

## Diseases Reach Peak

The year 1926 has experienced a wave of very high mortality from measles and whooping cough. This is in accordance with what seems to amount almost to a natural law, namely, that these diseases rise to a peak together, periodically, about every seven years, the last peak having been about 1920. This fact has been established by statistics analyzed by the Metropolitan Life Insurance Company, covering the four principal diseases of childhood, namely, measles, whooping cough, scarlet fever and diphtheria. These four diseases have run a fairly parallel course, and from a study of the Metropolitan's charts, based on the figures collected by the United States Census Bureau, it is shown that there is particularly close correlation between measles and whooping cough. The causes of the periodicity and of the parallel course of these diseases have, so far, found only tentative explanation. It has been suggested that some circumstance in the life cycles of the organisms causing these diseases may have something to do with their recurrence at regular intervals; or, perhaps, the seven year period may be related to astronomical phenomena influencing weather conditions.

Fortunately, the general level of these childhood diseases has been decreasing in past years, but the seven-year peaks still continue consistently to put in their appearance. In the present year, the wave in measles and whooping cough has risen to an exceptionally high crest. It may reasonably be expected that the peak has been passed for these two diseases, but it cannot be assumed offhand that the danger is passed for scarlet fever and diphtheria. In the case of scarlet fever present indications are favorable, as the death rate in 1926 has been quite low. As for diphtheria, there is nowadays a recognized and thoroughly tested preventative known as toxin-antitoxin, and physicians, school teachers and parents are advised by medical authorities to bear this in mind, to consider the advisability of Schick tests and to act on the strength of this warning. With such precautions made available by modern medical research, the year 1927 ought to be a good one for the youngsters.

Science News-Letter, December 11, 1926

If cod-liver oil is kept in the sun it loses its valuable vitamin A which promotes growth, though vitamin D that prevents rickets is not affected.

## 5000 Year Old Glass

By E. N. FALLAIZE

Where and when was glass first made? In a lecture recently delivered in London, England, to the Society of Glass Technology, Professor Sir Flinders Petrie in giving an account of the origin and distribution of Early Glass, said that no glass was made in Egypt before 1500 B. C. Up to that date all glass found in Egypt was imported. In Mesopotamia, however, glass was being made as far back as 2500 B. C. The connection between Egypt and Syria which followed the conquests of the Egyptian monarchs of the 18th dynasty led to the introduction into Egypt of a large number of Syrian workers in various branches of the arts, and within fifty years of that date glass became one of the commonest objects in Egypt. The most popular use of glass in ancient Egypt was in the form of glass beads of which enormous quantities have been found in the course of excavations.

The popularity of glass beads has been one of the most fruitful pieces of evidence with which the prehistoric archæologist has had to deal. Beads are among the more important objects, by tracing the distribution of which it has been possible to demonstrate the movements of early peoples, of early cultures, and the lines of early trade routes through Europe, Western Asia, and North Africa in prehistoric and early historic times. In this way has been traced the regular trade route by which amber, which was highly prized by early peoples, was brought from the Baltic to the Mediterranean in these early days.

In the early days of its manufacture, glass was not brought to the melting point but was used in the form of a paste. No blown glass was made until the Christian era. The use of a vitreous paste in the form of enamel was a favorite method of decoration on metal in early Europe and reached a very high point of technical development. The beautiful blue and red enamel manufactured in Great Britain in the Iron Age was highly prized, and with reason, as is shown by the famous bronze shield with enamelled bosses and foliate ornament in resousé of Iron Age date found in the Thames at Battersea, London, some years ago and now in the British Museum. The British Museum has also some very beautiful horse-trappings in red and blue enamel of the foliated design known as Celtic.

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## Wheel Greatest Invention

What is the most notable thing that man has created? The wheel is accorded first place by Hilaire Belloc, who, in an essay with which he prefaces his pictorial history of the vehicle, glorifies this instrument of man. The volume, which has recently been published under the title, "The Highway and Its Vehicles," contains more than a hundred reproductions of old manuscript illustrations, paintings, lithographs, and woodcuts, picturing the development of the vehicle from the hammock-wagon of the twelfth century to some early motor-cars which are being raced by horses and even dogs.

The highway, which has so largely conditioned human history, was made by the vehicle, but the vehicle became possible only through the creation of the wheel. In comparing this discovery with others of fundamental importance, the author points out that fire was an existing thing which was only captured and tamed by man, whereas music, plastic art, and building were mimicked from nature, but the wheel is a work alone of man's conception—a fact on which to nourish his pride.

Aside from its original purpose of providing easy communication, the wheel has lent aid to man in a multiplicity of functions; in grinding his corn; in turning ornaments and the furniture of his house; in drilling holes for him; in moulding his clay; in telling the direction of the wind upon his mastheads; in lifting weights out of wells, and in acting as a pulley for the development of the earliest sailing craft.

From these simplest uses the wheel has branched out in one direction after another, supplementing and extending man's power. Of its recent marvellous extension, the author states:

"It gives us electrical energy to use; it transmits power; it keeps time for us; it measures all things from a map to the speed of light; it permits our curious toys such as moving pictures. It endows us with the special use of the gyroscope; it drives our turbines by steam and water, and soon perhaps by air. It even aids us in our vices, and by its impersonality and exactitude it makes our gambling reasonably impersonal."

Science News-Letter, December 11, 1926

Glycerine can be obtained from petroleum.

Thistles in Argentina grow in thick forests higher than a man's head.

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## 5000 Year Old Glass

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The aim of the glass manufacturers of the early days was to imitate the color of natural objects, and some beautiful effects were obtained. They were able to produce a beautiful purple-blue coloring which even with modern methods was most difficult to obtain.

Glass was also used by the ancients for standard weights. In their manufacture remarkable accuracy was attained. Three glass weights of the same denomination when tested were found to be in agreement with one another within 1/200th of a grain.

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Zebras are vicious and very hard to train.

Buffalo milk is being tried out in China.

Consumption is the final stage of tuberculosis.

Ants move at a faster speed in warm weather.

People in Japan had no horses until early in the Christian era.

Awnings for automobile windows are a new car accessory.

Gold in sea water is mostly in the form of an insoluble slime.

Steam spray is being used by paper hangers to remove old wallpaper.

Boys played marbles even in the early days of the Indian mound builders.

An electrically operated passenger cable line up Mont Blanc is being built.

A height finder is a recent device for use by gunners attacking enemy airplanes.

When writing a book, Balzac sometimes worked 18 to 20 hours a day for weeks.

The first wall paper factory in this country was established in Albany, New York, in 1790.

Projected water power installations for Italy, Germany, Belgium, and France total several million horsepower.

In the past six years electric refrigerators in American homes have jumped from 3,000 to more than 142,000.

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