

### That Six-Hour Layoff

#### Not in the Contract

"The man who operates a dairy has a steady job, and those who work in feeding, milking, distributing and keeping the barn in condition can't loaf on the job or failure is sure," said Bob Bell, "as is illustrated by the dairyman who was noted for the high quality of his cattle and seeing to it that his hired help were kept busy. A negro came to him for work, and, after looking him over, was told he didn't look like he wanted a steady job. 'Yassuh, boss, Ah wants a stiddy job.' He was put to work. His 'stiddy job' was to milk 20 cows, care for the milk, wash the utensils, curdy the cows and feed them, and drive them to and from the pasture. It took him eighteen hours to perform his duties, but he was game and stayed for a couple of months. Then he gave notice that he was going to quit. 'I knew it! I knew it!' railed the dairyman, 'I knew you didn't want a steady job.' 'Yassuh, boss, Ah does,' protested the dinky, 'but yuh ain't been givin' me no stiddy job; yuh's been layin' me off six hours every night.'—Exchange.

### More Than One Method

#### of Arriving at Truth

Can you tell when another person is telling a lie?

There are people who claim to be able to detect a liar at once, and a machine has been invented which, by measuring a man's blood pressure, gives a fairly clear indication as to whether he is telling the truth or not.

A non-mechanical test for liars has been in use in the East for many years. If a crime has been committed in a village, the villagers are drawn up in a line, barefooted, and questioned.

The questioner doesn't pay much attention to faces—he glances at the toes of each individual. If they are "clawing down" into the ground, their owner knows more about the affair than he cares to admit.

This test, of course, only works where the natives don't know the signs for which the questioner is looking. And changes in blood pressure aren't necessarily a proof of guilt. They denote fear or anxiety, which may be felt by the innocent as well as by the guilty.—London Answers.

### Fire in History

Benjamin Franklin deserves to be called the father of American comfort. The rocking chair is attributed to him, and his was probably the first attempt ever made to construct a hot-air furnace. Certainly New England had no household furnaces before 1835, and even the first successful baseburner is dated about 1830. Primitive man dug hearths in his cave lodgings, classical dwellings found braziers adequate, the Middle Ages built fireplaces of a necessary enormity for their spacious halls and it was only a little while ago, as time flies, that anyone enjoyed the modern luxury of a stove such as within one century has become an "American antique."

### It Sounded About Right

A story Canon Doyle used to love to tell, for it was against himself—he was that kind of a man—had to do with a lecture he was about to deliver on one of his tours over here. At the last minute the man who was to have introduced him was unable to be present, and another local worthy was hurriedly pressed into service. He did right nobly until the critical moment arrived. Then he faltered, pulled himself together, and proceeded:

"And now, ladies and gentlemen, it is my great pleasure and privilege to introduce to you Canon Doyle, the eminent divine."—Kansas City Star.

### Food of Wild Pests

One of the duties of state trappers is to determine, by stomach examination, just what coyotes, wolves, wildcats and foxes live on. The stomachs of 32 coyotes examined revealed 13 rabbits, nine deer, two traces of sheep's wool and bird feathers, and one woodchuck.

Seven foxes examined showed them to be living upon woodchucks, rabbits, mice and ruffed grouse. Of seven wildcats three had eaten ruffed grouse and four, rabbits. One wolf revealed that it had dined recently upon venison.

### Copenhagen City of Spires

There are so many fine spires and towers on the churches and palaces in Copenhagen that it has been described as the "City of Spires." Although it is ancient, Copenhagen now is modern in appearance. The earlier houses built of wood were destroyed by fire in the eighteenth century and have been replaced with brick and stone buildings. Copenhagen is noted for its parks, among which the most famous are the Tivoli gardens, laid out in 1843.

### Doing One's Best

The thrill of doing a job to the best of our ability is one of the greatest rewards of this thing called work. And every task has in it this thrill. The man who doesn't get a kick out of his job should be given a kick out of it.—Griffis.

