

the light of subsequent events, proving, as they did too surely, that none of the kings of Judah could ever satisfy the hopes inspired by so lofty an ideal.

And in this connection it is worthy of notice that the compiler of the Book of Chronicles, who lived long after the return from the captivity, omits altogether the words, "If he commit iniquity, I will chasten him with the rod of men," as if he would remove from the promise what referred only to the human type, and not to the Divine ideal.¹

But without thus anticipating the later interpretation, we may see that David himself was conscious from the first that the promise was full of a mysterious blessing. In the prayer and thanksgiving which he pours out "before the Lord," he can find no words to express all the joy and wonder with which his heart is filled. "Who am I, O Lord God?" he cries. "And what is my house, that Thou hast brought me hitherto? And this was yet a small thing in Thy sight, O Lord God; but Thou hast spoken also of Thy servant's house for a great while to come. And is this the law of man, O Lord God? And what can David say more unto Thee? For Thou, Lord God, knowest Thy servant."²

Whatever may be the meaning of the difficult words "Is this the law of man?" the whole passage is full of astonishment and delight at the greatness of the promised blessing. How far David was able to discern the spiritual glory of the house which the Lord Himself would build for him, how far he could rejoice in the conscious assurance that as "the Lord's anointed" he and his seed were to be signs and figures of One "higher than the kings of the earth," whose "seed shall endure for ever, and His throne as the days of heaven," are questions to be answered in connection with those royal Psalms which show us the form of "one like unto the Son of God, enthroned at God's right hand, a King and 'a Priest for ever.'"

E. H. GIFFORD.

ART. V.—CHOLERA.

Notes of Lectures delivered at Gresham College.

BY PROFESSOR E. SYMES THOMPSON, M.D., F.R.C.P.

I. THE HISTORY OF CHOLERA.

THE literature of cholera is vast and varied; our earliest accounts of it are to be found in Sanscrit writings some 400 B.C. From the description contained in them the symptoms seem to have been precisely the same as those met with

¹ 1 Chron. xvii.

² 2 Sam. vii. 18-20.

at the present day. Hippocrates also refers to the disease, but in spite of repeated inroads of warlike races from the north-west into India, cholera does not appear to have spread with them beyond the confines of that country. Probably few of these conquering races over-ran Lower Bengal, which was, we may therefore suppose, as it is now, the "home of cholera." Coming nearer to our own times, we read that in 1438 Ahmed Shah was compelled to raise the siege of Mando in Mehweh in consequence of the outbreak of a disease which is said to have destroyed some thousands of his troops in the course of a few days; the disease is described as "waba," a word still employed to designate Asiatic cholera. In 1490 Vasco de Gama visited the Malabar coast, and has left us a full account of the symptoms of cholera as it affected the natives and his own sailors. The first extension of cholera was to the north, and it occurred in 1781-82, in which years it was very deadly in Calcutta; a division of our troops was then passing through the district of Ganjam, and the colonel in charge remarked that "death raged in the camp with horrors not to be described, and all expected to be devoured by this pestilence." The next year it was all over the Indian peninsula, and in fact from 1438 to 1817 we have references by sixty-six independent observers as to the occurrence of Asiatic cholera in India, and of these authorities ten refer to epidemic outbursts of the disease.

The first accounts of the disease to reach England were those which came during the early days of the East India Company, and though it was imperfectly described, there is no difficulty in recognising it. From 1817 to 1823 there was a violent outburst all over India. It seems to have commenced in August, 1817, at Jessore; before the end of October it appeared throughout the whole of Lower Bengal and committed frightful ravages. During the cold season it abated, but in April and May, 1818, it burst out with renewed violence, and advanced as far as Delhi. In the following year it invaded the Punjab, and spread westward, appearing in Pooneh and in Bombay. In 1819-20 it broke out at Oman in Arabia, being carried thither by our troops, and this is the first record of its introduction into a country situated beyond the confines of India. In 1821 it spread to Muscat and over the whole of Persia and into Asiatic Turkey; it appeared at Tiflis, and extended to Astrakhan. Nor did the epidemic confine itself to spreading westward, it also spread eastwards. In the latter part of 1819 it spread in Burma, and in 1820 Siam was absolutely devastated by cholera; in the same year it appeared in China, where it had been "formerly unknown," and committed frightful devastations. The disease gradually died out from

