

## Science Invention

In the course of some digging operations in a garden at Haslemere, England, a gardener unearthed a number of ancient vessels of peculiar shape, together with a quantity of calcined human bones, at a depth of about two feet below the surface. The British museum authorities, who have examined the discovery, pronounce the vessels to belong to the late Celtic age, about B. C. 150. Only three or four vessels were found to be in a perfect condition. He computed that twenty-two urns and pots were originally interred at the spot.

Bright colors assumed by maples, sycamores and angelicas during the autumn months are the result of the oxidizing of the color compounds, or color generators, of the leaf cells. Long protracted cool weather is most favorable to the production of autumn tints and slight frosts that are not severe enough to kill the cells hasten the display of beauty by producing an enzyme that brings forth the bright purples, oranges and reds. Leaves containing much tannic acid never give bright autumn tints, while those containing sugar give the very prettiest.

An Italian scientist claims to have established that electric tramways are great mediums in the disinfection of towns. He points out that the electric spark, which is so frequent an occurrence to the overhead trolley, and the emission of light from the car wheel when the rail is used for the return current transform the oxygen of the air into ozone which has a purifying and disinfecting influence. The high discharges, he says, are frequent enough to influence greatly the atmospheric constituents, especially where the line passes through narrow thoroughfares. They become antiseptic agents.

Sailors visiting the island of Laysan, in the Hawaiian group, are greatly amused by the curious antics of the Laysan albatross, or gony. These birds sometimes perform, in pairs, a kind of dance, or, as the sailors call it, "cake-walk." Two albatrosses approach one another, nodding and making profound bows, cross their bills, produce snapping and growling sounds, rise on their toes, puff out their breasts, and finally part with more nodding and bowing, only to come together again and repeat the performance. Occasionally three engage at once in this singular amusement. The spectators are always impressed with the extreme "politeness" of the birds.

Mr. Oliver Lodge, eminent by his discoveries about electricity, believes that he has found a method of electrifying the atmosphere on a large scale, and that in this manner dangerous fogs over rivers and harbors may be dissipated. In some experiments at Liverpool he was able to clear a space more than 100 yards wide in a dense fog. He also thinks it possible that rain may be produced by the electrification of clouds. At a recent meeting of the Physical Society in London he demonstrated his method. Electricity derived from a high frequency alternator is most effective, but it must first be turned into a straightaway current, and Professor Lodge employs for this purpose the Cooper Hewitt mercury vapor-lamp, which possesses the power to rectify an alternating current.

### BOY HAD PLENTY OF NERVE.

Was Not Discouraged by the Mad Rush of Infuriated Bulls.

There was an accident shortly after the close of a novillada at the Plaza Mexico that came near resulting in the death of a few young hopefuls who took it into their heads that they would like to join in the national sport.

Shortly after the crowd left the ring a half dozen young boys of ages ranging from 12 to 15 years got down into the bull ring to play bull fight. One of the number thought the game was too slow, so while the ring attendants were busy about other work he entered the pen where the bulls were confined and slyly let one of them into the ring.

With a mad rush the big black bull entered the ring. One of the little boys had been using his plish linen cape for a cap in his plays with the other boys and he was near the door when the bull entered. Although one of the opposite gates was open the bull made no effort to get away, but rushed at the boy with the cape.

There was but one thing for the boy to do, and he did it. With all the knowledge which he had gained by watching the matadors in the ring he let the bull charge the cape. But his arms were too short and the bull struck him a hard blow, knocking the little fellow fully fifty feet and tearing his shoulder with his horn. The angry bull then turned his attention to the red cape.

When the other boys saw the bull charging them they fled for the fence and climbed to safety, where they watched the bull tearing the cape. Finally it occurred to one of the older boys that by all charging for the bull he might possibly be scared away from the prostrate body of the injured lad. So with clubs and boards they drove the bull from the ring. They gave their attention to the bull none too quickly, for he had tired of pawing the cape and was making for the boy.

