



Hail, bounteous May, Woods and brooks are of thy dressing, Hill and dale doth boast thy blessing.

Underwood & Underwood





Throw Away That Old Monkey Wrench

> Get a Mueller Corporation Stop Wreuch

H-10048

PLAIN FACTS for Practical Water Works Men

MUELLER Water Works Goods are superior to any line we know.

This is no mere advertising claim.

It is supported by incontrovertible reasons.

Many of the most practical water works men know these reasons to be true.

Here are some of the reasons:

There is 85% copper in MUELLER Water Works Brass Goods.

There are 77 years of manufacturing experience behind them.

The goods have been kept abreast of changes in water works practice.

In addition to high copper content there is no stinting of metal.

Every MUELLER stop is under rigid laboratory control from the raw metal to the finished product.

There are other ample reasons. The extreme care predominating every manufacturing process of MUELLER is the direct cause for these superior goods.

Corporation stops for copper pipe service, iron, lead and lead flange—all styles—all of the same proved up quality.





Vol. XXIII

MAY, 1934

No. 246

FAULTY PLUMBING BLAMED

Amoebic dysentery reported as originating from faulty plumbing in some hotels in Chi-cago during "A Century of Progress Exposition" has provoked wide discussion by press and public. The outbreak of the disease, and subsequent plans for correcting the source of infection, has been of paramount importance to the plumbers. Despite the fact that the origin of ambiasis is charged against faulty plumbing, it is our belief that it will eventually rebound to the benefit of the plumber.

The fact that the hotels in which it is reported the disease had its beginning are forty or more years old in itself points out that plumbing and sanitation may not have been in the advanced stage of scientific construction of today. Then again it should be taken into consideration that the topography of the ground has been changed and entirely remade in recent years, which may have changed and in part may be responsible for the back water which may be a part of the blame for the insanitary conditions which investigating committees found.

It has been claimed that the medical profession failed to recognize amoebic dysentery as not occurring in the United States, contending that it was a tropical ailment. However, medical authority tells us it has been known in this country since 1890, being especially prevalent in the southern states. The principal source of infection is the water supply. In the Chicago case food is also blamed.

So much for the Chicago case which has been so widely discussed in trade and newspapers as to need no repetition here.

It seems to us that the plumbing trade has a master opportunity to profit by the Chicago incident. Plumbing methods today are different from forty years ago. Sanitation is better understood and practiced. Practically all states have laws governing plumbers and plumbing, providing competent inspection of all work and requiring all journevmen plumbers to take an examination.

With this foundation and background, the industry is in a position to insist on work that will measure up to the law and to the present plumbing ethics. The developments

in Chicago during the past few months should stand as a positive and permanent reminder to plumbers against any such recurrence in the future. It should be held up as a warning to the people who want cheap or imperfect plumbing at a price.

Unfortunately, there is plumbing being installed even now which is not creditable to the trade and a disgrace to the premises. One only needs to travel to discover this. At Miami recently we asked a barber to be directed to the toilet. To reach it one had to follow a narrow hallway, none too clean. Connected with the barber shop was a beauty parlor with quite a few operators. Barbers and beauty operators were using the same toilet. The plumbing was not good. The place was uninviting and seemed insanitary.

The conditions in many filling stations is simply repugnant and repellant. In many of these stations no provision is made for separate facilities for men and women. The plumbing itself is cheap and poorly installed. The toilet and lavatory are foul with filth.

These conditions should not exist. In every saloon, filling station, and restaurant separate facilities for men and women should be provided-the plumbing fixtures, fittings, and workmanship should all be of a sanitary character.

Can the plumbing industry contribute to this desired condition? We think it can. Chicago's case can be used as a powerful argument for good plumbing. It is reported that several suits for heavy damages have already been instituted in Chicago by victims (Continued on Page 2)

At Intervals

An American film star was applying for a passport.

"Unmarried?" asked the clerk. "Occasionally," answered the actress.— London Answers.

In Proper Place

She: "What did papa say when you told him that you couldn't sleep for thinking about me?"

He: "He offered me a job as night-watch-man in his factory!"—The Passing Show (London).

of amoebic dysentery and others will undoubtedly follow.

Forty or fifty years ago we did not know as much about sanitation as we do today; we had few men specializing in sanitation. there were few if any laws governing plumbing installations; journeymen were not required to take examinations; plumbing inspectors were not required by law.

Today we have all of these and they should combine to secure plumbing that will protect health, the plumber's reputation, and furnish better accommodations in all public places

One step in this direction is good goods and modern installation of plumbing that will prevent unhealthy accommodations. Then the insanitary conditions to which tourists are now subjected will disappear.

There is no longer any guess work in plumbing and sanitation. They have become accredited sciences.

A STRIKING EXAMPLE

Evidence That the Common Practice of Walking Is Dangerous

To emphasize safety by pointing out that there is no danger of serious accident even in performing the natural and necessary act of walking to many may sound an extravagant claim. It is not. The day an item in this issue was penned, a Decatur lady proved the truth.

She was on Water street, Decatur's principal business street, where sidewalks are of smooth concrete, when she stepped on a man hole cover. It slipped from its place and the lady fell in up to her waist, sustaining painful and serious injuries to her legs. They were so serious that she had to be taken in an ambulance to the hospital for treatment. The accident confirms the claim that there is danger even in walking on sidewalks. In any city, the downtown sidewalks are considered safe with all hazards to personal safety removed. This is largely true, but carelessness is still present in pedestrians. Observation proves this. Study any crowd on a busy street. Note the gawking, window gazing crowd as thoughtless of their own acts as they are of the rights of fellow pe-destrians. Disregarding all rules of foot travel, heedless of where their feet are leading them, they amble along as unthinking as cattle. Traffic signals mean nothing to them. Keep your eyes open and your mind alert on the subject of safety, even though you are only performing the natural function of walking on a perfectly smooth surface.

All in Same Family

Young Bride: "I'd like a wrench."

Salesman: "Monkey wrench?" Young Bride: "No, I think my husband wants the big baboon size."

MAGNOLIA SHRUBS AND TREES

There Are Many Varieties With Different Fragrant Blossoms

We are in receipt of a clipping with illus-tration from the last Mueller Record, sent by Cora M. Stevens, treasurer of the city of Shawnee, Oklahoma.

This article referred to had to do with a beautiful flowering tree on the lawn of Robert Mueller. It is known here as a magnolia. The writer says:

"This does not look like a picture of Oklahoma magnolias. Could the name be an error?"

No doubt the lady is right. The word magnolia covers a multitude of trees and shrubs which are grown in different sections of the country. Some are wild and some are cultivated. Generally, the flowers are large and erect, somewhat tulip shaped and often very fragrant. These flowers are usually white, greenish or pinkish. The ones referred to in Robert Mueller's yard are white and pinkish. The tree always blooms early in the spring and following the blooms come the leaves. We suspect that this tree is of the cultivated variety.

Among the foreign species of magnolias which are cultivated and fairly hardy are the Chinese tulip tree (M. Yulan and M. Soulangeana). These have many varieties. The former comes from eastern Asia. It is a tree with large, white companulate sweet scented blossoms, appearing in early spring before the foliage. The latter is a hybrid with gray bark and similar flowers washed with purplish tints on the outside. It blooms in March and bears a profusion of comparatively small white flowers with many spreading petals. The indigenous species are many and are often cultivated, especially in the south. The sweet bay, or swamp magnolia (M. Virginia Glauca) is found on the coast as far north as Massachusetts. (M. Grandiflora, a native of the southeastern states, forms a stately tree, from 75 to 100 feet high. It is an evergreen with lanceolate leaves. The white flowers in bloom from May to June are often nearly a foot across, and have a pungent fragrant odor.) There are still other varieties and all of them bear beautiful flowers. Most people when speaking of magnolias have in mind the flower of the south.

TELLS MAMA EVERYTHING

"Darling, you were awfully late last night. I'm afraid I'm dreadfully old-fashioned, but I should like to know where you go."

"Certainly, mummy. I dined with-oh, well, you don't know him, and we went to several places I don't suppose you've been to, and finished at a queer little club-I forget its name, but it's in a cellar somewhere

in Soho. It's all right, isn't it mummy?" "Of course, darling. It's only that I just like to know."

2

COLLEGE HUMOR

Lemon Squeezer

Mother: "But surely you didn't come right out and tell Jim you loved him?" Daughter: "No, mother, he simply had to

squeeze it out of me."

In the Physics Class

She: "You remind me of the ocean." He: "Wild, romantic, restless-?" She: "No, you just make me sick."

"Does Gladys ever go out on a party?" "Every one she's at."

She: "Your eyes remind me of a bird." He: "Why?"

She: "Because they flit from limb to limb."

He: "Do you believe in the hereafter?" She: "Why-a-yes."

He: "Well, how about a little necking? That's what I'm hereafter."

The Cats

First Cat: "I hear you had an addition to your family, Mrs. Cat was it a boy or a girl?"

Second Cat: "Oh, just six of one and a half dozen of the other.'

Where's Your Imagination?

Bluenose: "Pardon me, young lady, in the matter of your dress, don't you think you could show a little more discretion?" Flapper: "My gosh, some of you guys ain't never satisfied!"

Nasty Fall

"This is Bunker Hill monument-where Warren fell, you know."

The visitor surveyed the lofty shaft thoughtfully, and then said: "Nasty fall! Killed him, of course."

Worked Up to a Climax

He: "Dearest, your eyes are like twin pools of sparkling water; your lips are like two little rosebuds wet with dew; your teeth are like the finest pearls nature ever made; but you have the darndest nose I ever saw on anything except an African ant-eater."

Black Friday

"Mr. Chairman," quoth the flea, on Robin-son Crusoe's back, "I move we adjourn to Friday."