## WHY

### Poppies and Battlefields Are Associated

For hundreds of years this flower has been associated with the battlefields of western Europe, especially in Flanders, where it grows as a pest among the wheat and in uncultivated fields. Poppies grow luxuriantly on battlefields in that section simply because such fields are torn up and then neglected for a season or two. Contemporary writers refer to the profusion of poppies which sprang up on the battlefields of Landen, Ramilies, Malplaquet, Fontenoy and Waterloo. William of Orange and Luxembourg fought the bloody battle of Landen in the summer of 1693. In his history of England Macaulay says of this battlefield: "During many months the ground was strewn with skulls and bones of men and horses, and with fragments of hats and shoes, saddles and holsters. The next summer the soil, fertilized by 20,000 corpses, broke forth into millions of poppies. The travelers, who, on the road from Saint Tron to Tirlemont, saw that vast sheet of rich scarlet spreading from Landen to Neerwinden, could hardly help fancying that the figurative prediction of the Hebrew prophet was literally accomplished, that the earth was disclosing her blood, and refusing to cover the slain." The poppy became peculiarly associated with the battlefields of the World war as the result of the poem by John McCrae, Canadian physician, soldier and poet. "In Flanders Fields" was written during the second battle of Ypres. The poppy is the official memorial flower of the American Legion and is widely worn on Memorial day—May 30—which by reason of this fact is frequently called Poppy day.—Exchange.

### Why Lock System Was

#### Used in Panama Canal

There is a difference of only a few inches between the levels of the two oceans at the Panama canal, and this had nothing to do with the selection of a lock canal or high-level canal instead of a sea-level canal. Some of the reasons for the lock canal advanced by the chief engineer, John S. Stevens, were: 1. The time and cost of construction would be less than half that required for a sea-level canal. 2. It provided the best solution of the problem of how to care for the flood waters of the Chagres river, flowing into Gatun lake. 3. It provided for enlargement of its capacity to almost any extent at much less expense of time and money. 4. Cost of operation, maintenance and fixed charges would be much less. 5. It would provide as safe and a quicker passage for ships, and therefore would be of greater capacity. For these and other reasons and on the advice of President Roosevelt, congress in June, 1906, voted for the lock canal.

### Why Well "Whistles"

The phenomena of a well sometimes seeming to whistle and the water pressure change are largely the result of disturbance of the balance between two forces—air pressure and hydrostatic pressure. So delicate is the balance that some wells show daily fluctuations, according to the daily barometric changes. Around 3 a. m. and 4 p. m., when atmospheric pressure is usually least, such wells exhale air, the water table tends to rise and flows tend to increase. Around 10 a. m. and 9 p. m., when atmospheric pressure is usually greatest, such wells inhale air, the water table tends to drop and flows tend to lessen.

### Why Called "Black" Hills

Black Hills is a literal translation of the name given to the mountainous region in western South Dakota by the Sioux Indians. In the Dakota tongue the name was Paha Sapa, alluding to the dark and somber aspect of the pine-clad heights as seen from the plains. These heights really deserve to be called mountains. Harney Peak, with an elevation of 7,242 feet above sea level, is higher than any peak in the Appalachian or Ozark ranges. There are several other peaks in the Black Hills with altitudes of 6,000 feet or more.—Pathfinder Magazine.

### Why "Ham" Actors

Before the use of grease paint was introduced into this country, actors coated their faces with ham fat and then applied the colors. They were known at first as "ham fatters" and this was finally shortened to "ham." This was before the time of Charles Meyer, a hair dresser and wigmaker, who came to this country from Germany in 1868, and was the first to introduce grease paint in this country.

### Why Red Ink Is Used

The use of red ink by many banks, particularly savings banks, to note the interest is simply a matter of convenience, the interest being more easily distinguished from the principal sums by being written in colored ink. Any color preferred may be used, or it is not necessary to use a different color.

