

QUEER TIME TELLERS.

FORMER METHODS OF KEEPING TRACK OF THE HOURS.

The Sun Dial and Hour Glasses of Ancient Times—King Alfred's Horological Candles and the Water Clocks Used in the Early Centuries of this Era.

The National Museum, at Washington, has been making a collection of clocks and devices for telling the time among various people in different parts of the world. The results of several years' labor in this direction by a number of persons connected with that institution have recently been arranged and classified, and are now on exhibition to visitors. Professor Langley, the secretary of the Smithsonian Institution, has made a hobby of collecting clocks of ancient design and history, and several were brought by him from the old countries which he had visited in the last few summers.

The devices go back to the primitive times when sun-dials were in use, and consisted among the mass of the people the only method measuring the lapse of time. There is one dial in the collection such as were not uncommon in the rural regions of the Northern States thirty and forty years ago. Hour glasses, such as were used in England during Shakespeare's time, and models of the early clocks which were run by weights are included in the number of queer inventions. A large number of watches illustrate the progress in the make of that important mechanism.

One of the curators, who has made a study of the subject, said the other day, in referring to the collection, that one of the earliest methods of computing time of which there is any record was among the Babylonians. They used a staff stuck in the ground or erected a perpendicular pillar in a sunny place. The sundial was evolved from this. It was first called a gnomon, and the first of these instruments recorded in history was owned by Abaz, 742 B. C. It is believed, however, that dials were constructed on mathematical principles long before that year. Big posts were undoubtedly placed upon wooden or stone bases, but they were so rude and unwieldy that most of the people probably preferred to guess the time rather than attempt to compute it from the shadow.

The progress in the invention of devices for measuring the flight of the hours was very slow. It was hundreds of years before sundials were worked out. It answered well to mark the duration of time, but for counting the hours only the wealthy, who could afford an elaborate improvement on the device, could utilize it. It will be noticed that all these early timekeepers were not portable and a number of years elapsed before any success was made in manufacturing a timekeeper that could be carried about. The pocket ring dial was the first solution of this problem. They were invented about 100 B. C. They were manufactured in large quantities as late as the seventeenth century and sold to those who were too poor to purchase watches.

The water clock was the successor of these earlier inventions. This was an invention of the Alexandrians, and was brought about the time of the birth of Christ. It was used to measure the duration of time by allowing water to escape from a cavity through a regulated flow. It met with popularity in Greece, where it was introduced and used to measure the time for speakers in Athenian courts of justice. The first water was given to the accused, the second to the accused, and the third to the judges. A special officer was appointed to watch the water clock and see that it was stopped during any interruption. The amount of water to each speaker was regulated by the importance of the case. It was intended also to make the Athenians speak to the point without wandering from their subject.

King Alfred of England had a variation of the water clock, which consisted of burning candles that were set around them at various intervals. In some of these devices cogged wheels were made to receive their impetus from falling water. By this method there was a regularity of motion but a want of equality in force. One of these clocks, sent by Haroun Alrashid in 807 to Charlemagne, was considered one of the wonders of the world. The wheels were set in motion by falling water, and there were twelve little brass doors which were opened by the revolution of the wheel. Little balls then rolled out, marking the time of day. Although the time was hardly as exact as that required for running a modern express train, it was very accurate for those days.

As the balls rolled out they fell upon a brass bell, striking the hours. The doors remained open until 12 o'clock, when figures of twelve knights rode out on horseback and paraded before the dials. A monk named Valley modified these dials, and first gave them a scientific character. He divided a cylinder into several small cells, and as the water flowed from one to another the center of gravity was changed, and by the use of an indicator, as the suspended cylinder revolved, the hours were marked.

The invention of the clock, in principle as it is known today, soon followed. Its origin is unknown, but clocks were known in Italy as early as the tenth century. Some think they were first invented by the Saracens. From that time many elaborate and whimsical designs were constructed, and those which were skillfully and wonderfully made brought fabulous prices. An old Italian soldier, who served prior to 1689, constructed one of the most curious of these. By its mechanism the figure of a torii was made to drop into a plate of water, having the waters marked on its rim. The figure would float around and stop at the proper hour, telling the time "like a learned pig." A lizard also was made in the same timekeeper to ascend a pillar on which the hours were marked and point out the time as it advanced. A mouse did the same thing by creeping

along an hour-marked cornice. The figure of a golden cock that flapped its wings twice with the approach of the hours and crowed twice was also a popular favorite for ancient timekeepers.