Freed Daddy

Sue: "So Mable was married last night. Who was the lucky man?" Mary: "Her father."

FAILURE OF WATER SUPPLY

Melrose, Mass., Had an Experience Which Spread Terror in Community

We do not doubt that the citizens of Melrose, Massachusetts, grow impatient with the water works service occasionally, and that on payment of quarterly bills some citizens swell up and tell "that guy in the collection department where to head in." Melrose is no exception-every city has citizens rarin' to tell public utilities a whole lot of things to their faces, and to say a whole lot more behind their backs, when indignation reaches a point threatening a mental blow out.

But Melrose was not of that state of mind back in March when burst water mains left the little city of 26,000 without water for eight hours. The hectic faces of the roaring type of citizens who tell water works where to head in were blanched and they were praving that repairs could be speedily made.

Decatur Man at Melrose

Frederic C. Butterfield, a former resident of Decatur, writes the Decatur Review that every Melrose resident realized the horror of the situation. He, sensible man that he is, is among the minority who realize the vast importance of water works for public good and the vast possibilities of disasters when a plant ceases to function. He writes:

"The failure of water supply is the most serious of all disasters. I recall two serious experiences of my own. Once in western Pennsylvania the natural gas was off for several hours during a cold spell. Not only did thousands of homes have no heat or means of cooking, but there was the tremendous danger of escaping gas when the power was turned on again.

"I had a second experience with electricity in the Pacific Northwest where electricity is used for lighting and cooking and some times heating. A blizzard put the plant out of commission. For two days we lived in the basement by a wood burning laundry stove, ate meals there, and read by candle light in the evening.

Most Serious of All

"Now I have just been through my third experience of this type. Here the failure was water, most serious of all. The unprecedented cold in the east caused bursting of water mains when the thaw began. At 3 o'clock in the morning a mother attending a sick child found no water in her home. She called the police. An investigation followed. There was no water anywhere in the city of 26 000. "The entire police reserves, all the fire-

men, and every engineer were summoned for emergency duty. The telephone opera-tors of the day shift were rushed to their exchange. Every adjoining city was notified to have their chemical engines of the fire fighting service ready for immediate service if called. Thousands of homes with coal furnaces were reached by telephone and asked

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

IT'S MAY

May comes back with a riot of flowers: Roses, and honeysuckle, for true lovers' bowers.

Soft breezes, rich laden with fragrance of spring

When longing June brides await Hymen's ring

'Tis the season when youth finds its greatest delight

With never a thought of old age's dark night.

Let their happiness run through the carefree hour

It may lessen sad memories as faces grow dour.

Spring stands for "Good Morning", winter "Good Day'

But if you know how to live 'twill always be May.

INSURANCE COMPANIES GROWING SKEPTICAL

"Because life insurance companies," says the Decatur Review, "are becoming skeptical about heart disease being the cause of many of these sudden deaths in automobiles and automobile trucks, Mack Vandeventer, one of the engineering research men of the H. L. Doherty Co. of New York City, has been assigned to make a study of carbon monoxide and motor vehicles.

"Recently a truck driver died suddenly and quietly in his cab in Connecticut. The life insurance companies, the H. L. Doherty Co. and the state safety authorities of Connecticut put Mr. Vandeventer to work on the case.

"He took that truck, ran it a short time and in a few minutes showed that the cab was a lethal chamber. The actual chemical tests proved it. Experiments were then extended and reports made to the state of Connecticut authorities and to the life insurance company.

"So impressed were the authorities by the work of Mr. Vandeventer that he is now in Boston, Mass., at the request of the governor's safety committee, to continue his study on this danger in motor transportation."

Mack Vandeventer is a son of Mr. and Mrs. C. E. Vandeventer of Decatur.

(Continued from Page 3)

to dump fires. A large population suffered quite seriously, tempered somewhat by the mild weather and the possibility of those people with gas stoves melting snow. This last process is not very pleasing in a city for no matter how much one dug off the surface dirt, even underneath the snow was not pure white. How long on a gas burner it takes to melt a bucket of snow! Always Ready for Emergency

"Two things stand out clearly in such experiences which are quite common in the East just now and which may come to any city at any time. In the first place taxpayers may be pleased that there is a large staff of officials and public service men ready at a moment's notice to take charge of the emergency. In the second place, we are forcefully reminded how very dependent we are on these simple essentials which we accept as a matter of course without second thought. Rich and poor alike are utterly helpless in the breakdown of any of these necessary utilities.

"In the earthquake zones, the failure of water supplies causes more trouble than the quake effects. This is true in the hurricane regions as well. People living in large cities are absolutely dependent on the services of the city. This complete dependency of entire populations on public utilities is one of the major problems of the time. In no part of the world can man guarantee that nature will be completely harnessed and under his control. Everyone must be prepared, hope. for the best, and be thankful that everywhere are trained personnel standing ready for the emergency which may come."

GAS HEAT

Gas for house-heating gains ground each year. Some of the contrasts drawn by salesmen in putting over gas:

Gas always instantly available. Coal fires must be laboriously started.

Gas is the clean, ideal fuel. Coal and ashes soil and smudge the basement and property.

Gas requires no delivery. Coal must be hauled in over lawns and is not always. available.

Gas requires no storage space, making basements available for other use. Coal and ashes must be stored.

Gas rates are fixed and are not subject to variation yearly and cannot be arbitrarily raised.

The man who saves time by galloping, loses it by missing his way; the shepherd who hurries his flock to get them home spends the night on the mountain looking for the lost; economy does not consist in haste, but in certainty.-Ramsay Macdonald.

WhoRantoHelpMeWhenIFell?



Mothers' Day was observed on Sunday, May 13th, and the observance was doubtless larger than ever. When Miss Anna Jarvis, of Philadelphia in 1910, suggested the idea, it was taken up by a few cities. Congress in 1914 by resolution made it a presidential duty to annually proclaim the second Sunday in May as Mothers' Day. Now its observance is equal to almost any special day which calls people to church or back to the family circle. It's a beautiful custom to pay reverence to motherhood and insofar as we know, it is a strictly American custom.

Many Poems on Mother

Thousands of poems have been dedicated to mothers, many of them breathing extravagant love, veneration and devotion. Not many though equal the pathetic yearning and loyalty for mother love expressed in A. M. W. Hall's "Rock Me to Sleep, Mother", first published in the Knickerbocker Magazine May, 1861. It is the plaintive cry of one who has experienced the cruel barbs of life and looks back over the years of pain, sorrow, and toil to the unforgotten mother-love of his childhood's days, as a safe refuge to which he longs to return.

You know the old poem or will recall it by refreshing your memory with a few lines:

"Backward, turn backward, then time in your flight,

Make me a child again, just for tonight. Mother come back from that echoless shore, Take me again to your heart as of yore. Backward, flow backward, oh full tide of vears!

I am so weary of toil and of tears, Toil without recompense, tears all in vain, Take them and give me my childhood again. I have grown weary of dust and decay, Weary of flinging my heart's wealth away-Weary of sowing for others to reap; Rock me to sleep, mother, rock me to sleep."

Lead Pencil Chewers

The telegraph companies have come to realize that Mothers' Day is a good time to "Telegraph—Don't Write". They have prepared a lot of appropriate messages which the sender may use. Did you ever see a dream a-telegraphing? Well, we have. While selecting ten suitable words-the "dreams" and the "brutes" likewise will chew up a lead pencil quicker than a buzz saw can. We once thought that telegraph companies' preparation of suitable messages was due to a money making instinct. We know better now. The idea is to provide ready-made sentiments and thereby prevent patrons eating up the lead pencils.

Poetic Sentiments

"There was a place in childhood that I remember well

And there a voice of sweetest tone bright fairy tales did tell."

-Lover.

"But a mightier power and stronger, Man from his throne has hurled, For the hand that rocks the cradle Is the hand that rules the world." -Wallace.

"Who ran to help me when I fell, And would some pretty story tell, Or kiss the place to make it well? My mother."

-Anne Taylor.

"If I were hanged on the highest hill, Mother O' Mine, O Mother O' Mine! I know whose love would follow me still, Mother O' Mine, O Mother O' Mine!" -Kipling.

"Her children rise up and call her blessed." -Proverbs.

And remember that Mothers' Day in May is just a special occasion. There are 365 days in the year-and everyone should be a Mothers' Dav.

SO LONG MARY



"So you are not going to marry Mary after all?" "No." "You used to be so keen." "Yes, but I found she belongs to a ladies' boxing club."

I'm Tellin' You



"It is not the interest that bothers us." said we to the banker. "It's the principal of the thing that causes our 'insomnia'. * *

Books change with people of succeeding generations or "vice" versa. Twenty-five years ago books were selected for literary excellence, author's reputation, or his popularity. Today they are selected by smell. Those in the final stages of putrefaction are the most popular.

Hollywood in the west and New York in the east are leaving the cars in garages and are walking. They have discovered that walking is a healthful exercise. So you will be up to date if you walk. The old unused legs may creak and rattle when you begin, but you can avoid hearing them by putting cotton in the ears.

With the rest of good citizens our hand is against Dillinger, but we must admit that he has earned a crown-the kind they put on a man of his ilk when he sits down on the hot chair. We are broad minded enough to concede that in addition to his addiction to fire arms aimed at anyone who irks him by interfering with his plans, he is a magician of fine parts. Any one who can be in seven different widely separated cities in one day could have taught Houdini many tricks.

It required 400 government printed pages to show you who pays the process tax. Don't though it be idle time. Take one guess and you've got the answer. You're right, the consumer-that patient old tax burdened beast which has never yet flunked on the iob.

*

A scientist says alfalfa is just as good to eat as spinach. We hasten to assure him that he can have our share of the alfalfa.

