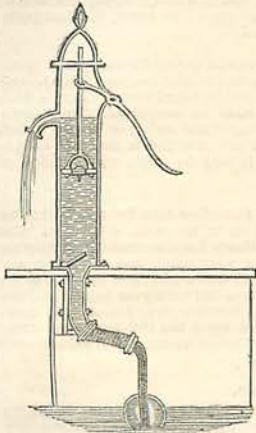


in the most accessible part of the beach, and upon some of these his children's nurse would seat herself day by day with the baby on her lap, and with the elder children playing about her, and with the children of other families similarly exposed to the same danger.—*Ibid.*

PATENT FLOATING FILTERING PUMP.

This new Pump, for cleansing and filtering unwholesome water, is the invention of Mr. S. Cheavins, of Donington, in Lincolnshire. Its advantage is to procure a pure and wholesome, as well as an abundant supply—results which, it is believed, have not hitherto been combined in a pump.

The inventor states that his Floating Filtering Pump has been tested in a tidal river, and is now used in the extensive brewery in Spalding, where it furnishes a constant and abundant supply of wholesome water, entirely free from the sand and filth which the old leaden pipes, by being placed nearly to the bottom of the water, were in the constant habit of contracting, thereby preventing the engine from obtaining a sufficient quantity of water for the supply of the brewery; and, as a still greater proof of its utility, it may be added, that it has been frequently surrounded with the weeds and rubbish carried down the river, and yet has never, in one single instance, failed to produce a copious supply. Water is sweeter and purer at the surface than it is at the bottom, and the Floating Filter totally ejects filth of every description, such as worms, &c., and all impurities of the smallest kind. The common pump, in consequence of the pipe descending within six or eight inches of the bottom, draws up with the pure water every pernicious sediment within its reach. On the other hand, the Floating Filter, by taking a supply of water within four or six inches of the surface, and rising and falling with the water, at once secures it from all sediment; and should there be any light filth floating in the same, the Filter totally ejects it, and will supply hundreds of tons of pure and wholesome water daily if required.



The importance of the purity of water for drinking was never better understood than in the present age of sanitary improvement. Now, the Patent Filter may be fixed to tanks and butts, so as to remove all apprehension of unwholesomeness in the water by any impurity drawn up with it. The Filter can also be attached, without difficulty, to pumps of the old construction. We have seen Mr. Cheavins's Floating Filtering Pump at work, and can fully attest its successful operation.

WRIGHT'S PATENT VULCAN CHIMNEY-SWEEPING MACHINES.

The inefficiency of machinery for sweeping tortuous, angular, and irregular chimneys, has long been matter of complaint; and has, in some instances, led to the return to the employment of climbing-boys, which the application of machines was intended to supersede. The common failure of the machines hitherto used has been that they swept equally both ways, and left much of the soot in the chimneys.

The Patent Vulcan Sweeper is capable of contracting and expanding by the use of a cylinder or band of vulcanised india-rubber, upon which separate little brushes are so placed, that in ascending they easily press backwards, and leave the soot on the slopes, in the same manner as the common brush; whereas, on the return of the machine, the pressure on the little brushes being reversed, they stand firmly out and hold the head in the middle of the flue, sweeping all before it. The cylinder is fixed under a cap, and is protected from all external obstacles. The six little brushes form a round head, when all at liberty, but each one can dip down independently of the other when required to do so. There are, also, universal joints of a novel character, constructed with the vulcanised india-rubber; and, in cases where the chimney pots are very contracted, a small pilot brush, with very stiff whalebone to scratch off the hard soot, precedes the main one, and thus averts the necessity of its being squeezed through the narrow orifice, which is always attended with more or less danger to the pot, and requires so great a range of elasticity in the machine as to render it weak and inefficient in large flues. The Vulcan machines are employed in various ways, and of different sizes, to sweep stove-pipes, and every kind of chimney. They are manufactured and sold by Mr. Evers, at Quarndon, near Derby.

PRECAUTIONS AGAINST CHOLERA.

