THE THERMOMETER.

It Was Invented by a Poor Man Who Had Failed as a Merchant.

There is one little instrument in which the interest of all classes of people in this country never diminishes through all the changing seasons of the year, from the first day of January to the last day of December. It regulates the business pulse of the nation and is the shrine to which men of all occupations turn. And this little instrument is the thermometer, which bears the name of Fahrenheit.

Before the seventeenth century men could only judge of the amount of heat prevailing at any place by their personal sensations and could only speak of the weather in a very indefinite way as hot or very hot, cold or very cold. In that century several attempts were made by scientific experimenters by means of tubes containing oil, spirits of wine and other substances to establish a satisfactory means of measuring heat, but none of them proved successful. Even Sir Isaac Newton, who applied his great mind to this work, and also the noted astronomer, Halley, failed in their attempts to produce a heat measure.

It was reserved to Gabriel Daniel Fahrenheit, an obscure and poor man, a native of Dantzig, to give to the world the instrument which has proved to be so serviceable to mankind. He had failed in business as a merchant and, having a taste for mechanics and chemistry, began a series of experiments for the production of thermometers. At first he made these instruments with alcohol, but soon became convinced that the semisolid mercury was a more suitable article to use in the glass tube.

Fahrenheit had removed from Dantzig to Amsterdam, and there about the year 1720 he made the mercury thermometer which has ever since been fashioned much like the original.

The basis of his plan was to mark on the tube the two points respectively at which water is congealed and boiled and to graduate the space between. He began with an arbitrary marking, beginning with 32 degrees, because he found that the mercury descended 32 degrees more before coming to what he thought the extreme cold resulting from a mixture of ice, water and sal ammoniac. In 1724 he published a distinct treatise on the subject of his experiments and the conclusions that had resulted therefrom.

Celsius of Stockholm soon after suggested the more rational graduation of a hundred degrees between freezing and boiling point. This was the centigrade thermometer. Reaumur proposed another graduation which has been accepted by the French, but by far the largest part of the civilized world Fahrenheit's scale has been accepted and used, with 32 degrees as freezing, 55 degrees as temperate, 96 degrees as blood heat and 212 degrees as boiling point.

It is true that the zero of Fahrenheit's scale is a solecism since it does not mark the extreme to which heat can be abstracted. This little blemish, however, does not seem to have been of any practical consequence.

Arctic explorers have persisted in describing temperatures below the zero of Fahrenheit, and scientists have produced artificially temperatures far below any ever dreamed of by the thermometer maker of Amsterdam. There is doubt as to the year of the death of Fahrenheit, but it is generally placed in 1740.—Los Angeles Times.

Sun Power.

There is one source to which all minds revert when this question is mentioned, a source most promising and yet one which has so far eluded the investigator. The sun on a clear day delivers upon each square yard of the earth's surface the equivalent of approximately two horsepower of mechanical energy working continuously. If even a fraction of this power could be transformed into mechanical or electrical energy and stored it would do the world's work. Here is power delivered at our very doors without cost. How to store the energy so generously furnished and keep it on tap for future use is the problem. That the next half century will see some solution thereof, either chemical or otherwise, seems likely.—H. S. Pritchett in Atlantic.

Victoria and Lady Millais.

It is related that when Sir John Millais fell ill Queen Victoria sent the Princess Louise to the dying man to inquire what favor she could accord him that could alleviate his sorrow if not his pain. Sir John thereupon called for his writing tablet and inscribed upon it the words, "I should like the queen to see my wife." Then the queen broke through her iron rule not to receive any woman whose marriage tie had been once dissolved, whether there be blame or not, graciously acceded to the request and accorded the sorely tried lady a tender and sympathetic interview.—St. James' Gazette.

Ambitions.

The toiler in the city had been given an advance in salary. "Now," he said jubilantly, "I can begin saving to buy a farm."

The agriculturist looked at the check received for his season's wheat. "Another such crop or two and I can move into the city," he mused.—Philadelphia Ledger.

Light Work.

"Want a job, Rastus?"

"No, sah; no, sah. Done got a job, sah."

"Indeed! What are you doing?"

"Takin' in washin' foah ma wife to do, sah."—Lippincott's.

Grieving for the lost opportunity is the very worst way to find new ones.—Baltimore American.