In an examination an eighth grade pupil said that in the United States people are "put to death by elocution", and he was not far from wrong. Neither was the one who told the teacher that a "demagogue is a vessel containing intoxicating liquor.

Playing cards were invented about 1390 to amuse Charles VI, King of France, who was subject to fits of melancholy. They are no longer a cure of fits of any kind, but a provoker of fits of anger, fits of profanity, and misfits of matrimony.

If you regard your light bills too high go with your butterfly net and catch the energy of a flash of lightning which will illuminate your home for 20 years providing the lightning doesn't catch you while you're catching it.

A German law requires 10% to a hotel bill to provide tips for the staff. You know what you are up against before you start.

A newspaper tells us that a deaf and dumb person fairly expert in the finger language 'can speak about 43 words a minute" and just for information why if the statement is true do they use their fingers.

All wild animals refuse to attack a skunk. Another evidence of their intelligence.

*

There are 15,000,000 deaf persons in the United States, not including the "none so deaf as those who won't hear."

Forty million dozen handkerchiefs are manufactured every year in the United States, and yet you can never get hold of one when seized with a spell of sneezing.

Many a True Word - ----

Druggist: "Here, sir, is your package. Seventy-five cents, please."

Deaf Old Gentleman (placing nickel on the counter): "Thank you. There is your nickel."

Druggist: "But I said seventy-five."

Deaf Old Gentleman (going out the door): "Well, there's your five cents!" Druggist: "Well, go on, you old fool, I

made three cents, anyway.

The average American woman is accused of paying \$150 per year for beauty aid which calls from our most confirmed bachelor, to remark, that a good many of them are not getting what they are paying for.

6

A bull dog bites and then barks,

UPSETS OLD BELIEFS

New Interpretation on Some Old Fashioned Health Beliefs

And now comes a "doc" who upsets a lot of beliefs regarding health rules which have been accepted since the pilgrims hit our shores. Maybe he is right. There is no doubt that a lot of health rules descended from the days when kids had to gulp down sulphur and molasses as a blood purifier, drink sassafras tea for something that was not the matter with them, and in the fall be sewed into underwear for the winter with a small sack of asafetida around their necks to ward off certain styles and fashions in contagions.

Bathing?

In some instances this medico iconoclast may be right, but in others we are not in full agreement with him. Especially when he says the health value of bathing is not proved. He admits that bathing is important for "aesthetic and social reasons". This is unquestionably true. It is not popular nowadays to circulate B.O. in the best regulated social circles. As a defender of the bath, we insist that it does more than chase B.O. We firmly believe it contributes to the health of all devotees. Our opinion is just as dependable as the "docs". He can't prove his assertion, while we can produce thousands of regular and systematic bathers who are clean looking, do not smell and insist that bathing keeps them fit as a fiddle and in good health.

Eating

The "doc" says piecing between meals is not harmful, which we believe. We never could understand why a man should eat at stated intervals, instead of doing as any other animal, grab a "snack" whenever hungry. Eating habits, as the "doc" says of bathing, "are aesthetic and social habits" hedged in by a lot of crazy shaped dishes for each course and an army of spoons, forks and "jim cracks" to hamper a good old shoveler who in emergencies can do a first class, though rather noisy job with nothing but fingers and a spoon.

Green Apples

Stomach ache from eating green apples is really a sign of appendicitis. Maybe so, but by experience we know that in real results they are an active, knot tying agent for the promotion of stomach ache and nothing but. The "doc" can't steer us to the operating table on his green apple theory. We've had dealin's with green apples and know their tricks are generally suited to a temporary annoyance in the equatorial regions.

But why argue with a doctor. We like to see them disagree and uphold or tear down things believed preached and practiced through long years.

When doctors disagree the patient falls into his own way of doping himself according to the almanacs and old fashioned home diagnosis.

IMPORTANT ANNOUNCEMENT

Your Attention Is Directed to Pages 16 and 17 of This Issue

On pages 16 and 17 of this issue the Columbian Iron Works—now a division of Mueller Co., Decatur, Ill.—presents a real improvement in fire hydrants and gate valves.

In developing these products, Columbian Iron Works and Mueller Company have drawn on vast experience in the manufacture and application of fire hydrants and valves—have put into every detail of their construction the combined engineering and manufacturing knowledge of two organizations who have played a conspicuous part in the development of waterworks equipment.

Every strong point of former construction has been made still stronger. The superior principles that have won the respect of the many users of Columbian products have been put into still better practice, and many advanced features have been added.

Note, for instance, that the Improved Columbian Fire Hydrant preserves that simplicity which has been responsible for Columbian dependability—the simple, positive drain; the easily replaceable valve and seat; the many other Columbian features. But note also, the higher refinement of these features and the addition of the perpetual selfoiling top, the safety flange and safety coupling; also the many other refinements clearly brought out in the illustration and description on pages 16 and 17.

Likewise, in the Improved Columbian Gate Valve, the sound principle of four-point contact is still preserved, but, through new design of the wedging mechanism, is brought to a still higher stage of perfection. And, similarly, every feature that has been responsible for the success of Columbian Gate Valves has been retained or improved.

To the man who holds to the sound principle that only the best is good enough, these new products have a real message. Study them point by point—now. It will pay you in days and years to come. Columbian and Mueller representatives will be glad to have an opportunity to demonstrate these improved products with working models. Ask for complete details.

Sunday newspapers are prohibited by law in Melbourne, Australia.

Antlers of the extinct Irish deer sometimes branched to a spread of more than twelve feet.

Hunger pangs can be staved off merely by taking something bitter in the mouth, while a sweet taste is the most effective aid to digestion, Dr. Donald A. Laird of Colgate University, has found.

In India, automobile registrations were increased 170 per cent in six years. Architectural Beauty of Fort Wayne Water Works



In the last issue of the Mueller Record we devoted considerable space to the beautiful new water works plant at Ft. Wayne, Indiana with numerous illustrations which emphasized its mechanical completeness, rather than its architectural beauty. This month we present to Record readers what is considered the best exterior view of this very modern plant of which Fort Wayne people, together with those who had any part in planning and building, feel a justifiable pride. The architect of this splendid building was Victor A. Matteson, A.I.A., of Chicago, who has designed many water works plants.

has designed many water works plants. Mr. Matteson, like the Mueller Co., believes that a water works plant and grounds should be one of the show places of a town and likewise emphasizes its indispensable necessity to every community, being above every other class of public building in usefulness and importance.

THE FORT WAYNE WATER WORKS BUILDING

By Victor A. Matteson, A.I.A., Architect

Where utilitarian and engineering requirements must be the prime consideration in designing a building, the results often represent either an exterior unsuited to the purpose of the building, or a typical engineering type of structure. It is said that every architect fondly thinks his own baby to be the best looking of all, and accordingly we feel that the Fort Wayne Water Works building presents an example of an engineering problem solved architecturally in a satisfactory manner.

An Impressive Setting

The location of the building at the juncture of the St. Mary and St. Joseph rivers, in Three Rivers Park, gives with appropriate landscaping, a very impressive setting.



Victor A. Matteson, A. I. A. Architect

Much of the success of the design of the building is due to the application of sound architectural principles of design to the physical layout of the various units of which the plant is composed, forming a well balanced plan.

Type

Without sacrificing any desirable engineering consideration, any item of convenience, of efficiency, or economy, the building conforms to accepted basic principles of good design. The exterior design is rather modern in feeling without being in danger of being called "modernistic", and while not Gothic in style, it has much of the Gothic spirit and a suggestion of Gothic detail.

Ornament

While the building may be considered ornamental in a way, there is little in the nature of ornament about it. Among the very few features that may be considered purely ornamental, are a number of carved panels on the pylons, practically no two alike, depicting features in connection with the evolution of water supply. In general the design depends almost entirely for its effect upon the relation of rugged masses, proportions, light and shade, and the color and texture of the materials. Suitable materials for a design are of great importance, and many an otherwise good design has been

8

ruined by the selection for one reason or another of inappropriate materials. The exterior of the building and a portion of the interior, is faced with Indiana limestone of rough texture and considerable variation in color. The visible roofs are of variegated red and brown mission type tile.

Dominated by Massive Tower

The massive tower, which dominates the group, incloses the steel water tank and the central space below the tank is utilized as the main entrance lobby, an octagonal room with high vaulted ceiling and cut stone walls. Connecting with this central lobby are two large corridors at right angles to each other, forming the north and south axis of the building, and from which every department is accessible. The east and west corridor connects the main pump room at the west, with the filter room at the east, and is finished like the lobby with stone walls. The ceiling of this lobby as well as that of the adjoining filter room is constructed of concrete panels and beams finished with brown stain to closely resemble woodwork paneling. This portion of the interior of the building is Gothic in treatment.

Water Plant a Necessity

The relative importance of water to a community is frequently not reflected in the appearance of the buildings housing the means of its supply. For some reason, libraries, city halls, courthouses, etc., are made as beautiful as conditions and finances permit, but not so with the waterworks. As a matter of fact, the city could not exist without a water plant, but could get along with-out any of the other buildings noted. Fort Wayne is a city among those which has recognized the architecture of the water plant buildings, the importance relatively of the water supply.

SLIX S'LITTLE SLOCUMS

Sudden swallows swiftly skimming. Sunset's slowly spreading shade; Silvery songsters sweetly singing

Summer's soothing serenade.

Susan Simpson strolled sedately, Stifling sobs, suppressing sighs. Seeing Stephen Slocum stately,

She stopped, showing some surprise. "Say," said Stephen, "sweetest sigher,

Say, shall Stephen spouseless stay?" Susan, seeming somewhat shyer,

Showed submissiveness straightway. Summer's season slowly stretches,

Susan Simpson Slocum she; So she signed some simple sketches,

Soul sought soul successfully.

