Primary Education in England—The statistical Blue-book lately published by the British Board of Trade exhibits in a tabular form the present state of primary education in Great Britain. From this table we learn that the number of schools inspected has increased from 3,825 in 1854 to 8,753 in 1866, the number of children who can be accommodated from 588,000 to 1,724,000, the average number of children in attendance from 461,000 to 1,082,000, and the number of children present at inspection from 473,000 to 1,287,000.

There are also a large number of schools throughout the kingdom which do not receive Government assistance and are not visited by the inspectors. The number of children in such schools is probably less than that in the schools of the other class.

From the same source we learn that the expenditure by the state for public education has increased from £189,000 in 1852 to £813,000 in 1861. In 1863 the grants under the Revised Code commenced, and amounted to £83,000 out of a total expenditure of £721,000. In 1866 the grants under the Revised Code had advanced to £402,000, out of a total expenditure of £649,000.

Since 1852 the population of Great Britain has increased by two and a half millions. The total population is more than twenty-four and a half millions. It will be readily seen that the appliances for educating the young Britons are inadequate, that they have not increased in the ratio of the increase of population, and that Mr Fawcett and his friends are quite right in agitating for a more efficient school system.

SCIENTIFIC INTELLIGENCE.

The Motor Clock of Greenwich Observatory.—The following passages occur in the report to the visitors: "This clock is compared and verified by an easy practical process. It maintains various clocks in sympathy with itself, it regulates clocks in London, sends signals through Britain, drops the Deal time-ball, fires guns at Newcastle and Shields (I think also at Sunderland), and puts communications in such a state that we can receive automatic reports from the signal-places as we may desire. I may, however, specially mention that daily signals are now sent to some places in Ireland; and that, during the expedition of the Great Eastern for laying down the Atlantic cable, time signals were sent on board twice a day, to enable her constantly to determine her longitude."

The Astronomer Royal reports that on 38 per cent of the days of observation, the error of the Houses of Parliament clock was below 1″; on 38 per cent., of days of observation, between 1″ and 2″; on 21 per cent., between 2″ and 3″; on 2 per cent, between 3″ and 4″; on 1 per cent., between 4″ and 5″.

STATISTICAL.

Lake Superior Iron Mines.—The total product of the Lake Superior iron mines last year was 306,252 tons of ore. The reasons for the exceedingly rapid development of these mines since the year 1855 when the shipments of ore were 1,445 tons—are many and obvious. The deposits are immense, easily worked, and nearly free from those noxious elements which render the flux of most iron or ores difficult and expensive. None of the mines, moreover, are over thirty-five miles from cheap water transportation, while most of them are only fifteen or sixteen miles distant.

Minerals in Mexico.—In Mexico there exist 187 different kinds of minerals, among which are gold, silver, iron, copper, lead, zinc, mercury, tin, etc.

Borax.—A California paper says that the company engaged in taking out borax in Lake county, will soon be in condition to extract five tons of this article per day from the Borax Lake.

Pensylvania Coal.—It is calculated that Pensylvania contains coal enough to supply 20,000,000 tons annually for the next 650 years.

Marmora iron.—The Marmora iron mines in Canada, forty miles from Lake Ontario, have been purchased by Philadelphia capitalists. The purchase covers 23,000 acres, also the Cobourg and Peterboro railway. Ore from this mine has yielded from sixty to seventy per cent. of fine iron.

MEMORANDA.

Bromide of Potassium in Epilepsy.—M. Namias states in Comptes Rendus that bromide of Potassium, beginning with one gramme taken during the day in three doses, and increasing it to several grammes in twenty-four hours, diminishes the violence and the number of attacks.

Opthalmic use of Sulphate of Soda.—M. D. de Lucea states (Comptes Rendus) that the powder of crystalized sulphate of soda dropped in small quantities on the cornea, and allowed to dissolved in the fluids of that organ will, in the course of time remove opaque spots.

Disinfectants.—Mr. Crookes, says the *Medical Times*, has shown that the favorite disinfectant, chloride of lime, is about the least efficient of any of those substances reputed to possess disinfectant qualities. Chlorine itself is very little better, for if used in large enough quantities it will in time destroy the virus, but as it acts by way of oxydation, and as living virus resists this longer than dead oxydizable matter, before the gas can attack a virus everything else that it can oxydize will be oxydized first.