When the doctors got in their work on the little fellow, whose name is Angel Moreno, they found that the wound was the only thing of consequence, and that although the boy was conscious from the blow there was

nothing of a really dangerous nature to fear from the accident, as the hurt was a flesh wound.—Mexican Herald.

### CAIRO STREET CRIES.

Sounds and Voices that Travelers Hear in the Egyptian City.

Take a chair outside a busy cafe near the market place and tram center and watch street life. There are no hungry men, no starving, pinched child faces, no finger-worn mothers, for this is the land of plenty, and the people's wants are few and simple. Thus sunshine and laughter spray a welcome fragrance over the novelty and romance of the gay city's streets.

Here is a street melodist twanging a monstrous one-stringed "something," and accompanied by a nose-ringed girl, who taps deftly on a species of tambourine, while bystanders ejaculate "Allah! Allah!"—the Arabic word for applause. If not quite in accord with your prejudices concerning music, well, maanilah (never mind), it is not nearly so distracting as a street corner at home, and they will go away if you tell them to. The baboon, the donkey and boy are in evidence, with a score of performing tricks that are very original and certainly funny, and you console yourself with the hope of a minimum of cruelty in the training.

A fruit seller, basket on head, with luscious grapes and figs, saunters by singing in a quaint minor. "O grapes, O sweet grapes, that are larger than doves' eggs and sweeter than new cream! O angels' food, delicious figs, bursting with honey, restorers of health!"

There is a drink seller, bent under the weight of the odd-shaped jar slung over his shoulder, a lump of ice projecting from his mouth, conjuring custom in a similar strain, as he struts up and down, making the air resound with the rhythmic clasp-clap of two brazen saucers: "O refreshment of the weary! O quencher of parched lips! O blessing of heaven!"

Another street cry which may be heard in the main street of Abbassieh, a suburb, contains the following enticing announcement: "To-morrow, O people, I am going to kill a camel. The doctor says it is young and healthy. Oh, its flesh will be tender as the quail and juicy as lamb. Its price is but 1 1/2 piasters (7 cents) a pound. Do you love the sweet flesh of the camel, then come early and be satisfied."

Not the least picturesque figures in the streets are the city police in their neat white drill and red turbans in summer and blue serge in winter.—London Traveler.

### FIRST USED IN CIVIL WAR.

Hypodermic Syringe Owed Its Existence to the Misadventures of Battle.

"The subject of the first use of the hypodermic syringe was discussed at the last meeting of the army surgeons in New Orleans last spring," said Dr. R. D. Jackson, "and one surgeon stated that the first time it was used, he thought, was in the army of the Tennessee. While in the Tennessee army I wrote to a friend in Augusta, J. P. K. Walker, to try to get me a hypodermic syringe and send it to me. I never had seen one, but thought from what I had heard about it that it would be very useful in relieving the wounded soldiers of pain."

"My friend was fortunate enough to secure one from a physician and sent it to me while I was on duty at the hospital at Ringgold, Ga. I exhibited it to my friends—the surgeons there, eighteen in number—none of them had ever seen one before. At that time I was treating a very severe case of dysentery, the patient being a chaplain from Texas and one of General Bragg's most reliable scouts. One of the surgeons suggested that we try the hypodermic syringe on the patient, which was done by inserting a quarter of a grain of morphia in the back. It is possible that the army surgeon at the New Orleans convention who referred to the first use of the syringe in the Tennessee army was one of the eighteen I have referred to."—Chattanooga News.

### Intoxicated Insects.

A dahlia garden where the flowers are cut at about noon is a regular hot house for bees and wasps and even the big bumbling bumble bees do not refuse to imbibe. From the cut stem of the plant on sunny days about noon a juice exudes that seems to be a whole side-board of intoxicants for the insects, and, for two or three hours afterwards the won't-go-home-till-morning state is apparent. The industrious, steady-going bees, misled into tasting it, will first stagger then drop to the ground and with head down attempt to drag themselves home, only to finally roll over and give up to it. Pretty soon they recover and are ready to try it again if the temptation remains. If not, they take up the burden of work and probably have some excuse to offer for the time lost and no returns. Bees and wasps and bumble bees are not white ribboners if opportunity offers.