DEFTLY OVERTAKEN.
The Popular Belief in Its Qualities Is Said to be a Delusion.

A recent number of a publication called Modern Medicine says:
"The late Dr. Austin Flint remarked on one occasion that thousands of patients have been starved to death while being fed on animal broths, beef tea, etc. No error could be greater than the notion very commonly held by the laity, and still quite too largely entertained by the members of the medical profession, that beef-extracts, beef tea, bouillon, animal broths, etc., are peculiarly nourishing in character. We can adduce no better evidence to the contrary than is afforded by the following paragraphs from 'Bunge's Physiological and Pathological Chemistry,' one of our latest and most reliable authorities:
"We must guard against supposing that meat bouillon possesses a strengthening and nourishing influence. In regard to this the most delusive notions are entertained, not only by the general public, but also by medical men.
"Until quite recently the opinion was held that bouillon contained the most nutritive part of meat. There was a confused idea that a minute quantity of material—a plateful of bouillon could be made from a teaspoonful of meat extract—could yield an effective source of nourishment, that the extractives of meat were synonymous with concentrated food.
"Let us inquire what substances could render bouillon nutritious. The only article of food which meat yields to boiling water is gelatin. It is well known that albumen is coagulated in boiling, the gelatin of meat is rapidly converted into sugar, and this again into lactic acid. The quantity of gelatin is, moreover, very small; for a watery solution which contains only one per cent of gelatin coagulates on cooling. Such coagulation may occur in very strong soups and gravies, but never in bouillon.
"Bouillon, therefore, contains much less than one per cent of gelatin. In preparing extract of meat, the quantity of gelatin is reduced as much as possible, because it is in a high degree liable to putrefactive changes, and therefore likely to interfere with the preservation of the preparation. The other constituents of bouillon are decomposition products of foodstuffs—products of the oxidations and decompositions which take place in the animal organism. They cannot be regarded as nutritious, because they are no longer capable of yielding any kinetic energy, or at most such a small amount that it is of no importance whatever.
"Nevertheless, until the most recent times, creatin and creatinin' which are among the chief constituents of meat extract, were regarded as the source of energy in muscle. This assertion was shown to be untrue by the researches of Meissner and of Voit, who proved conclusively that creatin and creatinin are excreted in the urine twenty-four hours after their absorption, without loss. A material which is neither oxidized nor decomposed cannot form a source of energy, apart from the fact that the quantity of creatin and creatinin which is absorbed in bouillon is so small that it could not possibly be seriously regarded as the source of muscular energy."

CHANGES IN BARBERS' SIGNS.
Fashions in Which the Form of the Pole Is Lost Sight of Completely.
Barbers' signs are going to be a puzzle to the people of the next two or three generations, for their form is undergoing a great change almost as took place when the barbers' pole ceased to be spelled "poll," say the N. Y. Sun. The fact is that the barbers' sign was originally a human head or poll. Then gradually it became a pole with a red stripe on a white ground to indicate the barbers' avocation of blood letter and tooth puller. When the civil war came on in this country, red, white, and red being an unpopular combination in the North, a blue stripe was inserted. Out of that grew the pole representing a buried United States flag, with the bit of the blue field showing up near the top of pole. The end of the pole was then ornamented in such fashion as to simulate a flagstaff. Sometimes the pinal of the staff was a ball, sometimes a liberty cap, sometimes an arrow head, sometimes an eagle.

The symbolic representation of the flag has been very popular with New York barbers, and has been varied in almost every conceivable fashion. It has been obscured in some cases by elegant barbers, who have substituted alternate black and gilt stripes for the white and red. Some have contended themselves with alternate red and white stripes on the door lintels. The Italian barbers, being lovers of color, have unfurled the flag, and place it on doors and shutters. They sometimes place the United States and the Italian flags side by side. The variety of modifications seen in the barbers' signs of this town is very large, and in many cases the form of the pole has been entirely lost sight of. So, too, has the idea of the flag, and the original colors have in many cases given place to others having no significance. The idea of alternate stripes of different colors, however, still remains. The man that clings to the tradition of a pole with alternate red and white stripes might easily look long in vain for a barber shop.

