

MUELLER RECORD

PUBLISHED AT DECATUR, ILLINOIS



*Autumn in the Ozarks — Saline River
Between Little Rock and Hot Springs, Arkansas*

NOVEMBER, 1937

THERE'S A LONG
COLD WINTER
AHEAD —



-GET YOUR SERVICE
BOXES IN SHAPE
TO MEET IT



H-10373



H-10374

This is the month—the right month for cleaning out and putting your service boxes in first class shape for winter. Don't delay.

Delay means added trouble and expense. If you feel you are out of luck when you find damaged boxes, just think how lucky you are to be able to get Mueller Service Box Repair Lids which make Buffalo Type Service Boxes **BETTER THAN NEW.**

This is no exaggeration, no high powered advertising sales talk, but an established fact. Many users of this type of box in buying them new stipulate they must be equipped with Mueller Repair Lids.

Another appreciated fact is their inexpensiveness in both sales price and installation cost.

H-10373 for 2½" and 3" new style Buffalo type boxes.

H-10374 for 2½" and 3" old style Buffalo type boxes.

New style fits inside the shaft, old outside.

Note illustrations at left showing conditions of service boxes. These are the only ones that can occur. They can be quickly remedied with Mueller Repair Lids. The labor cost is small because any one can attach the lids.

Mueller Service Box Clean-Out Augur should be a part of the equipment of every gas and water repair crew. Saves time, cleans the box thoroughly in short order. See illustration at right.

Again we say, don't delay. Give us your requirements—Prompt shipment from stock.



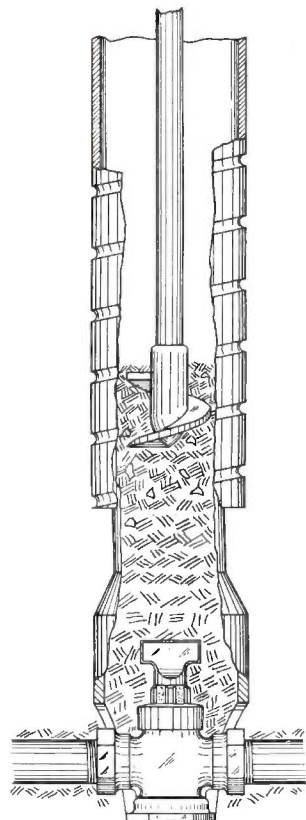
Broken Lug



Lost Lid



Broken Top



CLEANING WITH MUELLER
H-10330 CLEANOUT AUGUR

MUELLER CO.
DECATUR, ILL.

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Politeness is the badge of good breeding and should not only be acquired through a desire to be polite, but because you owe it to yourself as well as those with whom you associate. Show courtesy to others not because they are gentlemen, but because you are one.

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Steel when it loses its temper is worthless, and in this particular men are like steel. The man who cultivates equanimity of disposition and conduct inevitable cultivates his powers of reason and self-control. He always is in position to handle a situation calmly and intelligently. Men who give way to fits of passion and anger are not. Temporarily they have yielded to an impulse which is detrimental to themselves and their ability.

• •

The man who thinks grows wiser each day. Those who do not think do not progress. Thinking is not based entirely on what you read. Depending alone upon what an author writes is dangerous. It is likely to lead you in the wrong directions, because authors are not always infallible or correct in their reasoning. Read and analyze what you read. Observe others in their conduct and their work. Listen to what others say not of necessity to copy them, but to improve on their beliefs and ideas. Remember tomorrow what you did today. Sift the right from the wrong acts, and forget the latter. Education and wisdom come through use of all faculties and not through one or two of them.

PRINTING

In me all knowledge dwells:
The oracle of oracles,
Past, present, future, I reveal,
Or in oblivious silence seal;
What I preserve can perish never—
What I forego is lost forever.
I speak all languages; by me
The deaf may hear, the blind may see.
The dumb converse, the dead of old
Communion with the living hold.
All hands are one beneath my rule.
All nations learners in my school.
Men of all ages, everywhere,
Become contemporaries there.

—James Montgomery.

MISFITS

If you choose to represent the various parts in life by holes upon a table of different shapes—some circular, some triangular, some square, some oblong,—and the person acting those parts by bits of wood of similar shapes, we shall generally find that the triangular person has got into the square hole, the oblong into the triangular, and a square person has squeezed himself into the round hole. The officer and the office, the doer and the thing done, seldom fit so exactly that we can say they were almost made for each other.—Sydney Smith.

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A willingness to work is important, but a knowledge of how to work intelligently and usefully is much more so. Many a man would go uphill twice as fast on the energy he spends working in circles.

CUMBERLAND FALLS

Perhaps the most thrilling spectacle in Southeastern Kentucky is the Falls of the Cumberland River near Corbin and Williamsburg. The river chose a magnificent section of the mountains for its precipitous leap which is the greatest in the United States east of the Rockies and south of Niagara. The waterfall measures sixty-eight feet in height and one hundred and twenty-five feet in width. Silvery sheets of water with dashing spray, whirling rapids and seething whirlpools are framed by canyon-like walls of green. Indeed, the setting is hardly second to the falls, itself, in scenic appeal. During the full of the moon Cumberland Falls presents the only moonbow to be seen on this continent, the only other in the world being at Victoria Falls in South Africa. The old inn at the falls, Moonbow Inn, takes its name from this phenomenon.

Cumberland Falls State Park was a gift to Kentucky from the late Senator Coleman T. DuPont, a native son. It is a tract of 593 beautifully rugged acres with many scenic features other than Cumberland Falls. Lovers' Leap, Natural Bridge, High Bluffs and Little Eagle Falls are widely known. The bathing beach and the bass fishing are un-failing attractions and every native tree and flower may be seen while following bridle paths or foot trails along the ravine and mountainsides.

Moonbow Inn has been recently remodelled and great care was taken to retain the atmosphere of the sixties when it was first built. A group adds to the facilities for guests. These cabins are particularly in demand for week-end parties.

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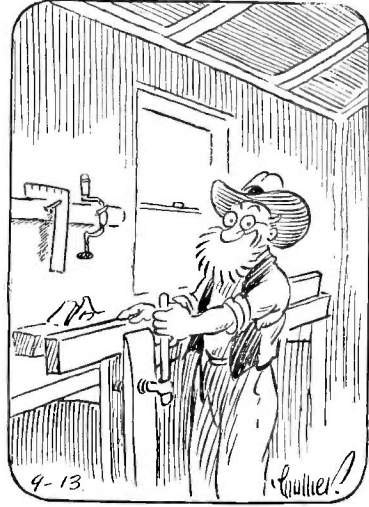
GROWTH OF AIR LINES

Air express was inaugurated September 1, 1927, and is therefore ten years old. There was a single line from Boston to San Francisco with extensions to the southwest from Chicago and to Los Angeles from Salt Lake City. Now the air lineage is 30,160 miles. At the close of the first full year the express air traffic was a little more than 17,000 shipments. In 1936 shipments had grown to 465,727. This year they are expected to reach a half million.

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In Chicago last month there was a convention of manufacturers of artificial limbs. The information was given out that there are 750,000 persons in the U. S. who require artificial limbs, and of this number 40,000 live in Chicago.

UNCLE ABNER SAYS:



"Pleased t'meet you," I sez to the new tax collector, an' he fainted dead away.

Link Oakey's wife has her heart set on a trailer; sorta wants to hitch her naggin' to a car.

AND THEN THERE WAS—

The man whose wife was so ugly that he always took her with him rather than kiss her good-bye.

The college boy who got extremely tight drinking punch at the frat dance before he was told there was no liquor in it.

The man so tough that he drank sulphuric acid with the result that it did not hurt him but made holes in his handkerchief when he blew his nose.

The fan dancer who was arrested for no gauze at all.

The man who never calls his wife better-half, but always bitter-half.

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The Aeronautical Chamber of Commerce, Washington, D. C., says there are 7,914 active licensed air crafts and 1,766 inactive licensed air crafts, a total of 9,680.

Departments of New York City estimate that \$642,410,000 will be required to run the city.

HOLD TO HANDWORK

Specialists in London Cling to Old Methods

There are some few things that have escaped mass production and the machine age. Old as "dear ole Lunnon" is a number of specialists still cling to hand work, and strangely enough some of these products go back almost to the beginning of civilization.

Wigs

The wig—which is a contraction of "periwig"—dates back to Egypt where it was found on mummies. Later they were worn for baldness, then for style. They are still used in stage make-up and by English judges and barristers. The early Romans and Greeks wore them. Among the number the great General Hannibal, who adopted the wig as a disguise. Emperors Otho Domitian and Caracalla wore wigs to conceal their baldness.

Getting back to hand work, there are left in London three men who still make wigs by hand. Their market is confined almost entirely to the legal profession.

Nautical Jewelry

A jeweler in Jermyn street makes nautical designs with precious stones and finds a steady market among yachtmen.

There is a man who deals in barks, but will have no commercial connection with anything but bark imported for tanning purposes.

There are plumassiers who deal only with the purchase, treatment, and sale of feathers.

In East London a firm does nothing but import huge quantities of gherkins.

Bleaching Ginger

Hackney Wick has a firm of ginger bleachers, but they had nothing to do with Ginger Rogers' topknot. Bleaching ginger is a trade secret. No layman has ever learned anything about it except that it is a process by which whole ginger is cleansed and treated for the market. The composition of the bleaching agent is a sacred secret. Perhaps it is well that the consumer does not know anything about the process.

There is a butcher who devotes his commercial activities to buying and selling sweet breads, which are a rare delicacy to some but repugnant and distasteful to others.

In the book binding industry there is a man who makes nothing but head bands for books.

Trade Secrets

Carefully guarded trade secrets, however, are not confined to hand workers. Everywhere, in these days of machines and mass

production, many manufacturers believe they have the only process by which certain results can be obtained, but keeping it secret for any great length of time is next to impossible.

The ubiquitous engineer bobs up with a knack for analyzing and gets the manner and method of how the thing is done.

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NEW YORKERS AND EATING

Three Meals Hardly Satisfies the Average—Eat Day and Night

New York is regarded as the food dealers' paradise. There are some seven million mouths there that must be fed daily—and nightly. Looking on from the side lines, one is led to the conclusion that the average New Yorker is always hungry. He arises in the morning at various hours and wants his breakfast. Then comes lunch and still later dinner. When they come from their evening's entertainment they want a snack before retiring or if they don't go to theaters, it is to a night club they wend their way, and night clubs are a great incentive to "fire up the human boiler." On the way home in the early hours they are quite apt to drop into some "wayside inn" for another little bite.

At Least Four Meals Daily

Recently the True Story Magazine made a survey of New York's eating habits. It was found that of those questioned fifty-five per cent indulged at least in a fourth meal daily. It was found in addition that those addicted to the eat before retiring habit have not lost their appetite. Sixty-eight per cent of them go in for heavy menus.

The survey showed something enlightening about the drink habits of these feeders. Milk led all the rest and after that came coffee, followed by tea and beer.

Permit us suggesting a slogan for New York food purveyors:

"Stuff them boys, stuff them with unending care,

From soup to nuts and chocolate eclairs."

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Latest W. P. A. Joke

Idle Man: "Say, Boss, I'm the only man on the gang who ain't got a shovel. How come?"

Boss: "You mutt, don't you know if you ain't got a shovel you don't have to dig?"

Idle Man: "Oh, yeah, but all the rest of the guys have something to lean on and I have to stand up."

THE MUELLER RECORD

Published at Decatur, Illinois, by MUELLER CO.,
Manufacturers of Vital Spots Products for the Plumb-
ing, Water and Gas Industries.

C. N. WAGENSELLER, EDITOR

POETIC MOODS

Autumn Brings both Sad and Joyful Refrains of Beloved Writers

Poets have different moods and different views. One sees the sad and melancholy side, while another sees joy and happiness. Perhaps no season of the year affects this class of writers so deeply as autumn. One poet looks out on the dying flowers, and strikes a doleful note suggestive of death and sadness. There was Bobby Burns with his "Man was made to mourn," which begins:

Makes One Chilly

"When chill November's surly blasts
Make field and forest bare,"
and adds "How man's inhumanity to man
makes countless thousands mourn."

The first line sends a chill running up and down your spine, and puts you in correct sympathetic mental attitude to go gunning for man and his inhumanity to fellow man.

Had the Blues

Then there was our own dearly beloved William Cullen Bryant, who must have had the blues when he dipped the old goose quill into the ink pot and wrote:

"The melancholy days are come,
The saddest of the year,
Of wailing winds and naked woods
And meadows brown and sear."

There are two couplets filled with dispiriting words, each breathing a requiem of sorrow—pick them out—"melancholy," "saddest," "wailing winds," "naked woods," "meadows brown and sear." However, this beloved poet was perhaps expressing his innermost thoughts for in his earlier masterpiece, "Thanatopsis," he points the way to his love of nature in the lines:

"To him who in the love of nature holds
Communion with her visible forms,
She speaks a various language."

He knew her moods and his heart responded to them, and to him autumn must have been his sad mood.

This Sounds Jolly

Then there was the later poet, James Whitcomb Riley, whose muse seemed most vibrant and responsive to human sentiments and emotions, because in dealing with them he brought dew to the eyes or laughter to the heart.

And when it came to autumn, he was not moved by any sadness of the scenes about him, but in rollicking, welcome measure he sang:

"O it sets my heart a-clickin' like the
tickin' of a clock,
When the frost is on the punkin'
And the fodder's in the shock."

Another Cheerful Writer

And there was Will Carleton with his "Over the Hills to the Poor House," and other verse which tore at the heart strings. He struck no discord however when he wrote about autumn as one verse proves:

"Yellow, mellow, ripened days,
Sheltered in a golden coating;
O'er the dreamy, listless haze,
White and dainty cloudlets floating;
Winking at the blushing trees,
And the sombre, furrowed fallow;
Smiling at the airy ease,
Of the Southward flying swallow.
Sweet and smiling are thy ways,
Beauteous, golden autumn days."

