

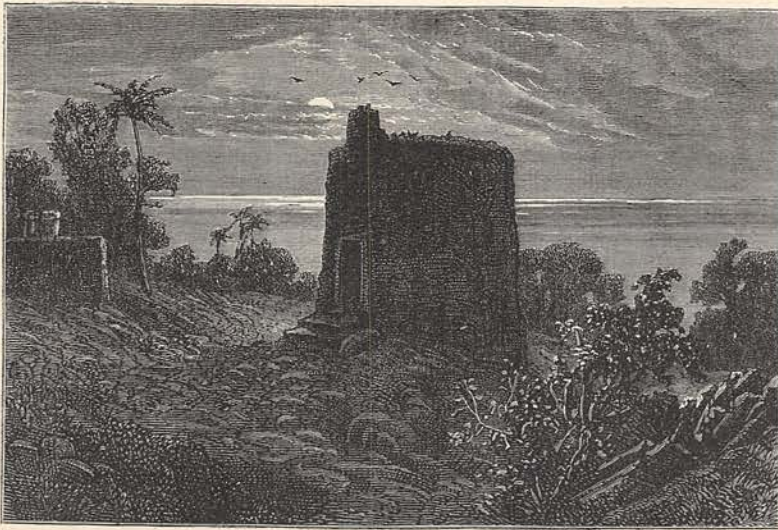
THE GATHERER.

The Towers of Silence.

The Towers of Silence lie at the end of the Parsee's earthly pilgrimage. When a Parsee dies, his body is exposed in one of these singular structures, that the decaying particles may be dissipated as quickly as possible, and "in such a way," says one of themselves, "that neither Mother Earth nor the beings she supports shall be contaminated in the slightest degree."

The Parsees, as most readers are doubtless aware, are descendants of the ancient Persians, who were expelled from Persia by the Mohammedan conquerors, and who first settled at Surat about 1,100 years ago. According to the last census they do not number more than 70,000

At a funeral, after the recital of prayers and some other ceremonies, the corpse is placed in the interior of the tower chosen, and abandoned to the destructive agencies of nature and the insatiable birds. At the end of a fortnight, or at most four weeks, the corpse-bearers—who form a distinct class among the Parsees, and live apart from the rest of the community—return, and with gloved hands, and implements resembling tongs, place the dry skeleton in a well in the centre of the building. Rich and poor all lie together. "In these five towers," says the Secretary of the Parsee Punchàyal, "rest the bones of all the Parsees that have lived in Bombay for the last two hundred years.



TOWER OF SILENCE, BOMBAY.

souls, of whom 50,000 are found in the city of Bombay, the rest being scattered throughout different parts of India, but chiefly residing in Guzerat and the Bombay Presidency. They are a small but most important and influential body of men, noted for their energy, enterprise, and opulence. The most curious feature of their religion is its apparent worship of fire and the other elements, regarded by them as visible representations of the Deity.

Nothing similar to their funeral rites exists among other nations. The Towers of Silence—one of which is shown in our engraving—stand in a garden on the highest point of Malabar Hill, in the neighbourhood of Bombay. It is a beautiful spot, a place of silence and peaceful rest. There are five towers in all. A sixth structure stands apart; it is square in shape—not round like the others—and is only used for members of the community who have suffered death for heinous crimes. On the parapet of each tower usually sit a troop of vultures, lazy and motionless, unless when a funeral is seen approaching—then they show signs of great excitement.

We form a united body in life, and we are united in death."

In Praise of Watercress.

This has long been a favourite vegetable, especially in the metropolis, where "tea and watercresses" is pretty sure to form an agreeable episode in a Londoner's innocent holiday. The watercress has in nature a double part to play; it is both food and medicine. An analysis lately made by the President of the French Academy of Medicine, shows that it contains a sulpho-nitrogenous essential oil; a bitter extract; iodine; iron; phosphates; water, and other constituents. As medicine the watercress has been praised for its efficacy in all cases where the digestive organs are weak, and in several serious complaints. It appears that the medicinal principles of the plant are more or less abundant according to its culture and maturity. When it is in flower they are present in greater quantity than in its flowerless condition. The essential oil, also, increases according to the quantity of the sun's rays which the cress receives. The

proper culture of the plant develops in it the bitter and tonic principles, and the phosphates are found in proportion to the manure employed. The quantity of iron depends upon the richness of the water in which it is planted. As food, watercresses should be used in their green or uncooked state, in the form of salad or without any seasoning.

Safe Travelling on Railways.