And if when pure, chlorine is so slow of acting when adulterated with eighty per cent of lime, its value is proportionately less In sulphrous and carbolic acid, on the other hand, there are substances absolutely destructive of every kind of living thing of low organization, such as cattle plague virus is supposed to be. These substances, besides destroying the virus, attack it at once, and arrest all putrefying tendency.

Engraving upon Glass.—The engraver is often at a loss for utensils to hold his acid, but Stalba mentions that ordinary glass and porcelain vessels are protected from the action of the acid by paraffine. A thin coating of this material is easily given to a vessel by first of all carefully drying it, and then melting some paraffine in it, taking care to get the vessel rather hot; it must then be rapidly moved about to get the whole of the inner surface evenly covered, and the excess of the paraffine may then be poured out.

Vessels prepared in this way may be substituted for those of lead and gutta-percha.

How to stop the Flow of Blood.—It is not generally known that the blood, even from severe cuts, may be staunched by binding on the wound the fine dust of tea. After the flow has been staunched, laudanum may be applied with advantage.

MISCELLANEOUS INTELLIGENCE.

The Way to Health.—The only true way to health is that which common sense dictates to man. Live within the bounds of reason. Eat moderately, drink temperately, sleep regularly, avoid excess in anything, and preserve a conscience "void of offence" Some men eat themselves to death, some drink themselves to death, some wear out their lives by indolence, and some by over exertion, others are killed by the doctors, while not a few sink into the grave under the effects of vicious and beastly practices. All the medicines in creation are not worth a farthing to a man who is constantly and habitually violating the laws of his own nature. All the the medical science in the world cannot save him from a premature grave. With a suicidal course of conduct, he is planting the seeds of decay in his own constitution, and accelerating the destruction of his own life.—*Scientific American*.

Causes of Acute Bronchitis.—In our climate, both forms of the disease are very commom. The essential feature of the disease consists in an inflammation of the bronchial tubes, and is commonly produced by cold and moisture, applied generally or locally, as by means of damp clothing, or exposure to a cold, moist, variable atmosphere, especially, after the body has been overheated by exercise or crowded rooms, or the inhalation of metallic dust or gases. Dr. Charles T. Jackson, the distinguished chemist of Boston, nearly lost his life on one occasion by an attack of acute bronchitis, caused by the sudden inhalation of chlorine gas Ipecac, in powder, when inhaled by some individuals, will cause bronchitis. The dust of newly cut hay, and the pollen of the rag weed, in some persons will produce the same effect; also the flowering of roses, and the inhalation of dust, exhaled from the foliage of growing plants and trees. Hooping cough is no doubt a certain form of bronchitis, induced by a specific morbid poison directly on the bronchial mucous membrane.

A very severe form of bronchitis often accompanies some of the eruptive fevers, measles, scarlatina, and small-pox, constituting a most dangerous and sometimes fatal complication. In measles, the recession of eruption is frequently followed by a great increase in the bronchial disorder, which is announced by the great increase of cough, and sudden oppressive dyspnœa. From the suddenness of the production and disappearance of the latter symptoms, which is occasionally observed in the cases, it has been suggested, that it is possible they may be rather congestive, than inflammatory, although if the congestion continue, bronchitis is the final result.

There are also many chronic diseases which may be said to favor the developement of acute bronchitis, these are Bright's disease of the kidneys and diseases of the heart and lungs. It often occurs during the progress of pulmonary tuberculosis, and sometimes proves very fatal to the patient.—*Med. & Surg. Rep.*

Artificial Digestion.—A London physician, Dr. Marcet, has announced a process by which natural digestion is simulated by artificial means, and solid food may thereby be prepared for invalids. Dr. Marcet takes fifty-eight grains of muriatic acid having a specific gravity of 1-1496; fifteen grains of pepsine—the organic principle procured from the stomach of a pig or other animal. Diluted in a pint of wate and added to a pound of raw meat, the whole is allowed to simmer over a water bath, at about the temperature of the body, 98° F. When the meat is by this means sufficiently broken up, it is strained and the acid neutralized by eighty-one grains of bicarbonate of soda. The product is of a most agreable character, easily digested and vastly more nutritious than beef tea. Where pepsine cannot be obtained, the doctor has found strips of calves stomachs to answer very well.

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