Here are only four poets just as there are only four aces, and they all look mighty good.

We get just as much enjoyment in seeing the four seasons as we do in having the dealer hand us four aces in a row. In fact, more. Seasons have come with unchanging regularity for countless by-gone centuries. Not so with aces. Just when you most need the fourth one it fails to show up.

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THOSE ASTONISHING ENGINEERS

Hats off to the engineers. And still the wonder grows that a few small heads can hold all that they know. These gentlemen in building Golden Gate bridge had to anticipate conditions a layman never dreamed of, and prepare to meet them, before a shovel full of dirt was turned. The bridge is 9,200 feet long, a mighty problem in itself. The problems of expansion and contraction present some astonishing facts. Here are some of them:

The road will lower sixteen feet when the sun heats the cables. The span can change its length by five or six feet between a hot noon and a cold night. The sun can bend the 720-foot towers toward each other or it can heat one side of a tower so that it stretches beyond the other side. A gale from the ocean can bow the center span twenty-one feet from its normal position.

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"Handsome is as handsome does" is found in the literature of practically all countries. It was very popular with the early fathers of the church and medieval moralists.

JUST ABOUT PENS

From Goose Quill to Gold—Steel Pens Appeared In 1803

Some of the little things in daily life attain vast importance, and are indispensable to mankind. The fact that they become common through constant daily use robs them of any appreciation of their value. They dwindle into nothingness and are not given even a passing thought of the service they render. Take that little instrument which is said to be mightier than the sword—the pen.

Mighty Instrument of Little Men

Byron's tribute to the pen in this connection seems apropos.

"Oh! nature's noblest gift—my gray goose quill!

Slave of my thoughts, obedient to my will,
Torn from thy parent—bird to form a pen,
That mighty instrument of little men!"

What would civilization be without this faithful servant in life from the primary grade to the most powerful potentate?

One might question the statement that the pen is "mightier than the sword," which has been attributed to no less than six persons, but agree with Byron's last line quoted above.

Various Styles

Prior to the introduction of steel pens writing was done with various instruments. The ancient Egyptians, Chinese and Japanese used a brush, which must have required no small measure of skill, considering their hieroglyphics. Then came the calamus or reed, still used in the east, formed with papyrus the true predecessors of Greeks and modern pen and paper. The Romans used the stylus to write on waxen tablets. In the middle ages the quill pen was the common method. Swan, turkey, and crow feathers were much valued as writing instruments. Back in the early nineteenth century efforts were made to increase durability by gilding the points and attaching particles of horn and tortoise shell.

The first steel pen was made by a man named Wise of London. This was in 1803.

Made by Machinery Since 1830

In 1830 Perry, Macon, and Gillot began the manufacture of steel pens by machinery. It was then they came into general use, something over a hundred years ago. The first mechanically manufactured steel pens in the United States were made in New York in 1858. The chief material for pen making is the best steel prepared in Sheffield. Swedish iron is largely used in the United States. There are some 16 processes

in the manufacture of a steel pen. Some of these are complex and others are quite delicate.

Gold pens are made from 14 to 16 carat fine. The process is much the same as that employed in making steel pens except the point is made durable by fusing on an alloy of iridium and osmium. Gold pens do not usually have side slits.

Progress of Fountain Pens

Fountain pens were patented as far back as 1869. They were the devil's torment, and caused more plain vehement profanity in six minutes than his satanic majesty could purge himself of in six months. It was not until the mid-eighties that fountain pens really became satisfactory and fool proof.

The volume of the pen business in the United States was given in 1935 as follows:

Steel and brass pens.....	\$1,180,484
Gold pens	525,984
Fountain and Stylographic.....	16,294,615

When steel pens first succeeded the quill pens, John Quincy Adams had this to say:

"In days of yore, the poet's pen
From wing of bird was plundered,
Perhaps from goose, but now and then,
From Job's own eagle sunder'd.
But now metallic pens disclose
Alone the poet's numbers;
In iron inspiration glows,
Or with the poet slumbers."

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BIGGER AND BETTER TO COME

Fishing tales are already floating up from Florida. Stiles Scott, 16, hooked a small tarpon. The fish jumped and hurled Scott's lure some 40 feet. It landed almost at his feet. Scott replaced it at the end of his line and continued fishing.

Carl Obendorfer hooked a lady fish and started to draw it in. The fish jumped and a pelican swooped down and grabbed it. Obendorfer pulled in both the bird and the fish.

Bigger and better tales are anticipated as the season warms up.

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HAPPINESS AND WISDOM

There is a difference between happiness and wisdom, he that thinks himself the happiest man is really so; but he that thinks himself the wisest, is generally the greatest fool.—Colton.

No man can convince another of that of which he himself is not certain.

I'M TELLIN' YOU

©A.C.S.



Austin O'Malley says: "You cannot weld cake dough to cast iron nor a girl to an old man." Yes, you can, Austin. Insofar as the girl and the old man are concerned, just take the "I" out of "weld."

An advertisement blares "the simple truth about gin," but does not tell the simple truth, which is, it will knock you for a loop if you get too familiar with it.

The teacher gave him a low mark, but we thing it was the brightest boy in the class who answered that the plural of "faucet" is "plumbing."

Good times have come again. This year forty-five million Americans have spent \$100 apiece during the summer in auto touring. Sounds like lot of money, but the average autoist is a good spender.

The latest thing in "perfumes" is "Sano-van" for use in circus menageries. It puts animal B. O. on the bum, which is very acceptable, but why confine it to animals.

One of those gal writers says, "Hubby's first carving lesson needs privacy." Oh, yeah! It needs also a sound proof room if there is any one in the house.

A good ear for music and a taste for music two different things and most folk have neither, measured by the tin pan "symphonies" that come in over the radio.

The canning business has gone to the dogs. Dog food is now rated No. 1 canning industry with annual retail sales of \$30,000,000. Bow! Wow!

There are 625,000 garages in the United States—no wonder half the cars won't perform.

The Chicago Tribune gives us this head line:

"Indict 27 for Cutting
Capers in Barber
Shop."

Serves 'em right, say we. Barber shops are not intended for cutting anything but hair, whiskers—and chins.

A popular nation-wide pastime nowadays is taking the dog for a walk. It's good for the dog you lead and your "old dogs" as well.

The best place to hold the world's fair is in your arms.

Persons unacquainted with Illinois nomenclature would doubtless have been surprised in reading a local paper to find this head line: "Oblong Man Is Killed in Robinson Smashup." It was not the man who was Oblong—that is the name of his town.

"Police Seek Man in Cap as Kidnapper," a newspaper head line tells us. Must have been a nudist.

A survey shows that "Bankers Are Held in Low Esteem." Why should they care so long as they hold our interest.

Jesse Jones, R. C. F. chairman, mentioned as a presidential possibility, after a cross country trip, said: "I listened awfully hard for Jones for president talk—but didn't hear a smidgen," and his hearing is acute!

"A quitter never wins", says an exchange, and adds "A winner never quits". What about Jack Dempsey and some more of the boys.

We would be much happier if our friends did not carry to us what our enemies have to say about us.

If an intelligence test were necessary for driving a car, where would a person be classed who writes to a newspaper to know "where can I find out the best highway routes between St. Louis and points in Wisconsin?"

"Between the devil and the deep blue sea" dates back to 1637, when a Scottish regiment was trapped between the ocean and Swedish artillery fire.

REPLENISHING GAME

Reminiscences of Days When Game Was Very Plentiful

The Nation's Business came to this desk October 8 and one of the first articles claiming our attention was the one by Edgar Forest Wolfe, entitled, "Dollars in the Underbrush." It was on the subject of wild game, its present scarcity, and the efforts of captains of industry and legislatures to restock "shot out" territories with game. Coincidentally with the date referred to was the fact that it was the opening of the duck shooting season.

Wise Policy

From any angle, the present policy in protecting game and restocking hunting grounds is a wise one.

Accompanying Mr. Wolfe's article is an illustration of a hunter taking a quail from the mouth of his dog, and beneath is this text:

"When the gun barked a cash register tinkled somewhere, because figures show sportsmen spend \$1,000,000,000 following game annually."

In the days before regulation and restocking were necessary there was more game and fewer dollars, and hunters got all the game they wanted with fowling pieces of a more primitive character than those used today. The repeating shot gun was not yet available. Comparatively few of the sportsmen of a half century ago could afford a breech-loading gun. The majority had to be content with muzzle loaders, while others did pretty fair execution with old army muskets left over from the civil war.

Game laws were lax. Water fowl hunting was confined to the spring and fall flights. There were many hunters in Central Illinois who shot for the market. All kinds of wild game had a prominent place on the menus of Chicago and St. Louis hotels. There was a famous feeding ground known as Spring Lake about forty miles south of Peoria. It was mostly swamp in which grew hundreds of acres of wild rice, celery, and other vegetation that water fowls crave.

Sportsmen from all over the United States came there to hunt and fish. Among the distinguished men who visited the lake for spring and fall shooting was President Benjamin Harrison. The lake proper abounded with black bass, pike, perch, and other desirable fish. One will never know how many ducks and geese were killed on that lake. Men hunting for a living would

sink a hog's head in the swamp, with a seat on one side and a shelf for the shells in front of them. Thus concealed the ducks would fly low right over the hunter, and make it possible for him to come to camp at night with a boat load. Another means of slaughter was the swivel gun mounted on the bow of the boat.

By the Wagon Load

We have seen farm wagons with side-boards back up to the town game market, and with a scoop shovel the dead ducks to the sidewalk. Town people could buy a pair of mallards for twenty-five to thirty-five cents. Now you can't buy one at any price.

Game Plentiful

Recalling those days of wild game, winter always brought to the butcher shops buffalo, venison, and sometimes bear meat. We have listened to the tales of game by early settlers, including our maternal grandfather, who came from Pennsylvania across Ohio, Indiana, and Illinois, where he settled. Like most of the pioneers, their meat consisted largely of game. A few vagrant Indians were still roving Illinois' unbroken prairies. Wild pigeons, wild turkeys, quail, prairie chicken, ducks, geese, and deer solved the meat questions.

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ENGLISH AND AMERICAN SPORT

Rt. Rev. Albert A. David, Bishop of Liverpool, does not like our national game of baseball. "The crowd," he says, "play a vocal part to an extent unknown in any English game. The back chat and calls of both players and spectators at a baseball match in America are something to be remembered when the play is forgotten. If the English ever learn the full phraseology of baseball it will not be long before its undesirable effects will be seen at association football matches."

Baseball has always puzzled the English. There was the Englishman who visited this country, and attended a game, leaving before the game was finished. Some one asked him how the game was going.

"It's a bloomin' good game," he said. "They are now playing the eighth inning, and the score board shows one million six hundred thousand to one million five hundred thousand."

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Time To Be Careful

"A man's good looks are often spoiled when he sneers," say a woman writer.

Especially when he sneers at a bigger man.

Wisdom of the Ages

Ability wins us the esteem of the true man; luck that of the people.—La Rochefoucauld.

Every one of us shall give account of himself to God.—Romans XIV: 12.

There is a wide difference between general acquaintance and companionship. You may salute a man and exchange compliments with him daily, yet know nothing of his character, his innermost taste and feelings.—Addison.

We shall at all times chance upon men of recondite acquirements, but whose qualifications, from the incommunicative and inactive habits of their owners, are so utterly useless to others as though their possessors had them not.—Colton.

How much easier do we find it to commend a good action than to imitate one.

The evil that men do lives after them; the good is oft interred with their bones.—Shakespeare.

It is easy in adversity to despise death; he has real fortitude who dares to live and be wretched.—Martial.

As the ant does not wind her way to empty barns, so few friends will be found to haunt the places of departed wealth.

Bad advice is often most fatal to the adviser.—Flaccus.

He who can take advice is sometimes superior to him who can give it.—Von Kriebel.

As you are old and reverend, you should be wise.—Shakespeare.

I am much beholden to old age, which has increased my eagerness for conversation in proportion as it has lessened my appetite of hunger and thirst.—Tully.

What is ambition, but desire of greatness? And what is greatness but extent of power?—Higgins.

The man who has not anything to boast of but his illustrious ancestors, is like a potato—the only good belonging to him is underground.—Sir T. Overbury.

Senseless and deformed convulsive anger storms at large; or pale and silent, settles into full revenge.—Thomson.

Men resemble gods in nothing so much as in doing good to their fellow men.—Cicero.

True blessedness consists of a good life and a happy death.—Solon.

AVERAGE AMERICAN CITIZEN

The average American citizen is discussed and classified by Wm. F. Ogburn, Professor of Sociology, University of Chicago. This refers to the urban citizen who earns \$1300, if he works in a factory, and \$1350, if he works in a retail store.

Four in ten persons, if marriageable age, are unwed, and one in ten is widowed or divorced. Two out of three families have no children, and 15 per cent of the wives are employed outside the home. About one-third of the children of high school age are not in school. The average family includes three or four persons, including boarders and relations. Average rent is \$28 per month. Homes in the north in cities of about 50,000 average \$5,000 in value and \$4600 in the south. Fifty per cent own homes in the north against thirty-five per cent in the south. The average tax for each person over 15 years is \$43 per year. Only one in ten families live in apartment houses. It is estimated that every other northern family owns a radio, while in the south only one family in four indulges in that luxury. Women apparently like cities better than men, there being 100 women to 97 men.

The professor has supplied a fine group of statistics, most of it news, except the tax figures.—They won't be good after a few months. That's one thing certain to go up.

Patrons Not Always Right

Field's slogan, "the customer is always right," has been used by Selfridge of London for twenty-five years. Now he has reached the conclusion that "the customer is NEARLY always right." Excessive demands by customers changed the Selfridge way of thinking.