To travellers by rail, the words "block system" sound like a talisman of safety. A vague idea is abroad that if these words represent the management of any particular line, nothing can possibly go wrong. And what is the block system? Here it is, as nearly as can be:—

A railway line is divided into a number of sections; the length of these being regulated by local requirements. The rule is then laid down that when a train has entered one of them a signal closes, so to speak, behind it, and does not re-open till the train has passed out of the section at its other extremity. Suppose three successive sections, A, B, and C, each a mile long; a train going from A to C would cause section A to be blocked until the train had entered upon section B. Whenever, then, the train passed over the boundary between A and B, section A would be thrown open to the following train. Section B, however, would remain blocked till the first train had passed into section C. The first train might chance to break down in section B; in that case section B would remain blocked, and any train in the rear would remain in section A, thus avoiding all risk of the first train being run into. When the block system works properly, it renders collisions impossible, because it preserves a definite interval of space between successive trains, no matter what their respective rates of speed. The signals by day are semaphore arms; by night, lamps, contrived to show red lights as block signals, green as caution signals, and white when the way is clear.

In spite of all appliances, however—or rather, perhaps, through neglect of the best appliances—railway accidents in the United Kingdom exhibit a steady tendency to increase. In 1872 the number of persons killed and injured was 4,083, in 1873 it was 4,482, in 1874 it rose to 6,465, and last year it reached 7,045. Of the 7,045 in 1875, 1,290 were killed and 5,755 injured. These are formidable figures, and on the whole we seem to pay a pretty high price for the convenience of railway travelling.

Carriages, Tickets, and Stations.

One is not always inclined to run and read, and may sometimes be allowed to run and think. This is why railway travellers' brains have ever been fertile in happy thoughts and sensible suggestions. We have already been speaking of a railway subject, and may as well dispose here of some kindred matters. And, first, there is a plan we should like to see generally adopted; it would be very convenient for those who go by rail. In place of having all carriages painted alike, or nearly alike, might they not, it has been said, be painted different colours, according to the different classes

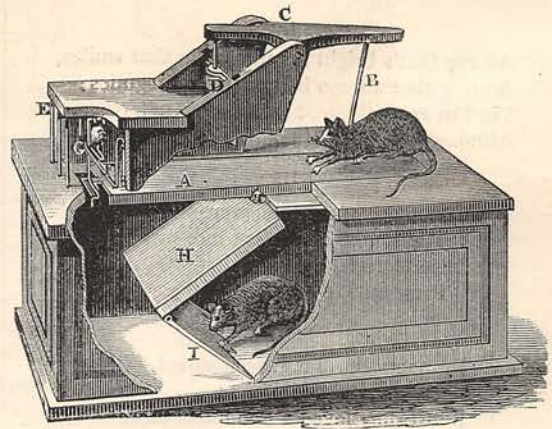
—say first-class, yellow; second, blue; and third, red? The tickets could correspond in colour, and in this way passengers would have no difficulty, either at a terminus or after having stopped for refreshments, in finding their proper places. One line, we understand, has already done this—painting the carriages yellow, brown, and blue—and all might profitably follow the example. Trains painted in this way would present a fine, gay, holiday appearance.

Next, might not tickets have the name of the stations at which passengers must change, printed upon them? This would not only be doing a friendly turn to passengers, but to railway servants, who, as things stand at present, are continually interrupted by anxious inquirers. The price of the ticket might also be added.

Another good plan would be to hang up in each carriage a list of the stations the train passes or stops at; and if railway managers were only thoroughly imbued with the educational spirit of the age, they would add a map of the route as well. Thus they would make a journey, not only a matter of conveyance from place to place, but an intellectual process—a lesson if need be in the geography of one's native land.

An Ingenious Mouse-Trap.

The mouse-trap of primitive times was nothing but a plate, a bowl, and a thimble. Nineteenth-century civilisation makes use of a more elaborate article. We show here a novel self-setting apparatus, entirely automatic in its action, and which, it is said, will continue working till the box is filled with unhappy prisoners.



A is a metallic plate, having flanged edges through which it is pivoted by a central pin. At the front end of the plate is a rod, B, connected with a vibrating lever, C, to which a gate, D, is suspended. The inner end of the plate is enclosed in the box, a portion of which supports the lever, C, as shown. The extremity of the box, E, is open and wired: it is thought that the animal being able clearly to see the bait, and the light beyond, will have its suspicions disarmed, and feel quite at home. The bait is attached to a curved rod, F, fastened to the side of the box. This

rod is bent round a catch-rod, G, which engages with the extremity of the plate, A, and supports the same.