DECAY OF STONE.

Even the Densest Siliceous Rocks Succumb to Time.

Whoever expects to find a stone that will stand from century to century, deriding alike the frigid rains and scorching solar rays, without need of reparation will indeed search for "the philosopher's stone." There is scarcely a substance which after having been exposed to the action of the atmosphere for a considerable time does not exhibit proofs of weathering. It may even be observed on the most densely compacted siliceous rocks. The fullest extent of this inquiry can only be to elucidate relative duration and comparative labor of appropriation to useful or ornamental purposes.

By examining the various productions of nature we find evident proofs of her industry in all ages. Changes have been going on from the remotest antiquity to the present time on every substance that comes within our observation. All the actual combinations of matter have had a former existence in some other state. Nothing exists in nature but what is likely to change its condition and manner of being. No material is so durable as always to retain its present appearance, for the most solid and compact bodies have not such a degree of impenetrability and so close a union of the parts which compose them as to be exempted from ultimate dissolution.

Even in the great globe which we inhabit nothing is more evident to geologists than a perpetual series of alterations. There can be discovered no vestige of a beginning, no prospect of an end. In some bodies these changes are not so frequent and remarkable as in others, though equally certain at a more distant period. The venerable remains of Egyptian splendor, many of them executed in the hardest granite, exhibit large portions of exfoliation and gradual decay, thereby following the primitive, immutable and universal order of causes and effects—namely, that all objects possess the materials of which they are composed only for a limited time, during which some powerful agent effects their decomposition and sets the elementary particles at liberty again to form other equally perfect combinations. Thus by divine and unerring laws order is restored amid apparent confusion.—Exchange.

EAST INDIAN SERVANTS.

An Amusing Complication Over a Dose of Medicine.

The experiences of an English householder in India are often amusing. An instance of one of the amusing experiences is given.

The old gray bearded butler announced at luncheon one day that the dishwasher was ill with fever, but that if I would give him some medicine he would soon be able to resume his work. I happened to have none by me, but the matter was urgent, clean dishes being important.

"Can he go to the chemist's, do you think, for some physic if I give him a letter?" I asked. "I don't know what to write for."

"Oh, yes," he said; "he is quite able to go that short distance."

I thought that was much the best way, and then the chemist could give him what was proper. So I wrote: "Please give the bearer a dose of medicine. He says he has fever."

I forgot to inquire about him till two days after.

"How is the dishwasher?" I said.

"He is much better, your honor."

"Ah, then he took the physic?"

"No, your highness. The bazaar cooly took the physic."

"The bazaar cooly!" I exclaimed. "What for?"

"The dishwasher said: 'Cooly goes errands. He may fetch me the physic.' So the cooly took the letter. Shop master prepared physic, then told bazaar cooly to drink it. Cooly said: 'Not for me is the medicine, but for another man. I take it to him.' 'Not so,' said the shop master. 'The mistress has written, "Give to bearer," and she means you must drink it here.' Many times the cooly said he was not the man, but they would not listen, and they made him drink it."—Exchange.

True.

"It isn't true, is it," asked Rollo as he finished reading "The Pied Piper of Hamelin"—"it isn't true that he could play on his pipe so that the rats would go off and drown themselves?"

"Well," replied Rollo's father, "I don't know about that. I think it may be true. Your Uncle George can play the flute so that it will scare a cow into a river and drive all the dogs in the neighborhood crazy. Yes, I should say the poem is true."—London Answers.

The Obsolescent Honeymoon.

Honeymoons are going out of fashion and will probably eventually disappear. At present they are often shortened to four or five days or even a paltry week end. Marriage is getting to be looked upon in a more matter of fact way, and it is no doubt well that the romantic girl should not expect absolutely unreachable things of wedded bliss.—London Bystander.

A Good Excuse.

"Now, then," demanded Luschman's wife the next morning, "what's your excuse for coming home in that condition last night?"

"Well, to tell you the truth, m' dear," he replied, "none of the hotels would take me in."—Philadelphia Press.

Of High Degree.

"What kind of a dog have you got there, my boy?"

"Dat's a mouse hound, mister."—Judge.

THE GREATEST WEDDING.

Over Twenty Thousand Persons Were Married by One Ceremony.