Medical authorities are agreed that the remedies proper for the premonitory symptoms of cholera are the same as those found efficacious in common diarrhoea; that the most simple remedies will suffice, if given on the first manifestation of this symptom; and that the following, which are within the reach and management of every one, may be regarded as among the most useful, namely, 20 grains of opiate confection, mixed with two table-spoonfuls of peppermint-water, or with a little weak brandy-and-water, and repeated every three or four hours, or oftener, if the attack is severe, until the looseness of the bowels is stopped; or an ounce of the compound chalk mixture, with 10 or 15 grains of the aromatic confection, and from five to ten drops of laudanum, repeated in the same manner. From half a drachm to a drachm of tincture of catechu may be added to this last, if the attack is severe.

Half these quantities should be given to young persons under fifteen, and smaller doses to infants.

It is recommended to repeat these remedies night and morning, for some days after the looseness of the bowels has been stopped. But, in all cases, it is desirable, whenever practicable, that even in this earliest stage of the disorder, recourse should be had to medical advice on the spot.

Next in importance to the immediate employment of such remedies, is attention to proper diet and clothing. Every article of food which is known to favour a relaxed state of the bowels should, as far as possible, be avoided—such as every variety of green vegetable, whether cooked or not, as cucumber and salad. It will be important, also, to abstain from fruit of all kinds, though ripe, and even cooked, and whether dried or preserved. The most wholesome articles of vegetable diet are, well-baked, but not new, bread; rice, oatmeal, and good potatoes. Pickles should be avoided.

The diet should be solid rather than fluid; and those who have the means of choosing should live principally on animal food, as affording the most concentrated and invigorating diet; avoiding salted and smoked meats, pork, salted and shell-fish, cider, perry, ginger-beer, lemonade, acid liquors of all descriptions, and ardent spirits.

Great moderation, both in food and drink, is absolutely essential to safety

during the whole duration of the epidemic period. One single act of indiscretion has, in many instances, been followed by a speedy and fatal attack.

On account of the intimate connexion between the external skin and the internal lining membrane of the bowels, warm clothing is of great importance. The wearing of flannel next the skin is therefore advisable. Recent experience on the Continent seems to show that it was useful to wear in the day-time a flannel bandage round the body, and this may become necessary in our own country during the damp and cold weather of the approaching season.

Particular attention should be paid to keeping the feet warm and dry; changing the clothes immediately after exposure to wet; and maintaining the sitting and bed-rooms well aired, dry, and warm.

It may be necessary to add a caution against the use of cold purgative medicines, such as salts, particularly Glauber salts, Epsom salts, and Seidlitz powders, which, taken in any quantity, in such a season, are dangerous. Drastic purgatives of all kinds should be avoided, such as senna, colocynth, and aloes, except under special medical direction.

If, notwithstanding these precautionary measures, a person is seized suddenly with cold, giddiness, nausea, vomiting, and cramps, under circumstances in which instant medical assistance cannot be procured, the concurrent testimony of the most experienced medical authority shows that the proper course is to get as soon as possible into a warm bed; to apply warmth by means of heated flannel, or bottles filled with hot water, or bags of heated camomile flowers, sand, bran, or salt, to the feet and along the spine; to have the extremities diligently rubbed; to apply a large poultice of mustard and vinegar over the region of the stomach, keeping it on fifteen or twenty minutes; and to take every half-hour a tea-spoonful of sal volatile in a little hot water, or a desert-spoonful of brandy in a little hot water, or a wine-glass of hot wine whey, made by pouring a wine-glass of sherry into a tumbler of hot milk: in a word, to do everything practicable to procure a warm, general perspiration, until the arrival of the medical attendant, whose immediate care, under such circumstances, is indispensable.

It has not been deemed necessary or proper to give instructions for the treatment of the advanced stage, from the confident expectation that the proposed arrangements will supply medical attendance to all cases that may reach that condition, by which means the specific symptoms of each individual case will receive their appropriate treatment.

Whatever is preventive of cholera is equally preventive of typhus, and of every other epidemic and constantly recurring disease; and the attention of all classes is earnestly called to the striking and consoling fact, that, formidable as this malady is in its intense form and developed stage, there is no disease against which it is in our power to take such effectual precaution, both as collective communities and private individuals, by vigilant attention to it in its first or premonitory stage, and by the removal of those agencies which are known to promote the spread of all epidemic diseases.—*Abridged from the Report of the General Board of Health, to July, 1849.*

DISINFECTING PROCESS.

