

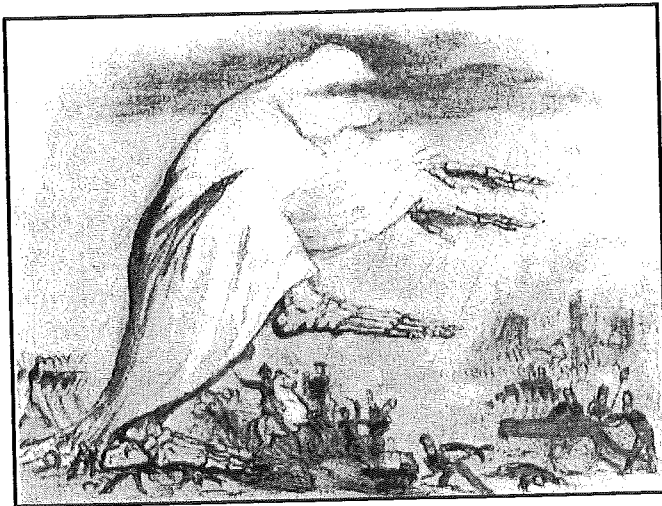
DISEASE AND DEATH RATE FROM CHOLERA

The cholera germ enters the body via the mouth, usually in contaminated water or food and sets up an infection in the small intestine. The incubation period is short, never longer than 5 days and sometimes less than one.

The disease usually developed in three relatively well defined stages; the stage of evacuation, the stage of collapse and the stage of reaction. The onset was invariably abrupt and characterized by a purging diarrhoea and copious vomiting which emptied the stomach and was followed by exhausting retching and hiccapping. As the body became dehydrated, agonizing cramps afflicted legs, arms, abdomen and back.

As the patient passed into the stage of collapse his physical appearance changed completely-his skin became lax, wrinkled, cold and clammy to touch, his eyes sunken, his cheeks hollow, and there was blueness about the eyes and lips. The voice became husky, the expression anxious and apathetic. His blood pressure fell and he was unable to urinate. At this stage death could occur from circulatory failure or failure of bodily functions.

If the patient was lucky, he survived the second stage; his blood pressure was restored, his urine flow was restored and he slowly recovered, though heart failure could still follow the slightest exertion.



Painting depicting the London cholera epidemic
U.S. National Library of Medicine
photographic archive

[1832] Mr. John Kale, basket maker of South Street, aged 23 years and his wife, aged 21 years died on the 12th of October. They were both in perfect health when they arose in the morning, but soon after the wife complained of being unwell; not suspecting anything materially amiss, he went on his business to Hucknall and on returning through Bulwell in the afternoon, was taken ill, and was so bad that he died on the road and so rapid was the decomposition of the body that it was obliged to be buried the same evening at Basford. In the meantime the wife sickened and died the same night of cholera at South Street in Nottingham.

Source: John F. Sutton, *The Date-Book of Remarkable and Memorable Events Connected with Nottingham and Its Neighbourhood. 1750-1850* (Nottingham: Simpkin & Marshall, 1852).

REPORT ON THE SANITARY CONDITIONS BY J. R. MARTIN ESQ.

The manufacturing occupations of the population are principally connected with the production of cotton and silk stockings, lace and bobbin-net, which are said to afford employment to upwards of 40,000 inhabitants. The work is carried on in rooms usually overcrowded and ill-ventilated, and in prosperous times during the greatest number of hours that men can be got to work; at other times, with much uncertainty and irregularity, but at all times under moral and physical conditions that tend to the deterioration of health of all who are engaged in these occupations-of the father, mother, and of the child.

"Children," says Mr. Butler, "are confined in number (proportional to space). Their work is stooping, unhealthy employment; they work far more hours than the factory children and appear to have been forgotten by the philanthropy of the day. . . ."

Speaking of the females, the same gentleman observes that "Taken to work at the tenderest age, when they marry they are uneducated for wives and mothers as if they had brought from the Sandwich Islands and expected to manage an English Establishment in Regent street. To this unhappy condition is referred some of the excessive mortality of infants and much of the dissolute and reckless habits of the husbands.