### Big and Little Purchases.

"O Randolph, you must get an automobile." "I can get the automobile on credit, all right, but how long would your grocer trust us for the gasoline?"—Fliegende Blaetter.

### Giant of the Equine Race.

The greatest size a horse has been known to grow is 20 1/2 hands high. This is the record of a Clydesdale which was on exhibition in 1886.

There are some women who never play the piano in any other way than as if trying a piece for the first time.

When you observe some one's fault, see if you can't find a virtue too.

### EVE BURIED IN JIDDAH.

William K. Curtis Tells Story of Port for Mecca in Moslem Writ.

Half way down the Red Sea, on the Arabian coast, is the port of Jiddah, where the pilgrims for Mecca, who come by sea, land. It is distant about sixty-five miles from the sacred city of the Mohammedans, has a population of about 20,000, an imposing and attractive appearance from the sea and is surrounded by funny looking Dutch windmills, which pump water from the artesian basin under the sand. But the moment you land on the shore the illusion is destroyed. The streets are narrow, dirty and full of all kinds of smells, while the population is made up of the human commorants who fatten up the pilgrims.

Jiddah is of particular interest to us because it contains the tomb of our Mother Eve. I never knew before where she was buried, but it is a comfort to know that she was 140 feet tall—a very large woman to be created from a single rib. According to the tradition of the Moslems, when our first parents fell from Paradise Adam landed on a mountain in Ceylon and Eve was unfortunate enough to light at Jiddah. After years of wandering they finally met at Mecca, where Adam to show his gratitude, constructed a tabernacle on the site of the present Kaaba, or Holy Mosque, which is exactly beneath God's throne in heaven. All that is left of the original temple of Adam is the famous stone of Mecca, which was once whiter than snow, but has been turned as black as coal by the kisses of the sinful pilgrims.

When Eve died Adam buried her at Jiddah. Her tomb is a cenotaph 140 feet long, built of masonry about four feet high and narrowing to a point at the top. It is white washed and kept quite clean. Pilgrims place flowers upon it and reverently kiss the hot masonry. Rich people often throw over the cenotaph valuable shawls and pieces of silk as offerings to the Mother of Us All, but they are stolen the first night by the vandals of Jiddah, who rob the dead and pick the pockets of the dying.—W. E. Curtis in Chicago Record-Herald.

### HAS CLOTHING TO SPARE.

New York State Man Astonishes the Mexicans by His Wardrobe.

Edgar Percival Whipple of Rochester, N. Y., arrived in the city yesterday and has a suite of fine rooms at Porter's. Mr. Whipple is somewhat of a globe trotter, having visited all the principal cities of the United States and Europe. He had some trouble at the border with the customs officers in the examination of his baggage, being delayed at El Paso two days in obtaining the necessary papers whereby he could pass his personal baggage without being compelled to pay duty. His effects consist of fourteen trunks. Eight of these are of the Saratoga make and larger than the common traveler's trunk. There are four different styles of cane cases and five umbrella holders; eleven leather bathtubs and twenty-three grips of different styles. Nine of these he brought with him in the Pullman, having engaged two sections for traveling from the Pass City here.

He will be in the city several weeks on a pleasure trip and will no doubt be a conspicuous figure in the parades on San Francisco street. His wardrobe is the work of merchant tailors from all over the world.

Mr. Whipple will probably not visit the tailoring establishments of this city, as the following list of wearing apparel seems sufficient to hold him for a while, although only a part of his outer garments, which consist of 138 pairs of trousers, 81 coats, 76 vests, 83 pair of shoes, 38 hats, 50 canes, 24 umbrellas and 56 pairs of gloves. It is needless to say that Mr. Whipple will change clothes at least five times a day to be able to keep in step with others who parade along the principal streets of the city.

His valet, George H. Franklin, says that Mr. Whipple has only a small part of his regular traveling equipment with him, for when he went to Paris last year he had seventy-one trunks, to say nothing about other small handbags and hat boxes.—Mexican Herald.

