

SMALLPOX REVIEWED

By FREDERIC J. HASKIN

Comparatively few people in these careful days of compulsory vaccination and rigid quarantine can realize what a frightful scourge to humanity smallpox has been. In its total of devastating effect on human life it has probably equalled any of the great plagues and distempers of history, owing to the melancholy fact that from probably the earliest times it always has raged in some quarter of the globe with greater or less mortality. It is always epidemic somewhere.

Formerly smallpox was considered inevitable and incurable, while the rude medical science of antiquity and of the middle ages down to the last quarter of the eighteenth century was powerless to prevent its ravages. Even to-day there is no cure for the filthy disease. The modern weapon consists wholly in prevention.

Smallpox is said to have prevailed in eastern countries from the most remote antiquity, but its early history is shrouded in obscurity. Aaron, an Alexandrian priest, who lived in the early part of the seventh century, is said to have first described the disease. Some have traced an allusion to it in certain passages of the Old Testament. The Greek writers included smallpox and measles under the same head or class of diseases.

The first appearance of smallpox in Europe is supposed by some to have been the epidemic described by Gregory of Tours as having prevailed in France in the reign of Childebart about 520. It is more generally considered, however, that the disease was first brought to Europe by the Saracens about 710. Spreading from Spain, it soon overran Europe, but spared for a time certain isolated countries, such as Denmark, where it did not appear until 1527. It was carried to the West Indies in 1517 by the adventurers who hastened to profit by Columbus' discovery of the new world. It reached Mexico in 1520 and Brazil in 1563. Farther north it first appeared in Maryland, having been brought there by an English ship in the early part of the seventeenth century. Thence it rapidly spread through Virginia, the Carolinas, New England and other portions of the

American colonies. Strangely enough, the disease is more than usually fatal to aboriginal peoples, such as the native Indians of the West Indies, the inhabitants of Polynesia, our own American red men and the Eskimos of the Arctic circle.

Neither palace nor hovel formerly was immune from the ravages of smallpox. Royalty itself perished in the persons of Queen Mary of England in 1694, the Emperor of Germany in 1711, the Dauphin and Dauphiness of France in 1712, the Emperor of Russia in 1730, the Queen of Sweden in 1741, and Louis XV. of France in 1774. In the middle of the eighteenth century 2,000,000 perished in Russia. In London in 1723 one out of every 14 deaths was due to smallpox, while in France in 1754 the rate was as high as 1 in 10.

Up to the beginning of the nineteenth century, when its ravages were decidedly checked by vaccination, smallpox continued its course as a deadly pestilence almost always and everywhere present, sparing no age, sex, condition nor nationality. No one was safe from it except by virtue of having already passed through its perils. Its history, like that of other acute contagious diseases, is that, while always prevailing to a certain extent, especially in large cities, it raged as an epidemic every few years. This periodical recurrence is doubtless due chiefly to the fact that each epidemic exhausts nearly all the subjects then susceptible to the disease, so that a certain time must elapse for a sufficient number of others to be born into the world to afford the material for a fresh outbreak.

This theory explains the recurrence of such scourges as the plague and the sweating sickness through so many centuries. As has been noted, up to the latter part of the eighteenth century there was no known method of rendering people immune from smallpox. It looked as if the human race was doomed to suffer indefinitely from its awful ravages. But about the year 1773 Dr. Edward Jenner, an English physician and a pupil of John Hunter, began the search for a prophylactic. Some time previously he had investigated the cowpox, being led thereto by accidentally hearing