The biggest wedding ever known to history was when Alexander the Great and over 10,000 of his soldiers took part in a wedding in the court of Darius, king of Persia, after the latter's conquest by Alexander. Twenty thousand two hundred and two persons were made husbands and wives in one ceremony.

The facts are these: After conquering King Darius, Alexander determined to wed Statira, daughter of the conquered king, and issued a decree that on that occasion 100 of his chief officers should marry 100 women from the noblest Persian and Medean families. He further stipulated that 10,000 of his Greek soldiers should take to wife 10,000 Asiatic women.

For this purpose a vast pavilion was erected, the pillars being sixty feet high. One hundred gorgeous chambers adjoined this for the 100 noble bridegrooms, while for the 10,000 soldiers an outer court was inclosed. Outside of this tables were spread for the multitude.

Each pair had seats and ranged themselves in a semicircle round the royal throne. As it would have taken several weeks for the few priests to have married this vast number of couples had the ceremony been performed in the ordinary way, Alexander invented a simple way out of the difficulty. He gave his hand to Statira and kissed her, and all the remaining bridegrooms did the same to the women beside them, and thus ended the ceremony that united the greatest number of people at one time ever known.

Then occurred a five days' festival which for grandeur and magnificence never has since been equaled.

MAN AND HIS HORSE.

The Way to Show Approval That the Animal Will Appreciate.

Caress plays no small part in developing the best in any horse, but this is never to be by word of mouth. You may as well curse as bless for all your horse knows or cares. The caress of the hand addressed to the part with which the animal has just performed some feat is always appreciated—the expression shows that—and one loves to see a good man as he lands safe over a big place just reach back and give the clever horse a loving pat or two on that swelling muscular loin which has been the chief agent in negotiating the obstruction.

Do not pat neck or shoulder or any part not actively engaged in the undertaking. Caress may do no good, but it is pleasant to believe that it does, and we are quite positive that the voice simply diverts attention. The former mode of address is at least worthy of trial if only as a mark of appreciation between two gentlemen. The threatening tones appear sometimes serviceable, but this is so only when horses have been abused and associate punishment with the stern voice. The wild horse is as indifferent to the voice of affection as to that of rage.—From "Schooling the Hunter," by Frank M. Ware in Outing Magazine.

Drowned Manuscript.

James Russell Lowell, the first editor of the Atlantic, was walking across Cambridge bridge when his hat blew off and fell into the Charles with half a dozen or more manuscripts with which it was freighted and which he was returning to the Boston office. A boatman recovered the hat, but the scattered manuscripts perished in those waves of oblivion. "If they had been accepted articles, it wouldn't have been quite so bad, for," said he, "we might with some grace ask the writers for fresh copies. But how can you tell a self respecting contributor that his manuscript has been not only rejected, but sent to a watery grave?"—J. T. Trowbridge in Atlantic.

A Domestic Breakdown.

A well known lord discovered a thief in his London house. Aided by the butler, he secured the man and then rang the bell. A servant appeared, whom the peer requested to "go into the kitchen and bring up a policeman or two." The domestic returned and said there were no policemen on the premises. "What!" exclaimed his master in incredulous tones. "Do you mean to tell me that with a cook, two scullery maids, a kitchen maid and three housemaids in my employ there is no policeman in my kitchen? It is indeed a miracle, and our prisoner shall reap the benefit. Turner, let the man go instantly!"—London Standard.

True to Nature.

"Are you satisfied with your dentist?"

"Perfectly. He's a real artist. His false teeth are perfect jewels."

"Can't you tell the difference?"

"They are exact imitations of nature. There is even one that's so good an imitation that it aches sometimes."—Paris Journal.

Many Sides.

"That's the way the thing was told to me, but, of course there's always more than one side to a story."

"Of course. There are always as many sides to a story as there are people to blame."—Philadelphia Press.

Quite a Difference.

"What does Vernon do for a living?"

"He works in a paint shop."

"Why, I understood he was a writer for the magazines."

"Well, you asked me what he did for a living."—Bohemian.

It isn't so that woman is at the bottom of all trouble. It's money.—Manchester Union.

ANXIOUS WAGNER.

The First Performance of "Rienzi" at Dresden.