The diet of a considerable portion of the working classes in Nottingham is universally stated to be very poor, owing to the "low and irregular earnings" and they are unable to purchase butchers meat except "in the smallest quantities", the popular diet consisting principally of bread, potatoes, milk. . . . The want of fuel in winter is common: all witnesses speak to this fact. . . ."

The mortality in Nottingham during the years 1840-41 and 1842 was 2.8% while the average mortality of all England is but 2.2%. Mr. Hawksley states the annual mortality at 2.8% and adds that the average age at death amongst males is only 20.5 years and amongst female only 23.9 years. . . .

The circumstances under which children are made to work in Nottingham must unavoidably confine the natural action of the chest, and limit through the great reduction in the quantity of oxygen admitted, the decarbonization of the blood and the due production of animal heat. It may well be anticipated therefore, that diseases of the respiratory and digestive organs are found, in large proportion of instances, to say the foundation of health, and mar the development of a naturally sound constitution; and such is the actual case.

I have been furnished with tables exhibiting the amount of medical relief afforded by the hospitals and dispensaries of Nottingham. These tables show that the patients treated at the dispensary, a very large proportion of the admissions and deaths are from those diseases which are produced and aggravated by crowding, destitution and the other evils described. . . . that the fevers of Nottingham, can in general be traced to houses and rooms in a locality tainted from privies, defective drainage and by the custom of keeping live animals, such as pigs and rabbits in the cellars of inhabited houses; that the rich are rightly served when contagious diseases invade their dwellings of the working classes . . . that the unhealthy compulsory abodes of thousands is bad economy in the towns and state; that if thousands and tens of thousands languish out a brief existence in scrofulous and other forms of disease, almost entirely owing to their miserable and unhealthy houses how great must be the amount of private suffering. . . . It will be sufficient to state in conclusion that, upon the most careful examination, the average age at death of the inhabitants of several of the Nottingham districts is only 14 or 15 years, a lower rate than has as yet been ascertained to exist in any other city or town within the British empire.

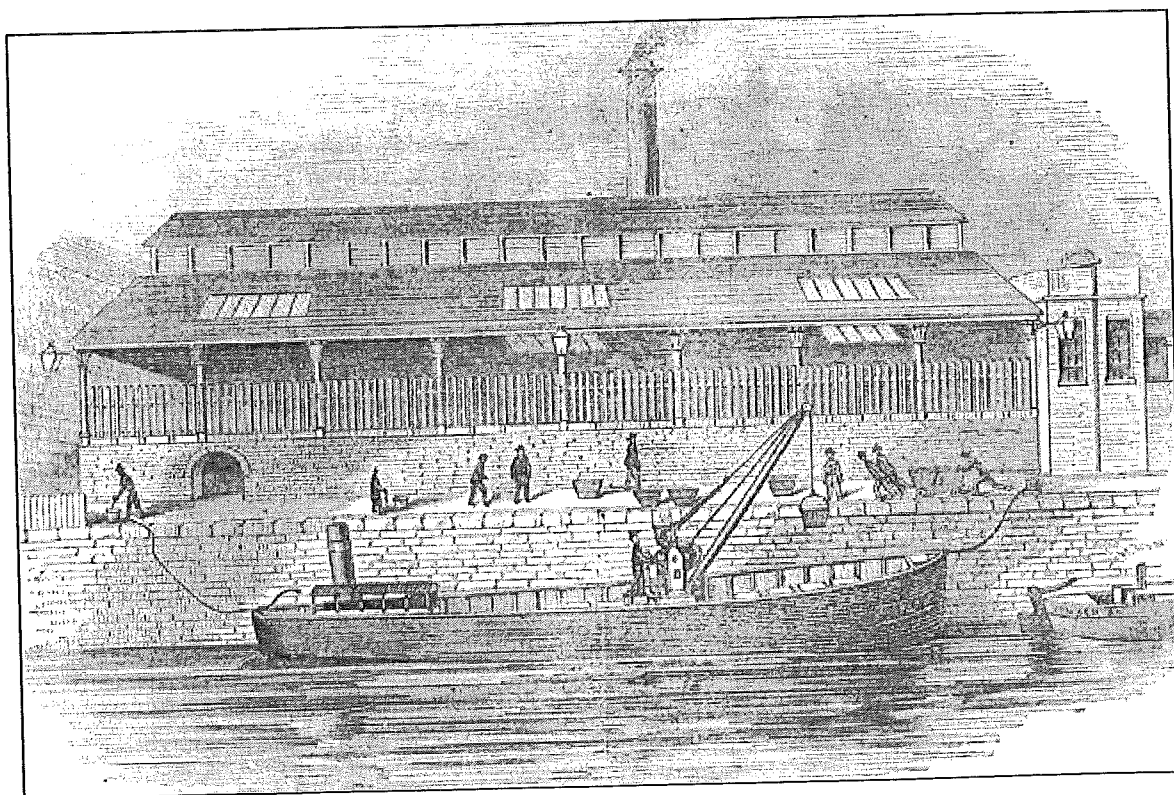
J. R. Martin, "Report on the Sanitary Conditions," in University of Nottingham, *Public Health and Housing in Early Victorian Nottingham* (University of Nottingham: Manuscripts Department, 1975), Teaching Unit 3.

