

a sight is rarely met with. Small-pox, although never completely stamped out in this country, has ceased to be a common cause of death. In Denmark it was stamped out for a time by compulsory vaccination, and again in Chili.

How efficacious this hygienic measure of vaccination is is shown by some very striking facts.

In Homerton Fever Hospital during the epidemic of 1871 one hundred and ten persons were engaged in attendance on small-pox patients; all were revaccinated with the exception of two. All escaped small-pox except the two not revaccinated, who caught the disease. In the epidemic of 1876—77, at the same place, all who were revaccinated escaped small-pox; one who had not been revaccinated took the disease and died of it. In 1881, out of ninety Nurses and servants of the *Atlas* Hospital-ship for small-pox patients all were revaccinated except one housemaid, and that housemaid was the only person who contracted small-pox.

To take another disease—ague, which is due to malaria, a poison emanating from marshy land. Formerly it was exceedingly common, not only in the marshes of Lincolnshire, Cambridgeshire, and Essex, but deaths from ague were numerous in London, when the low ground about the river was undrained. In the year 1661 out of 19,771 deaths in London, no less than 3,490 were due to ague! Nearly one-sixth of the whole number.\*

Now this disease, once so common in London Hospitals, is seen only occasionally in the eastern districts. It has been practically extinguished by drainage of the soil.

Look at scurvy again. It was formerly the scourge of British seamen, due to the want of fresh vegetable food. In 1780, 1,407 patients suffering from this disease, were admitted into Haslar Hospital,† and it was not unknown on land. In the time of Queen Elizabeth the children of Christ's Hospital were often ill from scurvy. The introduction of lime juice into the rations of seamen, and of the potato, have almost extinguished scurvy.

I have mentioned that in the year 1780, before the introduction of lime juice, the number of cases admitted to Haslar Hospital for Seamen was 1,457. Ten years after the introduction of lime juice by Dr. Blair and Sir Gilbert Blane (in 1795), viz., in 1806, it had fallen to one, in 1807, one only.

Now scurvy is met with only in exceptional cases of privation, as in shipwreck and Arctic expeditions, where fresh vegetables are wanting, and amongst a few children limited to farinaceous food.

In the same way typhus fever, which formed a serious cause of mortality in London and all large towns, has fallen to a very low ebb since it was discovered to be due to overcrowding and foul air. It was cultivated largely in the foetid atmosphere in prisons, and was called "jail fever." John Howard, the philanthropist, who visited these places, affirms that the malignity of prison air was so great that his clothes were rendered offensive to such a degree that he could not bear to ride in a post chaise, but was obliged to travel on horseback; while the leaves of his memorandum book were so tainted that he could not use it until it had been spread for an hour or two before a fire. The typhus thus bred spread from the court-houses where the prisoners were tried to the surrounding population.

Typhoid fever still lingers with us, although it has been largely subdued by improved drainage and water supply. In Bristol, for example, before the sanitary improvements were carried out there, the death-rate of this "filth disease" (as Mr. Simon calls it) was ten per thousand; it has been reduced to 6.5. Similarly in Croydon, the old death-rate of fifteen fell to 5.5, and in Merthyr Tydvil from twenty-one to eight.

Even consumption has yielded in a considerable degree to improved sanitary conditions; to improved drainage in certain towns, and in barracks to better ventilation.

Gout is far less severe and general amongst the wealthier classes, who live less grossly than of old; and even drink diseases, terrible as the mortality still is from them, are declining under the undoubted spread of more temperate habits. In the time of Queen Elizabeth beer was the regular breakfast beverage; the Queen herself took it. Of ale, in 1666, the consumption in London has been calculated at one hundred and eight gallons per head.

There remains one deadly disease, however, which still holds its own, a disease associated with foul air and water, and yet increasing rather than diminishing in spite of improved hygienic conditions—diphtheria.

Now the grand result of all these sanitary improvements appears in the increased length of life. Dr. Pollock, in his recent Harveian Oration at the College of Physicians, states that two years have been added to the average length of life in males; three and a-half in the case of females.

It has been questioned whether people live to a greater age than formerly, whether the three score and ten years is more frequently passed. If the life statistics collected by John Gaunt in the seventeenth century are to be trusted seven per cent. of the population only attained the age of seventy. The number now is said to have risen

\* Poore's "London," page 25.

† Sir T. Watson, "Principles and Practice of Medicine," vol. ii., page 951.

[previous page](#)

[next page](#)