HYGIENE

Healthiest Year on Record

The healthiest year in history was 1927. Only 8.4 deaths for every 1,000 persons is the record for a group of insured wage-workers that numbers one-seventh of the total population of the United States and Canada.

If the death rate of 1926 prevailed, 8,808 persons among the insured group now living would have died, and if the rest of the population improved its health as much, some 50,000 lives were saved. If the death rate of sixteen years ago, 1911, had not been reduced 33 per cent. to the present figure, last year's death list would have numbered 72,570 more among the insured group.

These facts are shown by the statistics of the Metropolitan Life Insurance Company reporting the mortality of its industrial policyholders, which has been found to reflect the trends of the whole population.

The outstanding health fact of 1927 was the big drop in the tuberculosis mortality, the rate of 93.5 per 100,000 representing a decrease of 4.8 per cent. from the previous minimum of deaths from the great white plague. Recent surveys have shown that this reduction applies to all parts of the country, rural and urban, colored and white, and extends to all occupations and branches of industry.

Three of the diseases of childhood, measles, scarlet fever and whooping cough, had encouragingly low death rates, while influenza and pneumonia reached unexpected low records. Never, except in the years immediately following the big influenza epidemics of 1918 and 1919, has there been as big a drop in the number of deaths from these much dreaded plagues.

To counterbalance these gratifying returns, the toll of cancer was higher than ever before and that of diabetes remained the same as last year in spite of the increasing use of insulin. This, however, is no ground for drawing the conclusion that insulin is ineffective. Statisticians declare that the average age of diabetics at death has increased, and that without insulin the diabetes death rate would undoubtedly run even higher than it now is.

The automobile continued its guilty role in 1927 as principal cause of fatal accidents. Almost as many wage-earners' children lost their lives in 1927, it was pointed out, from automobile accidents as from measles, scarlet fever and whooping cough combined, while the number of motor car fatalities as a whole was double that of ten years ago.

Science News-Letter, February 18, 1928

ASTRONOMY

To Measure Sun's Distance

A definite check on the distance of the earth from the sun is being made by University of California astronomers through observations of stars that will form a background for the planetoid Eros when it makes its remarkably close approach of 16,200,000 miles to the earth in 1931.

Many of the observations already have been completed by Dr. R. H. Tucker from the Lick Observatory on Mount Hamilton.

The positions of 821 stars were accurately determined in the series of observations thus far completed, according to Dr. Tucker. In the second series of observations, of 402 stars, about 2,100 checks were made during the course of 77 nights of work during the best observing season at Lick Observatory in 30 years.

The positions of the fixed stars, it is explained, appearing in the same portion of the sky as will the planetoid Eros during the coming approach, although at an infinitely greater distance away, will aid in the determination of the distance of Eros from the earth, both in terms of miles and in terms of a common astronomical unit, the mean diameter of the ellipse which the earth describes about the sun once each year.

By determining the exact distance of Eros in terms of both miles and of the unit of distance set by the earth's orbit about the sun, it will be possible also to compute the latter unit of distance in miles more accurately than ever before.

Eros' approach in 1931, astronomers state, will be its first close approach since its discovery in 1898. twenty miles in diameter, one of the host of such bodies known as the asteroids, but departing from the path followed by most of the group sufficiently to bring it in close proximity to the earth once in about 36 years.

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The increasing angle of the Leaning Tower of Pisa is found due to a spring of water under the tower, which has again become active and causes the soil to give way.

RADIO

Radio Photos Across U. S.

Photographs will be sent across the continent by radio from Schenectady, N. Y., to Oakland, Calif., by May 1, with the same process that was used recently when pictures were broadcast from station WEAF in New York.

This is the prediction made here today by engineers of the General Electric Company who are now working to complete the preparations for the tests. At Oakland a special station is being erected which will operate on a power of ten kilowatts and with wave lengths of from ten to forty meters. This station will become a part of station KGO, which adjoins the General Electric factory at Oakland.

The process used in the WEAF tests, and the one which will be used in the transcontinental work, was developed by Dr. E. F. W. Alexanderson, of the General Electric research laboratory. The short wave transmitting station now in operation at South Schenectady, in conjunction with WGY, will be connected directly to the picture transmitter in Dr. Alexanderson's laboratory. One of Dr. Alexanderson's assistants is now on his way to Oakland with the receiving apparatus, which will be connected with the receiver at the new short wave station. Just as soon as this apparatus can be set up, tests will begin in transmitting photographs, and facsimiles of writing and printing, from New York to California. It is expected that this can be done before May first. After the picture transmission has been successfully operated, transcontinental experiments in television by radio are scheduled.

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ASTRONOMY

"Comet" Was Photo Defect

The new "comet" that was announced recently as having been discovered by an astronomer named Filipoff in Algiers was not a comet at all, but a spurious image on a photographic plate. This announcement was made by Dr. Harlow Shapley, director of the Harvard College Observatory, which acts as the American clearing house for news of astronomical discoveries.

The original announcement of the supposed discovery was received from the international clearing house at Copenhagen, from which word has just been received of the mistake. As a result, the first comet discovery of 1928 is yet to be made.

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