the countries over which it had extended in 1817-22, and in Bengal little was heard of it throughout the years 1823-24-25, except in its endemic area; but in 1826 it again began to increase in Lower Bengal, and thence it spread westwards, until on August 26, 1829, it appeared at the Russian frontier trading town of Orenburg, and was for the first time practically known in Europe. In 1830 it appeared at the great annual gathering of Nijni-Novgorod, and speedily passed to Moscow and to the western provinces of Russia, where, in consequence of the war going on between Poland and Russia, it was disseminated quickly through both armies and to the inhabitants of the former country. In 1831 it had spread throughout Russia, and had passed thence to Sweden; on August 3, it reached Vienna and Berlin, France remaining free till the following year. About the end of October cholera appeared at Sunderland, and was supposed to have been imported from Hamburg. The epidemic broke out soon afterwards at Newcastle, Gateshead, Edinburgh, and in London in February, 1832. The disease was most deadly throughout almost the whole of Europe in 1832-33.

On June 8, 1832, cholera appeared in the cities of Quebec and Montreal, being carried thither by Irish emigrants, and before the end of the year it had spread over the greater part of America. The next epidemic of cholera was that of 1841-46, which appeared in our own country in 1848. The course it took was almost identical with that of the epidemic of 1832, and in fact we have described that attack in some degree of detail, as it shows in an almost typical manner the way and direction in which cholera spreads whenever it reaches the western part of Europe. The epidemic of 1841-51 (it existed in England from 1848-51), which was probably the most fatal epidemic that has ever spread from India throughout Europe, Asia, and America, committed fearful ravages; in England alone it killed no fewer than 53,293 men, women, and children.

From the above description it will be at once noticed that cholera spreads along special lines, and those lines are the lines of commerce. It was brought into Europe at a time when our commercial relations with India were being largely expanded. It appeared at the trading town of Orenburg, and next at the great annual fair of Nijni-Novgorod; in fact, any large concourse of people for any kind of purpose is, though not necessary, extremely favourable for the spread of cholera, and the larger the concourse the more rapid is its spread and the wider the limits to which it is carried. For the same reason we can understand that the rapidity of distribution is much greater in modern times, when the use of steam and the existence of a Suez Canal, together with the multiplication of railways, has

almost completely replaced the caravans and the sailing-ships with their forced journey round the Cape of Good Hope. The 1832-33 epidemic began in India in 1826, but the present epidemic, which we shall have later to deal with in more detail, began in India in 1891. In 1890 there was comparative freedom from the disease. .

It has been said that "cholera is a filth disease, and is carried by dirty people to dirty places." The saying is a hard one, but there is no doubt that the latter part of the sentence is strictly true. But by the term "dirty" must not by any means be understood "unwashed," though there is no doubt that the "great unwashed" have a most important influence in leading to the spread of the disease. The Hindus are apparently cleanly in their habits; *personal* cleanliness is enjoined upon them as a religious duty; the men bathe the whole body once a day, the women oftener. How comes it, then, that India is the "home of cholera," from which it is never completely absent?

The fact is that except in certain parts of Calcutta there is no regular public water-supply, but the only water obtainable is that of the rivers and of the tanks. The condition of the water, especially in the dry season, in these rivers and tanks, particularly the latter, may well be imagined—it consists of sewage more or less diluted with water.