A Hint to Mothers.
Those mothers who wish to develop and encourage a love of nature in the youthful mind will give the children a little garden plot "all to themselves." It need not be large—better only a few feet square and every foot of earth well cared for. The important point is to give the little ones freedom in conducting their own "establishment," and by skillful management lead them to do "just as mamma and the other folks do." Take special point in showing how to prepare the soil properly, explaining the necessity of this work; how the various seeds should be planted; and en-

courage all sorts of questions. It is wonderful how a child's mind will expand with the encouragement given by judicious and kindly answers to eager questioning.

Teach them how to distinguish the young plants from the weeds; and do not look upon it as a serious matter if childhood curiosity should lead to an occasional pulling up of a shoot "to see how it grows." We all have had that same curiosity. Make it the occasion of a pleasant little lesson on plant growth if your own stock of knowledge will permit. Nature's reward in the shape of beautifully growing plants and flowers will fully recompense the children for their labor and time. The plots should not be large enough to seriously tax the play-hours. The lessons that will be unconsciously impressed upon the children in their "garden play" may be made important factors in their training and development.

A BRILLIANT SUCCESS.

Canadian Invasion of the City of New York.

PROMINENT DRUGGISTS OF THAT CITY ENDORSE THE HAWKER STANDARD REMEDIES.

The Sales of Which are Constantly Increasing in the Great Metropolis.

The Hawker Medicine Co. (Ltd.) have won a brilliant success in New York. Their standard remedies have won in the great metropolis a remarkable measure of public favor, as will be seen from the testimony of druggists given below.

This is a success of the most significant character, for there is no city in the world where the trade and the general public are more coldly critical of a new comer. New York has been the rock on which a thousand patent medicine concerns have split. But the Hawker remedies are not patent medicines in the ordinary acceptance of that term. The Hawker Medicine Co., knowing the merit of their remedies, from the wonderful success achieved in Canada and England, went confidently into the new field and set to work in precisely the same manner as in Montreal and other leading Canadian cities. They remedied themselves at first to one section (a large and important one, indeed), and proceeded systematically to introduce their remedies. That was less than six months ago.

But New York, if coldly critical of a new thing, is as quick to recognize merit when it is proved. The merit in the Hawker standard remedies was soon discovered, and as a result there arose a demand that has steadily increased. The proof of this is in the following practical statements made by wholesale and retail druggists, including some of the largest houses in the city, whose endorsement in such a manner is a most significant evidence of the triumph won by these Canadian remedies in the great city of New York:

The Hawker Medicine Co., 6th avenue and 15th street, New York:
"My customers speak favorably of the Hawker Medicine Co.'s remedies, and I notice a healthy growth in the demand. We are daily receiving mail orders for Hawker's nerve and stomach tonic.

Druggist, 430 Sixth avenue, cor. 26th st., New York.

We carry a full line of the Hawker Medicine Co.'s remedies, and have an active demand for Hawker's nerve and stomach tonic, Hawker's catarrh cure, and Hawker's liver pills.

WM. B. RIKER & SONS CO.
Druggists, 6th avenue, cor. 22nd st., New York.

Our sales of Hawker's nerve and stomach tonic, Hawker's Catarrh cure and Hawker's liver pills are constantly increasing.

Druggist, 7th avenue and 14th st. New York.

I noticed a marked increase in the demand for Hawker's nerve and stomach tonic and Hawker's liver pills.

ED. LEGOLL.
Druggists, 286 Seventh avenue, New York.

Gentlemen—The demand for Hawker medicines far exceeds our expectations.

J. W. BIRDSALL,
Druggists, 255 Sixth avenue, New York.

The increase in demand for Hawker's nerve and stomach tonic, Hawker's catarrh cure and Hawker's liver pills has been surprisingly large.

HARRY HELLER.
Druggist, 157 7th avenue, New York.

We sell the Hawker Medicine Co.'s remedies, and have a good demand for Hawker's nerve and stomach tonic, Hawker's liver pills and Hawker's catarrh cure.

ROBT. G. BUEBIN.
Druggist, 717 Sixth avenue, cor. 41st st., New York.