Six September seasons swelter,

Six sharp seasons snow supplied; Susan sat in sofa's shelter,

Six small Slocums side by side.

Oil for the Squeaks

Husband: "What are those pans of oil doing in the corners of the room?"

Wife: "I put them there for the mice. You said it annoyed you to hear them squeak.'

LAMBS AND RAMS

Experimental Farmers Get a Big Kick Out of Them

The Chicago Tribune has an experimental farm not far from that city and publishes a daily story from there. Recently, the big sensation was the arrival of two lambs. This called for a picture of the animal which made Mary famous. A day or so later the startling discovery was a ram-not of the sheep family-this ram being of the hydraulic variety. It furnishes water to the farm house, and it proved a very interesting discovery to the reporter who wrote the story. A half century or so ago hydraulic rams were used to some extent in the country where the conditions were favorable, but we had supposed in this day when water supply for farms was so easily available at such reasonable price for modern electric equipment, that hydraulic rams were obsolete. They may be at that. This relic above referred to has been on duty for thirty-five years.

Tells About the Ram

Speaking of the ram, the writer says: "This piece of machinery is one of the most unusual mechanical things on the farm. With no other power than flowing spring water, it pumps water up a hill that is about fifty feet high, and then a distance of some 100 rods into one of the farmhouses and the barns nearby. It's a sort of "perpetual motion' water system, furnishing fresh cold water winter and summer'

It is an interesting piece of machinery, but to plumbers it is something of a back number compared to a little electric pump or gasoline engine which with pipes and fittings gives farmers their own water works system at small cost.

The hydraulic ram is 138 years old and should be on the pension list. It was in-vented by J. M. Montgolfier in 1796.

TEETER, METER, PETER



A skeptical gent was Bill Teeter; He wouldn't believe his gas meter So he pulled out a match

And gave it a scratch.— "Good morning," he said to Saint Peter.

The Washington Convention





President Robert J. Barrett of the National Association of Master Plumbers, his aids and committees, are devoting every moment to perfecting ar-rangements for the 52nd convention to be held in Washington, D. C., May 28, 29, 30 and 31.

The selection of the national capital for the 1934 convention is regarded as a wise step in view of the tremendous interest that has been centered on the capital during the past year. Aside from this Washington is always a strong attraction for American citizens. No other city is so rich in magnificent public buildings,

beautiful boulevards, and historic places of interest.

The convention itself is to be one of the most important held in recent years. New conditions face the plumbing industry with questions of a vital sanitary character demanding attention.

Big Plumbing Goods Display

In addition to the regular convention sessions, there will be an exposition of plumbing goods for the benefit of the plumbers and the public. They will prove an object lesson in the advancement of sanitary science.

In the past quarter of a century, America has taken a commanding position in the development of sanitation, giving to the people of





H. O. Green, Tulsa, Okla., Treasurer

whatever station in life, home comforts and conveniences unequalled in any other country.

Aside from the educational value in the sessions of the convention and the display of products, the social side of the gathering is always a feature with a strong appeal to both delegates and visitors. Washington people, so accustomed to playing the host, would not be expected to fall behind in this particular. Social Events

J. Harry McCarthy, Chairman of the Entertainment Section of the Convention and Exposition Committee,

and members of the committee, announce the following program:

May 28th—Monday night — "Washington's Welcome". An informal reception and "get acquainted evening" for members of the N. A. M. P. and the Women's Auxiliary, delegates, guests, and exhibitors. Mu-sic, dancing — 9 P. M., Ballroom, May-

flower.

- May 29th Tuesday night-"A Night in Monte Carlo". Ballroom. The Mayflower. From 9 P. M. until you are broke.
- May 30th Wednes-day night "Grand Divertissement pour les Plombiers"; which means in plain English, "an evening's vaudeville entertainment for everyone." 9 P. M .--



Ρ. W. Donoghue, Boston, Mass.



George H. Drake, Buffalo, N. Y.

Center, Pres. Robert J. Barrett; Below, Frank Bentley, Secretary (Buckingham Studio, Inc.) Orange, N. J.



Edward B. Kleine. Cincinnati

Washington Auditorium. May 31st—Thursday night—"Pres-idential Ball". 10 P. M.—Ballroom, The Mayflower.

Much to Be Seen Washington is a city of unending places of interest. Every spot of ground abounds with traditions of the past. The memory of the nation's greatest statesmen, military and naval heroes, the founders of the republic, adds reverence to interest. There is an inspiration for every local American, as well as a lesson in governmental methods. A visit to the national capital never fails to make news

from Washington more understandable and interesting.

A great deal may be seen in four half days if a systematic program is followed out, such as the following prepared by the Greater National Capital Committee of Washington Board of Trade.

First Half Day:

i di

The White House Corcoran Art Gallery American Red Cross Buildings D. A. R. Buildings Pan-American Building Lincoln Memorial Washington Monument The Speedway via Reflecting Pools Bureau of Engraving and Printing Department of Agricultural Administration Buildings and Grounds



James Smyth, Spokane, Wash.



Joseph W. Pate, Birmingham, Ala.



M. Swinnerton. Los Angeles

Wilkes-Barre, Pa. Lincoln Museum Smithsonian Institution Group U. S. Botanic Garden Library of Congress Folger Shakespeare Library

Franciscan Monastery Soldiers' Home Third Half Day:

Cross Arlington Memorial Bridge to Alexandria

George Washington National Masonic Memorial

Mount Vernon Arlington to Fairfax Great Falls Return by way of National Cathedral Rock Creek Park National Zoological Gardens National Education Association

Fourth Half Day:

Boat trips Chesapeake Beach or Bay Ridge Possible visit to Annapolis and U.S. Naval Academy

Street cars and taxicabs make all the above accessible in a few moments. You can ride (1 to 4 persons) from any hotel listed to the auditorium or the Mayflower for 20 cents.



J. J. Shana... Norfolk, Va. J. Shanahan,



Jere Sheehan, Jr., St. Louis, Mo.



Louis J. Petrie, New Orleans



11

Walter C. Williams.

Second Half Day:

U. S. Bureau of Fisheries Aquarim Constitution Avenue Triangle Building Program

U. S. Capitol, Grounds and Plaza

MECHANICAL NOSE

Makes Possible the Detection of Slightest Odor in Drinking Water

Our water works friends will be interested, no doubt, by the news of the invention of a "mechanical nose" which attached to a human nose enables a person to detect impurities in water by merely smelling it. A press dispatch to the Chicago Tribune from Cambridge, Mass., under date of January 7th tells the story as follows:

Cambridge, Mass., Jan. 7.—(AP)—A new mechanical nose, named the Osmoscope, made to smell impurities in drinking water, is announced at Harvard university. The Osmoscope is a smell meter, attaching to the nose.

It promises to vitalize the one human sense most neglected by civilization. This is the olfactory ability, which scientists have calculated can detect a smelly substance 100,000 times earlier than it can be found by spectrum or chemical analysis.

The meter saves the human nose from the fatigue of olfactory organs that ordinarily dulls the keenness of smell and limits practical use. Announcement of the device was made tonight in a statement from Nicholas S. Hill Jr. of the Hackensack, N. J., Water Company, for which it was developed. It was perfected by Gordon M. Fair, associate professor of sanitary engineering at Harvard.

Calibrated Sniffs

In mechanical principle the Osmoscope is an air pump, operated by a mercury piston. It is first filled with air purified of all odors. Then the smell to be analyzed by sniffing is trapped and pumped into the meter.

For each cubic inch of odoriferous air admitted, the mercury piston forces out an equal volume of pure air. The nose, attached to the osmoscope, gets its first smell at its "threshold," the smallest sniff it can recognize. The sniffs continue with increasing, exactly metered amounts of smell.

threshold, the smallest shift it can recognize. The sniffs continue with increasing, exactly metered amounts of smell. "The organs of smell," says a statement by Prof. Fair, "are quickly fatigued. Protracted smelling of an odor exhausts the power to recognize it. Popularly this is referred to as 'getting used to an odor."

The meter reduces this fatigue, and also enables the nose to make quantitative and qualitative analysis.

Radios Affect Water

It is estimated, Prof. Fair's statement noted, that the human nose can smell one two-hundred-billionth part of one milligram of skatol in 50 cubic centimeters of air. Skatol is a liquid of vile odor. If one gram of this liquid were distributed it could be detected as smell by the entire population of the earth.

The new sniffer was made to investigate more thoroughly a recent discovery by

(Continued on Page 13)

THE JAW BREAKERS

The long German word recently printed in the Record created interest and called forth a number of letters.

Harley Himstead of the Engineering Dept. came across with another jaw-breaker and has contributed it to the Record museum of verbal distortion. It's nothing but a hunk of "cheese".

Harley found it in the "Portal", a Sunday School paper, and the little story by Edwin Tarrisse is as follows:

Truly

"The English-speaking world is accustomed to regard with respect the length of transsubstantiationalists and antidisestablishmentarianism, but those pygmies of twentyfour and twenty-eight letters are dwarfed by comparison with the giant name of a form of unfermented cheese made abroad. "The cheese is made of fresh, curdled

"The cheese is made of fresh, curdled milk, flavored with the dry, finely cut blossoms of Asperula odorata, or woodruff, a European herb. The originality of this dairy product, however, rests largely in the name under which it was placed on the market, O b e r a m m ergauerpassionsfestspielalpenkrauterklosterdelicatesfruehstueckskaese.

"It has seventy-six letters and occupies two full lines of print in the Moniteur des marchands de beurre et oeufs. Its great advantage lies in its specific meaning, for when translated it signifies, cheese of the cloister, a breakfast delicacy flavored with herbs of the Ålps, prepared for the feast of the representation of the Passion at Oberammergau."