But this difficulty is comparatively an easy one to overcome. Being, as I have said, naturally cleanly, the natives would be only too glad to use pure water if they could get it. At the International Congress on Hygiene, held at Vienna, the reproach was often cast in our faces by Continental medical men and scientists, "You take every precaution that cholera shall not invade England, and your precautions are admirable, but why do you not attack the disease in India? why do you not prevent your own subjects from being the cause of contamination of other nations?" And the reproach is a just one. Our responsibility in this respect is very great, and unfortunately we do not move in the matter; not because we are ignorant of the cause—there is information enough on the subject, and the importance of the water-supply has been pressed home upon our various Governments by medical men, who well know the terrible deficiencies there still exist upon this point. The undertaking would be Herculean and expensive, but it is a matter of necessity, if we consider the number of deaths that occur from cholera. In India alone there died in 1878, 318,000 human beings; in 1881, 161,000; in 1887, 488,000; and in 1888, 270,000; a million and a quarter of human lives sacrificed in four picked years, mainly because we have not seen that our fellow-subjects have a pure water-supply.

It is only fair to say, however, that this is not all, and that though the question viewed in the above light seems difficult, its difficulties are increased a thousandfold when it is remembered that much of the bathing and drinking of water in the East constitutes a religious ceremony of the most important kind. Here Governments and scientists are helpless, and it is only when Christianity has gained a strong hold on the people that it will be possible to eliminate this source of danger. Though they may not know it, our missionaries in India are doing as much as the hygienists in endeavouring to eliminate cholera from the peninsula. It may be worth while just to give a short description of one of these "bathing festivals" and of a Mecca pilgrimage.

"Hurdwar is a town on the banks of the Ganges, about thirteen miles from where the river escapes from the Himalayas. Here pilgrims collect from all parts of India on a certain day of the year to the number of about three million; they camp on a space about twenty-two square miles in extent. 1867 was the year of the *Kumbh mala*, which occurs every twelfth season, when the blessings derived from bathing in the Ganges are supposed to be unusually great, and Hindus flock to Hurdwar in vast numbers from all parts of India. The pilgrims began to pour into the camp from April 1 in vast numbers, and the stream increased until the auspicious bathing hour of noon on April 12. It is important to notice here that on the night of April 11 a very heavy thunderstorm burst over this vast unsheltered multitude. The rain lasted the whole of the night and throughout the following day. Those only who have been exposed to these hill storms in the tropics can realize what a night of misery these three million pilgrims must have passed on the open plain of Hurdwar, cold and drenched to the skin, the water running in streams off their half-naked bodies over the rocky ground into the river, and however perfect the conservancy may have been, this downfall of rain must inevitably have washed excrementitious matter from the latrines and surface soil into the Ganges during the night of April 11. With the exception of a case of cholera on the 9th, the entire mass of pilgrims appears to have remained in good health up to the 12th, and I cannot do better than give what then occurred in Mr. Cutcliffe's own words. He says: 'The bathing-place of the pilgrims was a space 650 feet long by thirty feet wide, sbut off from the rest of the Ganges by rails, which prevented the people from getting out into the river further than the limits of the space enclosed. Into this long narrow enclosure the pilgrims from all parts of the encampment crowded as closely as possible from early morn (the rain still beating down over them) till sunset. The water in this

space during the whole time was thick and dirty, partly from the ashes of the dead, brought by surviving relations to be deposited in the water of their river god, and partly from the washing of the clothes and bodies of the bathers. Pilgrims at the bathing ghaut, after entering the stream, dip themselves under the water three times or more, and then drink of the holy water whilst saying their prayers. The drinking of the water is never omitted, and when two or more members of a family bathe together, each from his own hand gives the other water to drink."