There has been a remarkable increase in the sale of Hawker's nerve and stomach tonic, Hawker's liver pills and Hawker's catarrh cure.

GEORGE N. SYMS,
Druggist, 91 Eighth avenue, 14th and 15th sts., New York.

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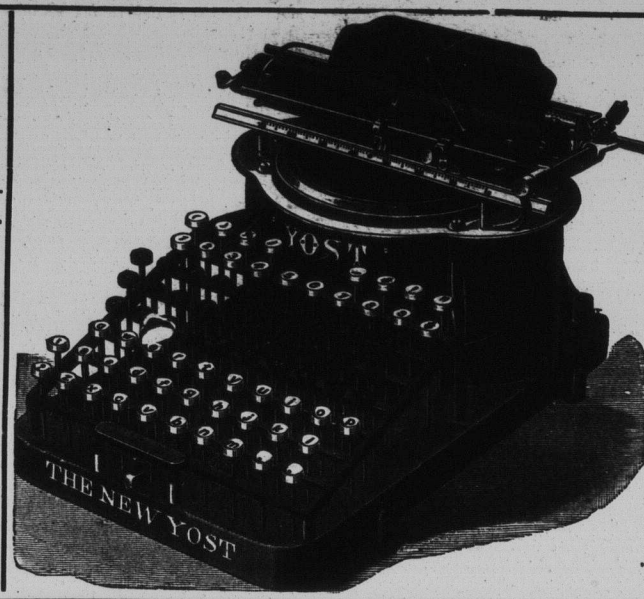
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well evidently recognize merit in the Hawker Medicine Co.'s remedies. The demand for Hawker's nerve and stomach tonic, Hawker's catarrh cure and Hawker's liver pills has been phenomenal.

THE CHAS. N. CRITTENTON CO.,
Wholesale druggists, Nos. 115, 117
Fulton street, New York.

HERE IS BARK BURBIE.

Silly Superstitions Which Belong to the Age of Ignorance.

When you buy a pair of new shoes never put them on a shelf higher than your head, unless you want to bring bad luck; and, if you blacken them before you have had both shoes on, you may meet with an accident or even have a sudden death. This is an old Irish superstition. The Scottish girls believe that if they drop their shoes before they are worn, trouble will ensue, while a French lady losing her heel is sure of some disappointment in love, and a German mother in the same predicament feels that she will soon lose one of her children. You must not put your right shoe on your left foot or your left on your right, nor must you put your left shoe on before the right, unless you want bad luck. This superstition dates back to one of the Emperors of Rome, who, it is recorded, put on his last shoe first one morning, and came near being assassinated during the day.

As a sign of respect the Japanese take off their slippers when they meet in the street, and the Jews used to pluck off one of theirs to confirm a bargain. Throughout the East, when an interior enters the presence of his superior he leaves his shoes or slippers at the door.—English Paper.

The Seasoning of Stone.

Stone, like lumber, requires seasoning. Stone is often spoken of as the synonym of solidity—"as solid as a rock," we say, but, as a matter of fact, stone is very far from being solid. A cubic foot of the most compact granite, for instance, weighs about 164 pounds. This plainly shows that it is between atoms which compose the mass of the most enduring stone there exists much space for air, moisture, etc. This seasoning of stone prior to use for building purposes has been well understood by the architects of all ages, but in the modern rush of the nineteenth century building too little attention has been paid to it. Now it enters into the calculations of every good architect.—Scientific American.

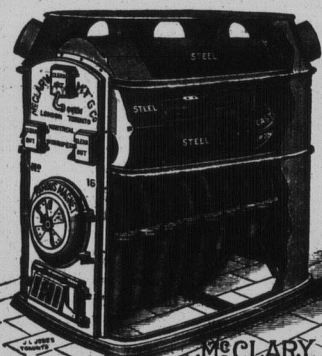
Redeeming the Currency.

The pursuer of the steamboat Seneca, running between Bar Harbor and Sarnento, Me., was making change with a passenger at his office on the deck of the boat one day last week, when a twenty-dollar bill was blown out of his hand and overboard. Ellis Bray, the mate, was standing by, and he followed the bill like a hawk after a sparrow, striking the water about the same time that the bill touched it. He was hauled aboard with the bill in his teeth, and got \$5 and a lot of applause for his quickness of thought and action.—N. Y. Sun.

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