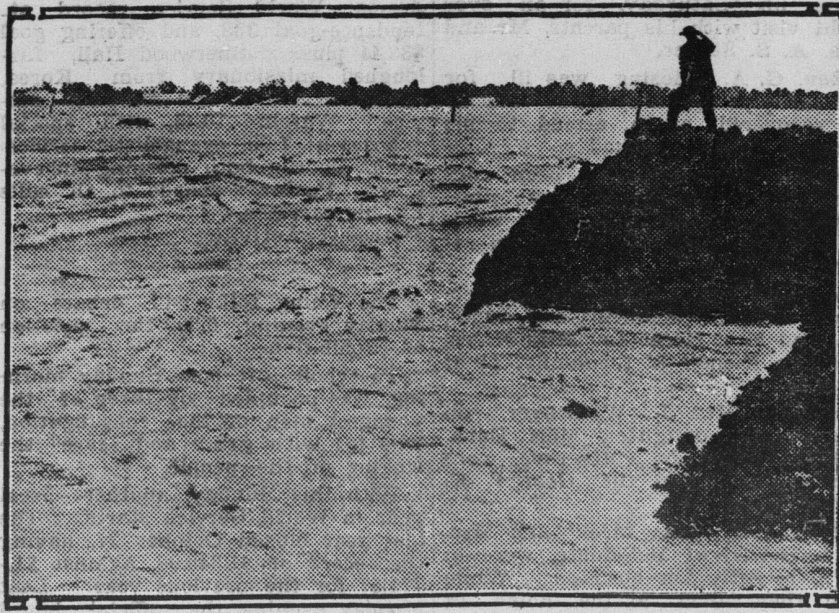
### Why "Sons of Han"

The Chinese people are sometimes called "sons of Han," from Han, the founder of the twenty-sixth Chinese dynasty, with which modern history begins.

### Why Sun Causes Sneezing

Gazing at the sun causes a person to sneeze because the gazing stimulates certain nerves in the eyes and perhaps in the nose.

# Great Rivers



Flood Waters Raging Through a Break in a Mississippi Levee.

(Prepared by the National Geographic Society, Washington, D. C.)

NATURE played favorites in apportioning the great rivers of the world. Of the dozen largest, six are in Asia and three in Africa, leaving only three for the two continents of the New World. And among the twelve leaders, Europe and Australia are wholly unrepresented.

The longest single river is the Nile, measuring some 4,000 miles from head to mouth. The Nile is further distinguished in that it has no tributaries for the last 1,500 miles of its course to the sea. During this stretch its waters are considerably reduced in volume by evaporation and irrigation, so that it grows smaller instead of larger toward its mouth.

Other African rivers among the length-scoring twelve are the Niger and the Congo, both fed by the tropical rains of hot regions near the Equator. In a general way they more nearly resemble South America's representative, the Amazon, than the great streams of the colder northern continents.

Of Asia's six longest rivers, four are in Siberia, the Ob, Yenisei and Lena, flowing north into the Arctic ocean, and the Amur emptying into an arm of the Pacific. The other two are the Yangtze and Hwang, or Yellow, river of China.

These twelve river basins represent the greatest variety of climate and civilization. The Amazon and the Congo flow through lush equatorial jungles inhabited by birds of brilliant plumage, wild animals and savage tribes, while the mouths of the Yenisei and the Lena are above the northern timber line and their valleys support the sparsest population. The Mississippi and the Yangtze flow through established, if divergent, civilizations, with rich cities along their banks like jewels on a string. The Nile is one of the cradles of world history; the Mackenzie is still a frontier stream.

Five of the dozen rivers flow to the north. These are the Nile, Mackenzie, Ob, Yenisei, and Lena. The Mississippi and Niger flow south. The Amur, Yangtze, Hwang and Amazon run eastward. Only the Congo points toward the west.

### Difference in Floods.

All these streams overflow their banks at intervals but the results are strangely different. In the case of the Mississippi and the Yangtze, floods are national disasters bringing untold suffering to millions. The annual overflow of the Nile with resulting fertilization of the valley by the deposit of silt is the source of the wealth of Egypt. The Hwang, or Yellow river, from its habit of overflowing its banks and changing its entire course at intervals is known as the "scourge of China."

The Amazon and the Congo lie almost under the Equator, and the other ten longest rivers are in the northern hemisphere. Four flow into the Arctic ocean. A reason is not far to seek. The greatest land masses are in the northern half of the world, and without large land areas long rivers are impossible. The smaller continents of Australia and Europe are not represented in the dozen. Similarly, the reason for the longest rivers flowing to the north and east is that the longest continental slopes extend in those directions.