This description is sad enough, but observe what follows: "On the evening of the next day, April 13, eight cases of cholera were received into one of the hospitals at Hurdwar. By the 15th the whole of this vast concourse of pilgrims had dispersed, and the encamping ground was again left a barren waste. Dr. J. Murray has given a detailed report of the events that occurred after the pilgrims left Hurdwar. He states that the immense crowd at Hurdwar having entirely dispersed on the 15th, the pilgrims passed chiefly on foot at about the rate of fifteen miles a day. 'The moving mass crowded the roads to Meerut in a continuous stream for nearly a week. This pilgrim stream carried cholera, which lined the roads with victims, whose funeral pyres studded the surrounding fields, or whose corpses were thrown into the canal, or collected by the police and buried. The disease was communicated to the neighbouring towns and villages, and the pilgrims carried it to their homes over the whole of Hindostan.' Cholera spread to Peshawar and to Cabul, to which many pilgrims travelled from Hurdwar; it broke out with fearful violence in Cashmere, and at Teheran in the summer of 1867. It appeared at Meshed in July, 1868; the place was then crowded with pilgrims, and with them it was dispersed over the whole of Persia and Asiatic Turkey. In the same circumstances Kiev, 'the Jerusalem of Russia,' when full of pilgrims was attacked with cholera (August, 1869), and in the three succeeding years in Russia alone it destroyed no less than 241,808 people, and throughout Europe probably not less than 1,000,000 human beings."¹

"Behold how great a matter a little fire kindleth!"

In the case of the Mecca pilgrims the difference is one of kind only; each pilgrim in turn stands naked by the holy well; a bucket of water is poured over him; he drinks what he can of it, and the rest falls back into the well. As may be

¹ The above is taken from Mr. Macnamara's "Asiatic Cholera," London, 1892.

imagined, an analysis of this water shows that it is "fearfully polluted with abominable contaminations."

Once it has commenced its spread, cholera almost invariably reaches us here in England by way of Russian and Polish immigrants. "Cholera is a filth disease carried by dirty people to dirty places," and the lack of cleanliness among such alien immigrants is equally well known and deplored. This opens up the question as to how long England is to remain the dustbin of the Continent. According to the condition in which the law at present stands, though pauper aliens can be registered, they cannot be refused entrance into our country; so that the recent strict measures adopted, though they meet with the approval of all reasonable persons, are nevertheless somewhat beyond the powers of the Local Government Board. Whether legislation is necessary with regard to restriction of competition, hardly concerns us now; it is on the health question alone that we are contented to rest for our opinion.

The present epidemic of cholera is the seventh that has visited Europe during a period of about sixty years. Unknown previously, it visited that continent first in 1829-32, next in 1848-51, next in 1853, next in 1864, next in 1869-71, next in 1884, and lastly in the year 1892. The present epidemic began with an outbreak of cholera amongst the pilgrims assembled at Hurdwar about March 22, 1892; on the 25th the Government issued orders preventing the railroads from taking any more pilgrims to Hurdwar, and those who were assembled were dispersed as speedily as possible. This action of the Government was the subject of much comment in the native papers, but, as the *Indian Pioneer* at the time observed, it was impossible to sympathize with "the complaints which reach us from Delhi and elsewhere regarding the action of the authorities in dispersing the pilgrims at Hurdwar when cholera appeared among them. It is argued that whereas the course taken was meant to stamp out the epidemic, it has had the opposite effect, returning pilgrims carrying the disease with them wherever they appear in large numbers. This is unfortunately the case, but it was inevitable. What the authorities really did was to minimize the local outbreak. . . . It has been proved over and over again that pilgrims, imbued with the spirit of fanaticism, and filled with that fatalistic belief so common amongst Eastern races, will incur every risk from pestilence rather than abandon the religious object they have in view. Thus at Hurdwar several Hindus in the last stage of cholera were actually lifted from the sacred waters only to die a few minutes later. Their companions resented all interference with their 'right' to bathe, and it was with the greatest diffi-

culty that their dispersal was eventually effected. . . . Less than 100,000 persons had assembled when the order was given to break up the fair, and we know what has followed. What would have been the return of mortality if 500,000—a figure well within the mark—had made their way to Hurdwar? Not all the appliances of sanitary science, and no amount of medical skill, can check an epidemic of true cholera when hundreds of thousands of people are camped together in a small space. There is nothing for it but to disperse the gathering as quickly as possible. It is the less of two evils, and the only question is when the order for the breaking up of the pilgrims' camp should be given."