Take a Bite of These Two

George Armbruster of Fairbury, Illinois. is a plumber and a reader of the Record. The German jaw breakers we have printed in recent issues interested him and he enters the contest with this one: "Kaiserlicheleibs garderegimentsunteroffizierszimmernuminer65".

This is translated into English to mean: "Room 65 of the noncommissioned imperial body guard regiment".

In English It's Chimney Sweep

Another interested plumber is Paul O. Rantzow of Garnaville, Iowa, who writes us as follows:

I read every page of your Record. I see you have the "Grosse Deutsche Wort". Miss Louise Roth is right on your last word. I'll go it one better. My word is: "Schornsteinfegermeisterberufsgenossenschaft".

You may publish this word and get a kick out of it.

Respectfully

Paul O. Rantzow.

P. S. I have one of your tapping machines and believe me it works fine. Translated Mr. Rantzow's word means:

Translated Mr. Rantzow's word means: "Master chimneysweep cooperative association".

SHERMAN MIGHT CHANGE IT

His Description of War Scarcely Fits the Annual Slaughter by Automobiles

General William Tecumseh Sherman was asked some years following the Civil War to describe war. The old fighter did it in three words: "War is hell."

If he could come back and contemplate our frightful automobile slaughter each year he might say: "Worse than war."

The shocking figures for the past year have been made public by John E. Long, president of the National Safety Council.

The number of automobile fatalities was 30,500. The number of other public accidents was 17,000—a total of 47,500.

The Americans killed in action in the World War, according to the World Al-manac, was 37,568. In peaceful America there were 10,000 more accidental deaths in one year than in over a year of fighting in actual warfare.

Year after year the same gruesome record is compiled. The automobile harvest of death for three years past is only a few short of 100,000.

Death Rides With Careless Drivers

But Death will continue to ride with the careless driver. In the face of such terrible slaughter can any one doubt the responsibility of thousands of persons driving au-tomobiles today. Life and limb have no value. Newspapers preach, states pass laws, and police the highways, Associations of Commerce pass resolutions, cities adopt ordinances and pay traffic police, and still the slaughter goes merrily on.

Children as Drivers

We throw up our hands in horror at a volcanic eruption or an earthquake which leaves five hundred or a thousand dead, but 30,500 dead by automobiles makes no dent in our imagination. Earthquakes and volcanos are not so common, and therefore more exciting. We are case hardened when it comes to automobiles. They are so harmless that little boys and girls over twelve years are considered perfectly safe and reliable drivers.

Last month a 13-year-old boy driving an automobile struck and killed a Decatur citizen. On examination it was said he had driven a car since he was 11 years of age. The coroner's jury exonerated the boy, but think of a child of 13 being trusted in public with anything as dangerous and deadly as an automobile.

Home Sweet Home Not So Safe

And from the automobile there are other accidents to worry about. The next highest number of deaths from accidents occurred in "Home Sweet Home". There were 29,500 fatalities in the place which we are generally led to believe is safe. In the home, falls caused most of the fatalities, being about 44 per cent of the total. Three-fourths of the fatalities involve people over sixty-five years. Other causes of home accidents are

stairs or steps, smooth floors, rugs, burns, scalds, asphyxiation, suffocation, firearms, poison, cuts, and scratches.

Something Awful

If figures mean anything, let these sink into your mind and be kept fresh as a warning to you that danger lurks on every highway and byway and within the walls of your home.

Total fatal accidental deaths (1933)......89,500 Economic loss nearly.......\$2,000,000,000

Something awful, isn't it?

(Continued from Page 12)

Hackensack chemists that drinking water turns pink, blue and green and gets bad smells and tastes from electrolysis of water pipes. Radio sets grounded to pipes were widespread cause of electrolysis. So were stray earth currents from leaky commercial electric lines.

The metered dilution principle of the sniffer has been applied by the Hackensack scientists also to tasting water. They state this principle promises to revise the entire taste practice.

These water studies have been reported to the American Waterworks Association and to electric and power companies with suggestions for a nation-wide survey.

Knew Where to Go

The officer of the day, during his tour of duty, paused to question a sentry who was

a new recruit. "If you should see an armed party ap-proaching, what would you do?" asked the officer.

"Turn out the guard, sir." "Very well. Suppose you saw a battleship coming across the parade ground, what would you do?"

"Report to the hospital for examination, sir," was the prompt reply.

NOT A CHANCE TO HAUL HAY



"How was it you never got your hay hauled in?" "Well, when I wasn't tending the roadside gas pump or running the tearoom, my wife was in town, and I had to wait on the gift shoppe."

Harry E. Jordan, President

Prominent Member of American Waterworks Association Is Unanimous Choice. Gives Mueller Record a Message to the Water Works Industry and Manufacturers of Supplies.

Mr. Harry E. Jordan, Chemical Engineer and Superintendent of Filtration, Indianapolis Water Company, is the fourth member of that organization to be elevated to the presidency of the American Water Works Association, the highest bonor that can be conferred on a member of the Association.

The nominating committee recently selected him for the office and named Wm. W. Brush, Chief Engineer of the New York Water Department, for Treasurer. Mr. Brush has filled the office of treasurer. There being no opposition, Mr. Jordan will assume his duties on the last day of the session of the convention, June 4 to 8, Commodore Hotel. New York, while Mr. Brush will simply begin another term as treasurer, a position he has filled efficiently and satisfactorily for several terms.

The Indianapolis Water Company seems to be a fer-tile field for A. W. W. A. presidential timber. Preceding Mr. Jordan, three men from the company have pre-

sided over the Association, the highest deliberative body in the water works industry.



Mr. Wm. W. Brush, Treasurer

Message to Members and Manufacturers

"The readers of the Mueller Record are aware of the service rendered by the manufacturers to the water sup-ply industry of America. The spirit of fair competition among the manufac-turers has resulted in the production of increasingly serviceable supplies and equipment for water works use. Many of us are aware of the accuracy and equipment for water works use. Many of us are aware of the accumulated needs of the water supply field. We know of many communities where the supply is not adequate, where fa-cilities for distribution and fire protecclities for distribution and fire protec-tion need much improvement, where the quality of the supply, if not un-safe, at least is unpleasant. These needs will move forward to correction only when water works men recognize more fully than now the value of or-ganization and interchange of ideas offered by the American Water Works Association and of the assistance Association and of the assistance which they can receive from the members of the Water Works Manufacturers Association.

> "HARRY E. JORDAN, President Elect, A.W.W.A."

The three men referred to are: Frank C. Jordan, now sec-retary of the com-pany, 1925. Same name but no relation of the incoming presdent.

Carleton E. Davis, now manager of the Philadelphia Suburban Company, 1920. F. A. W. Davis (deceased), 1896.

We do not know of any other city in the United States that has a record equal to



Mr. Harry E. Jordan, President-elect, A. W. W. A.

this. We doubt if any such record exists in any national business organization.

Mr. Jordan, the new president, is eminently fitted for this distinguished position by his long experience and activity as a member of the Association.

Mr. Jordan was graduated from Franklin College as a Chemical Engineer in 1903, and in that year he entered the service of the Indianapolis Water Company. His connection with the company has been uninterrupted, except for a brief service in the World War. He has been, since 1929, Secretary of the Indiana Public Utilities Association.

In the Association of which he becomes president at the coming meeting in New

York, he has been an active and valued member. In 1923 he was chairman of its Water Purification Division and in 1925 became secretary of that division, a position he has since filled. In 1925 he served as chairman of the Indiana Section of the American Water Works Association, and has also served the section as its representative on the Board of Directors of the National Association from 1931 to 1934. In 1932, he accepted the task of leading the joint Edi-torial Board of the A. W. W. A. and A. P. H. A. of the Manual of Standard Laboratory Practice otherwise known as "Standard Methods".

Mr. Jordan possesses a fine personality and is imbued with a spirit of cooperation, which should be of great benefit to the industry during his tenure of office.

Attendance of 1000 Predicted

The annual meeting of the American Water Works Association will be held June 4-8th, Commodore Hotel, New York City. The committee arranging for this important gathering is striving to make it a big success in both a technical and social sense.

W. M. Niesley, assistant to Secretary Beekman C. Little, advises that an attendance of one thousand water works men is confidently anticipated. Many of the delegates will be accompanied by their wives and families. An elaborate program on entertainment is being prepared. These with New York's numberless attractions are ample assurance that delegates and visitors will have a busy and happy week.

The convention sessions are to be replete with matters of interest to every water works official. A tentative program has been worked out.

Among the subjects suggested for papers and discussion are:

- "Features of New York City's Water Pro-gram"—Wm. W. Brush.
- "Water Works and the P. W. A. Outlook"-Willard T. Chevalier.
- "New Questions of Law and Policy in the Making of Rates for Water Service"— Judge W. L. Ranson.
- "Recent Tendencies in Relation to Valuation of Water Rights"-Robert E. Horton.
- "Outstanding Factors in Underground Wa-ter Waste Surveys"—Fred B. Nelson.
- "Amoebic Dysentery in Relation to Water Purification"-Thorndike Saville.
- "Significant Features of Chicago's Amoebic Dysentery Outbreak" (a) Engineering— Joel L. Connolly; (b) Epidemiology—Ar-thur E. Gorman.
- "Handling Chlorine to Avoid Trouble"-L. L. Hedgepeth.
- "A Study of the Efficiency of the Ammonia Chlorine Process"—Attmore E. Griffin.
- "Changes in Federal Tax Laws Affecting Water Companies"—Louis D. Blum.
- "Taxation as Applied to Municipally Owned Water Works"—A. C. Kamplain.
- "Financial History of Water Department of the City of New York"-Joseph Goodman.
- "Federal Securities Act in Relation to the Financing of Water Companies"-Berne H. Evans.
- "Effective Publicity as a Means of Eliminating Water Waste"-H. L. Meites.