A FINE RECORD

Alex W. McCallum, 35 Years Chief Clerk In Spokane Water Dept. . . .



It's a real pleasure to introduce to the readers of Mueller Record, especially those of the water works division, a man who has given the best years of his life to the water works industry. Tip your chapeau to Alex W. McCallum, for thirty-five years chief clerk in the Water Department of Spokane, and a glance at the accompanying picture would indicate that he has just got a good start and has settled down for a world's record. He has witnessed and had an important part in the development and growth of the water department of the thriving northwest city.

Born in Canada

Mr. McCallum is a native of Lanark, Ontario, Canada, but he was born on a good United States day—July 4, 1861. With his parents he moved to Minneapolis in 1861, where the family remained until 1866, when they moved to Spokane, Washington. That was twenty-three years before Washington was admitted to the Union, and therefore with no stretch of imagination or truth we are safe in saying Mr. McCallum is an old settler. He has seen and been part of the development of the great northwest.

From 40,000 to 140,000

Since he joined the water department, the population of Spokane has increased from 40,000 to 140,000. This has necessitated many changes in the building of the Spokane Water System to meet the increasing demand for water. The water services now

total 34,896 and all water is served through meters, the number in active service now being 30,154. Spokane has an area of 41.4 square miles which the water department serves.

Mr. McCallum celebrated his golden wedding in 1933 and is the proud great-grandfather of Jack and Judy McCallum, aged three and one year respectively, the children of his grandson, John McCallum.

The fact that Mr. McCallum is seventy-five years of age and a great-grandfather has nothing to do with his ability or his appearance. We judge this by his picture and the news item which appeared in a Spokane newspaper of June 20. It is as follows:

Meticulous in Dress

Acting Mayor Frank G. Sutherlin yesterday congratulated Alex W. McCallum, W440 Sharp, construction accountant in the city water department, as the municipal organization's most outstanding contribution to Father's day.

Mr. McCallum is said to be the best dressed man in the city hall—in fact, better dressed than a city commissioner, said Mr. Sutherlin. With carefully creased gray trousers, polished shoes, a bright tie correctly tied and hair brushed with precision, McCallum walked through the office of Commissioner Sutherlin with ease and poise, a perfect figure of what a man of 75 can be.

Mueller Record tenders to Mr. McCallum congratulations on his fine record, and the stamina which enables him to remain on the job, "all dressed up and plenty of places to go."

• •

Costly

The Hollywood magnate told an assistant that in his opinion a certain writer was the only man for a film they had under consideration. The assistant was tactfully doubtful. "Don't you think, perhaps he's a bit too caustic?" he suggested.

"I don't care how much he costs," demanded the producer. "Get him!"—Tit-Bits.

• •

So long as we love we serve; so long as we are loved by others I would say that we are indispensable; and no man is useless while he has a friend.—Robert Louis Stevenson.

Always Something New

A one-piece rust proof metal clothes pin, small and light weight. Serves also as a paper clip.

A new electric kitchen clock performs triple duty as a time piece, an automatic oven control, and a timer for cooking intervals from 1 to 55 minutes.

A neutral soap soluble in either water or solvents such as kerosene cuts heavy grease on old engines or floors so that it may be washed off with water. Does not harm painted surfaces.

A new golf tee of aluminum bends when hit instead of leaving the ground. A coil spring returns the head to an upright position.

A flat spring with rubber feet giving the effect of a double wedge slips under doors and holds them to any desired spot.

A new hand punch makes 150 washer sizes from leather, cork, rubber, etc. Has 18 dies on an eccentric turret plate. Centering system insures concentric punching.

New compound for mixing with paint permits painting of wet or moist surfaces, particularly iron or steel. After counteracting water it does not affect the paint.

A new type of snap fastener can't rip off or break in laundry. Used now on men's shorts.

A synthetic substitute for tile bath rooms is resistant to acid and alkalis. Durable yet inexpensive in five colors.

A control valve for vacuum brakes on trailers permits varying degrees of power without fanning the control. A gauge registers the amount of power used.

Small objects are displayed inside a fortune teller's crystal globe, which is made transparent by approach of a person. By the same method a mirror may be made transparent for larger displays.

Only one American man in 200 is six feet tall.

SAID IN 1843

The people of the two nations (France and England) must be brought into mutual dependence by the supply of each other's wants. There is no other way of counteracting the antagonism of language and race. It's God's own way of producing an Entente Cordiale, and no other plan is worth a farthing.— Used by Louis Phillippe in speech from the throne in 1843.

PAYING DEBTS

Is One Way to Get Peace of Mind and Avoid Evil

Freedom from debts is peace of mind, freedom from worry and independence of the bill collector. If it 'twere as easy to get out of debt as it is to fall into the trap of credit, the advice would be different. It's like falling into a well. Going down is rapid, but climbing out is a long and tortuous practice. Two wise men of earlier days give food for thought to this subject.

Chesterfield's Opinion

Lord Chesterfield says, "A man who owes a little can clear it off in a short time, and if prudent he will, whereas a man, who by long negligence, owes a great deal, despairs of ever being able to pay, and therefore never looks into his accounts at all."

What Delaney Says

Another old writer, Delaney, says, "Paying of debts is, next to the grace of God, the best means in the world to deliver you from a thousand temptations to sin. Pay your debts and you will not have wherewithall to buy a costly toy or a pernicious pleasure. Pay your debts, and you will not have that to lose to a gamester. In short, pay your debts, and you will of necessity abstain from many indulgences that war against the spirit, and bring you into captivity to sin, and cannot fail to end in your utter destruction, both of soul and body."

It takes 100 pounds of ocean water to make 3½ pounds of salt.

Only one person in 10, over 21, has perfect vision.

GENTLEMEN OF THE PRESS

How the Newshawks Get Their News from the White House

One seldom picks up a newspaper without finding news from the White House. Generally it concerns the president. Sometimes the news comes from the chief executive direct, but on some questions of public policy he will not speak. If, however, he confers with some high official, senator, or representative, the boys of the press may get a tip on the president's position on some important public matter. As a rule they qualify their report so as not to involve any one.

Referred to as Spokesman

The president when quoted is referred to as the spokesman of the White House as it is considered unethical to quote the president direct. In the earlier days some newspaper men were given to grab news—rumors or direct statements from whatever source they could obtain them. Perhaps the gentlemen of the press have a higher sense of honor today.

Sense of Honor

Every newspaper man carries under his hat many things told him in confidence, and his sense of obligation is so strong that he would rather be scooped than to violate his promise of secrecy. The Washington newspaper correspondents would find themselves in bad order for future news favors if they follow any other than a strict regard of pledges to not reveal advance information until the appointed time for the news to break. They might write speculative inferences all around a subject without violating their pact, but they must wait for the appointed time for authoritative releases.

President's Message

The annual message of the president is a good illustration. This is given the Associated Press several days prior to its delivery to Congress. The Associated Press delivers a copy to every member with strict injunction not to use until telegraphic release is received. Hundreds of papers put this message in type, ready for press, but no word of it has reached the public. The minute the house messenger delivers the document to the speaker the "President's message released," is flashed to every member of the Associated Press, and in five minutes later it is going through the cylinders of the printing presses.

In these times the Washington correspondents are received by the president on stated days. Previous to these meetings they

(Continued on Page 13)

WANTS GRAY HAIR

Young Lady Reader of Record Appeals for Help

We get many letters from readers of the Record, and enjoy most of them because they are friendly. Once in a while some one throws a brick bat, and we like them, too. They give us good exercise dodging them. Then again we get letters asking us for additional information on something we have printed, which is the character of the unusual request coming from a lady. Read it and you'll agree.

Wants to Be Gray

Editor Record:

Some time ago you published in your column, "Always Something New," an item referring to the fact that there is being used chemicals to turn the hair prematurely gray, and that is just what I want. Where can I secure the treatment or chemicals?"

We will not give the writer's name or address. We presume she is a young lady, because if elderly she would be "hot footing" it to a beauty parlor to have the gray hair reclaimed by henna.

Fight Gray Hairs

As a rule, women begin fighting gray hair the instant one makes its appearance, but here is an exception. Many men are attracted to a pretty young face surrounded by graying hair. The contrast is not hard to look at. Could this have had any influence on our correspondent's longing for prematurely gray hair? If we were a Beatrice Fairfax, Gladys Glad, Doris Blake, Ruth Cameron or any other columnist, we might be competent to give some advice or information, but being an old, hard boiled codger, we suffer the humiliation of professional incompetence. However, we want to help our young friend and knowing our suggestion will be unethical and unsupported by any knowledge or experience in tonsorial accomplishment, will say,

Let Nature Handle the Case

"Let nature take its course. It's a difficult task to make over what nature intended you to be. Those who try it make nothing but a mess. The time will come and gray hairs will come with it, when you'll wish for your hair in its natural color, and will be seeking a beauty doctor's aid and again it will be a mess."

We know this without experience, but by a cultivated habit of observation in the male of the species. Can we ever forget those young blades with blonde mustaches, who dyed them black—with shoe blackening—if we remember correctly.

Judge and Jury



Nothing But Trouble

Judge: "And have you found a law firm that is satisfactory?"

Widow: "Don't talk to me about lawyers. I've had so much trouble over the property I sometimes wish my husband had not died."

A Wise Client

Lawyer: "Now, see here, before I take your case, I want to know if you're guilty?"

Prisoner: "Am I guilty? D'yer suppose I'd be fool enough ter hire the most expensive lawyer in town if I wuz innocent?"

Probably the Bearded Kind

Lawyer: "And what was the defendant doing meanwhile?"

Witness: "He was telling me a funny story."

Lawyer: "Remember, sir, that you are under oath."

Witness: "Well, anyway, he was telling me a story."

Night Mare

"That lawyer of mine has a nerve."

"Why so?"

"Listen to this item in his bill: 'For waking up in the night and thinking over your case. \$5.'"

First Installment

"Here's a letter from Dunleigh asking that we send him a part of what's due him, and enclosing a stamp for reply. What shall I do about it?" asked one of the two impecunious law partners.

"Send him back the stamp on account," replied the resourceful side-kick.

Con Game

There ain't no justice in this here land.
Just got a divorce from my old man.
And I laughed like heck at the judge's decision,
'Cause he give him the kids and they ain't his'n.

No Hunting License

Rastus' lawyer was informing him on the legal status of his matrimonial relationship and his chances for a divorce. "Mistah Brown, I have discovered I kin get you a divorce on account of her father. He had no license to carry a gun."

Exonerates the Judge

Counsel: "Can you repeat the exact words in which the prisoner confessed taking the pig?"

Witness: "He said, sir, he took the pig."

Judge (trying to simplify the question): "Did the prisoner say, 'He took the pig' or 'I took the pig'?"

Witness: "Oh, Your Honor, he said he took it. Your Honor's name wasn't even mentioned."

Knew His Coppers

Judge: "What's the charge?"

Cop: "Knocking people down in the theatre line and stepping on them."

Judge: "Thirty days for impersonating an officer."

Could Afford to Be Generous

Judge: "Your sentence will be 99 years. Have you anything to say?"

Prisoner: "All I know is you are darn liberal with other people's time."

PAGE "THE PIED PIPER"

One does not see or hear much about rat traps. In early days when nearly every city lot had a barn on the alley, rats and rat traps were very common. The rodents infested residences also, frequently getting in the walls and then gnawing their way out through the baseboards. However, rats are still with us. J. B. Rasbach, technical assistant on the Jefferson Memorial, St. Louis, says the first problem to solve in this undertaking is rats. The proposed memorial will comprise 37 blocks. This area must be freed of rats before the demolition of buildings is begun. If this is not done the rats will simply move into other buildings. The aid of the Department of Agriculture will be enlisted.

ILLINOIS NEW OIL FIELDS

Men Who Were Poor Two Months Ago Are Now Accounted Wealthy

The sudden and sensational development of paying oil wells in the south central portion of Illinois has brought the dollars rolling in on a lot of land owners who are dazed by their sudden acquisition of wealth.

Doubtless these folk, like thousands of others, have dreamed and talked of what "I'd do if I had a million dollars." Now that they stand to realize something like that stupendous sum, they do not know how they are going to use it.

Calls for Million Dollar Mind

A million dollars in money takes a million dollar mind and tastes to spend judiciously in enjoying the comforts and pleasures of life, and at the same time keep the old wad twirling to gather in additional dollars so that the principal can be maintained at a safe and sizable sum.

Case of Oscar Poppe

In the Clay City oil field a little south of Vandalia, the old state capital, lives a farmer, Oscar Poppe, age 73, and now suddenly as if by fairy magic transformed from a poor to a wealthy man. This particular man was close to the center of the shower when Amalthea turned her goats horn filled with oil upside down, and he got a fine bit of it.

\$750 Income Daily

Mr. Poppe is a worthy citizen and was the owner of 160 acres of land. He has spent a lifetime developing the land and making it yield enough to support his family. Now there are seven wells on the land bubbling up hidden wealth which never could have been attained by tilling the soil. Mr. Poppe, according to the best estimate, is at the present time the receiving end of a stream of about \$750 which pours in on him daily. He says he is not going to quit farming his 160 acres of land, which is quite natural for a man who has known only work all his life. At present he does not know exactly what his income is, but he guesses it will be enough.

The seven oil wells on the Poppe farm produce 4,500 to 5,000 barrels per day, which at \$1.35 a barrel is around \$6,075. Poppe's split is one-eighth of that sum or at least \$750 per day.

Does Not Like Taxes

At the beginning of this article, reference was made to thousands of persons who dream of what they would do if they had a million dollars. If they had that tidy sum they would be like Mr. Poppe is with his

sudden fortune. He says: "I'd rather they didn't drill so many wells on my farm and drill on somebody else's. Then the government would not get so much of it."

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R. H. Pflug-Felder, for many years secretary of the Philadelphia Association, has resigned that position. He was widely known in plumbing circles because of his attendance at the national meetings through a long course of years.