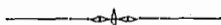
From April 1 to the 7th there were twenty-four cases of cholera between Simla and Kalka. By the 20th it prevailed to an alarming extent at Peshawar and in the surrounding country. During the month of May cholera spread to Cashmere, and in Shingar alone 5,000 out of a population of 124,000 died from the disease. By May 11 it was "raging at Cabul"; the disease spread rapidly over Northern Afghanistan, and, in spite of the strict quarantine of forty days imposed on their frontiers by the Russian and Persian authorities, cholera reached Meshed by May 27, 700 deaths occurring in that city every day. Places westward of Meshed, in spite of *cordons sanitaires* placed around the city, were speedily affected, and by June 26 it appeared at various towns on the shores of the Caspian. Within the next month it had penetrated into the heart of Russia, and trains from Moscow to St. Petersburg were stopped. On August 19 it appeared at Hamburg, no doubt being conveyed thither by Russian emigrants on their way to England and America. The choleraic disease which has existed in Paris since May 10 does not seem to have been part of an invading cholera such as that which has just been described, and which destroyed thousands of people within a few months in its progress. Mr. Macnamara, one of the greatest English authorities on cholera, is disposed to believe that the Paris disease was, at all events at first, a revival of the South of Europe epidemic of 1884-87, unless cholera had been imported in the meantime directly from Tonquin into Paris. There seems to be no doubt that the disease was true Asiatic cholera, although with comparatively feeble properties, and in this respect it was very different from the form at the same time so prevalent in Hamburg.

In England only twenty-six cases in all have occurred, and all of these were imported; in no case has the disease spread to others, on account of the great care that was taken to isolate the patients immediately they were known to be ill. It is worth remarking, however, that all of these cases appeared on

our eastern coast, thus suggesting in a very striking manner the idea, which is now known to be a fact, that they were all infected with the disease in Hamburg.

Such is the natural history of cholera, and unless we recognise our responsibility for India, and "set our house in order," such epidemics, and more terrible ones than their forerunners, may be infallibly expected in Europe every few years.

E. SYMES THOMPSON.
WALTER S. LAZARUS-BARLOW.



ART. VI.—THE PROSPECTS OF THE PRINCIPLES OF THE REFORMATION IN THE CHURCH OF ENGLAND.

THERE is nothing gained by concealing from ourselves that there are at the present day two great schools of the clergy living side by side and intermingling in every direction within the organization known as the Church of England. One would properly be called Sacerdotal, or Mediæval; the other Primitive, Catholic, or Reformed. The terms High Church and Low Church have nothing whatever to do with the distinctions between them, and are altogether misleading. The subject can be discussed with perfect good-temper and unreserved freedom, for all of us have intimate associates on both sides. The laymen of the time do not, to any great extent, enter into the controversies that have been raised, nor do the mass of them understand the issues. For example, the typical organization of the mediæval set is the English Church Union, in which the clergymen enormously outnumber the laymen. The laymen, for the most part, are content with a very plain, simple and Scriptural type of Christianity. There is every indication that if they could be polled, or if they could have any distinct influence in the affairs of the Church, they would be found in an overwhelming degree on the side of the principles that are Reformed Catholic or Evangelical. In discussing points of difference it is well to remember that it is mainly, at present, a concern of the clergy. Both sets are ordained by the same bishops; but while the one set believe that they are accepting no authority or directions except those of the Prayer-Book, the others consider that there is a great undefined body behind the Prayer-Book called the Catholic Church, to which they owe an equal or superior allegiance, an undefined set of opinions and practices called by them