The oldest set of bells in the United States is a set of four, bearing the date 1682, which hangs in the Moorish belfry of the Spanish Cathedral in St. Augustine, Fla.

LATE INFORMATION

Members and guests may register by mail. It is only necessary to send check for \$5.00. Badge and tickets will be mailed immediately. Remittances should be mailed the Association at 29 West 39th St., New York, N. Y. Those who do not care to do this may do so at the convention.

IMPORTANT—UNDER THIS YEAR'S ARRANGEMENT NO ONE WILL BE ADMITTED TO MEETINGS WITHOUT A BADGE SHOWING THAT HE HAS REGISTERED.

While it is urged that members and guests pay the regular registration fee of \$5.00, alternate plans have been established this year by the Convention Management Committee to provide for the possible needs of guests and of members who may be able to be at the convention for only a brief time.

The regular fee includes registration fee allowing admission to meetings and including for MEN the following FIVE entertainment features:

Reception and Dance, Monday evening, June 4; Golf Tournament, Wednesday, June 6th; Theatre Party, Wednesday evening, June 6th; Boat Ride, Thursday afternoon, June 7th;

Smoker, Thursday evening, June 7th. In connection with Golf, only those paying the registration fee of \$5.00 will receive a ticket to enter Tournament.

et to enter Tournament. For LADIES, the \$5.00 fee includes the SIX enter-tainments: Reception and Dance, Monday evening; La-dies' Luncheon Bridge, Tuesday; Sight-seeing Trip and Fashion Show at Wanamaker Store, including Luncheon, Wednesday; Theatre Party, Wednesday eve-ning; Boat Ride, Thursday afternoon; Smoker, Thurs-day evening. For those who can attend only a part of the conven-tion, anyone who wishes may register for \$2.50 and re-ceive a badge which will entitle him to admission to the meetings but not to the entertainment features. Any members or guests who do not desire to attend all of the entertainment features may register by paying the fee of \$2.50. receive a badge admitting them to meet-ings and may then purchase such entertainment tickets

ings and may then purchase such entertainment tickets as desired.

For those who may wish to attend some of the enter-tainment features and not the meetings, entertainment

tainment features and not the meetings, entertainment tickets may be purchased. On Tuesday morning, June 5th, the ladies are invited to go "behind the scenes" at the Macy Store. The party is limited to thirty and will leave the Hotel Commo-dore at 10:30. There is no charge for this trip and tickets can be secured at the registration desk. This fea-ture will be repeated on Thursday morning to accom-modate those who are unable to go on Tuesday. On Tuesday evening, June 5th, the Water Purification Division dinner will be held. On Friday, June 8th, arrangements have been made for a bus ride to the Kensico and Croton Dams. Lunch-eon will be served at "The Farm" on the Bronx River Parkway.

Parkway.

Presenting the FIRE HYDRAN

Solid Bronze Operating Nut-Hydrant can not be made inoperative by removal of detachable cap nut by unauthorized persons.

Self-Oiling – All working parts are automatically oiled each time the hydrant is opened and closed.

Malleable Iron Gland Follower— Ball joint effect on gland prevents binding valve stem.

Nozzles can be pointed any direction by loosening safety flange bolts -swivel flange accomplishing this without regard to bolt holes.

Reinforcing Ribs – Hydrant barrel is reinforced at critical points, assuring that any breakage will be at safety flange.

Bronze Seat Ring— Screws into threaded bronze bushing, preventing corrosion and making it easy to remove seat ring in case of repairs.

Bronze Bushing in Hydrant Shoe— Threaded bronze bushing, held against unscrewing by heavy bronze drain tubes in drain openings.

"VIM" Leather Value of Extra Large Diameter— Gives large bearing surface of value against seat ring. Bronze Weather Cap-Prevents freezing and malicious removal of hold-down nut.

DryTop-Corrosion of stem threads is prevented by isolating them from water zone and keeping them always in oil.

Long Radius Hose and Steamer Openings—Prevents frictional loss in flow of water.

Safety Flange and Coupling—In event hydrant is broken off by collision only the safety flange and safety thimble need be replaced. The safety flange breaks at the intentionally weakened groove and the slotted safety thimble opens outwardly when the flange breaks to prevent damage to the valve stem. Note that only the flange and thimble need be replaced and this can be done quickly—with no digging and at negligible cost.

Double Leather Drain Valves-Insuring extra safety in draining hydrant. The leather is fitted into machined dovetailed groove and secured by two bronze screws.

Bronze Drain Tubes — Opening under flange — corrosionproof, extra large in size.

Bronze Lock Nuts-Jam nut is crown type, preventing corrosion of steel stem threads. The T COLUN FIRE HY



COLUME IAL

IFOR MICS

Bronze packing ring for stuffing boxwith ball joint effect on top.

> Cadmium plated stuffing box bolts with bronze nuts prevent corrosion and make it easy to repack stuffing box

Malleable iron follower working with ball joint effect againstbronzepacking ring, preventing binding of valve stem.

The merit of Columbian Hydrants and Gate Valves is clearly and convincingly shown in the accompanying illustration. Study the strong points. Ask us for complete details.

COLUMBIAN IRON WORKS Chattanooga, Tenn.

DRANT

Interlocking lugs on valve discs, holding discs in alignment and maintaining proper distance between discs.

Top wedge nut with horizontal opposed cams, holding valve stem in straight line at all times and preventing bending from side strains.

Bottom wedge with similar horizontal cams opposing horizontal cams of top wedge-nut and acting interdependently with side spreaders to equalize pressure at four points of contact on each disc.



The New

GATE VALVE

Umbian

In opening valve, all mechanical pressure between valve discs is instantly removed before upward movement of gates takes place, thus eliminating the possibility of breaking valve stem and abrasion of seat ringswhen opening.

> Spreaders, working in direct vertical action on horizontally opposed cams of top and bottom wedgenuts, equalizes pressure at four points of contact against valve discs.

THE AUTO LINE



lim: "Did you carry a stove on your camping trip?"

Tim: "Where do you think we cooked, on the mountain ranges, or the radiator?'

Had Back Seat Diploma

A sweet little woman, meek of face and wearing gold rimmed spectacles, was apply-

ing for a driver's license. "How many miles have you driven?" asked the official.

"Fifty thousand miles-and never had hold of the wheel!" interposed her husband, stepping up.

She got the license.

The Novice

"How much do you get out of your new car?"

"Oh, about 50 miles to a fender."

Service

Hotel Garage Man (to fusser about midget car): "All right, sir, all right! I'll see it's refilled and washed and polished, and if you like I'll have it left outside your bedroom door with your boots in the morning.'

A Self-Stopper

"You can't stop there," yelled the Woods-ville traffic cop at Cecil whose car stalled at the street crossing. "You don't know this car," replied Cecil

with a sad smile.

Speedink

"Oh-h-h. Lemmel, vat you t'ink? I vas arrested today for speedink." "Vat, you? Vy, I didn't know you had a

car"

"No, no, not dat. Speedink-speedink on der sidewalk.

Two Way Suspicion

"I want a very careful chauffeur-one who doesn't take the slightest risks," warned the would-be employer.

"I'm your man, sir," answered the appli-cant. "Can I have my salary in advance?"

Willing to Help Exasperated Traffic Cop: "Say, lady, do

you know how to drive a car?" Fair Motorist: "Why, yes; I think so. What is it you wish to know?" (Continued on Page 19)

SEEING BOULDER DAM

Decatur Newspaper Man Gives Some Valuable Suggestions to Prospective Visitors

Boulder Dam is proving a great drawing card for tourists. Thousands of them are going there to see the progress of the work on the most stupendous engineering job ever undertaken in this country. It is a mistake to call this Hoover Dam as many people do. It is officially known as Boulder Dam. The model city built by the government near the site and managed by U. S. officials is known as Boulder City. No provision was made by the government for the care or entertain-ment of tourists as many of them find upon reaching there.

H. C. Schaub, editor of the Decatur Review, while touring the west stopped over in Boulder Dam and through the columns of his paper furnishes some first hand information regarding the city and the dam. He says:

Make Reservations

"If you are thinking of visiting Boulder City, be sure you know where you are going to stay before you get there. Many this winter have driven into this city to stay a day and night or longer and either slept in their cars or driven miles to get a bed somewhere else. Los Vegas, Nevada, is twenty-four miles away with a number of good sized hotels and it is not unusual for every one of them to be filled to capacity night after

night. "There are about five thousand men at work on the dam earning some \$200,000 weekly. This with the money spent by tourists makes Boulder a lively place. All the places of business operate to capacity. It does one's heart good to see every place thronged with people and all the purveyors of food, gas, cigars, drinks, and so on crowded with business. The city designers calculated the number of stores needed and no more go in. Ruinous competition is not known here."

Three Thousand Sunday Visitors

It is not unusual for three thousand automobile loads of people to drop into the city on Sunday.

There are no storage garages in Boulder, and cars are left standing in the street. Automobiles can be taken care of for repairs or supplies, but if storage is desired one must drive to Los Vegas, twenty-four miles distant, over dirt roads.

Boulder City was nothing but a few tents March, 1931. Now it is a lively city of 6,000 with paved streets, sewage disposal works, water, lights, gas, stores, restaurants, clubs, four churches, big schools. one theater and one hotel. It cost \$3,000,000 to build. It is the home of the engineers and workmen building the dam. Most of the city will be useless when the dam is completed. Only enough men to operate the dam will be left. Temporary residents occupy frame build-ings which will disappear when the dam is (Continued on Page 21)

MARKETING IN RUSSIA

Dealers Do Not Have Enough to Go Round And No Wrapping Paper

Before canned goods and package goods were generally accepted by grocers, the methods of handling food stuff by dealers was rather careless and not particularly neat or cleanly. Many people still recall the old fashioned grocery store, as a rather messy and uninviting place. Beans, sugar, rice, pickles, etc., were sold out of barrels and jars, which recalls to mind an old story illustrative of the free and easy way in which grocers conducted their business.