SEWERAGE: NOTTINGHAM'S LABYRINTH

In all the parishes there are numbers of streets to be found of the worst construction as regards ventilation, construction of habitation, sewerage, supply of water, paving, and lighting; but as might be expected these defects are most conspicuous in the older quarters, and in the lower levels, as under the Castile and down to the Narrow Marsh, Canal Street, Leenside and in the greater part of St. Ann's and Byron wards.

I believe that nowhere else shall we find so large a mass of inhabitants crowded into courts, alleys and lanes as in Nottingham, and those too of the worst possible construction. . . . The courts are almost always approached through a low-arched tunnel of some 30 or 36 inches wide, about 8 feet high, and from 20–30 feet long. . . . They are noisome, narrow, unprovided with adequate means for the removal of refuse, ill-ventilated, and wretched in the extreme, with a gutter or surface drain, running down the center, they have no back yards and no privies are common to the whole court: altogether they present scenes of a deplorable character, and of surpassing filth and discomfort. It is just the same with lanes and alleys. . . . In all these confined quarters, too, the refuse is allowed to accumulate until, by its mass and its advanced putrefaction, it shall have acquired value as manure; and thus it is sold and carted away by the "much majors" as the collectors of manure are called in Nottingham.

Source: J. R. Martin, Report on the State of Nottingham and Other Towns (1845), 3–4



Sewage disposal: Steam barge collection in Manchester
Illustrated London News, 1877. Available: <<http://www.victoriantimes.org>>

BOOTH EDDISON ESQ
February 26, 1841

[Booth Eddison, Esq.] is a surgeon in practice at Nottingham and have been 10 years resident at the General Hospital, has had great experience as to the diseases of the laboring classes.

The effects of long-continued labor in lace-running, mending, drawing &c, are to impair the general health and especially to derange the uterine functions. Indigestion is the most common derangement of the general health, and chlorosis the most frequent in the uterine action. It is very usual for children and young persons to sit together in considerable numbers, and in small rooms; the air thus becomes deteriorated and to this cause witness attributes a considerable part of the derangement of the general health. . . . The sudden change from high temperature to the common atmosphere causes pulmonary diseases and predisposes to consumption.

The whole class of lace workers becomes after a time permanently short-sighted, a change which is indicated by a particular prominence of the cornea. Is quite satisfied that this effect on the sight is much more prone to take place in consequence of these persons beginning to work at a very early age, six, seven and eight when the eye is in the progress of growth.

Deformity of the spine, lateral curvature is very frequently produced, caused by the constrained and unchanged position of the body. From his experience is certain that the use of the various forms of opium for quieting infants whilst the mothers are at work is very prevalent in this town. In two instances has had occasion to use the stomach pump in consequence of mothers having administered laudanum, for the above purpose, in too large doses. Is convinced that a large portion of the deaths of children under three years of ages arises from the administration of laudanum by the mothers.

Signed

Booth Eddison

Source: Richard Iliffe and Wilfred Baguley, *Victorian Nottingham: A Story in Pictures* (Nottingham: Nottingham Historical Film Unit), 17: 44.