The Yangtze and the Mississippi are joined with wealthy cities largely because of their location in the temperate zone. The tropic Amazon, Niger, and Congo are too hot; the Mackenzie and the Siberian rivers are too cold for the favorable growth of towns. The Nile valley beyond Cairo is a mere strip of green from 15 to 30 miles wide between two burning deserts. The Hwang is too variable in its habits to encourage navigation or river ports.

From the earliest times these long rivers have furnished high roads for the exploration of continental interiors. Nero sent an expedition to discover the headwaters of the Nile, which failed to reach its objective. Russian penetration of Siberia followed the great river beds. The Amazon and the Congo are still highways of discovery. Head reaches of the Yangtze are veiled in Asiatic obscurity. The Niger was the river of romance in the great days of Timbuktu. The histories of the world's river basins have been the history of the world's empires. A great river is both a roadway and a source of life.

### Menace of the Mississippi.

Although North America can claim only two of the world's dozen longest

rivers, it possesses in the Mississippi-Missouri the longest of them all. This magnitude of the Mississippi is becoming more and more of a menace because each flood seems greater than the preceding one. Why this should be true has been a problem to some laymen; but one of the chief factors is plain enough: It is the usually laudable effort of Americans to develop and build up their country.

Aside from the fact that several decades ago there were fewer people living and fewer dollars invested in the regions subject to overflow in the lower Mississippi valley, the flood stages were actually lower in those days. They were lower, to consider one important fact, for the very good reason that then less water was fed into the Mississippi's 100,000 tributaries in a given space of time. Forests and woodlands that do not now exist held a large part of the rainfall and fed it slowly into brooks and creeks and rivers. Irregularities in the life of the land formed puddles that later evaporated, or sent rills in tortuous paths that slowed up the runoff.

In late years a constantly increasing population has been busy changing these conditions. Every tree cut, every road built, every street paved, every drainage ditch dug, and every culvert constructed in the vast area drained by the Mississippi river system has done its bit toward pouring rainfall more quickly into the great river.

Not only has man helped to pour more water into the Mississippi; his works have helped to confine it there. When De Soto and his followers first knew the Mississippi it spread out at each flood season over a wide area. Sometimes in its lower reaches it was 20, 30, and even 40 miles wide.

The fact that the flood waters spilled away at numerous places into swamps and lowlands kept the flood crest down in the lower river. In 1717 three-foot levees protected New Orleans. Now they rise 25 feet or more above the city. Even as late as 1882 the highest flood stage at New Orleans was 16 feet. In 1922 it was above 22 feet. One reason, at least, for this, is that more efficient levee maintenance for many hundreds of miles along the river has herded the flood waters past New Orleans as well as other lower river points in the regular channel.

### Levees Protect Vast Areas.

More intensive development of the lowlands has made this levee system necessary. Now some 29,000 square miles are dependent on the levees for protection. Breaks still occur, and when they do they drain off some of the flood waters and so relieve in some measure the strain on the banks farther down stream. But it is not the innocuous affair that it was in the days of De Soto. Now towns and plantations, railways and industrial plants lie in the lowlands, and any "relief" that a levee break may occasion to down-river points is at a cost of many lives and much valuable property.

On the whole a considerable quantity of water finds its way from the lower Mississippi through levee breaks and bayous. The most important natural safety valve is the Atchafalaya river or bayou which flows away from the Mississippi at the mouth of the Red river, and finds its way directly to the Gulf of Mexico some 50 miles west of New Orleans. In flood times this out-flowing stream takes from the swollen Mississippi as much as 350,000 cubic feet of water each second—an amount equal to more than half the average flow of the Mississippi. It is because of such losses as this, coupled with the much greater depth of the channel in the lower river, that the flood stage can be between 50 and 60 feet at Memphis and Vicksburg, and only a little more than 20 at New Orleans.