A woman customer detected some small, dark, globular objects in the beans being weighed out to her by the dealer. Her suspicions of frolicking mice in the bean barrel seemed justified and she voiced them at once.

"Oh, Mrs. Smith," said the dealer, "it could not be. That's the barrel the cat sleeps in."

In Soviet Russia

And that brings us to our story of how Soviet Russia, which boasts of accomplishing in 16 years more than America did in 150.

Roy Durstine, a prominent New York advertising man, tells about the grocery business as conducted in that country. It's not dissimilar to our old methods, which bad as they were are still ahead of Soviet methods.

Mr. Durstine in his article "A Nation Without Trade Marks" describes the grocery store incident as follows:

Not Enough to Go Round In a Moscow food store a little group of women stood silently looking about them. Each shawled head turned slowly as their eyes went over the shelves and surveyed the show window. A cabbage had the place of honor in the window.

"Is that for sale?" asked one of the wom-

en. "No," answered the storekeeper. "It is for display."

Sometimes there are enough cabbages to sell a few. Sometimes there are carrots. The Russian housewife can never plan in ad-vance what she can have for dinner. She must go to the food shop and see what they have that day and what her food card will let

her get. "What is that on the shelf?" cried one of the group. "Is—is it sugar?" "Yes," was the answer.

"Yes, there is a good supply today—the first we've had for weeks." He told the price.

"How much can we buy?" "All you want." "All we want?"

"Yes."

Catch Was in Getting It Home

There was a hurried consultation. Excitedly the women estimated their needs and their resources. They gave their orders.

"It is too bad," said the storekeeper. "But I have nothing in which to wrap it up."

Here was a desperate situation. Sugar, actual sugar, was almost within reach, and there was no way to get it home. If they went back to get containers, it would be snapped up by other shoppers before they could return.

Again the women went into a huddle. They found a solution and explained it to the storekeeper. He agreed to stand in a corner and close his eyes. Then his patrons methodically removed their petticoats. wrapped up the sugar in them, paid for it and went on their way rejoicing.

(Continued from Page 18) The Shasta Auto

"What is the name of your car?"

"I call her "Shasta'.

"Because she's a 'daisy'?"

"No; because she has to have gas, she has to have oil, she has to have air, she has to have something all the time."

Weather Forecast

Judge (in traffic court): "I'll let you off with a fine this time, but another day I'll send you to jail."

Driver: "Sort of a weather forecast, eh, Judge.'

Judge: "What do you mean?"

Driver: "Fine today—cooler tomorrow."

No Flats

Motorist (to car parked off highway): "What is the trouble; got a flat tire? Other: "No, this is a live wire."

It Was His Fault

"I'm so sorry," said the woman. "It was all my fault."

"Not at all, madam," the man responded with a gallant gesture. "I was to blame myself."

"But I insist the fault was mine. I was on your side of the road."

"That may be true; but, my dear madam, I am responsible for the collision. I saw you coming blocks away, and I had ample opportunity to dart down a side street.'

FAITHFUL TO THE END



Farmer : along?" "And how is Lawyer Soakum getting

ong?'': Doctor: "Poor fellow, he's lying at death's door." Farmer: "That's a lawyer for you. At death's door, and still lying."

SIGHTS IN THE NATIONAL CAPITAL

Those who visit Washington to attend the National Convention of Master Plumbers may find themselves bewildered in trying to see the innumerable attractions which the capital so generously affords. In another column we print a schedule of objects of interest which the Washington Chamber of Commerce says may be visited in four half days. In keeping up with the schedule means a hurried visit and a stingy little peek at different attractions. It will crowd so much into a few brief hours that the visitor is apt to return home with a confused jumble in mind and little of definite memory of what was really seen. The right way to see Washington, or any other city, is to go about it leisurely and absorb what one sees and hears. There is one thing in Washington favorable to sight seers-reasonable taxi-cab rates

If you are going to the convention and feel that you have only limited time, we would suggest that you keep in mind the following things of national and historic interest.

Historic Mt. Vernon

By all means see Mt. Vernon. It is a shrine no American should miss. In this home of Washington, soldier, statesman, and planner of the national capital, you will find a closeness to the personality of the father of his country that you have never previously experienced. From the broad porch of the mansion, you will have an inspiring view

R CAN



of the broad Potomac. In the numerous rooms of the building you will find many of the original furnishings and personal belongings. A short distance from the mansion you will find on the side of a hill overlooking the Potomac, the tomb of George and Martha Washington. Here thousands of Americans each year pause in reverent silence. This famous mansion was built in 1743 by Lawrence Washington, brother of George Washington.

Arlington Memorial Bridge

This wonderful bridge was built as a tribute to George Washington. It is 2150 feet long, cost \$10,000,000 and is said to be the largest drawbridge in the world. It has nine segmental arches of 155 feet at the ends of the bridge, and spread gradually to 184 feet in the central arch. The bridge converges with the new Mount Vernon Memorial Highway said to be the finest roadway construction in the world.

Arlington

Arlington National Cemetery—"On fame's eternal camping ground their silent tents are spread and glory guards with sacred round the Bivouac of the dead." This sacred ground is located in Virginia. No visitor to Washington should miss it. Here lie in rest the bodies of many famous men of martial fame. Here on the platform of the majestic amphitheatre is the marble tomb of the Unknown Soldier under constant vigilance of the sentinels from the regular army.

The Lincoln Memorial

This has been selected as the most beautiful structure in the United States. The jury making the choice was composed of



fifty prominent architects. It was designed by Henry Bacon and erected at a cost of two million dollars. The dedication was on Memorial Day, 1922, by William Howard Taft.

The memorial is a circular terrace one thousand feet in diameter. Large reflecting pools mirror this classic memorial and the Washington Monument nearby. There is a colossal statue of Lincoln seated in a chair. The Lincoln Memorial, its beautiful grounds and its remarkable reflecting pools, form one of the greatest sights of the national capital which no visitor neglects to see.

White House and Other Sights

Of course, every tourist and visitor wants to see the White House and its grounds. Only certain parts of the president's official home are open to the public.

The Washington Monument, Congressional Library, and the National Capitol appeal to all Americans. They are easily reached and will repay you for a visit.

There are so many attractions adjacent to the capital well worth seeing but to get to them requires considerable time. Among these are the Franciscan Monastery, Cathedral of Saints Peter and Paul.

Those interested in Lincoln will want to see the Lincoln Museum which is housed in Ford's theatre where Lincoln was fatally wounded in 1865 by John Wilkes Booth. The Bureau of Engraving and Printing is where money is made by millions and is well worth a visit, but you can't see everything on limited time.

So decide before you go what you really want to see. Do that and if you have any time left see some other sights.

(Continued from Page 18)

finished. Only the substantial buildings will remain. Every feature of the city was laid out on paper before the work started. Now the same men who planned the city are operating its government. It has a city mauager appointed by the U. S. chief engineer in charge of building the dam.

Seeing the Dam

To see the dam any one can drive to a parking place, leave his car, climb to an observation point, and look down into the chasm where hundreds of men are at work with huge cranes, trucks, swinging cable carriers.

A better way is to register with the Tourist's Bureau, a semi-official agency in Boulder City, pay \$1.50 for each car, get a guide who takes passengers of three cars in a group, and see everything. The guide takes his party down into the works, among the big trucks at the mouth of the tunnels, under the swinging buckets, each carrying eight cubic yards of concrete, into the clanging shops where giant machines make 30-foot pipe out of two and a quarter inch thick sheets of steel, and then on top to look over a plain where good-sized mountains will be turned into small rocky islands in a lake longer than from Decatur to LaSalle, a distance of 115 miles.

Mr. Schaub advises any one going to the dam and Boulder City to make reservations in advance. The indications point to a big influx of tourists this year. Every one going west apparently has Boulder Dam on their list.

Their Pa Was Refined

Letter received by a school teacher in a rural district of South Dakota from the mother of one of her pupils:

"Dear Teacher—My John is getting all peeked and thin. He says he can't get no blood out of his vittles from you always a-naggin' at his manners. Now I want to tell you my kids don't need any teacher to learn them manners. If you had ever et at our house and knowed how refined their pa is you would be ashamed. I have lived with their pa for 20 years and never once have I seed that man put his knife in the butter without licking it first.

"School is most out and I don't want to have to complain agin."

The Pennsylvania Department of Forests and Water has found that a ton of dry oak leaves contains 2.6 pounds of phosphate, 18.8 pounds of nitrogen and seven pounds of potash.

The largest producer of patent leather among nations is the United States.

WEDDING IN THE EAST

Horner-Riggard

Mueller Record takes pleasure in reproducing from H_2O , the house organ of the employes of the Water Companies of the Delaware Valley Utilities group, an announcement of the wedding of E. O. Horner, manager of Eastern Pennsylvania companies with neadquarters at Shenandoah, Pa., and Laura A. Riggard. The announcement says:

"On St. Valentine's Day one of the finest things in the history of the Delaware Valley Utilities happened—the wedding of E. O. Horner, Manager of the Eastern Pennsylvania properties with headquarters at Shenandoah, Pa., and Laura A. Riggard, clerk in the offices of Reeding Suburban Water Company. This romance which has been budding for two years culminated in a quiet ceremony in the Haddonfield Methodist Church at Haddonfield, N. J., with Mr. and Mrs. L. T. Reinicker as official witnesses and whole-hearted well-wishers.

