

Immense Brass Brain

Figures Out the Tides

In a room of the United States Coast and Geodetic Survey building at Washington is a great machine which answers to the name "Great Brass Brain." Its function is to predict tides with the utmost exactness at any place in the world, or to tell the state of the tides at any moment in the past.

This robot is a marvel of wheels and pulleys. Tides rise and fall with mathematical exactness, and there are a large number of forces acting upon them, such as the moon, the motion of the earth, and many other things. The machine takes into account 37 of these factors in its mechanical calculations.

Its chief purpose is to help in setting time schedules for ship movements, but it is also useful to the historian.

For instance, the delay of the British expedition which landed at Charleston in 1773, which gave Paul Revere the chance to save the countryside, has been ascribed to their waiting for low tide. Brass Brain, however, showed that the tide was low when the British landed, so that they must have been waiting for something else, probably provisions.

Vast Water Resources

in Black Hills Region

One of the most productive water-bearing formations of the northern interior of the United States is what is known as the Dakota sandstone, which crops out about the flanks of the Black Hills in southwestern South Dakota. The formation extends eastward and northeastward to the borders of Iowa and Minnesota.

As the sandstone slopes away from the Black Hills, the water percolates northeastward and eastward through the porous rock and underneath a dense covering of thick clay shale.

Beneath the James river valley it is under considerable pressure, and where the surface altitude is not too great, strong artesian flows have been obtained. In fact, the artesian wells are among the greatest natural resources of that area.

However, so many wells have been driven, the supply shows signs of having been taxed about to the limit, and the force of many of the wells has fallen considerably below the original pressure.

Monarch Before His Birth

Sapor, king of Persia, probably holds the record for the earliest age at which a king has been crowned. He was crowned about two months before he was born. His father, the reigning king, died at that time, and an uncle, finding the throne vacant, organized a usurpation. The queen, anxious for the succession of her son, proclaimed a coronation ceremony and had her unborn child crowned in her own person. Such was the veneration of the people for the dynasty that the ceremony was effective in forestalling the uncle's usurpation. The child proved to be a boy and ruled as King Sapor.

Birthplace of Telephone

Among the many things for which Boston is famous is that it was the birthplace of the telephone. It was on the afternoon of June 2, 1875, that Prof. Alexander Graham Bell and his associate, Thomas A. Watson, were working in two garret rooms over the electrical shop of Charles Williams at 100 Court street, Boston, and there discovered the principle of the telephone. More than nine months later Professor Bell received from the United States on March 7, 1876, a patent No. 174,465, and thus established the existence of the Bell telephone. This has often been called the most valuable patent to mankind ever issued.

Under the Stone

"Passing through a village in western India," writes a lady missionary, "followed by a friendly crowd, we stopped at a small wayside altar, the god being represented by four flat stones decorated with red paint. We said, 'There is no god here. These are only stones.' 'Oh,' said a man, 'the god is underneath.' We promptly lifted one of the stones to discover beneath it three large, hissing frogs, whereupon a great laugh went up from the crowd, in which we all joined."

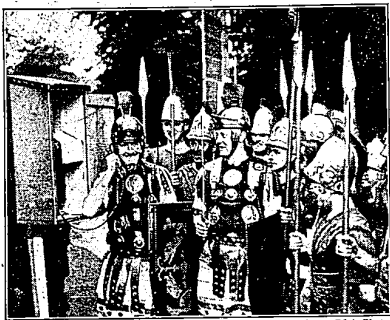
Knew the Candy Man

A Baltimore policeman picked up a small girl crying lustily for "mumma." Other than that her name was "Marie" he could learn nothing about her. She was taken to police headquarters. Finally some one thought to ask her where she bought her candy when at home. She gave the name of a candy store owner without hesitation. The rest was easy. Her name was Marie Bliser, aged four. She had strayed from her mother in a downtown store. —Copper's Weekly.

Consolation for Fat Folks

Many people in middle age and beyond are the worst and most serious offenders in the fad of reducing. Nature intentionally, with most folks, adds weight with years. The lover of fat that becomes most noticeable over the stomach is furnished for additional warmth and protection to vital organs, and to compensate for the fact that with age the body generates less warmth. A little fat, at forty, is no sign of physical degeneration. —American Magazine.

"Volo Romam IX VIII VII VI Ave, Caesar"



This Roman Legionary in Britain will find that Julius Caesar "doesn't answer," due to an anachronism of a couple of thousand years. He and his fellow spear-toters, however, correctly represent the armed forces which long held Britain as an outpost of the Roman Empire. The occasion for the costume party was the Rochester Historical Pageant, held at Rochester Castle, England, and this telephone came in handy at the dress rehearsal.

Grammatical Dispute

The term, "more perfect," is condemned by some grammarians, but every adjective of this kind that means an absolute degree becomes gradually weakened to force in colloquial use and a secondary meaning is developed. In that sense adjectives of this kind may be compared. More and most perfect have been employed by some of the greatest English writers.

Country's Smallest Tree

The Alpine willow, which does not exceed six inches in height, is the smallest tree in the United States.

Classical City Names

Marcellus, Ilion, Rome, Carthage, Utica and Syracuse are some of the classical names drawn from classic names and places fathered upon New York cities.

Your Telephone comes from



Before the Shepherd Kings ruled in ancient Egypt, the raising of sheep for their wool was one of man's well established industries. Among the most famous of sheep is the merino, a breed produced by the Moors of Spain by crossing the hardy African sheep with the more delicate but high-grade Roman strain. During the reign of George III of England a few merinos were introduced into Australia, where they thrived and rapidly increased in numbers. Today sheep herding is one of Australia's principal industries.

One of the most important uses of wool is in the manufacture of felt. This material, in turn, is used in the manufacture of hats, clothing, floor coverings, pianos and for many other purposes. The pad on the base of the telephone instrument is made from a special grade of woven felt. Although it plays no direct part in the transmission of the voice, this felt contributes importantly to the comfort, convenience and economy of telephone service.

No Escape

An explorer tells of certain South Sea Islanders who sit and moan for about an hour after a meal. "We had no idea they had after-dinner speakers out there," —London Humorist.

Uncle Eben

"A man dat ain't got no cares ne' troubles," said Uncle Eben, "won't be satisfied to let well enough alone. He'll go an' git hisse'f a dog." —Washington Star.

Few Now "Lost"

In these days of radio, teletype and telegraph it is difficult for a person to get "lost," the chances being about 10 to 1 against complete disappearance.

May Contentment Chase Away
All Gloom and Despair
And Leave Instead Kind Thoughts,
Happiness, Sunshine and Good Cheer
Making Your

**Christmas
Merry**

and your

**New Year
Happy**

—and we mean it—every word
May we here thank you for your
1931 patronage and the pleasure of
serving you in 1932.

Lee Hardware Co.
Phone 62



MERRY CHRISTMAS

SEARCH as one may for other words, it is
pretty hard to beat that old, familiar
greeting, "MERRY CHRISTMAS"

Enjoyment and happiness are two of the
greatest privileges that are granted us. We
hope that when you awake on Christmas
morning, you will have the pleasure of
enjoying with your family or other true
friends, one of the happiest days of your
life

Warner Dairy Co.