

## General Information.

**MORTALITY IN DIFFERENT PURSUITS.**—The reports of the British Registrars-General show that the annual death-rate in the United Kingdom is about one in forty-five of the entire population. The larger, but not the largest towns, lead in the rate of mortality, and the rural mainland districts occupy an intermediate place between them and the insular districts, the extremes varying by about fifty per cent. As between the three great classes into which the population may be divided—the laboring, the trading and professional classes, and the gentry and titled—the chances are very nearly equal, although a slight advantage appears to be shown in favor of the first class. The trades most unfavorable to long life are, as a rule, those which tend to expose the operative to an atmosphere loaded with dust, or compel him to deal in one way or another with poisons. Dry grinding, as practiced on needles and forks at Sheffield, is the worst; working in coal-mines is the next in deadliness. Gilders and silvers of glass are exposed to vapors of mercury; workers in brass are liable to diseases produced by exposure to volatilized oxide of lead; all who work in paints are subject to great risks; soldiers and sailors have their lives shortened by the exposure they have to undergo, or by diseases brought on by their habits of living. Bakers, tailors, milliners are liable to consumption; compositors peculiarly so. Pressmen fare better than compositors, probably because their work is more active. In the country, farming appears to be the most healthy of occupations, while that of the innkeeper is the most fatal. Butchers die comparatively early, as also do brewers, draymen, and those who have much to do with establishments for eating and drinking. The over-exertion of those who follow athletic pursuits appears to conduce quite as much to short life as does the sedentary strain of the student. It seems to make but little difference in the "expectation of life" of in-door workers whether their labor is hard or not; but those who are employed out-of-doors have a chance of living six years longer, if their work keeps them busy and active, than if it is a mere matter of routine and standing around; and a "comparison of the tables leads us to the conclusion that the life of the out-door worker with little exercise is worse than that of the sedentary in-door worker, whether with little or with great exercise." The most curious fact brought out is that the scavengers, dustmen, and cleaners of sewers in London, are reckoned among the healthiest of the population.

**PARASITES IN FOOD AND DRINK.**—M. Milne-Edwards has recently expressed some interesting views suggested by the discussions concerning trichina, respecting the hygienic questions which are connected with the establishment of colonies of intestinal worms, or *microbes*, within human bodies. He believes that certain religious precepts and certain established usages, among people whose civilization is very ancient, are based upon acquaintance with the inconveniences that may result from the alimentary use of particular meats or waters. He thus deduces, from the aptitude of the hog to transmit his parasites to man, the reason for the prohibition of pork among the Israelites and Mohammedans, and for the Biblical distinction between pure and impure animals. He also attributes to the very ancient recognition of analogous facts the general use of hot drinks, like tea in China and other countries of the extreme East, where the natural waters are often charged with noxious animalcules or polluted by unclean animals. As bearing on this point, he cites the ravages caused in Cochinchina by a microscopic eel, which produces a persistent endemic diarrhoea. These animals have a faculty of multiplication in the human intestine, that is illustrated by the fact that a single patient is said to have evacuated more than a hundred thousand of them within twenty-four hours! The simplest prudence should suggest the expediency of boiling the drinking-water wherever they abound.

**ORIGIN OF THANKSGIVING DAY.**—The story is told that in a time of great despondency among the first settlers of New England it was proposed in one of their public assemblies to proclaim a fast. An old farmer arose and spoke of their provoking heaven with their

complaints; he reviewed their mercies—showed they had much to be thankful for, and moved that instead of appointing a day of fasting, they should appoint a day of thanksgiving. The incident teaches that true piety in all circumstances finds something to be thankful for. The old farmer acted upon the theory that our Heavenly Father does not take pleasure in seeing his children suffer, and that we cannot please Him by starving ourselves. "Ye are my friends if ye do whatsoever I command you." This custom of proclaiming a public thanksgiving day continued a New England custom, at first at irregular intervals, afterwards annually till 1862, when President Lincoln proclaimed a national thanksgiving day. Since that it has been observed annually; but not until within a comparatively few years has the day been generally observed outside of New England. In the East this is the day of all the year for family reunions and neighborly meetings and greetings. The custom is a beautiful one, and should be universally observed. The fourth Thursday in November should be one of the brightest days of the year.

**SLEEP.**—There is no fact more clearly established in the physiology of man than this, that the brain expends its energies and itself during the hours of wakefulness, and that these are recuperated during sleep; if the recuperation does not equal the expenditure, the brain withers; this is insanity. Thus it is that in early English history, persons who were condemned to death by being prevented from sleeping, always died raving maniacs; thus it is also that those who are starved to death become insane; the brain is not nourished and they cannot sleep. The practical inferences are three:—Those who think most, who do the most work, require the most sleep; that time "saved" from necessary sleep is infallibly destructive to mind, body, and estate. Give yourself, your children, your servants, give all who are under you the fullest amount of sleep they will take by compelling them to go to bed at some regular early hour, and to rise in the morning the moment they awake of themselves, and within a fortnight, nature, with almost the regularity of the rising sun, will unloose the bonds of sleep the moment enough repose has been secured for the wants of the system. This is the only safe and sufficient rule, and as to the question how much sleep any one requires, each must be a rule for himself; great nature will never fail to write it out to the observer, under the regulations just given.

**BANK OF ENGLAND NOTES.**—Bank of England notes are made from pure white linen cuttings only, never from rags that have been worn. So carefully is the paper prepared that even the number of dips into the pulp made by each individual workman is registered on a dial by machinery, and the sheets are carefully counted and booked to each person through whose hands they pass. The printing is done by a most curious process within the bank building. There is an elaborate arrangement for securing that no notes shall be exactly like any other in existence; consequently there never has been a duplicate bank note except by forgery. The stock of paid notes for seven years is said to amount to 94,000,000 and to fill 10,000 boxes, which, if placed side by side, would cover over three miles in extent.—Stationer and Printer.

**IN JAPAN** the spiders are so numerous that their webs form the chief draw-back to telegraphy by grounding the electric current. The trees literally swarm with spiders, and they spin their webs everywhere between the earth, wires, posts, and insulators. When these lines are covered with heavy dews, they become good conductors, and run the messages "into the ground." The telegraph company are obliged to employ men to sweep the wires with bamboo brushes, but the spiders are so numerous, and such indefatigable workers, that the men with their brushes cannot always keep the wires in good condition for the transmission of messages.

**THE BLUE SKY.**—M. Chappius thinks that the blue of the sky may be due to ozone present in the upper regions of the air. He argues that the electrical discharges constantly taking place will produce ozone; and the researches of himself and M. Hautefeuille have shown that ozone, at any rate when near its condensation point, is of a blue tint. He has examined the absorption spectrum of ozone and finds nine dark bands in it, three at least of which correspond with known bands in the telluric spectrum.