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WHY PATRONS QUIT

Investigation by Prof. Nagley Brings Out Some Interesting Information

All business men in all lines frequently wonder why customers suddenly drop out of sight and give their patronage to another dealer. Prof. Frank Nagley, University of Oregon, has pondered on this subject, but quit pondering and through a survey got some valuable information. He questioned 4,000 former customers of West Coast retailers, and found that only 14% had been lured away by better prices. Nearly 10% of customers quit certain dealers because of slow service and poor quality. Seven per cent because they did not like store policies and haughtiness and the remainder because of faults ranging from high-hatting to poor advertising. Prof. Nagley's conclusion is that "dealers could save 86% of lost typical accounts by giving more attention to management, salesmanship, and knowledge of products." Service, pleasant personality, and quality are three qualifications essential to success in business. The patrons resent being highhatted by a dealer, they want prompt service and quality—then they pay the price willingly and gladly.

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(Continued from Page 11)

have submitted to him written questions. The president answers these orally—if he wants to.

The First Roosevelt

Theodore Roosevelt was perhaps the first president to meet the gentlemen of the press in a familiar, friendly way, trusting to their honor not to violate any confidence. Being human, the newspaper men gave him a square deal and contributed materially to the upbuilding of his great popularity.

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Be resolutely and faithfully what you are; be humbly what you aspire to be. Man's noblest gift to man is sincerity; for it embraces his integrity also. Thoreau

HE IS ON THE WAY

November and December Bring Big Holidays of Year



In the offing are two of the greatest holidays of the year—this month, Thanksgiving, and next month, Christmas. The former is of secondary importance compared to the latter. It is of American origin, having been instituted by Governor Bradford in the days of the Puritans. In 1621 he set aside a day for giving thanks for the blessings of the year. Whether this became an annual event or was only occasionally observed is not stated. The custom, however, has been maintained. There is no stated date for the observance. The president selects the day by proclamation. Apparently through custom the last Thursday in the



month has permanently become the proper day. One authority says it is in essence a day of Thanksgiving for harvest.

While churches hold services, the day's outstanding features are the two "f's"—feasting and football. Turkey is popular, but poultry men tell us that the big day for turkey is Christmas.

There appears to us to be a considerable portion of truth in Will Carleton's poetic version of Thanksgiving; a few lines tell the story:

Thanksgiving day, I fear,
If one the solemn truth must touch,
Is celebrated not so much
To thank the Lord for blessings o'er,
As for the sake of getting more.

Christmas has more religious significance and is much more interesting from a historical point of view. It was not always Dec. 25. The day has moved about as much as a tenant who never pays his rent. Long before the present date was selected, winter

festivals were celebrated. These included the Roman Saturnalia and the winter festival of the heathen Britains. Following this the Romans held a festival in honor of the Sun God. This was about 273 A. D. It became known as "The Birthday of the Unconquered Sun," and after its adoption by the Christian church in the fourth century, it became known as the anniversary of Christ's birth. This name was given a symbolic interpretation. Customs associated with this period indicate pagan origin.

Lighting of the Yule log on Christmas Eve, a common English practice, was once of such predominating importance among Lithunians and Letts, that it was known literally as "Long Evening."

The "Lords of Misrule" in England is believed to have been an inheritance from the Saturnalia.

Decoration of churches with the once sacred mistletoe and holly is of pagan survival.

Sending of gifts has been traced back to the Yule gifts of Northern Europe and Ancient Rome.

The Christmas tree is of German origin.

Father Christmas or Santa Claus is identical with St. Nicholas, Knecht Ruprecht and Robin Goodfellow.

In some parts of Germany Knecht Nicolas is regarded as an attendant on the real gift-giver, who is sometimes the infant Christ, though frequently represented as an ugly, hunched-backed dwarf called Krampus, who carries off naughty children.

In Rome and throughout the greater part of Latin Christendom, the day we call Christmas was known as "The Feast of the Nativity"; in Greece as Genethlia, having the same meaning. French—Noel; Italian—Natale or Nativita; Welsh—Nadolig; German—Weihnacht (holy, or consecrated night).

Holly was thought, by the early Christians, to resemble the crown of thorns worn by the Saviour at his crucifixion, hence its

popular use at Christmas. There is a superstition that holly brings luck to men of a household, and ivy to women.

The custom of kissing beneath the mistletoe seems to be peculiarly English, although it may be founded on an ancient Scandinavian custom, for mistletoe was deemed so sacred that if enemies met under it they laid aside their arms and maintained a truce until the following day. From that grew a practice of placing mistletoe over a doorway so that all who entered tacitly pledged peace and friendship.

And then there is a Christmas custom, purely American as any newspaper reader will admit. Don't forget it. Only — shopping days until Christmas.

SOME SAFETY THOUGHTS

The home is still high up in the list of accidents.

Bath tubs are one of the chief causes of accidents resulting in many serious injuries. Slipping in the tub may be averted by the use of a rubber mat. A bar along the wall giving a good strong hand grasp is good insurance.

Porcelain faucet handles are out. They are too easily broken, and cut the hand severely. We quit them some years ago and use metal handles on faucets of all kinds. They are safe.

Be careful about the use of electric lights in bath rooms. Wet hands and electric current form a dangerous combination. If light is operated by a chain, have a piece of string tied to the end. Under all circumstances do not operate an electric light with wet hands.

Medicine boxes and bottles should be plainly marked and kept out of reach of children.

Two good records: in the Old Hickory, Tennessee, plant of the Du Pont Company, 11,361,846 hours of work were completed without a lost time injury—said to be a new national record. In the Coxton, Kentucky, mines of the Kopper Coal Co. 474,724 man hours were completed in 1936 without a lost time or compensation accident—a national safety record for mines.

DON'T BE A FAILURE

Don't think failure,
Don't walk like a failure,
Don't talk failure,
Don't dress like a failure,
Don't associate with failures

Wealth without health is check without a signature.

MILK DISTRIBUTION

Different Countries Employ Different Ways of Serving Customers

Cows may "give" milk, but the man who distributes this human necessity does not. You can bet your last milk ticket on that. What's more, the milk man will win and will take the ticket without the least compunctions of conscience. But his lot is not a happy one. He must get up between 3 and 4 o'clock to prepare for his daily round regardless of weather conditions. The automobile, as in practically all cases, has nearly displaced the horse.

Local Company Keeps Them

In Decatur one large company still depends on horses and it is a delight to watch these intelligent animals. On our street the big dappled gray moves with stately tread, while the driver darts from wagon to porch. If the horse gets too far ahead, it stops till its master catches up. Reaching the end of the block, the smart animal turns around as neatly as if guided by reins. All this is done without a word of command.

There are many countries where neither horse nor car is used for distributing milk.

Different Ways

In Czechoslovakia the milkman uses a small four-wheeled wagon, and a dog in harness pulls it through the streets. In Holland the dog also produces the motive power. In that country the cart has two wheels, and the axle is bent like a yoke so that the dog does not touch it. All the man does is to raise the handle of the cart to balance the wheels.

Down in Chile boys ride horses with cans of milk hanging across the horses' necks and haunches. His customers meet him with their pans and the boy ladles out the desired quantity of milk.

Goat Milk

But the strangest custom prevails in Malta where goat milk is used. The milk man drives a herd of fifteen or twenty "Nannies" through the streets and the customer brings out his container and the goat is milked in his presence.

The milk man hasn't a ghost of a chance to put water in that milk.

In the U. S. the dairy industry is of vast proportions. It consists of some 4,800,000 farmers, 25,000,000 dairy cattle, a quarter of a million manufacturing and delivery employes and all the people are consumers.

The first and last thing required of genius is the love of truth.

WATERWORKS ON AIR

John B. Dean Gives Interesting Story Concerning The St. Louis System . . .



JOHN B. DEAN
Water Commissioner,
St. Louis,
Mo.

Mr. John B. Dean, Water Commissioner of St. Louis, is doing a fine bit of work in his radio broadcasting facts concerning the city's water works. The average citizen in the average city knows little or nothing concerning the water works in his town. He seems to be without interest, content to know that when he turns the faucet in his home he will receive an ample supply of water. He is apparently not concerned with the source of supply or the method of distribution, al-

though he is absolutely dependent upon the water works for a pure healthful supply of water. No municipal enterprise is so closely interwoven in the lives of the whole population of a city. The very lives of the people depend upon the character and quality of the water that is served them. No greater calamity could happen any community than to have the water supply shut off if only for a few days.

Commendable Plan

Mr. Dean's plan of broadcasting facts concerning the St. Louis water works is most commendable, and we hope that he has and will have an interested audience. Surely what he says should get preference over the silly features that burden the wires by day and night. One of Mr. Dean's first broadcasts outlined the history of the St. Louis plant. We reproduce it in the belief that it will interest our water works readers.

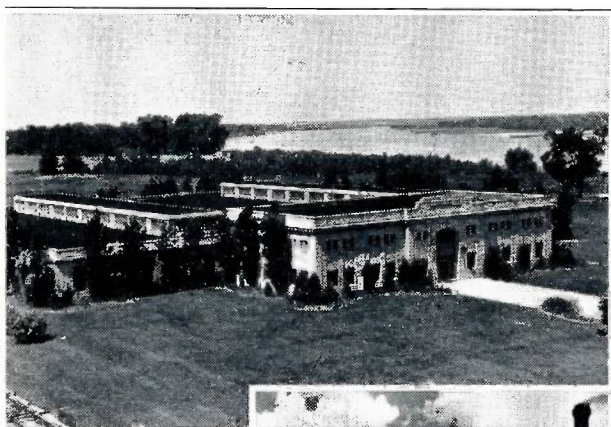
Early History

On Feb. 15, 1764, a young man in charge of a party of thirty helpers, landed and encamped on the west bank of the Mississippi River at a point 17 miles below the mouth of the Missouri. The young man was Pierre Laclède, and he was in the act of founding the City of St. Louis.

The early settlers obtained water from springs and wells, from Mill Creek and from the Mississippi River. Mill Creek was then a clear stream, draining Chouteau's Pond, which was fed by cold springs in the vicinity of the Rock Springs neighborhood. The wells were expensive to construct and not very satisfactory, and a large part of the water used was hauled in barrels from the river to the various residences.

First Efforts to Secure Plant

In 1823, when the population had increased to approximately 4,000, the settlement was incorporated as the City of St. Louis, and Dr. William Carr Lane was elected the first mayor. As a young man he attended college in Philadelphia which then had a waterworks, and had learned to appreciate the convenience of city water. He made a very strenuous effort to have a water works built for the City of St. Louis, but nothing was accomplished toward this end until 1829, when a contract was made with John C. Wilson and Company to construct and operate a water works and to

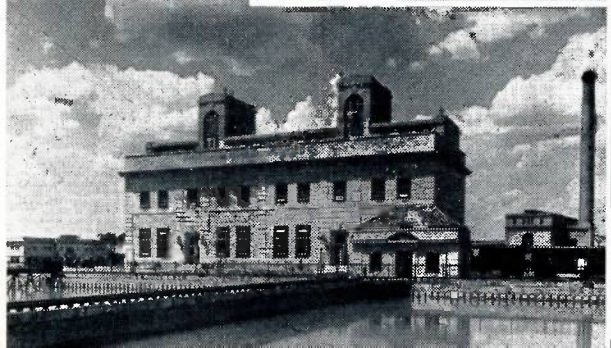
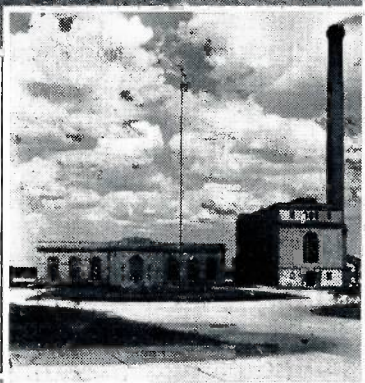


Filter Plant

Buildings at
Howard Bend
Plant

High and Low
Service Pumping
Station, Stack
275 Feet High

Coagulant House



collect the revenue from the sale of water for a period of 25 years, after which the plant was to become the property of the city. Under this contract a pumping station was built at the foot of Smith Street, and a reservoir 64 feet by 58 feet by 12 feet deep was constructed on the Little Mound at Dickson and Collins Streets, three blocks west of the pumping station. A small part of Smith Street still appears on the city map near the foot of Cass Avenue.

Only Small Pump Required

The first pump, which had a 10-inch steam cylinder and a 6-inch water cylinder with a 4-foot stroke, proved unsatisfactory, and was replaced by two rotary pumps purchased from Asahel Hubbard. These pumps were hauled by ox-cart from Windsor, Vermont, to Albany, New York, whence they were shipped to Chicago by boat and hauled across the prairies to St. Louis. Mr. Hubbard took as part payment a white horse, and rode him back to Windsor where the animal was known for many years as the "St. Louis horse". During the building of the plant, the contractors got into financial difficulties and sold three-quarters interest to the city. Mr. Wilson withdrew from the firm, leaving the work in charge of his partner, Abraham Fox.