### Witness Was a Puzzler.

In a case heard in a Scottish court some time since a rural witness, after relating how McL., the defendant, came to him and struck him, proceeded:

"So, your honor, I juist up and gied him one, too. Juist then his dog cam' along an' I hit him again."

"Hit the dog?"

"No, yer honor, hit McL. And then I oops w' a stane an' thraved at him and it rolled him over an' over."

"Threw a stone at McL.?"

"At the dog, yer honor. An' he got oop an' hit me again."

"The dog?"

"No, McL. An' w' that he gi' a howl an' wen aff."

"McL.?"

"No, the dog. An' when he cam' back at me he pounded me, yer honor."

"The dog came back at you?"

"No, McL., yer honor. An' he issa hurt a bit."

"Who isn't hurt?"

"The dog, yer honor."—Tit-Bits.

### Another Interpretation.

Naggsby (facetiously):—"If you think I'm a perfect gentleman, you ought to know my brother."

Waggsby—Yes, I suppose he would set me right on the matter.—Baltimore American.

After a woman reaches 200 pounds in weight, she couldn't help looking superior if she wore old clothes.



## EDITORIALS

Opinions of Great Papers on Important Subjects.

### The Hired Man.

It is important that the hired man on the farm should be sociable and "chipper." That lesson protrudes from nearly every page of the interesting government bulletin on "Wages of Farm Labor in the United States." The relations of the hired man and his employer are personal and sentimental, and democratic to a degree found in few other occupations. If the farm hand has a likely tongue and a cheerful manner, the employer may do any number of things for him that will not figure in the contract. He will let him cut firewood from the wood lot, raise as many hens and pigs as he chooses on the farmer's land, graze a cow or two, have a horse and buggy whenever he wants to drive into the village, and if he is married, occupy a house and garden patch, rent free. It pays to be agreeable on the farm.

And it pays every farmer to have as diversified crops as possible, particularly if he is hiring help. The one-crop farmer, be his product corn or cotton, crowds into about four months all the work of the year. If he uses his acres at other seasons for dairying or lumbering, he could profitably employ a good part of his own surplus time and energy and those of his sons if he has any, or of his hired man if he has engaged one. As the government bulletin intimates, the season of idleness on the farm, when there is none or little employment of labor, as contrasted to steady employment in a factory, constitutes "the greatest difficulty in procuring help for the farm." The hired man's wages are highest in the States where the farms are well wooded, lowest in the treeless prairie States. The farmers of the country earn a pretty penny every year—over \$100,000,000—from the product of their wood lots; the annual value of sawlogs cut for the lumber business expressly is only \$50,000,000 more than the farmer receives as a side issue from his winter's work with the ax and saw.—New York Mail and Express.

### Why Forests Are Useful.

LET us take two hillides of identical slope and exposure, one being forested, the other cleared. The rain falls on the canopy of trees in the one instance and drips softly from leaves and branches and trickles down the trunks. The soil beneath is soft and loose (even in winter it does not freeze hard), a composition of disintegrated rock, decaying leaves and twigs and even logs, and all tied together by a dense mass of roots and rootlets. The rain comes upon this forest soil so softly through the trees that the ground is not compacted and hardened or gullied as it would be if the rain fell directly on the soil.

The loose and spongy earth takes up the water as fast as it falls, and that which is not soaked by the roots for the nourishment of the trees is carried away into underground basins, from which it slowly percolates and eventually comes out upon the surface again as springs. So slowly does this filtering go on, the spongy soil holding the water back, that the springs are given a constant and almost steady supply. Even drought will actually dry up but few such. Snows also melt more slowly in the forest, thereby preventing disastrous spring freshets.

In the other case, that of the treeless slope, the rain falls directly on the bare ground and pounds it hard and impervious. The water for the most part runs off superficially as from a roof. Not enough water sinks into the ground to help feed constant springs. The surface run-off of a hard rain on a bare hillside is moreover conducive to gullying and washing of a most destructive nature, and the waters being poured immediately into the stream beds cause freshets. The freshest waters quickly rush by, wreaking havoc with fields, bridges, mills and the next week the streams are nearly run dry.—Boston Transcript.