In Ludwig Frankenstein's Wagner year book Gustav Kietz tells this story in connection with the first performance of "Rienzi" at Dresden: "On the day of the first performance Wagner asked me to meet him in front of the theater after the box office had been opened, so that he could give me and my friend Schuster, the butcher, tickets for the performance. Wagner was in a state of great excitement, and when he gave me the two tickets Heine whispered to me, 'Take some one with good big hands with you.' He watched the people as they came toward the theater, and every time one went in he would make some remark to his wife which showed his satisfaction. I had to go within, but I shall never forget the childish joy of the composer when he saw groups enter the house and the disappointment when others passed the open doors. I thought of it even that evening when the enthusiasm was the greatest. How happy Wagner and his wife must have been at the following two performances, when the house was so filled that even his relatives, who had come to Dresden for that purpose, could not be admitted to the theater!"

THE DESERT SANDS.

Why the Arabs of Sahara Lose the Use of Their Eyes.

"I shall winter in the Sahara," said a traveling man. "With a caravan I shall traverse under a blinding sun and an endless plain of snow white sand, and none of my Mohammedan attendants will wear any kind of shade over his eyes.

"Against that dazzling glare the backs of their necks will be swathed in white linen, and even their ears will be protected. Nothing, though, will keep the sun out of their faces.

"Wondering about this, I said one day to the kaid of an Algerian village: 'Why don't you Arabs wear a cap of some sort? You live in the world's worst sun glare, but neither fez nor turban under any circumstances has a peak.'

"'The Koran,' the kaid answered, 'forbids all true believers to shade their eyes. Obeying the Koran implicitly, we dwellers in the desert avoid like poison brims to our headgear. In consequence there is more blindness among us than among any other people in the world.'"—Los Angeles Times.

A Popular Play Indeed.

Shakespeare's "Julius Caesar" has been translated into German nine times, into French seven, into Italian six, into modern Greek three, into Latin and Swedish twice and into Croatian, Danish, Dutch, Frisian, Polish, Roumanian, Russian, Magyar, Portuguese and Yiddish. There are seven or eight English acting editions of the tragedy. But one attempt actually to alter and improve it has ever been made. This was in 1722, when John Sheffield, duke of Buckingham, split the tragedy into two parts at the death of Caesar, calling it "The Tragedies of Julius Caesar and Marcus Brutus," and made many other changes. To enrich this poor play, or, rather, these poor plays, Pope furnished some choruses, but they had the usual effects of ill adjusted ornaments—they served only to make the meanness of the thing they bedecked the more conspicuous.

Full Faith in the Doctor.

A young farm laborer called one market day at the registrar's office to record his father's death. The registrar asked the date of death.

"Well, father ain't dead yet," was the reply, "but he will be dead before morning, and I thought it would save me another journey if you would put it down now."

"Oh, that won't do at all," said the registrar. "Why, your father may take a turn before morning and recover."

"Ah, no, he won't," said the young laborer. "Doctor says he won't, and he knows what he's given father."—Liverpool Mercury.

Irish Wit.

As Sir Walter Scott was riding with a friend near Abbotsford he came to a field gate, which an Irish beggar, who happened to be near, opened for him. Sir Walter was desirous of rewarding him by the present of sixpence, but found he had not so small a coin in his purse. "Here, my good fellow," said he; "here is a shilling for you, but, mind, you owe me sixpence." "God bless your honor!" exclaimed the Irishman. "May your honor live till I pay you!"

The Bone.

"Say, paw," queried little Tommy Toddles, "what is the bone of contention?"

"The jawbone, my son," answered the old man, with a side glance at his wife.—Chicago News.

A Blunder.

Customer—I must say, waiter, this is the first time I've ever had a really tender steak here. Waiter (aghast)—Good gracious, I must have given you the proprietor's steak!—London Standard.

His Awful Threat.

Mother—Why did you not scream when Hans kissed you? Daughter—He threatened me. Mother—How? Daughter—He said if I did he'd never kiss me again.—Meggendorfer Blatter.

Worry.

He—You know, if you worry about every little thing it's bound to affect your health. His Wife—Yes, I know. That's one of the things I worry about.—Town and Country.

SIGNS OF OLD AGE.

How a Man May Know When He Is No Longer Really Young.