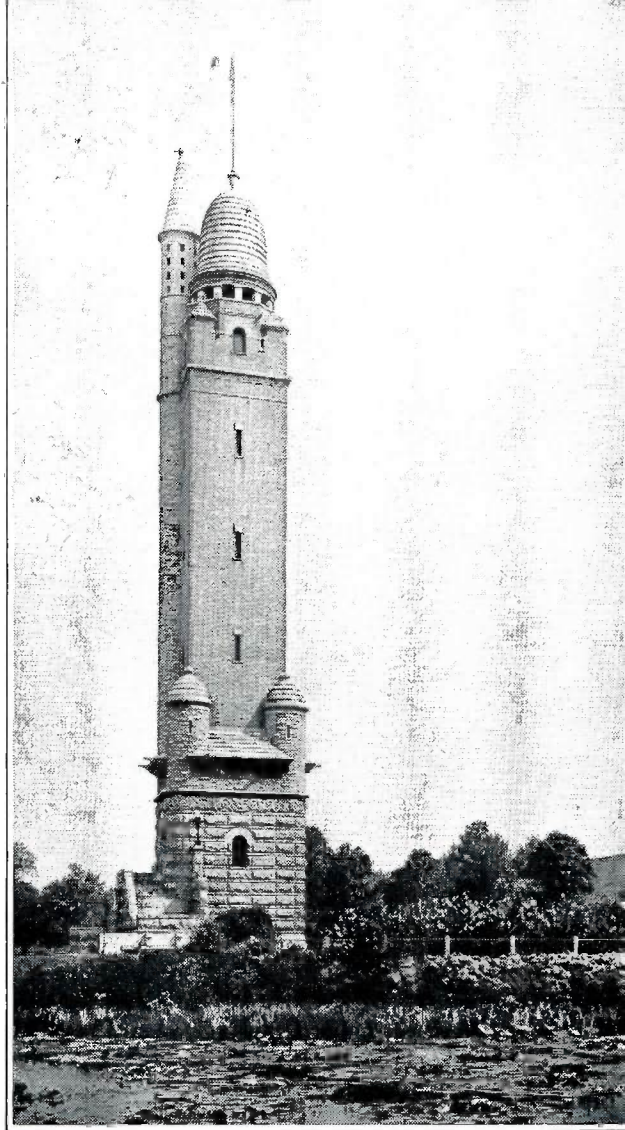
First Distribution System

In 1831, the water works was put into operation with Mr. Fox as the first superintendent. The first distribution system consisted of a 6-inch pipe from the Little Mound down Third Street to Wash Street, thence east to Main Street and south on Main Street to what is now Poplar Street, a distance of about $1\frac{1}{4}$ miles. There were only 12 fire hydrants on this main. Mr. Fox continued to act as superintendent until 1835, when he sold his interest in the water works to the city, and was succeeded as superintendent by John A. Wimer, who afterwards became mayor. Since 1835, or for more than 100 years, the St. Louis water works has been municipally owned.

The original plans called for a basin on the river bank, into which the river water was to be pumped and clarified by settling, whence it was to be repumped to the storage reservoir on the Little Mound. This settling basin was never built because solid rock was encountered a short distance under the surface of the proposed site. Therefore, the one small basin was necessarily used for settling and storage, and practically no settling took place.

Install Wooden Reservoir

In order to alleviate this condition, a wooden reservoir 100 feet square and 12 feet deep was constructed in 1845 on top



Water Tower in Reservoir Park at Compton Hill

of the original basin. Additional pipe lines were laid from time to time to extend the distribution system. Later two reservoirs were built at Twentieth and Benton Streets, one completed in 1849 and the other in 1855. Even with these additions the early basins were not of sufficient size to permit settling the water long enough to remove much of the sediment, so that the water delivered to the consumer was very little better than the river water. As there were many people living upstream from the pumping station, the water pumped from the river was somewhat polluted by sewage.

Gravity Pressure

The pressure in the mains depended on gravity, and because the reservoirs were not high enough and the mains were too small, and too few in number, the pressure was insufficient for proper fire protection, par-

ticularly in the high-lying districts. Furthermore, there were never enough reserve pumps, and practically all parts of the system were barely sufficient to meet the immediate demands.

The Bissell Point Plant

This unsatisfactory condition prevailed until two years after the close of the Civil War, when the construction of a well-designed plant was started at Bissell's Point. This new plant consisted of a low service station for pumping water from the river into four sedimentation basins, and a high service station to pump the clarified water from Bissell's Point to the Compton Hill reservoir, which was also a part of the project. The east Grand Avenue water tower, which is in the form of a Corinthian column, 154 feet high, was built at the same time. This familiar landmark is known to practically all St. Louisians.

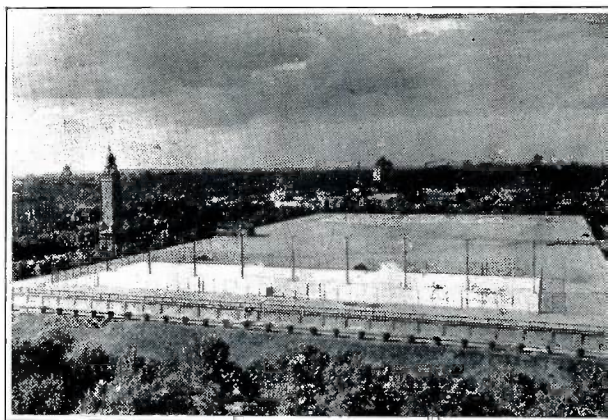
The Bissell's Point plant was designed to supply about 15 million gallons of purified water per day, but the city had grown very rapidly and the per capita consumption had increased so that by 1886, the peak consumption had reached 37 million gallons per day. In the meantime, several pumps had been added and the second 36-inch main was laid to Compton Hill, but the supply barely kept up with the demand, and once during the winter of 1883-84, Compton Hill reservoir was completely drained.

Chain of Rocks Plant

After much investigation and discussion, an ordinance was passed in 1887 authorizing the immediate construction of a purification plant at the Chain of Rocks, the discontinuance of pumping from the river at Bissell's Point, and the use of the basins there for storing only clarified water. The construction of six settling basins and a low service station to pump from the river at the Chain of Rocks, as well as a masonry conduit to Bissell's Point was completed in 1894. The high service station at Baden for pumping water into the city mains was completed in 1897.

First Chemicals Employed

The greatest improvement in the history of the St. Louis Water Works occurred in the spring of 1904, when chemicals were first applied to improve sedimentation, with the result that cloudiness disappeared and the water was suddenly as clear as spring water. This process, then in the experimental state, was introduced by Mr. Ben C. Adkins, Water Commissioner, and Mr. Edward E. Wall, Assistant Water Commissioner. The improvement was highly desirable because the World's Fair was about to open and bring many visitors to St. Louis.



Compton Hill storage basin in Reservoir Park with all weather tennis courts on roof. Capacity, 85 million gallons.

At times, when the river water is very muddy or when the consumption is very high, a great amount of basin capacity is required even with the aid of chemical coagulation and, at best, the quality of the water clarified by sedimentation alone never equals that of properly filtered water. Ten years after the introduction of chemical coagulation, it was evident that either additional settling basins or a filter plant would be required to take care of the city's needs. As filtration was the cheaper and more satisfactory method, it was recommended by Water Commissioner Wall, who prepared the plans for a filter plant which was completed at the Chain of Rocks in 1915.

As a city grows, the demand for water almost invariably increases more rapidly than the population. People use more water, and industries requiring large amounts become established, so that the water works engineer must constantly look forward to the future requirements.

Howard Bend Plant

Prior to 1923, a study of the future requirements at St. Louis had been made and it had been decided that the capacity of the works existing at that time would soon be insufficient and that the proper location for the next extension would be on the Missouri River, an entirely independent supply and nearer to the probable future center of population to be served. In order to provide funds for this extension, an item of \$12,000,000.00 was provided for in the bond issue which was favorably voted upon in 1923. In fact, the idea of the whole bond issue grew up around the proposed bond issue for an addition to the water works.

Work on the Howard Bend Plant located

on the Missouri River was started the same year, and on August 15, 1929, it was put into operation 24 hours per day and has been in continuous operation since. The water is delivered to the City of St. Louis through two 60-inch steel conduits. This is one of the most attractive and satisfactory water purification plants in existence. You are cordially invited to visit this plant at any time.

ANSWERS AT "EXAM"

Answers to examination questions by pupils in the fifth grade bring an amused smile to the faces of erudite elders.

But let's move up to the higher brackets and have a merry haw-haw. Here are some of the answers given at Baylor University by 650 freshmen in the required psychological examination at registration.

Oxygen—an eight sided figure.

Nero—nothing.

Homer—a type of pigeon.

Ulysses Grant—a tract of land upon which several battles of the civil war were fought.

Quorum—a place where fish are kept.

Vegetarian—a horse doctor.

Henry Clay—a mud treatment for the face.

All the answers are "good" except the one given for "Homer." The student displayed his ignorance by failure to answer—a four base hit.

CONFUSING

"Now, sir," said the counsel to the witness, "did you, or did you not, on the date in question, or at any time, previously or subsequently say or even intimate to the defendant or anyone else, whether friend or mere acquaintance, or in fact a stranger, that the statement imputed to you, whether just or unjust, and denied by the plaintiff, was a matter of no moment or otherwise? Answer—did you or did you not?"

"Did I or did I not what?" asked the witness weakly.

Square thy self for use; a stone that may fit in the wall is not left in the way.

A patent was recently issued by the United States Patent Office for an air-filled, stream-lined horsecollar?

They laughed when I came on the stage in my glove-tight shorts, but when I bent over they split.—Froth.

The only place that some men shine is in the top of the head.

THE LIFE WORTH LIVING

It is easy enough to be prudent,
When nothing tempts you to stray;
When without or within no voice of
sin
Is luring your soul away;
But it's only a negative virtue
Until it is tried by fire,
And the life that is worth the honor
of earth,
Is the one that resists desire.

—Ella Wheeler Wilcox.

"THANK YOU MARM"

The above colloquialism was used by President Roosevelt in his October 12 radio broadcast. He said that the people feel that, so long as the country is traveling the right road, it does not make much difference if it occasionally hits a "thank you marm." The president's language is usually good. He expresses himself by use of the simple but effective words, and practically any one can grasp his meaning, but this colloquial "thank you marm," had, to use another colloquialism, many persons "up a stump."

Webster defines the expression in this way:

"A small ridge or hollow made, usually diagonally across a road, especially on a hillside, to deflect water. It comes from the sudden bobbing or bowing of a person when a vehicle strikes the ridge or hollow. The expression was therefore used as if making polite acknowledgment of a courtesy."

Thanks, Mr. President, for getting us "up a stump" for a brief period and you, Mr. Webster, for assisting us down.

TAXI WENT ROUND AND ROUND

The drunk hailed a cab and fell into the back seat.

"Shay, driver," he ordered, "drive me aroun' the block a hundred timesh."

The driver was startled—but he obliged just the same. Around and around the block they went. And on the sixty-fifth trip, the stew leaned over to the driver.

"Step on it, buddy," he hic-coughed, "I'm in a hurry."

To be a "comer" start by being a "goer".

Doing easily what other find difficult is talent; doing what is impossible for talent is genius—Aniel.

CHAWIN' TOBACCO

A One-Time Common Habit Seems to Now Be Neglected

It's like the old gray mare, "it ain't what it used to be." In those "good old gray mare days" it was quite popular in the homes and on the street. Practically every home was equipped with cuspidors, called by the less euphonious and more objectionable name of "spittoons." There were two kinds of chawin'—plug and fine cut. In fact, there were four—the other two being less popular, and known as "twist" and "humps." The latter was tobacco leaf clippings left over after making cigars.

Nothing Inviting

There was nothing enticing in seeing a man take a "chaw." The user of plug had two methods. He got a good grip with his "grinders," and then shook his head side-wise while pulling back. The nearest resemblance to this performance that we have ever seen is our wire hair "Skippy" when she indulges in her favorite performance of getting a mouthful of rug or rag and shaking it violently, growling noisily all the time. As between looking at these performance we much prefer "Skippy." We are sure of one thing, she is too much of a lady to take any kind of tobacco in her mouth. The plug chewer's other method was a jack knife with which he whittled off good size chunks and stored them away until one side of his face resembled a half inflated 12-inch toy balloon. Then, with his jack knife, he gave an imitation of a sword swallower.

Reminds One of Pop-Eye

The victim of fine cut had only one method—just shoved it in his mouth like the spinach-munching "Pop-Eye." We are always reminded of a fine cut artist every time we see Pop-Eye in a comic strip or on the screen. We have a suspicion that the creator of Pop-Eye got his inspiration by watching a fine cut artist at work.

The subject may be rather vile to persons of sensitive natures, and yet we remember what a kick we got out of it in reading Charles Dickens's "American Notes." He did not mince words. He was distinctly shocked by the habit especially when he saw it in practice among statesmen and at other gatherings. And he criticized it unsparingly.

Disgusted Dickens

Here are a few lines on the subject by Dickens, the great English novelist:

"As Washington may be called the head-

quarters of tobacco-tinctured saliva, I must confess that the prevalence of those two odious practices of chewing and expectorating soon became most offensive and sickening. In all the public places of America, this filthy custom is recognized. In the courts of law, the judge has his spittoon, the crier his, the witness his, and the prisoner his; while the jurymen and spectators are provided for, as so many men who in the course of nature must desire to spit incessantly. In public buildings, visitors are asked to use national spittoons and not expectorate about the bases of the marble columns. The stranger, who follows in the track I took myself, will find it in its full bloom and glory, luxuriant in all its alarming recklessness, at Washington. The thing itself is an exaggeration of nastiness, which cannot be outdone."

In those days small boys were willing to get sick any number of times, to reach the third degree.

Reasons for the Change

A writer in the Kansas City Times says that tobacco companies blame paved streets and automobiles. They say that it makes a person self conscious to expectorate on a concrete sidewalk or asphalt pavement or to use tobacco in a nicely upholstered car. It may be the anti-expectorating ordinances have had something to do with it, or maybe again we have become more cultural, or perhaps, like the writer, indulged in a little self-analysis and reached the conclusion that he was chewing something that a hog was too much of a gentleman to put in its mouth.

Anyway, we quit and confine ourselves to smoking, wondering all the time, however, why a person should draw smoke into his mouth only to blow it out again.

Only answer, excuse, or reason is that it's a sedative and we are in no danger of having a servant throw a bucket of water on us to put out the fire as the servant did to Sir Walter Raleigh.

Why Explain

Lecturer—"Of course, you all know what the inside of a corpuscle is like."