In all times of epidemic, it is desirable that householders should be warned of the necessity of looking to the state of the sinks, drains, cesspools, water-closets, &c., and that, as a means of prevention, those receptacles should be cleansed by pouring down them a solution of chloride of lime, and that this should be done simultaneously throughout the neighbourhood, in order to produce an effect on the public sewers; this mode of purifying being adopted at one time: thus, in 1849, it was publicly recommended, between the hours of nine and ten on each Saturday morning. This plan was carried out at Tottenham for several weeks, and here no case of cholera occurred, nor were the cases of diarrhoea more frequent or severe than usual at that season of the year. Chloride of lime may be had of any druggist. Two ounces is sufficient to be stirred into a pail-full of water, and costs only one penny.

ORIGIN OF THE "BILLS OF MORTALITY."

The Bills of Mortality were commenced in the reign of Queen Elizabeth, and ever since the year 1603 have been published by authority in London. In this respect the English metropolis stands alone; no weekly tables of the causes of the death of every inhabitant are published in the capital of any other European state. Various motives for the measure have been assigned; but the fact of continuous publication from a period anterior to the appearance of newspapers and gazettes, is remarkable and characteristic. It may be fairly referred to the natural inclination of the English people, when they are in trouble, to know the truth, and to see in figures the precise extent of their losses, although at times the sight might well make the courage of the bravest quail. On the Continent, "precautions" were used in publishing the mortality of cholera in 1849; and the deaths from all causes were not made known.

The parish-clerks of London, in the seventeenth century, when the plague was at its height, counted the deaths and reported the supposed causes; and the citizens, when the death-cart traversed the streets, anxiously studied the bill, surrounded by its gloomy symbolical border, announcing 297 deaths in a week, out of a population of 600,000. Returns just published by order of the House of Commons, show that the total number of new houses built within the metropolitan police districts since January 1, 1839, up to September, 1849, amounts to 64,058; and the number of new streets formed to 1652, in length 200 miles. The increase of population from 1839 to 1849, within the said district, is estimated at 525,004; the total population of the metropolitan district being now about 2,336,960. In the hands of Price, Heberden, Willis, Bateman, and other statistes, these records have disclosed the laws of mortality, and the causes of the insalubrity of the present cities.

STATISTICS OF METROPOLITAN BURIAL-GROUNDS.

In area, the parochial grounds take up 176 acres and 3-10ths; the Protestant Dissenters, 8 acres and 7-10ths; the Roman Catholics, 3-10ths of an acre; the Jews, 9 acres and 2-10ths; Swedish Chapel, 1-10th; undscribed, 10 acres and 9-10ths; private, 12 acres and 6-10ths. Total of intramural, 218 acres and 1-10th; total of new cemeteries, 260 acres and 5-10ths.

|                            | Annual No. of burials exclusive of vault burials, | Average annual No. of burials per acre. | Highest No. of burials per acre in any ground. | Lowest No. of burials per acre in any ground. |
|----------------------------|---|---|--|---|
| Parochial grounds ..       | 35,747  | 191                                     | 3073   | 11  |
| Protestant Dissenters ..   | 1715  | 197                                     | 1210   | 6   |
| Roman Catholics ..         | 270   | 1043                                    | 1613   | 814   |
| Jews ..                    | 340   | 33                                      | 52   | 13  |
| Swedish Chapel ..          | 10  | 108                                     | —  | —   |
| Undscribed ..              | 2167  | 294                                     | 1109   | 5   |
| Private ..                 | 5112  | 405                                     | 2323   | 50  |
| Total intramural ..        | 41,355  | 203                                     | 1050   | 46  |
| Total of new cemeteries .. | 3326  | 13                                      | 155  | 4   |
| Vault burials ..           | 789   | —                                       | —  | —   |

It is computed that it requires seven years for a layer of bodies to decay in the metropolis.—*Banfield and Weld's Statistical Companion.*