Attracted by the bait, and thinking the trap a veritable manufactory of toasted cheese, the mouse proceeds to the rear end of the plate. Foolish and perhaps hungry mouse! The moment the bait is touched, a very slight movement suffices to throw the portion of the catch, G, which sustains the plate, into a notch in the latter, so that the end of the plate is free to descend by the weight of the animal. As this descent takes place, the opposite end of the plate rising moves the lever, C, so as to cause the gate, D, to be lowered, thus preventing any backward escape. The mouse then slides down the smooth surface of the plate—the inclination of which is limited by the piece H—and is launched into the rear compartment of this house of misfortune. The poor mouse is in the Black Hole now, and has seen his last of the pleasant world. The plate, A, meanwhile regains its natural position, the bait and catch-rod slip into place, and the trap is ready for a new victim. The apparatus, we may add, can not only be used for mice, but for any other small animals which are to be allured by bait.

Double Acrostic.

Without my first my whole had never been ;
Wheels, rollers, rags, and spirit gave me life ;
My last in dress of calico is seen,
Or else with warlike properties is rife.
Few do more service than myself, although
Hundreds of small attendants on me wait,
And though I'm welcomed everywhere I go,
Still to have many cuts is e'er my fate.

I.

An eye that's bright is mine, a lip that smiles,
A voice that always listening ears beguiles ;
Yet I'm an antidote, and as some tell,
Although no "bee," inclining to a "spell."

II.

The sister of a famous queen
Mentioned in ancient lore was I ;
In modern lore a gift I had
Presented, ere its leaves were dry.

III.

By poets I'm a monarch called,
To sportsmen I am dear,
But if they loved a good deal more
I should have less to fear.

IV.

My blossoms of pure ivory-white,
In early summer, cause delight.

V.

Rough Esau's son. My greater namesake sought
To comfort one in dire affliction brought.

VI.

A stone am I, some people prize,
And in a brooch they place it ;

A ray of me
You'll clearly see
In sunny skies,
Or in some eyes
May trace it.

VII.

Though people love to tread me 'neath their feet,
Bishops without me would not be complete.

VIII.

A river, and by force of sound,
Quite the reverse of mad I'm found.

J. G.

KEY TO HIDDEN LINES ON PAGE 383.

"For where is any author in the world,
Teaches such beauty as a woman's eye?"
Love's Labour's Lost, act iv., scene 3.

Economy for Bakers.

When bread is made on a large scale—to feed an army, for example—a serious loss may be sustained by not adopting the most economical process. The military authorities of France have just determined that in the baking department, at least, under their care, no one will be able to accuse them of extravagance, and the Minister of War has lately approved a new method of making bread, invented by an engineer, M. Cecil, and arranged for its adoption.

M. Cecil has observed that in the grinding and wetting processes employed in the manufacture of flour, about twenty per cent. of the nutritive properties of the grain is lost. He has therefore planned to do away with the miller's occupation altogether, and to make bread in the following manner:—

Take the unground grain and steep in water ; then place it in two revolving cylinders so as to deprive it of its outer husk, which contains only four or five per cent. of nutriment. Next soften the grain and form it into a thin sponge, which must be kept for from six to eight hours at a temperature of 77° Fahrenheit. Last of all, crush it under rollers, and make it into dough with salt and water as usual.

Suppose one is making bread wholesale, and with a certain quantity of grain turning out by the ordinary process 7,000 pounds of bread at a time. By this new method it is confidently affirmed that the same quantity of grain would produce no less than 8,750 pounds. Bakers in a humbler way might also find it worth their while to consider M. Cecil's process and see whether, by lowering the price of bread still farther, they could not rejoice the hearts of all thrifty people.

How to Check Habitual Intemperance.

The following is a preparation which, acting as a tonic and stimulant, may be prescribed as a substitute for the accustomed dram. It should be taken at the times and in the quantities in which the drams were usually drunk (say twice a day):—Mix four grains of sulphate of iron, one drachm of spirit of nutmeg, and eleven drachms of peppermint water.

At a Russian Dinner-Table.