Chairman of Meeting (interrupting)—"Most of us do, but you better explain for the benefit of them as has never been inside one."

Success often lies not so much in what we do as in what we don't do.

The employee who frequently has occasion to say: "Sorry, I misunderstood you," might more honestly say: "Sorry, I only half listened."

Miss Gee, **CHINESE** Girl With College Education To Sell Plumbing Goods to her Countrymen

If you happened to be in San Francisco and called on the phone for the plumbing house of Thomas Brodie, Inc., 1281 Mission Street, the chances are you would be answered by Miss Josephine Gee, an Americanized Chinese young lady. Miss Gee is a graduate of Stanford University, and is thoroughly modern in views.

Recently the Brodie company decided to go after business in San Francisco's Chinatown. There are about 10,000 Chinese in San Francisco, and their business amounts to a sizable sum. While it is true that some of the Chinese residents still cling to their old racial customs, it is equally true that the younger generations have gone modern and are adapting themselves to western standards of civilization in surprisingly large numbers.

Mr. Brodie recognized the changes that have taken place, and figured that the time was ripe to get plumbing business from the Chinese population. He was sure that in a colony of ten thousand persons, a large per cent, through long residence and education, had absorbed our western customs, and were desirous of keeping abreast of the times. His plan shows that he is awake to every opportunity to expand his business, and he does not know any hours—he advertises day and night service.



Mr. Frank C. Brodie of Thomas Brodie, Incorporated, progressive San Francisco plumbers who are opening a new field for plumbing sales in San Francisco Chinatown.



Miss Josephine Gee, graduate of Stanford University who will teach Chinatown residents the way to cleanliness and health.

The first logical step of contact with the Chinese residents was some one who knew Chinese ways and needs. Miss Gee was selected to fill this important position. The campaign is being carried on in truly American fashion.

One of the first steps was advertising. A folder done in Chinese and English was sent out.

On the address side there appears this phrase, "When the pipe breaks—," and on the second fold a picture of Miss Gee and opposite the wording—"or whenever you want the plumber, here's the person to help you."

The Brodie company gives a day and night service, and urges Chinatown residents to get greater comforts and conveniences in home, shop, and factory. This particular campaign is directed to and centers on residents in the Chinese quarter. The campaign just getting under way promises development of considerable new business.

Concerning this campaign, Miss K. Hancock, Mr. Brodie's secretary, says:

"Our direct advertising campaign will include eight mailing pieces going to all Chinese property owners, Chinese merchants leasing stores, wash houses, etc. This campaign is supplemented by two column newspaper advertisements in the "Chinese

Times," which is printed in Chinese and has a big circulation. This paper has also run a column article about our activities, and Miss Gee's connection with our organization. Her father and family are prominent in the business and social life of Chinatown. Our campaign has proved an interesting venture, and one which, already at this early stage, is showing gratifying results."

Miss Gee Tells of Her Race

"The Chinese race has played an important part in the building of the Pacific Coast. Historians have credited the rapid completion of the railroad linking the Pacific Coast with the Atlantic Coast to the application of Chinese labor. They have been an important factor in the development of practically every industry," said Miss Gee.

Their Own Communities

"The Chinese people, with a few exceptions, have the tendency to live within certain geographical areas. They settled in the different cities and towns and formed their own little communities. Here, in San Francisco, is the largest Chinatown in the United States.

"In San Francisco, there are many aged Chinese who migrated here in the early '70's. If they were encouraged to talk, they could give valuable information regarding the history of California.

Old Cling to Old Ideas

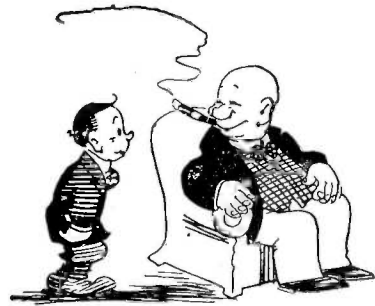
"You will find here, the older generation of the Chinese people clinging to their old ideas and customs with their temples and their traditional long gowns and pajamas. They still celebrate the Chinese New Year, the Festival of the Moon and other holidays of old China. But the younger generation have undergone a series of changes. They hold more to the Western ideas than to the Chinese. They are as modern as any other race. They have their own churches, social and sport clubs, dances and all the other activities that the American people enjoy.

Overcrowded

"San Francisco's Chinatown is, naturally, an overcrowded community and one of their most important problems is the housing condition. Many of the buildings are old and without suitable sanitary facilities.

"Working for an old established firm such as Thomas Brodie, Inc., I am in a position to be of great assistance to my countrymen. My chief aim is to win the confidence of my people, and by so doing, render them an intelligent service in their plumbing and heating problems."

Kid Jokes



EMBRYO Announcer

Aunt Emma: "Aren't you going to say the blessing, dearie?"

Modern Child: "This food is coming to you through the courtesy of God Almighty."

Forewarned

"Mama, where from doth elephants come? And don't try to thal me off wiv that gag about the thtork."

Another Smart One

Nurse: "Do you want to see the cute little brother the stork brought you last night?"

Bobby: "Heck, no! I wanta see the stork."

Preparedness

Father: "Why are you sitting on that boy?"

Jimmy: "He pasted me in de eye!"

Father: "But didn't I tell you to count one hundred before you let your angry passions rise?"

Jimmy: "Yes'm, an' I'm sittin, on him so he'll be here when I git troo' countin'."

Chimes?

Storekeeper: "This ten-cent piece doesn't ring good."

Tommy: "What do you want for a dime, a set of chimes?"—Open Road.

Was Dad's Face Red?

"Why, dad, this is roast beef!" exclaimed Willie at dinner one evening, when a guest of honor was present.

"Of course," said his father, "what of that?"

"Why, you told mother this morning that you were going to bring an old mutton-head home for dinner this evening!"

The **MIRACLE** of Water as Viewed by A Layman, and Other News

We read with deep interest in Water Works Engineering a letter by Mr. J. H. Harding, under the caption of "Water Supply Miracles." He is one layman who not only appreciates the vast importance of water works, but voices his appreciation of its incalculable service to mankind. The inestimable value of water works and plumbing, which deliver to the factory and home an ample supply of water for industrial and domestic use, is seemingly so matter of fact that it receives little attention. A few excerpts from Mr. Harding's letter:

Taken for Granted

"In Holy Writ we are told that Moses struck on a rock with his staff and water gushed forth. In ancient times this was a class A miracle, but to my way of thinking, the greatest miracle of modern times is that I or any one else can by a mere twist of the wrist, obtain a copious supply of clear, cool, wholesome water. Day or night, winter or summer, the supply is unfailling, and although, next to the air we breathe, it is the most vital element of human life, we take it for granted.

Traveling Changes View

"Those of us who have traveled in foreign lands, usually come home with a much different attitude toward our water systems. In parts of Italy, Greece, and France, pure drinking water costs more than wine. In Egypt and other desert countries water is a precious commodity that is peddled in goat skins. In the mud huts of Egyptian peasants, the only furniture is a water bottle and a sleeping mat. Water is carried by hand and is too precious for bathing. Millions of Chinese and other Asiatic people never have enough water.

Make People Water Conscious

"I believe and I make so bold as to suggest, that some appropriate measures be taken in every city of the country, to make citizens water conscious, to instill a deeper appreciation of the blessings of a supply of pure water, and of the men in the Water Departments that make it possible.

"I am just an ordinary citizen, with no connection with the water business, and perhaps I am speaking out of turn, but getting this off my chest makes me feel better and I'll enjoy my before dinner bath all the more."

Slight Disagreement

We disagree with Mr. Harding in one particular only—that he is not an "ordinary

citizen"—he is an extraordinary citizen to recognize the indispensable need of water works. They are, as he says, "a modern miracle," the magic link in the chain of industry, commerce, and modernity. Sweep away the water works and the plumbing industry and where would our vaunted civilization be today—in utter helplessness, deprived of one of our greatest needs that stands today as the most powerful activating force which makes every progressive village, city, and metropolis what it is today.

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BOULDER DAM POWER

Is Now Available to Users—Expected to Pay for Dam

The Boulder Dam power plant has been in operation since September, 1936, but it was not until June 1, 1937, that the plant commenced production of firm power. Previous to June 1 the government was not in position to guarantee continuance of this firm power and charge the full rate of 1.63 mills per kilowatt hour for the power furnished. The cities of Los Angeles, Burbank, Glendale, and Pasadena, California, had been buying power and paying a half a mill per kilowatt hour. There are enough contracts now in force for the sale of power to pay the full cost of Boulder Dam together with appurtenances within fifty years, including interest at 4 per cent. In addition a substantial surplus is anticipated. The power plant when completed will have a capacity of 1,835,000 horse power. This is four times the capacity of the electric generating power installed on the United States side of the Niagara River.

Lake Mead now extends upstream from Boulder Dam over 100 miles. It has become, as was predicted, the largest artificial body of water in the world.

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Oklahoma's Big Plan

Oklahoma City is considering the bringing of her water supply from the Fort Supply project down the Canadian River, a distance of 250 miles. Victor Cone, Chief Civilian Engineer of the Southwestern Division

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of U. S. Army Engineers, recently said the plan was feasible. The present plan is for Oklahoma City to join State and Federal Governments in construction of a huge lake in southwestern Woodward country at a cost of \$7,500,000 for the joint purpose of municipal water supply. The engineer said: "It's not a question whether you can afford to get water supply from this project but whether you can let it go."

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Law Suit Over Noise

The board of Water Supply, New York City, faces a suit for \$322,000. Noise is the basis of the action and home owners of West Yonkers, New York, are the plaintiffs. These people live in the vicinity of Shaft 23 of the Delaware project for New York City. Their sleep, happiness, and health have been impaired seven days and nights a week because of the "bedlam" at the shaft.

One of the complainants says that because of the noise she can not keep a maid, and therefore could not entertain guests.

The plaintiffs ask that construction work be limited to an 8 hour day and 6 days per week and that all excess noise be eliminated.

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Big Main

Atlantic City has turned water into its one million dollar main. This line is expected to produce an additional supply of from 15 to 20 m. g. d. It is a 48" cast iron main and is laid on a trestle over the salt marsh. The iron pipe will connect with the old 48" wooden main. This wooden main is in good condition in the sandy soil, but has been practically destroyed where laid in the salt marsh.

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Demand for Larger Mains

Water system engineers say that improved distribution in the past decade is partly responsible for the 53 per cent in the United States annual fire loss. It's a known fact by every one that water is the most effective and efficient agent for extinguishing fire. Like many other well known facts, it is so well known that it is not given the thought it deserves except by firemen and water works engineers. Mains of sufficient size are still lacking in many sizeable cities. Four and six inch mains may have been ample fifty years ago but not now.

ACUTE SENSE OF SMELL

Expert Uses Nose to Determine Quality of Water

Professional smellers and tasters have an important place in business. There are many things which the "nose knows" where the sense of touch, sight, and hearing fail. One of the tests on stimulants is a man who rubs a few drops on the palms of his hands and then sniffs the aroma arising to determine if it is suitable for consumption. We have little confidence in this type of "snifters." In fact, we feel they have either a bad cold, catarrh or adenoids, or else they are afraid of their own medicine, for which feeling we have no criticism.

Pure Cold Water

As a rival to these "snifters" of the demon rum, a new smeller has appeared on the horizon in the person of Henry Laughlin of Tyrone, Pennsylvania. He confines his highly olfactory nerves to clear cold water, but not always pure. In fact, it is to determine the quality of water that Mr. Laughlin smells it. He has classified taste and odors into thirty different classes. A very unpleasant water often results from a blended mixture from several sources. "Most odors in water," Mr. Laughlin is quoted as saying, "are caused by harmless microscopic organisms that live in water and give off an oily, fishy taste."

Chemically Treated

Practically all modern works treat water with effective chemicals for purification and clarity before distributing it to consumers. "Supplying water for public or private consumption is," says the Nation's Business, "one of the big industries of the country with an annual value of \$1,000,000,000 and a per capita daily consumption of 100 gallons. It is as much a manufacturing business as making steel or hoes, and requires a high degree of engineering and chemical skill to maintain the necessary qualities of purity for human consumption as well as safeguarding users against water-borne diseases.

Cost Is Small

"It is necessary," continues Nation's Business, "that sediment be precipitated out of the water, harmless bacteria killed and undesirable tastes and odors removed. The usual annual cost of treating water by modern methods is about three cents per capita."

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A wound seared by the iron may become whole, but a wound burnt in by the tongue can never heal.

Out of the Ordinary

Oglesby grade school, Decatur, Illinois, has four sets of twins.

Kyle Beggs, post office employe, Pecos, Texas, was bitten by a rattle snake while hunting. He was ill but an hour. The snake died.

Instead of a dog to protect his car, Howard Welden, Jr. Wilmington, Delaware, carries a half dozen black snakes. Never locks car door and no one ever opens it.

Bert Thompson, 46, Spokane, Washington, could not eat and could not sleep. An X-ray solved the trouble—lower false teeth in his stomach instead of his mouth.

Pete Petrovitch, Benton, Illinois, is awarded a buggy whip for the championship "Out of the Ordinary" item. Six months for drunken driving—a horse and buggy.

B. J. McCartney, salesman, was standing outside of a filling station at Hartford, S. D., when an explosion inside blasted the shoes from his feet but left him practically uninjured.

Raymond Eckborn, North Weymouth, fell fifty feet from a bridge and landed on his back on a skunk. Eckborn suffered no injuries but the skunk was killed before it could get into action.

A patient called on Dr. Fred Halm, Oklahoma, saying insomnia was driving him crazy. The doctor told him to be seated for a few minutes. When the doctor returned the patient was fast asleep.

Cameron county, Texas, believes in economy. Recently the commissioners began slashing the budget. When they finished they found nothing left with which to pay their salaries. An amendment is in order.