The Mississippi river system is truly a continental feature, draining a million and a quarter of the three million odd square miles of the United States. Thirty of the 48 states send a greater or less contribution of water to this great stream.

The main Mississippi river is more than 2,500 miles long, while the Mississippi-Missouri is 4,200 miles in length—the longest river system in the world. The great scale on which the Mississippi is built becomes evident when one considers the time required for floods to pass down its course. About thirty days are required for the surging flood crest to pass from the mouth of the Ohio to New Orleans, and from ten days to two weeks from Greenville, Miss., to New Orleans.

## HOW

### COLOR HARMONY AFFECTS APPEARANCE OF HOUSE.

Of all the factors which give the house complete character and charm, that of pleasing harmony in the color of roofs, walls and trim is perhaps most important. Color harmony is achieved only by the use of hues, permanently fixed in the material of the roof, which blend with the color of the body of the house, of the sky, and of surrounding foliage.

This harmony is furnished in a slate-surfaced shingle of multichrome type, now available everywhere, which gives a heavy and thick roof at moderate cost, supplying the requisite color in variations of the surface texture.

This type of roofing is economical to lay and equally good for new or old jobs, laying right over old roof surfaces where desired.

Waterproofing of the heavy base is done by impregnation with practically pure bitumen, treated by a vacuum process.

Thickness of the base provides that always desired quality in shingles, a heavy shadow line, enhancing the interest of both color and texture in roofings and increasing the apparent expanse of the roof.

Colors available include weathered brown, onyx, tapestry tan, opal and bronze mosaic. An almost limitless number of rich effects is possible by utilizing various combinations. An interesting device called a harmonizer is available through the makers of these shingles, consisting of a series of color cards representing roof and house body so that the owner can predetermine the harmony of the two.

### How Sugars Differ in

#### Degrees of Sweetness.

Corn sugar or dextrose is one of the three carbohydrates most important as food. A bushel of corn will produce approximately 25 to 27 pounds of dextrose. It cannot be distinguished from ordinary granulated (cane or beet) sugar in appearance.

The other two sugars referred to are sucrose or ordinary sugar, and levulose, the finest of all sugars, large quantities of which are consumed in honey and sirup, and the sugar which is the most easily assimilated physiologically.

The relative sweetness of the three sugars rates as follows: Dextrose, 74.3; sucrose, 100; levulose, 173.3. The United States bureau of standards originally developed dextrose for its low sweetening power. Since it has been produced in the form of granulated sugar its sweetening power has greatly increased. It is used to adulterate beer and sirups.

### How Cities Are Improving

Evidence that at last "some cities are pulling out of their dreadful frontier" is beginning to appear, according to a report of the committee on city and regional planning of the American Institute of Architects, made public by the president of the institute, Robert D. Kohn.

"The pioneer era of ugliness is passing," the report says. "Major traffic street plans involving the expenditure of hundreds of millions of dollars have been completed in 144 cities, and started in 64 cities.

"Both small and large cities increasingly seem to appreciate provision of playground for both children and adults with the centralization of children's playgrounds at schools."

### How to Contrast Colors

Black is often used in decorating sun parlors, either as a background for the bright splashes of other color or as a contrast here and there. Because the sun porch is so sunny and so colorful it can stand some black, which would perhaps not be possible in an indoor room. Think of such a sun porch on a summer afternoon—a big wicker armchair or porch swing with bright cushions and a near-by table holding magazines and lemonade glasses! On a winter afternoon it is just as enticing.

### How to Restore Glass

A glass dish ruined by having hard water stand in it continuously may be reclaimed by filling with sour milk and allowing to stand a day and a night, discloses a correspondent in Successful Farming. The glass should then be washed, after which it will be found that the original luster is restored.

### How Error Gave City Name

Translated, "Rio de Janeiro" means river of January. An early explorer, De Sousa, sailed into the bay upon the first of January. He thought it was a river and gave it the name. The city took its name from the bay.

### How to Clean Fine Glass

Use eggshells to wash bottles or vinegar cruets. Crush them fine, put them into the cruets with warm, soapy water and shake well. This will clean the finest glass without scratching it.