They were arguing about the signs of approaching old age.

"Well, I'll tell you one thing," said one. "When a girl ceases to take a lively interest in you and doesn't mind your seeing her with her hair slightly untidy and listens to your conversation indulgently where formerly she manifested interest and sympathy, then you may know you are growing old."

"No," said another. "That isn't an infallible sign, because some young women show interest and sympathy to everybody. It's when your bones creak slightly on arising from a chair and you no longer swing on a moving car with full confidence and you walk up a flight of stairs a step at a time, then you are growing old."

"Not so," chimed in a third, "for young people with rheumatic diseases sometimes exhibit these signs. When the workings of your liver come to be of more importance that the affairs of your heart, then you are growing old."

"You are all wrong," announced a fourth. "When in pulling on your trousers in the early morning you are compelled to gain the support of the bedstead when you slip on the other leg—then—then—you are growing old!"—New York Press.

MADE ONE BLUNDER.

But to Square It an Offer of Generous Restitution Was Made.

In one of the northwestern states they like nothing better than to tell how a few years ago there came to that section of the Union a Boston newspaper man whose mission it was to "write up" lynching in that quarter, although it appeared that there had not been an illegal execution in the state for a long time. The natives took the questions of the eastern scribe in good part and even "jollied" him into believing that for downright lawlessness the community wherein he was for the moment sojourning was about the most conspicuous portion of the United States.

"Do you ever make a mistake in these lynchings?" guilelessly asked the Bostonian—"that is, don't you ever lynch the wrong man?"

"That happened once," put in some one, "but we tried to do the square thing by the widow."

"Indeed!"

"Yes; we appointed a committee to inform the widow that the joke was on us, and we gave her the choice of the crowd for her second husband."—Lippincott's Magazine.

How She Rests.

In Germantown there dwells a family of ancient lineage which for years every summer has employed a colored woman named Liza as cook while the family was at the shore. Sons and daughters have married and migrated, reared children and added to the branches of an already luxuriant family tree. On one occasion a number of these signified a desire to assemble again under the old roof. The old lady who now is the head of the family, seeing that special help was necessary, sent for Liza to come and help cook the dinner. Liza's answer was brief and dignified. "De winter am my vacation," she said, "an' den I doan' cook for nobody. In de winter I rests, an' all I does is washin' an' ironin'."—Philadelphia Record.

A Curt Reply.

A story is told of Professor Masson when editor of Macmillan's Magazine. It refers to the days when Kingsley and Newman were engaged in their famous pamphlet war. Conscious of the excellence of an article on the subject of the controversy which he had written in the magazine, Masson ventured to bring it under the notice of Newman, but he was not prepared for the reply he received, although he afterward spoke of it with philosophic humor. Newman's laconic message was in words such as these: "I have not heard of your magazine, and your name conveys no impression to my mind."—Westminster Gazette.

Heartfelt.

Lord Carrington when governor of New South Wales made his first public appearance at the mayor's dinner at Sydney. Having committed a few words to paper, he delivered them in reply to the toast of his health and then sat down, feeling very much satisfied with himself. Opposite to him there sat an M. P. who had suffered the long flow of abundant eloquence of the new governor's predecessor. When Lord Carrington sat down the man filled his glass to the brim and said, "Thank the Lord, he can't speak!"

Just a Spill.

"Beg pardon, sir," said the awkward waiter, "but was that last meal on you?"

"Not all of it, garcon," replied the guest as he meekly rubbed his much spattered trousers; "only the soup."—Pittsburg Press.

Lots of It.

"Initiative is the great thing that we all need and that most of us lack."

"Well, my husband has lots of it," replied Mrs. Gottawadde. "He's initiated in twelve lodges every night."—Chicago Record-Herald.

Sensitive.

"Willie is so sensitive."

"Really?"

"Exceedingly so. When papa kicked him down the steps the last time he couldn't sit around for three weeks."—Cincinnati Enquirer.

While the world lasts fashion will lead it by the nose.—Cowper.

Italian Regard For Animals.

