate their findings regarding the rôle of unsaturated fatty acids in deficiency diets.

(3) With our thesis that the effectiveness of cod-liver oil and other Vitamin A containing substances depend for their action on the relatively high content of unsaturated fatty acids, and the low but important content of iodine, it was scarcely to be expected that we would give linoleic acid and ferrous iodide in equal amounts, as did Reed, Mendel and Vickery. They did not know our dosage, hence could not repeat our experiment. We used 2 cc of the linoleic acid (sometimes 4 cc) and only .1 cc of a 300 to 1 dilution of syrup of ferrous iodide. We finally concluded, however, after all our preliminary studies with fatty acids, that we had "simply piled up evidence in favor of the more general uses of cod-liver oil in nutritional deficiencies." (*Medical Times*, 59, 138, 1931.)

While our opponents have been studiously endeavoring to demolish our very early work, and, not knowing of our main thesis, have been producing iodization of depleted animals, we have progressed to the crucial experiment, run from February to June, 1932, in which we attempted to evaluate iodine added to oxygenated cod-liver oil, in A-avitaminosis. The results obtained were encouraging and we hope to have others repeat the experiments, for the evidence is now unmistakable, that part of the virtue of cod-liver oil in avitaminoses, as well as in various diseases is due to the iodine content of that oil.

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### THE PAINTED DESERT

IN SCIENCE for October, page 319, there is a statement that "The Painted Desert" region was first discovered by Coronado in 1540, and was named by him "El Pintado Desierto."

The area called "The Painted Desert" in Arizona was named by Lieutenant J. C. Ives in 1858. This can easily be verified by reference to the report of Lieutenant Ives on his expedition to explore the lower Colorado River when he traveled overland eastward into the region in question and applied the name.

On page 76 of the geological part written by Dr. Newberry that report states under the heading, "Painted Desert":

After crossing the Little Colorado at Camp 85, a detachment of our party struck northward. . . . Ascending the mesa wall which bounds the valley north of our crossing place, we entered a region to which the above name was appropriately given, as indicative of its barrenness

and desolation, as well as of the peculiar scenery which it exhibits.

And on page 86 he writes:

The erosion then reached the surface of the Marl series, and thence to the distance of forty or fifty miles we could see walls and pinnacles of red and white rising abruptly from the green plain, producing the peculiar scenery of the Painted Desert.

It would seem that Dr. Newberry was the real author of the name, Painted Desert, since Ives in his narrative does not mention it, but as it had his approval it may be accredited to his expedition in general. He placed it on his map between the Little Colorado and the "Moquis" (Hopi) towns.

There seems to be an obsession to attribute to the Spaniards the naming of the natural features of the Southwest, even of features they never saw. Major J. W. Powell, first explorer of the Grand Canyon of the Colorado, gave it that name, yet I have heard of some trying to ascribe that name to the "early Spaniards."

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### PROBLEMS OF POPULATION

READERS of SCIENCE in which my address before the Third International Congress of Eugenics was printed (August 26, 1932) may be interested in the following letter from Dean W. R. Inge, written from the deanery of St. Paul's, London, under date of October 3:

Many thanks for your address, with which I entirely agree. One great difficulty, I think, is that the population is so badly distributed. Every country ought to have as many people as it can feed, and not many more. There is overpopulation in England, because the conditions which stimulated an increase from 8 millions in 1801 to nearly 40 millions in 1901 no longer exist. We can only feed ourselves by underselling other nations in our export trade, which means a lower standard of living at home (apart from the tariffs which strangle our enterprise abroad). Of course we ought to colonize the empty places in our dominions—but you know the difficulties.

I think the *rice* countries are a problem by themselves. Everywhere where rice is the staple food we find intensive cultivation, a congested population, and extreme poverty. (In Ireland before 1840 the conditions were the same, the potato taking the place of rice.) India and China have almost reached the stationary condition; both are supersaturated.

I see no remedy for unemployment, the main causes of which seem to be permanent—labor-saving inventions and women as wage-earners. A revival of trade would diminish unemployment, but I fear only slightly.

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