### How "Henri" Became "Harry"

The name "Harry" evolved from Henry through our ancestors' difficulty with the French nasal "n." Thus Henri, or Henry, became Herry; then Harry.

### Collectors Gather at

#### Frankfurt's Insect Fair

One of the strangest fairs in the world is held at the German town of Frankfurt every year. Nottingham, England, has its goose fair, and in other cities there are mop fairs and fur fairs. But Frankfurt goes one better than any of these by holding an insect fair.

Collectors come from all parts of the world to meet sellers of rare butterflies and moths. Some of these are worth amazing sums. There are men, too, offering and disposing of beetles, flies, grasshoppers, crickets, and so on. Most of the vendors bring their stock with them and display the beauties of their specimens to inquirers. There are many, however, who do business in quite a different way.

They have no stock with them; they sell insects, so to speak, on the hoof, just as cattlemen will sell beasts that are a thousand miles away on the ranges. These sellers of queer insects specialize in knowing just where the rarest kinds are to be found. Along comes a collector who asks if a particular specimen can be obtained for him. Though the one which will eventually grace his cabinets is not yet born, the order is booked and in due course the specimen is delivered.

### Louis Kossuth Showed

#### Eloquence in English

America's deep-rooted tradition as an asylum for the oppressed of other lands, a tradition which in some instances has been permitted to lapse in recent years, found vivid expression on the visit of Louis Kossuth to this country after the collapse of the Hungarian revolution of 1848 and 1849. Says an article in a Boston paper:

Kossuth was an orator of stirring eloquence even in the English tongue, which he had mastered by reading Shakespeare and the Bible in an Austrian prison cell.

Here is a sample of his oratory, the start of his Faunell hall speech:

"Do me the justice to believe that I rise not on any pretension to eloquence, within the Cradle of American Liberty. If I were standing upon the ruins of Prytaneum and had to speak whence Demosthenes spoke, my tongue would refuse to obey, my words would die away from my lips, and I would listen to the winds, fraught with the dreadful realization of his unheeded prophecies."—Detroit News

### Opened Indies to Trade

In 1599 the Dutch raised the price of pepper from 3 shillings to 6 shillings per pound, and in September of that year the merchants of London banded together for the purpose of joining a company to direct trade to the Indies. The East India company was granted a charter by Queen Elizabeth in 1600, and was first called "Governor and Company of Merchants of London Trading with the East Indies." In 1698 William III incorporated the "English Company Trading With the East Indies." The two were amalgamated in 1708 under the title "The United Company of Merchants of England Trading to the East Indies," commonly called "Honorable East India Company."

### Smart

A Santa Monica woman has at last become the champion of her sex. She had been subpoenaed as a witness and the court, before she began her testimony, instructed her as follows:

"You must be very careful, madam, to state only what you actually saw and know. There must be no hearsay evidence." He then signaled for the prosecutor to go ahead.

"What is your age?" asked the worthy.

"I cannot answer," cooed the lady, "I have only hearsay knowledge on that point."—Los Angeles Times.

### Russian Universities

The universities of Russia before the World war were divided into two classifications—the universities of arts and sciences and the institutions which included the schools of mines, technological institutions and the like. Students in the universities of arts and sciences wore uniforms of dark blue material, trimmed with light blue. Students in the other institutions wore uniforms of black or dark blue and wore special insignia of the particular institution which they attended, on the shoulders of the uniform.

### Firefly's Light

Lightning bugs or fireflies belong to any species of two genera of beetles of the family Lampyridae. Photuris pennsylvanica is a common form in the eastern United States. Fireflies produce a bright, soft, intermittent light without sensible heat from an organ in the lower part of the abdomen. This organ appears to be a specialized part of the fat body and is supplied with nerves and abundant tracheae. The light is supposed by some to be caused by oxidation of a substance secreted by the cells.

### Difference

Sunny, driving through the countryside with his grandmother, observed some pigs eating greedily in a field of clover, and inquired what they were doing. "They are eating clover," his grandmother, informed the little fellow. "They like it just like you like spinach." Sunny was instant in his disclaimer: "But I don't like spinach at all," said he.