Russia presents to the traveller no institution more worthy of critical study than its dinners. Underlying the repast one sees the delight which the inhabitants of that country, in common with all Northern races, take in raw food and startling contrasts. By way of introduction you have a long list of relishes which are to be washed down with strong liqueurs. You may take caviar, raw herring, raw smoked salmon, raw dried sturgeon, raw smoked goose, cheese, butter, or radishes. Then follows cold iced soup of "kvas"—a beverage made of fermented rye. In this soup float pieces of herring, cucumber, and meat. Or you may choose another cold soup of a green colour, or fish soup, or "stchi," a cabbage soup eaten with sour cream. The next course is fish, and you will do well to select either Rastigai patties, strongly resembling muffins with fish, or a dish composed of fish and cabbage, which goes under the name of "sòlianka." Then comes "póròsionok pod khrenòm," or cold boiled sucking-pig with horse-radish sauce. After this the diner-out is recommended to try chicken or veal cutlets and roast mutton stuffed with buckwheat, and to pass on to "capercailzie," "riabchick" (a kind of grouse), or double snipe, with a salad composed of salted cucumbers, and various sweet dishes, including Nesselrode pudding in the land of its birth. The demands of digestion may now require a return to cheese and caviar. During the meal you ought to be drinking the wines of the Crimea, the Caucasus, or Don; "but," says one authority, "you will not find it easy to get them unless you pay for them under the names of Bordeaux, Burgundy, or Champagne." It is better to try cider, perry, or raspberry kvas, or the cool Lompopo. The repast is wound up by coffee, yellow tea, liqueurs, and cigarettes, and one may then turn one's steps homewards, meditating on the peculiar nature of a Russian banquet.

Street Passengers, Beware!

In the year 1875 no fewer than 231 men, women, and children died of injuries by horses and vehicles in the streets of London. This is the highest number ever recorded in a single year. The number injured reported to the police was 2,926. But besides horses and vehicles, another source of danger has to be encountered, and not only in the metropolis, but in all large towns—namely, the telegraph wires, which are carried now-a-days over our house-tops. Some years ago a telegraph wire during a gale of wind fell across an omnibus, pulled a passenger off, and killed him. And quite recently an unfortunate man was decapitated in the streets of London by a wire, in similarly boisterous weather. Sir John Hawkshaw points out that such accidents do not need a gale to produce them, for galvanised wire does not last longer than twelve years in a smoky atmosphere: at the end of that time, if not carefully looked to, it will probably fall and kill or maim those who are beneath it. This being the case, it is to be hoped that an exclusively underground system of telegraphs for

towns will soon be adopted. There is no need for human life being imperilled by telegraph wires, which might much more safely and economically be buried alongside our gas and water pipes. From the picturesque point of view the change would also be an improvement, for telegraph wires on house-tops are far from sightly.

Impressions from Stones.

Sometimes, in journeying about the country, we come upon a curious old stone, of the inscription upon which, from sentimental or other motives, we would like to take an exact copy. In anticipation of such occasions let us store up in our minds the following method of taking impressions from stones:—Clean the surface of the stone with a soft dry brush, then lay upon it a sheet of thick paper—such as thick blotting-paper—previously damped. Then tap the paper with a slightly-wetted brush—a common hat-brush will do very well—the paper being held firmly at the corners, till it gradually sinks into the inundations on the stone. If the paper cracks, lay on other layers. In this way a perfect impression will be obtained, but, of course, reversed.

The Pulse in Health and Disease.

When a medical man takes us by the wrist and feels our pulse, he consults an oracle of which we are the better of knowing something. The average pulse of a healthy man in the prime of life beats about seventy-two times a minute; but this rate is disturbed by various causes, such as the time of meals, physical exercise, mental emotion, and external temperature. The following is a table of the average number of pulsations per minute at different ages:—

Age.	Pulsations.	Age.	Pulsations.
Birth	... 136	20—25 years	... 69
5 years	... 88	25—30 "	... 71
10—15 years	... 78	30—50 "	... 70
15—20 "	... 69		

It is generally thought that the pulse of the aged is slower than that of the young, but the contrary is the case. The frequency of the pulse, however, it is to be added, is of far less importance in the eyes of a medical man than its rhythm or tone; "whether it be full and bounding, or jerking, or soft, or wiry, or compressible, or feeble, or remittent, or intermittent, all these and other varieties of pulse convey impressions to a doctor's mind."

In setting down this information we do not mean to suggest—as was lately done by a contemporary—that pulse-feeling should be tried by all and sundry. The pulse is a guide which it requires much education, and no little practical experience, fully to take advantage of. "To feel a pulse properly," says a medical authority, "and to gather from the feeling any real, definite, trustworthy information, requires more practical knowledge than unprofessional persons can possess." At the same time, there are some to whom a knowledge of the above general facts may not come amiss.