A thief who stole milk from residents of East Orange, N. J., was more than dishonest. He had a "nerve." Proof of it was the notes he left in the bottles telling the milkman to leave extra quarts the next day.

Clarence Schuff, Allentown, Pennsylvania, fishing for trout, made a cast and caught

a blue heron instead. Just as he made the cast the heron dived for the minnow on the hook and swallowed the hook. Schuff hauled in his unusual catch.

Just as Mr. and Mrs. Howard Sherman, Kendallville, Indiana, retired for the night a bolt of lightning struck in the bed room, knocking plaster from the walls, jumped to the metal bed, passed through the bed posts and splintered the floor.

Here is a "zipping" story. A locksmith received a call from a beauty parlor, and asked to hurry as a "lady was fast in her zipper corset and could not get out of it." The lady was near collapsing and did collapse when she recognized in the locksmith the husband she had deserted two years before.

Here's another along the same line. Mrs. George Day, Joliet, Illinois, started to slip into a dress when a mechanical snap shut on her eye lid. Neighbors worked two hours trying to unfasten her and then called the doctor who rushed her to the hospital. With scissors and other instruments he managed to release Mrs. Day. Nothing serious except the necessary lacerations to remove the fastener.

Jane Toohy of Chicago was in Cincinnati where she purchased twenty-four oranges. After much difficulty she cut into one of them, and then learned why the orange was so hard to cut. There was no outward mark on the skin of the fruit, but inside she found twenty-four pennies.

A taxi cab ride costing \$625 was taken by an English couple seeing America. They started from a sight-seeing tour in Washington, D. C., turned it into a tour of Virginia, then up into Canada to see the Dionne quintuplets and back to New York to catch the boat for home.

Twelve years after the crash of the Shenandoah, the Annapolis class ring of Commander Isaac Lansdowne was found. A Caldwell, Ohio, woman pulled a weed from her garden. Encircling the root was the ring. The name of the owner was engraved on the inside.

Elmer Ruffalo, age 22, arraigned before Judge Calvin Stewart, Kenosha, Wisconsin, charged by a relief supervisor with

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disorderly conduct, couldn't work on a farm, knowing nothing about farming, and did not know where to find a job. "Well, you found where to get relief. Now you'll have time to think about finding work. Filthy days in the county jail. It's time tax payers were relieved of taking care of these lazy relief cases." But tax payers are not relieved. They pay taxes for keeping Ruffalo in jail.

In the mountain regions of W. Virginia, Ronnie Reveal, 22, shot and killed Clarence Walker because he would not stop singing "Daddy, My Sweet Daddy". The song made Mrs. Walker cry. Her father died recently. The shooter considered this sufficient cause for plugging his uncle.

Some one told Terry Moore, Jr., aged 5, Los Angeles, that automobiles drank gasoline so they could run faster. Ambitious to be a sprinter, Teddy took a drink of gasoline. A fast "run" to the hospital saved his life.

A Kenosha, Wisconsin, merchant, in reply to a dun, received a letter from the doctor asking him to refer to Matthew 19:29 which he did and read, "Have patience with me and I will pay thee all."

Chester Crubaj, Buffalo, took a short automobile ride. In six blocks he ran a red light, drove 50 miles an hour, had no driver's license, lacked proper registration, and had defective brakes. Otherwise everything was O. K. A total fine of \$64 may hold Chester for a few weeks.

Carl Hageman, 41, and Doris Hahn, 31, Chicago, have been married for the fourth time since 1930. There were three divorces.

FREAK WRITING

In May an article was published in the Mueller Record concerning the achievement of Vincent Wright, Los Angeles, in writing a novel, "Gadsby—Champion of Youth." The book contained 50,110 words, without the use of the vowel "e."

And now comes Rev. J. F. Cargile, Macon, Georgia, a Baptist missionary, who has written a 13,000 word novelette, entitled the "Gladiator's Choice." His specialty was doing this by beginning every word with an "s." Here is a sample of his work:

"Spain's sapphire seas, surging sonorously, scared sickly sojourners. Stephen's 'Sea Ships' sailed swiftly southward. Scattered seaweed (sunstruck) shone serenely. Sea-

DREAMER LIVES FOREVER

I am weary of planning and toiling
In the crowded hives of men;
Heart weary of building and spoiling
And spoiling and building again;
And I long for the dear old river
Where I dreamed my youth away;
For a dreamer lives forever,
And a toiler dies in a day.

—John Boyle O'Reilly.

gulls swiftly sped, sometimes swooping suddenly, scraping seething sea surfaces, stopping several seconds, seeing something stomach-satisfying."

The only similarity in the authors that we are able to discover is in their ages. Both are 66 years old. Just as freak writing both samples are of momentary interest. For enduring literary value.—Nix.

SOME MUD LARK

The government's new dredger, Goethals, was launched recently. It's the world's biggest boat of that type. The Goethals has an over-all length of 476 feet and a loaded draft of 25 feet. The hopper capacity is 5,000 cubic yards, and the maximum cutting capacity is fifty feet.

UP TO DATE APHORISMS

A man doesn't have much horse sense until he can say "nay."

Don't be a cloud because you can't be a star.

Covering a house with a mortgage will not keep out any rain, but it will make the sun less bright.

All roads that lead to success are under construction.

Hot dogs may not bark, but put some hot mustard on them and they'll bite.

A lazy man asleep in the shade is just as useful as a hustler who stirs up nothing but dust.

Travel broadens one, but so does over-eating.

Life begins at 40—to tell us what a mess we have made of it.

The average man is proof enough that a woman really can take a joke.

One way to promote honesty is not to own anything taxable.

—Highways of Happiness.

THE BATH TUB

An Aid To Health Say Authorities ... News In The Field of Plumbing

Plumbers have a good talking point on the healthfulness of bathing. The medical profession stands back of them. In magazines and newspapers we frequently come in contact with articles on this subject. The efficacy of frequent bathing comes to us from ancient times. For years persons affected with certain ailments have sought out places where waters impregnated with certain medicinal properties are located. Many Americans have gone to the European continent where there are hot waters which claim great curative powers. Our own Hot Springs is an outstanding instance in America. But all of this is unnecessary with a bath room in the house. Warm water soothes the nerves and relaxes the muscles. It chases fatigue away. Insomnia yields to the soothing influence of hot water if baths are taken regularly. Painful joints resulting from arthritis are relieved. Heat is an efficient aid to many bodily and muscular ailments, and moist heat is credited with being far superior to dry heat. The beneficial qualities of hot water, according to medical men, is due to the fact that the blood is drawn into the skin from its internal deposits, capillaries are dilated and waste products washed away. There is nothing more desirable and precious. Hot water's contribution to health and relief from certain ailments appears to us good selling talk. It would, it appears, be a good policy for plumbers to carefully study all newspaper and magazine articles on the subject, coming as they do from men of recognized ability and standing in the medical profession.

Many persons travel thousands of miles and spend many thousands of dollars to secure relief from some bodily difficulty.

It's quite probable that they could get as much relief in their own bath room if they followed faithfully the same routine prescribed by the commercialized bathing places.

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Dr. Royal S. Copeland, an internationally known writer on health subjects, recently published an article on "Napoleon and Bathing." The great general is quoted as saying:

"Water, air, and cleanliness are my favorite medicines."

Dr. Copeland adds that all physicians will

agree that the prescription is an excellent one. When Napoleon was tired and in need of relaxation, he always resorted to a hot bath.

Continuing, Dr. Copeland says:

"Despite modern advancements, we are still confronted with many diseases and disorders that can be traced to neglect of body cleanliness.

"In addition to the cleansing properties of soap and water, a warm tub or shower bath is relaxing and beneficial. At the end of a busy day it is invigorating to have a bath. Further, it helps to keep the pores clean, and aids in elimination of body wastes. The bath is of value for everyone, especially beneficial for the young and aged."

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BATH TUB AND SINK

In the October issue of "Better Homes and Gardens," Norman J. Radder of the Plumbing and Heating Industry had an article. This publication has 1,600,000 readers, quite an audience, to hear the glad news of progress in the plumbing field. "Better Homes and Gardens," as its name signifies, goes to a class of intelligent readers on the lookout for the better things in life. While a sink is only one part of a domestic plumbing system, it is a most important part. The bath room and the kitchen are the two things in a home which most concern the housewife. Both can be made beautiful as well as serviceable. Both are in constant daily use. The tub and sink equipped with dependable fittings give to the entire household invaluable service. There is always one necessary precaution to insure all the goodness and efficiency which these two articles provide, and that precaution is to be sure they bear the name of a responsible maker and to have them installed by a competent plumber.

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For years the tub bath was the choice of the majority, probably the heritage of the wash tub in the kitchen on Saturday night. Now its about 50-50 tub and shower. In fact, the modern bath room has both.

(Continued on Page 29)

Maw and Paw



Baiting the Trap

Maw: "What are you cutting out of the paper?"

Paw: "About a man getting a divorce because his wife went through his pockets."

"What are you going to do with it?"

"Put it in my pocket."

Times Change

Mrs. Sad Eye: "He used to kiss me every time our train passed through a tunnel before our marriage."

Friend: "And doesn't he do so now?" asked her bosom friend.

Mrs. Sad Eye: "No; he takes a drink."

Far From It

Wife: "You're lazy, you're worthless, you're bad tempered, you're shiftless, and you're a cock-eyed liar!"

Husband: "Well, my dear, no man is perfect."

Two Different Tours

Mr. Coleslaw: "Boy, wasn't that great stuff where the President had four billion dollars all in a lump sum to spend as he saw fit?"

Mrs. Coleslaw: "I'm glad you liked the idea. Now, I wish you'd let me have \$4 in a lump sum, to spend as I see fit."

Trapped

Mrs. Smith: "Oh, John! I dropped my diamond ring off my finger and I can't find it anywhere."

John: "It's all right, dear. I came across it in my trouser pocket."

Beast!

Mary: "John, dear, I'm to be in amateur theatricals. What will people say when they see me in tights?"

John Jones: "They'll say I married you for your money."

Accident

"How did you find your husband when you returned from your vacation?"

"O, I just happened to stumble over him while I was cleaning up the cellar."

Hoggish

Katrina: "Vell, I wish I vas in Heaven!"

Fritz: "I wish I vas in der beer garden."

Katrina: "Ach, ja! always you pick out the best for yourself!"

Oh, My!

Mrs. McSnorter: "Say 'our.' I'm tired of hearing you talk about 'my house', and 'my car', and 'my daughter'. It gets my goat. What are you looking for in that closet?"

McSnorter: "Our pants."

Cautious

Mrs. Cox: "Oh, Myron, let's go and see the storks."

Mr. Cox: "No, dear! I fear they may return the visit."

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MAY BE A LESSON TO YOU

Forgetfulness is a human failing. It works faster than chain lightning. Everyone has seen men and women going about hunting their spectacles, with these eye-aids roosting comfortably atop the owner's head. Or have you seen office people place a letter on the desk, jump up suddenly to do something else and then spend a half hour hunting for the "lost" letter.

The experience of the memory expert might help us remember. At the close of his lecture he was exasperated at the volley of questions fired at him. Finally an old lady approached to ask the expert to what he attributed his remarkable memory.

"Well, Madam," he said, "When I was in the Air Force I once had to make a record parachute jump from a height never before attempted. Just as I jumped from the plane, the pilot leaned over the side and yelled: 'Hi, you've forgotten your parachute'."

"Believe it or not, lady, that taught me a lesson, and I've never forgotten anything since."

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The largest artesian well in the world, it is said, is located on the Oasis ranch in New Mexico. This well coughs up 9,100 gallons of water per minute.

(Continued from Page 27)

But the shower bath seems to have been the grand-dad of the bathing habit.

WORLD'S OLDEST BATHROOM BUILT 5000 YEARS AGO

The idea of a separate room in the house for bathing purposes is 5,000 years old, says the Plumbing and Heating Industries Bureau.

The Oriental Institute of the University of Chicago has excavated in Iraq, once ancient Babylonia, a room about 15 feet square in the Palace of King Urnimmar. The room has a floor of water-proof bitumen with a drain made of clay tile. Here the king stood while slaves threw water over him.

Thus, says the Bureau, the world's oldest bathroom is a predecessor of the modern shower cabinet. The fact that the room was built three thousand years before the beginning of the Christian era is established by the imprint of the name of the king on all of the bricks used in the construction of the palace.

In the five thousand years since King Urnimmar stood in his crude shower cabinet of clay and bitumen, the bathroom has developed until today with glamorous, colorful, and streamlined fixtures of vitreous china and enameled cast iron, it has become the most beautiful room in the house.

Shower cabinets, too, have been perfected so that today they are available in handsome and colorful units suitable for the finest bathroom. They may be obtained with non-skid receptors, water-saving showerheads, and thermostatically controlled mixing valves.

BATH TUB SITTERS

A Baltimore dispatch says the former home of the Duchess of Windsor is now a museum. Mrs. W. W. Matthews, hostess, says that many of the visitors sit in the bath tub for luck. It's an old fashioned type with four legs. Mrs. Matthews says, "An English woman started the practice, saying it meant good luck to sit in the tubs of famous women," and that she had sat in lots of famous tubs all over Europe, including Cleopatra's and Marie Antoinette's, and did not want to slight the Duchess.

Most of the "sitters" have pictures taken while in the tub.

Animals In The News

Sheriff West, Olney, Ill., and Harry Berringer, city dog catcher, are "lawin" each other about Jerry, the good natured, happy go lucky jail dog. Jerry is chairman of the reception committee, welcoming the sheriff's callers with notable impartiality, be they socialites or criminal. Berringer took Jerry from the jail yard to the city pound. Sheriff West paid a dollar to get Jerry out. Then the dog catcher repeated the performance. This time the sheriff went Jerry's bond, posting \$50 in a justice court for the dog's appearance. First class attorneys have been employed and a howling time is expected at the trial.