On the occasion I was a passenger on one of the lake steamers which ply between Desenzano and Riva. It was a day of wild wind and driving storm. At Salo a peasant of a peculiarly truculent type came on board, clad in the shaggy cloak of the district and bearing a vast blue umbrella no less indigenous. With him, too, he brought his donkey. Now, even Italian steamers do not knowingly admit quadrupeds of this size to the shelter of the fore cabin, though possibly if they did no great harm would be done or sentiment violated. The beast, therefore, was tethered on the open deck and thus became exposed to the fury of wind and weather, not to mention the wave. A British peasant would probably have accepted the situation and let him bide. Not so the Lombard. Hastily divesting himself of his ample overcoat, he spread it carefully over the lower animal's back and, unfurling his voluminous umbrella, held that patiently over the asinine head—and his own—all the way to Riva. Now, here, surely, was a good man, merciful to his beast.—London Times.

The Invention of Spinning.

The invention of the art of spinning was ascribed by the ancients to Minerva, the goddess of wisdom. The date 1500 B. C. is given as that of the beginning of the art in Greece, under the direction of the king of Arcadia, but pictured inscriptions on Egyptian monuments show that the use of the spindle and distaff was known in that country much earlier. The first distaff was simply a stick, around which the fiber to be spun was loosely coiled, held in the left hand; the spindle was a sort of top set in motion by a twirl of the hand, the fiber passing between the finger and thumb of the right hand. This invention was improved upon in the course of time by placing the spindle in a frame and making it revolve by mechanical action of the hand or foot in connection with a wheel or treadle, thus giving the true spinning wheel. The first recorded use of this was in the early years of the sixteenth century, but it was probably made and used long before this. The first spinning jenny, a machine working eight spindles, was invented in 1767.

Mermaids and Mermen.

Not many generations ago mermaids and mermen were believed in implicitly. Says the Aberd en Almanac of New Prognostications For the Year 1688: "To conclude for this year 1688. Near the place where the famous Dee payeth his tribute to the German ocean, if curious observers of wonderful things in nature will be pleased thither to resort the 1, 13 and 29 of May and in divers other times in the ensuing summer, as also in the harvest time, to the 7 and 14 October, they will undoubtedly see a pretty company of mar maids, creatures of admirable beauty and likewise hear their charming sweet melodious voices—

"In well tun'd measures and harmonious lays,
Extol their maker and his bounty praise,
That godly honest men, in everything,
In quiet peace may live, God save the king!"

Heaving the Log.

Heaving the log is one of those picturesque sea expressions with which all landsmen are acquainted, though probably few could explain the exact process. The "log" is a quadrant shaped piece of wood loaded with lead at the curve. The line to which it is attached is 120 fathoms long and is divided by knots into equal distances of forty-seven feet each. These distances are the same fraction of a nautical mile (a knot) as twenty-eight seconds is of one hour. Consequently the number of knots that slip off the reel in twenty-eight seconds after the "log" is in the water is the speed per hour that the ship is making.—St. James' Gazette.

Retrogressive.

Extracts from Miss Evergreen's diary:

"This is my eighth birthday. A new brother came. His name will be Fritz."

"Fritz is twenty years old today, just a year younger than I. People always take us for twins."

"Fritz will be thirty years old tomorrow, his wedding day. How the time does fly! Of course he is eight years my senior and used to carry me about when I was a baby; still it seems strange to think of the boy getting married."—Fliegende Blatter.

The Last of the Plagues.

One by one the plagues of Egypt are being abolished by science. The frogs were abolished long ago by the draintile. The fleas are checked by insect powder, and the darkness that could be felt has melted away before the arc light. The sixth plague still remains in full glory. The fly is always with us. The great Dr. Radcliffe used to declare that the three worst annoyances of life were smoke, flies and irreverent questions.—Collier's Weekly.

Wanted to Be Posted.

Restaurant Patron—I see that you have on the bill of fare "assorted pies." Waiter—Yes, sir. Restaurant Patron—Well, the last time I was here I found a nail in a piece of pie, and the time before it was a collar button. What kind of an assortment have you got this time?—Exchange.

Fancy Work.

"Mrs. Follansbee tells me that she is studying Chaucer," said Mrs. Oldcastle.

"Indeed?" replied her hostess. "She always was great over fancy work."—Chicago Record-Herald.

The Same Thing.

He—So you were never in love? She—Why, no! But I've been engaged to heaps of men who were.—Bystander.