### Economic Independence.

IT is probable that \$100 per capita is a moderate estimate of the value of the food annually consumed by the people of the United States. In other words, the grocery and provision bill of this country approximates \$8,000,000,000 a year. The impossibility of ascertaining with accuracy the money value of these sources of table supply in which no commercial transaction is involved—the farmer's kitchen garden; the fish and the game of those who eat what they catch and shoot; and the beef, mutton

### THE LAZIEST PEOPLE.

Koreans Make Their Women Beauts of Burden Scout a Filthy City.

Broadly speaking, it is hardly an exaggeration to say that the Koreans are the laziest people on earth. All day long they lay about the streets smoking their gigantic pipes in native pipe is a six-foot length of bamboo with a metal bowl, and is carried hooked into the neckband and down the trouser leg. All work of very nearly every kind, is done by the women, who occupy, perhaps, the most degraded position held by the sex of any nation. The unfortunate female population is collectively a beast of burden, and denied even the most elementary recognition as human beings. A Korean girl has no name; she is merely known as "Daughter of—"

During the first moon of each new year the Cho-sense throw off their inordinate laziness and allow their naturally quarrelsome proclivities full play. This is the period permitted by law when anyone and everyone may fight in the public streets, or anywhere they choose, with impunity. And full advantage of the license is taken. Now are family disputes, which have been seething for a whole twelvemonth, settled in the most primitive fashion, and often half the town is drawn into the brawl. The creditor, catching his debtor abroad, may thump and pound him to his heart's content, and no one may interfere. For fourteen days a veritable pandemonium reigns, and as a method of "clearing the air" it is certainly not without interest for the spectator.

Seoul, the capital, on the Hang-Kang river, is an untidy, ill-built city, surrounded by twenty-foot walls. The curfew system, common to feudal England, still prevails as in most Korean towns. A great bell is rung at sunset, and the gates are immediately closed, not to be reopened until the

following sunrise. No lights may then be carried in the streets, and no one may go out of the city, with one rather startling exception. All funerals, by immemorial custom, take place only at night, and for this purpose there is a special exit called "The Gate of the Dead." Between the hours of sunset and dawn, no male is allowed to be abroad in the streets; these hours are sacred to the women, and constitute their only privilege. They usually employ the time in paying visits. Up to a few years ago, any masculine phillander found out after dark was beheaded, but since the Europeans have introduced their own customs, the entire system is in danger of revolution.

Seoul is one of the filthiest and worst-kept towns to be found in all the east. The idea of drainage has not yet entered the official mind, and that pestilence has not made there its abiding home is proof of a beneficent Providence. During the writer's sojourn some years ago, it was not an unusual occurrence for the agile leopard (Korea's most common "wild-fowl"), to scale one of the walls, and entering the nearest house, carry off a child in the darkness. To-day, however, they have changed all that; but Seoul's greatest need, from a western point of view, is still a decent hotel. The native dwelling-house is an impossibility to all but a salamander. The flooring, in most cases, is composed of neatly-jointed flat stones, over which mats are laid. Underneath is a hollow space, in which firewood is laid in bundles and lighted. The paper doors are then slid into their grooves, excluding all air, and soon you find yourself in a Turkish bath. The average newcomer only tries it once.

A new baby looks like a lobster. This will make mothers mad, but it is true. We have a right to say so, having once been new, and a baby.

and pork killed and eaten by those who raise the animals leaves any statement of the cost of feeding the nation a matter rather of estimate than of known amount.

Some idea of our absolute economic independence, as far as food products are concerned, is obtained by a realization of the fact that about 97.5 per cent of the \$8,000,000,000 grocery and provision bill is supplied from domestic sources. If the remaining 2.5 per cent obtained by importation, be analyzed, it is seen that a half dozen items, such as coffee, tea, cocoa, sugar, spices and tropical fruits, represent more than three-quarters of the foreign supply. The importation of articles which might be or even could be raised in this country is probably less than one-half of one per cent of the total value of our annual food consumption.