Polly Ann is a cat owned by a family living in Waynesville, a small town thirty miles north of Decatur. Polly Ann was an exemplary cat, but would have nothing in common with birth control. Periodically she had a flock of kittens, and being a feline of unusual fecundity the returns were always large. The kittens were always drowned. The other day Polly Ann pulled a fast one. Finding a hole in a tree, she crawled up and crept in for her accouchement. However, the family discovered and rescued the mother cat and baby kittens. They deserve to live.

A similar case is reported from Decatur. This mother cat climbed a tree and found a hole in the upper portion of a porch. The family discovered the kittens by their crying. Members dug around the lower part of the porch only to find the old cat had higher aspiration. A rescue was effected by tearing out a part of the porch roof.

June, a four year old police dog, was sentenced to death by a Municipal Court judge at Skowhegan, Maine, after two persons testified the dog had bitten them, but June still lives. Her owner appealed the case to the Superior Police Court. A queer feature of the first trial was three character witnesses who gave June a good reputation as a docile dog.

And here's another one about Buddie, a two year old German Police or Shepherd dog, which lives with its master, George F. Collins, in a suburb of Philadelphia. Buddie bit a child and was sentenced to death within ten days. Collins got his dander up,

(Continued on Page 30)

THE CONSTITUTION

How do the people maintain supremacy over their government?

The government did not create our Constitution. "We the people" established it and thereby created our government and its three main branches—(1) Congress (to make laws), (2) the Executive (to enforce laws), and (3) the Courts (to construe law). The only powers these branches have is what "we the people" give them in our Constitution which defines itself to be "the supreme law."

Our Constitution, therefore, is superior to the branches of our government. Any-



thing they do that conflicts with or that is prohibited by our Constitution is void. It follows that any ordinary law passed by Congress is void if it conflicts with our Constitution.

To determine this, "we the people," in our Constitution, create the Supreme Court as the people's agent to construe our laws, and we require the judges, under oath, to uphold our Constitution as "the supreme law."

When a case concerning an ordinary law passed by Congress is brought into Court, the Court examines that ordinary law and compares it with the supreme law—with the Constitution. If it finds that the two laws conflict, and that one law cannot be obeyed without disobeying the other, it necessarily requires obedience to the superior law—to the Constitution. In other words, it finds the inferior or ordinary law unconstitutional.

The supreme law can be changed, but not by Congress, the Executive or the Courts as our Constitution provides that it can be amended only by the people through their state legislatures or conventions.

In this way "we the people" maintain our supremacy over the government.

(Continued from Page 29)

bought a farm in New Jersey, and moved there, taking Buddie with him.

Reaching the Canal Zone, Mr. and Mrs. Charles B. Williams, N. Y., found they couldn't land with their pet, Pomeranian, Bonnie, unless they had a health certificate showing she had been free from rabies for two weeks. Rather than have Bonnie in quarantine for six weeks, Mr. and Mrs. Williams sailed back to New York, 4700 miles, and got the necessary certificate. Bon voyage for Bonnie.

A 6 year old German shepherd dog, Palmer, Mass., owned by Louis West, died because of her rescue of a month old kitten from beneath the wheels of a truck. The dog saw the kitten about to be crushed under the wheels and leaped and knocked it out of the way, but was pinned under the rear wheel.

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BETTER THAN HEAVEN

A widow visited a spiritualistic medium, who satisfactorily produced the deceased husband for a domestic chat.

"Dear John," the widow questioned eagerly, "are you happy now?"

"I am very happy," the spook quietly assured her.

"Happier than you were on earth with me?" the widow continued, greatly impressed.

"Yes," John asserted. "I am far happier now than I was on earth with you."

"Oh, do tell me, John," the widow cried rapturously, "what is it like in Heaven?"

"Heaven?" the other snapped, "I ain't in Heaven."

Had The Floaters

Little Willie: "Mom, you said the baby has your eyes and daddy's nose, didn't you?"

Mother: "Yes, darling."

Willie: "Well, you better watch him, he has grandpa's teeth, now."

Reassuring to Grandpa

"Grandpa, can you make a noise like a frog?"

"Why, no, Willie, why do you ask?"

"Well, 'cause I heard Pa tell Ma this morning that when you croaked we would get twenty thousand dollars insurance money."

AGAIN RED CROSS SCORES

Notable Feature of 1937 Was the Relief and Care of the Flood Victims



Thousands of tons of food, clothing and medical supplies were used by the Red Cross last January to care for the more than a million flood refugees in the Ohio and Mississippi valleys.

Within the space of several days these families were forced to flee their homes. School houses, churches and public buildings of all kinds were used as refugee centers by the Red Cross. In addition to such permanent buildings that were used to shelter flood victims, numerous tent and barrack camps were set up in places where no adequate housing facilities were available.

Supplied Food

Since hundreds of stores in the affected cities and towns were under water the Red Cross obtained food supplies from a score of different states. Thousands of tons of fresh and canned foods, both bought and donated supplies, were sent in to the affected areas by train, boat, truck and, in some isolated places, by plane. Purchasing and warehousing depots were established at key cities in the flood area to clear food supplies to the refugee centers.

The number of persons to be fed fluctuated greatly from day to day, making it doubly difficult to plan meals. The population of some refugee centers increased or decreased from a few hundred to several thousands over night, as fresh groups arrived or as hundreds of families returned to their

homes. But through all these changes the dietitians and supply officers of the Red Cross worked hand in hand to meet each day's needs and planned as adequately for the morrow as the unstable conditions would permit.

Health an Important Feature

Giving adequate medical and nursing care for ill flood victims and guarding against epidemics among the many refugees temporarily housed in public buildings and tent camps was also an important part of the Red Cross disaster relief job last winter.

The care and feeding of flood refugees by the Red Cross was made possible by its years of experience in disaster relief work and by the generosity of the American people in contributing an adequate flood relief fund.

Everyone can help keep the Red Cross ready to serve in disasters and support the organization's year-round programs of public health nursing, first aid, water life saving, assistance to veterans and service men and the volunteer services by joining a local Red Cross Chapter during the Roll Call, held from November 11th to 25th.

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Running Water on the Farm

Farmers, through development of running water, by electric pumps, and plumbing, now have some measure of protection against fire. Sale of equipment during this year are reported 62.3 over 1936. Last year sales of electric systems totaled 154,000—this year it is predicted they will reach 250,000. Despite this, it is said, only 10% of farmers have running water under pressure. This fact, according to the Electric Council, is largely responsible for an annual fire loss of \$100,000. Concluding, the Council says: "A dependable supply of water under pressure is the best means of controlling fire. A hundred gallons of water at the time the fire breaks out is more valuable than 10,000 gallons of water after the fire has made headway." Another good sales argument for plumbers and electric pump makers.

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Meticulous Hospitality

I would like to ask for a little information concerning a birthday party I am to give. There will be six couples. I would like to know if it is proper for the hostess to take the gentlemen's clothing on entering the house or to take them into the bedroom so as to deposit their clothing where they wish.—Newark News.

THINGS WORTH KNOWING

That lowly bit of money called "nickel" is misnamed inasmuch as it contains three times as much copper as it does nickel.

The Apprentice Training Council says that in Europe 600,000 apprentices are being trained for skilled labor jobs, while in the United States the number is only 75,000.

In the mail service the average train letter travels 469 miles, while in the air service the distance is 1,558 miles.

Pribilof Islands are occupied by thousands upon thousands of seal. In spite of this the mother seal comes back from a long swim and instantly identifies her baby seals, although there are thousands of them. Seals are blessed with great intelligence, as any one who has witnessed their marvelous performances in circuses will agree.

The cheetah, a hunting leopard in Asia and Africa, is said to be the swiftest of all animals—a mile and one-fifth per minute.

The term baker's dozen is of old English origin. Fearing of being accused under anti-fraud laws, the baker gave a full dozen of cookies, etc., and added an extra one for good measure.

China's oldest newspaper is over a thousand years old. It has cost 800 editors their heads for saying things about authorities.

A cow's stomach has eight times the capacity of that of a horse.

The heart does not beat at a constant rate. It ranges under normal conditions from 50 to 100 beats per minute.

He Knew

Father: "What did you and Joe talk about last night, dear?"

Daughter: "Oh, we talked about our kith and kin."

Small Brother: "Yeth, pop, I heard 'em. He seth. 'Kin I hev a kith?' and she seth, 'yeth you kin'."

"What a sad-looking store."

"Why because it has pains in the windows?"

"No, the books are in tiers."

MUELLER TAPPING MACHINES

OUTSTANDING FOR SIXTY-FIVE YEARS



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2ND

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WATER TAPPING MACHINE "B" FOR TAPPING WATER MAINS AND INSERTING STOPS 1/2" TO 1" INCLUSIVE, UNDER PRESSURE.

Many designs of corporation tapping machines have been made, but the original Mueller machine with its refinements and improvements has remained outstanding for 65 years. The design of the Mueller machine permits operation in two parts, affording a means of overcoming unexpected conditions and saving costly shut-downs. The Mueller construction gives the minimum area in contact with the main so that the pressure has less tendency to loosen the machine. This feature makes it possible to tap small sized cast iron pipe with bosses and collars. Mueller machines may be operated in any position on the main.

All wearing parts are made removable so that worn parts may be replaced at minimum expense. If your machine needs attention, why not send it in today?

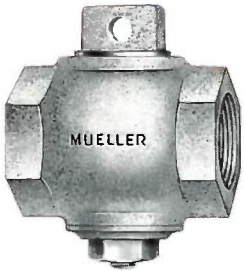
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THE SEAL
OF HIGH
QUALITY**



H-11074
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MUELLER Gas Stops today are made by men who have devoted their lives to making brass stops of various kinds. They have been at the business since 80 years ago September 7—80 years of knowing how.

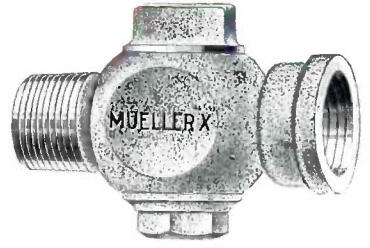
MUELLERS made good brass stops from the beginning, but did not have the priceless experience gathered in their four score years of manufacturing. Today they know precisely what the trades wants in brass gas stops. This demand is met with fine metal, modern machinery, and trained workmen.

MUELLERS do not depend entirely upon human judgment and experience. MUELLERS support their experienced workmen with strict laboratory control, and finally give all MUELLER gas stops an air pressure test, when submerged in liquid.

A few patterns are shown herewith.

The MUELLER line embraces all popular patterns of brass and iron gas stops, in all sizes as well as in many special patterns. The line is complete, will give you good and lasting service.

Give MUELLERS your inquiries and they will give you GOOD service and GOOD goods with the Mueller Seal of High Quality.



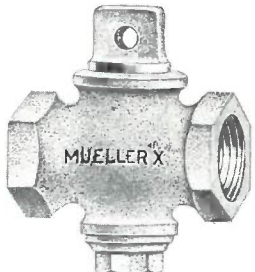
H-11070
Extra Heavy Gas Main Stop



H-11026
Extra Straight Way Lock
Wing Pattern



H-11080
Solid Brass Lever Handle with
Check



H-11007
Extra Straight Way Flat
Head Pattern



H-11066
Extra Heavy Tee Head Service Stop

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KNOWING
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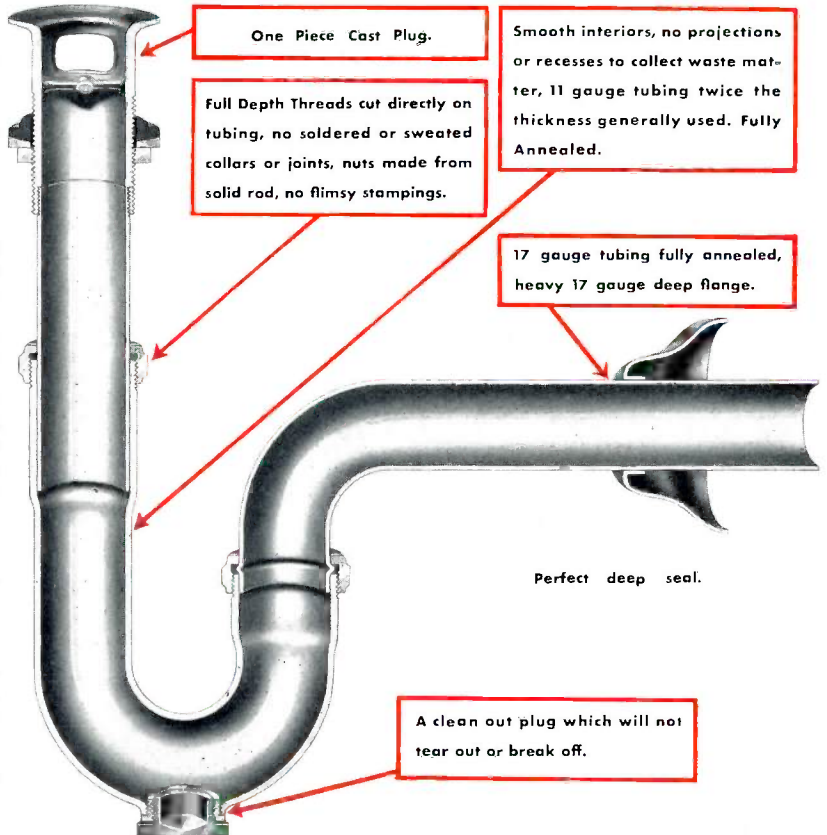
ELEVEN GAUGE!

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—With the Quality in Keeping

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All tubing is fully annealed. Construction throughout is solderless and seamless. Full depth threads are cut directly in the tubing, and all nuts or plugs are made from solid rod. There are no flimsy stampings in Mueller Traps. Write for complete details and prices.



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