

ly arouse antagonism or even doubt. Danger comes with the presentation and insistence upon the claims of some particular type of evolution.

It should be said plainly that there are abundant unquestioned facts upon which our theories are based, and while we may differ in our opinions as to the significance of those facts, they are generally accepted. Variation of individuals of species or race, reproduction of like forms, the struggle for existence, the adaptation of organism and environment through the cutting off of the unfit, the production of new forms by hybridization, all these are facts of everyday experience, facts that may be taught without raising questions as to the teacher's religious views, facts which if more clearly and consistently taught would tend to develop a better trained group of scientific workers, teachers and general citizenry.

From the standpoint of right and wrong the teacher in college or elsewhere can not more justly force his theories upon an unwilling or unsuspecting public than can a religious enthusiast require all men to subscribe to his beliefs. The quack doctor, the religious fanatic, and the poorly balanced teacher of science are similar in that they are alike dangerous, and the general public should consider all with suspicion. Lampooning earnest religious folks because they refuse to accept all that comes to them in the name of science will not help to develop the very desirable discrimination between the true and the false, but will rather arouse more vigorous antagonism. There is no fundamental basis for conflict between enlightened and sincere churchmen and true scientists. The development of American institutions and ideals and the advancement of the material welfare of the American people have come from the efforts alike of churchmen, statesmen and scientists; and for continued prosperity, it is essential that there be harmony of purpose between these factors. It is the business of the leaders of scientific work and teachers of science to make such a discrimination between fact and theory that all must respect their findings, and to use such care in the presentation of subject matter that no one

idea will be given the undue prominence that is provocative of misunderstanding and distrust. Why not make it quite clear that "Darwinism," whatever that may mean to the individual professor, is not all of evolution? Why not spend more time making clear to college students the facts of observation and experiment upon which the "Origin of Species" was founded? We are confident that more teaching of fundamental facts will lead to a better understanding between scientists and the rest of the world, and to a more hearty support of scientific endeavor.

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SCIENTIFIC EVENTS

VITAL STATISTICS OF GERMAN CITIES¹

ACCORDING to official publications, the population of the 343 larger cities from which reports are accessible had increased one million, being 25,700,000 in 1921, as compared with 24,700,000 in 1920. It is evident, therefore, that 41 per cent. of the total population of the empire resides in these 343 cities. This remarkable growth of the cities is doubtless due, to a considerable extent, to the influx from the smaller towns and to the immigration from foreign countries. The number of living infants born in these cities was 560,000, or 21.8 per thousand of population, which denoted a falling off when contrasted with the record for the previous year, which was 23.8 per thousand. Since it has been found that economic factors exert a great influence on the birth rate, Dr. Roesle, taking the value of the mark in relation to the American dollar as a basis, has been making a critical investigation of the possible effect of economic conditions. In order to discover the influence on the varying birth rate throughout the twelve months of the year, it is quite evidently necessary to date back nine months the birth rate for each month, since in this manner the month in which the children were conceived is ascertained. In 1921, the birth rate of the urban population continued to drop until August, or, taking the

¹ From the *Journal* of the American Medical Association.

month of conception, back to November, 1920, in which month not only the value of the American dollar in marks but also the wholesale prices of German goods thereby affected reached the maximum of the observation period. Roesle therefore assumes that the failure of the rational increase in the birth rate for July, 1921 (conception month, October, 1920), to materialize is traceable to the further increase in the cost of living which followed the advance of the dollar and of the wholesale prices of German goods. In the months of February and March, 1921, the cost of living came down, and it is to be noted that there was a corresponding increase in the birth rate for the months of November and December, 1921 (just nine months later). It could not be shown that economic conditions exerted a perceptible influence on the death rate. The year 1921 shows the lowest recorded death rate in German cities with more than 15,000 inhabitants; namely, 13.5 per thousand of population, and excluding deaths among strangers and transients, the death rate was only 11.9. A comparison of the monthly death rates for former years brings out the fact that during the winter months of January, February and March, 1921, especially favorable weather conditions must have prevailed. The abnormally mild winter was followed by an abnormally hot summer, but the summer peak of infant mortality did not reach the terrible percentage of the summer of 1911. Also during the autumn of 1921 the weather conditions were favorable. These favorable weather conditions prevailed elsewhere as well, so that favorable death rates for the year 1921 are to be expected also from other countries. Only for the month of December, 1921, was there a higher death rate than for the corresponding month of the previous year, which is explainable by the severe influenza epidemic. The rapid and continued decrease in the death rate, since the war, is due, for the most part, to the improvement in the food situation.

THE REDWOOD TREES OF CALIFORNIA

DR. J. B. GRANT, chairman of the board of directors of the "Save the Redwoods League," has issued a report, giving the history of the

league which was organized four years ago. The report, according to the *New York Times*, states that the original redwood belt is a remnant of the massive forests of this and related species that in prehistoric times covered a considerable part of the northern hemisphere. It averages twenty miles in width and extends some 450 miles from Monterey County, California, to just above the Oregon line. In the southern part of this belt, in Santa Cruz County, as long ago as 1905, the State of California established a state park, preserving what is known as Big Basin, containing many magnificent trees. Muir Woods, on the slopes of Mount Tamalpais, has already been made a national monument. And now, as a part of the Save the Redwoods movement, the nucleus of another state park has been preserved in the northern portion of the redwood belt, in Humboldt County, in the basin of the south fork of the Eel River and adjoining the California State Highway.

The Humboldt State Redwood Park, which is the beginning of a larger area to be preserved, consists of about 2,000 acres, extending fourteen miles along the California state highway, where it skirts the eastern bank of the south fork of the Eel River, between Phillipsville and Dyerville. It contains perhaps 200,000,000 feet of some of the finest redwoods. It is 230 miles from San Francisco on the main state highway leading to Eureka, California, and is administered for the state by the California State Forestry Board. It is accessible through the year by train.

One tract of redwoods saved by private donation was Bolling Memorial Grove, which is within Humboldt State Park. It was established by Dr. John C. Phillips, of Massachusetts, in memory of Colonel Raynal C. Bolling, one of the first American officers of high rank to give his life in the World War.

The establishment of Humboldt State Redwood Park is a part of the general movement to save representative groves through the redwood belt, particularly those along the "Highway of the Giants," the state highway, leading from the southernmost redwoods in Monterey to the northernmost at the Oregon line. It is in the northern region that a larger national