Not only does our actual domestic supply of alimentary substances exceed in its percentage that of any other nation or people rightly claiming to be civilized, but there is the further fact that in point of variety our menu is almost unlimited. The question of cookery is a side issue depending on individual taste. But the fact remains that we have the food in limitless quantity and infinite variety, the product of American farms, gardens, fields, orchards, forests, rivers, lakes and oceans.

In addition to this generous supply of our domestic needs, we sold to other countries, last year, about \$900,000,000 worth of surplus crop. It may be remarked that we also have a few acres of land not yet under cultivation.—New York Sun.

### Your Share of the Public Debt.

YOUR father can remember when a 7 per cent government bond served as a sort of interest standard. Of course, it was a gilt-edged security, but 7 per cent for money was considered about the proper figure. That was not very long ago. It was in a day when the public debt of the nation, measured by the resources of the people, was a heavy burden. Now we have 2 per cent bonds. In fact, more than half of our bonds are 2 per cent securities. In the face of a thousand alluring investments, including farm mortgages and municipal bonds, the government can have all the money it wants at 2 per cent. Your share of the interest on the public debt is 34 cents annually. Your share of the interest-bearing debt is \$1.1.

We piled up millions of liabilities during the Spanish war, and yet the total of the public debt is less than the capital of the Steel Corporation; less than the total amount of life insurance credited to at least two concerns. The interest-bearing debt on Dec. 31, 1908, was \$901,747,220. Eleven dollars per head. In Great Britain the debt is \$71 per capita, and in Holland it is \$90. France has a national debt so great that each inhabitant owes \$150. The ray of sunlight there is the fact that France has borrowed from the people, and there is no danger of foreign creditors foreclosing a mortgage on that country. Argentina owes \$122 per capita, and Australasia \$263.

We talk much of our natural resources, our loyal people and our new navy. Don't forget that one of our greatest items of strength in foreign lands is our financial standing. The nation with unlimited credit, with a big treasure chest, is in a position to command and direct and influence. Financially, the United States has no competitors.—St. Louis Chronicle.

### Too Many Railroad Accidents.

WITHIN a month 125 people have been killed by railroad accidents in the Eastern and Middle States, and more were injured. It may be argued that this is hardly more than a normal amount of destruction in so large a population as ours, but there is no normal rate of violent death. If accidents continue in the same proportion, it will mean that whole regiments of our citizens will be exterminated by trains in the course of this year, and that is entirely too many. Our authorities are always lenient toward the people who are primarily responsible for these slaughters, because presidents, superintendents and directors are not personally cognizant of defects which caused the slaughters; but if we were to acquire a habit of holding the officers of railroads to account, they in turn would exact more faithful and adequate service of their employees, and there would be a lessening in the number of accidents as a result.—Brooklyn Eagle.

### RANK POISON IN THE BODY.

Generated in the System It Frequently Causes Disease and Death.

The body is a factory of poisons. If these poisons, which are constantly being produced in large quantities in the body, are imperfectly removed or are produced in too great quantity as the result of overfeeding, the fluids which surround the brain cells and all the living tissues are contaminated with poisonous substances which asphyxiate and paralyze the cells and so interfere with their activity. This fact explains, in part at least, the stupidity which is a common after-dinner experience with many persons.

When food is retained in the stomach beyond the normal time, either because of its indigestibility, the taking of too large a quantity of it or a crippled state of the stomach, these changes are certain to take place. This fact explains a very large share of the myriad symptoms which afflict the chronic dyspeptic. The giddiness, the tingling sensations, the confusion of thought and even partial insensibility, which are not infrequently observed a few hours after meals in chronic dyspeptics, are due to this cause. Here is the explanation of the irascibility, the despondency, the pessimism, the indecision and various other forms of mental perversity and even moral depravity which are not infrequently associated with certain forms of gastro-intestinal disturbances.—London Family Doctor.

### Thawing out an Oil Pipe Line.

An eight-inch oil pipe line from the Bakersfield region to San Francisco has to be heated at intervals so that the oil will flow.

When a number of poor cooks get together, what a lot of blame you will hear given the flour!

A man naturally believes in the survival of the fittest as long as he lives.