"After spending several days in Baltimore, the happy couple sailed from New York on the 16th, on the Munson liner S.S. Munargo for Nassau, Miami and Havana returning March 1st. (They must have had inside information about the blizzards. What a time to be down south!) "We feel so proud of this handsome couple

"We feel so proud of this handsome couple that their picture was judged worthy of Front Page position in H_2O , and the good wishes of everybody in the organization, from Mr. Ware down, go with them on their journey through life together."

In Argentina, about one-half of the motion picture theaters have been wired for reproduction of sound films.

To serve 17,000 consolidated schools in the United States, 47,500 buses are being used.

"Aa" is the name of a town in Sweden.

Steel office furniture was first manufactured in South Africa.

THE ONLY WAY OUT



"You are still engaged to that Smith girl, are you not?" "No."

"Lucky for you. How on earth did you get out of it?" "I married her !"









DECATUR'S MODEL SEWAGE

Decatur has a model sewage plant and is proud of the fact. It has cost a million and three quarters dollars. but under the management of Dr. W. D. Hatfield it is performing all the duties for which it was designed and has been one of the best advertisements the city has. It is known far and wide in this country and to a considerable extent in foreign lands and since it was first put



Wm. D. Hatfield. Supt. Decatur Sanitary District

in operation has attracted many sewage treatment engineers from all parts of the country.

Recently Joshua D'Esposito of the PWA committee on projects for the State of Illinois, headed a commission of distinguished men on a visit to the Decatur plant. This visit was preparatory to drawing plans for the \$100,000,000 plant in Chicago. This party was composed of:

- Joshua D'Esposito, Chicago. Prof. D. W. Meade, Madison, Wis.

- W. B. Story, Chicago. General C. W. Kutz, Washington, D. C.
- E. F. Robinson, Syracuse, N. Y.
- G. G. Dixon, Youngstown, Ohio. S. W. Freese, Fort Worth, Tex.

The first four constitute the commission and the last three are experts on the subject of sewage. Prof. D. W. Meade of the commission is quite well known in Decatur. Some ten years ago he made an exhaustive study of Decatur's water supply.

To a local newspaper reporter, Mr. D'Es-

posito said: "This plant is looked upon as one of the model sewage disposal plants in this part of the country and we are looking over any plants which have shown their efficiency both through construction and operation. That is why we are spending the day in Decatur.

"Chicago, you know, is planning to spend somewhere around 100 millions on the sewage disposal equipment which such a large city will call for and we are out to study the best equipped and best operated, the most efficient plants in the country. We knew of the good record of the Decatur plant and we are here today to see it under the guid-ance of its operating head, Dr. W. D. Hatfield.'

The plant is located a short distance southwest of Decatur between the Lincoln Memorial Highway, crossing the central part of Illinois from Danville to the western line and the Sangamon river. The surroundings are in neat and orderly condition. The wooded banks of the Sangamon river, a quarter of a mile distant, make a pretty background for the main building and the necessary treatment tanks and other equipment.

TREATMENT PLANT SANITARY ENGINEERS MUCH INTERESTED

LILLOIL

Decatur Plant's Rather Unusual Combination of Treatment Processes Attracts Technical Men.

By William D. Hatfield, Supt. Sanitary District of Decatur, Ill.

The sewage treatment plant at Decatur, Illinois, is of particular interest to sanitary engineers because of its rather unusual combination of treatment processes. This combination of processes was made necessary because the sewage consists of about five million gallons per day of normal domestic sewage from a city of 58,000 inhabitants and 4 to $4\frac{1}{2}$ million gallons per day of the waste from a large corn products factory. The combined sewage and wastes are equivalent in organic matter content to a population of 100.000 to 120,000 population.

The large intercepting sewer was built in 1920-1922 at a cost slightly over half a million dollars. In 1926 an extension of the intercepting sewer cost about one quarter of a million dollars, thus making the total cost of the intercepts about three quarters of a million dollars.

Completed in 1924

The original sewage treatment plant was completed in 1924. It consisted of grit chambers (figure 1), Imhoff tanks (figure 3), sludge drying beds (figure 4), sprinkling fil-ters (figure 8), a final Dow clarifier (figure 9), and an administration building not shown in the illustrations. This original plant cost slightly more than half a million dollars. It was designed with ample capacity for a population of 60,000. However, during the preparation of plans for and the construction of the intercepting sewers and treatment plant, the corn products industry had a phenomenal growth so that when the new plant was placed in operation in 1924 the sewage was found to be equivalent to a population of 350,000. Cooperative studies between the industry and the Sanitary District resulted in a recovery of by products by the industry so that the resulting sewage-waste mixture received at the treatment plant has been equivalent to between 100,000 and 120,000 people since 1928.

In 1926 and 1927 the Sanitary District constructed an addition to the treatment plant which raised its designed capacity to a population of 150,000. The addition consisted of an aeration plant in which the settled sewage from the Imhoff tanks were aerated $1\frac{1}{2}$ to $2\frac{1}{2}$ hours before the sewage was sprayed on the sprinkling filters. Figure 7 is a picture of one of the six aeration tanks. In figure 10 the Imhoff tanks are in the foreground, the aeration plant including the blower house is to the left in the background, and the sprinkling filters are on the right. This aeration plant cost \$215,000.00 and is only necessary when the corn products industry is in operation.

In 1926 the grit chambers and conduits above the Imhoff tanks were covered with





concrete covers to house in any odors eminating from these parts of the plant. Figure 2 shows the covered grit chamber as it appears today. At this time the gases resulting from the digesting sewage solids in the Imhoff tanks were collected in an extensive

collecting system. These gases are used for heating the plant building and will probably be used later to generate the power for the acration plant.

The sewage flows to and through the treatment plant by gravity, but the plant site is situated on rather low river bottom land which is subject to overflow at times of high water. Therefore, the plant site is surrounded by a dike approximately 12 feet high. At flood periods it was necessary to discontinue the use of the sprinkling filters, and for that reason in 1930 an effluent pumping station was built so that complete treatment is obtained at all times. The pumping capacity is 22 million gallons, which takes care of the hydraulic capacity of the plant and ground water infiltration.

Storm Water Plant

In 1932 a storm water treatment plant consisting of mechanically cleaned settling tanks, a floating cover type of heated sludge digesting tank and a sludge storage tank was constructed. This allows the complete treatment of 17 m.g.d. of sewage and the settling of 25 m.g.d. storm water in the storm water settling tanks. The final cost of the sewage treatment plant is about three quarters of a million dollars. The total cost of the intercepting sewers, treatment plant, land, and engineering is about one and three-quarters million dollars.

The Process

The processes of sewage treatment used in the Decatur plant are:

- 1. Sedimentation.
- 2. Biological digestion of the settled sludge.
- 3. Biological oxidation of the colloidal and soluble organic matter in the aeration plant and on the filters.
- 4. Final settling of the purified effluent before it enters the river.

Under normal operation no chemical treatment is necessary. The various tanks are designed and operated so as to make an ideal environment for the growth of biological organisms which in simple language eat up the organic matter in the sewage much as hogs eat up garbage.

Gas and Fertilizer

The sewage is screened by a bar screen having $1\frac{1}{2}$ inch openings as it enters the grit chambers. In the grit chambers the velocity of flow is retarded so that the sand, ashes, coal particles and grit washed from



Left to right: S. W. Freese, Fort Worth, Tex.; Prof. D. W. Mead, Madison, Wis.; Gen. C. W. Kutz, Washington, D. C.; Joshua D Esposito, Chicago; W. B. Story, Chicago; E. F. Robinson, Syracuse, N. Y.; G. G. Dixon, Youngstown, O.

-Herald and Review Photo.

the street settles out, but leaves the light organic matter in suspension. Then the sewage passes through the Imhoff tanks where the suspended organic matters settles out of the upper part of the tank and passes through



the opening into the lower chamber. In this lower chamber the solids are decomposed by anaerobic bacteria which form a gas similar to natural gas and a residue which is a good fertilizer. The gas is collected and used and the fertilizer is run out on drying beds for removal by farmers and others.

The settled sewage then passes to the aeration tanks where three million cubic feet of air per day are blown through the sewage. This allows aerobic bacteria to attack the easily broken down organic matter which will not settle in the Imhoff tanks. After settling this aerated sewage is then intermittently dosed on the sprinkling filters. In these filters the more resistant organic matter is destroyed by aerobic bacteria and other small plant and animal life. The filtered sewage is settled and then passes into the Sangamon river.

The efficiencies of the various processes in the removal of organic matter and bacteria are as follows:

Imhoff tanks	25%	removal
Aeration plant	25%	removal
Sprinkling filters	40%	removal
Final settling	2%	removal

The final effluent is clear, contains dissolved oxygen, nitrates, and will not decompose or cause nuisance, having a stability toward methylene blue of 95% to 99%. Fish thrive in the river below the treatment plant outlet where prior to construction of the plant all fish life was extinct for ten to twenty miles below the city.

The Decatur plant is unique in that it contains a combination of the three recognized methods of sewage treatment, i. e., Imhoff tanks, sprinkling filter, aeration, and separate sludge digestion which is the type of treatment used in the storm water treatment addition.

FREE ADVERTISING

A "slicker" in a slang sense is a smooth, city "gent" who resorts to little tricks, which the average individual disdains to employ or take advantage of. Slickers are not necessarily dishonest, although they come pretty close to the line of demarcation at times. Some of the slicker clan are now pulling an advertising stunt without paying postage which is always a heavy drag on the legitimate dealer. Under the postal regulations, an advertiser by enclosing a business reply envelope with publicity matter provides free means for the prospect to answer if he so desires, the postage on the "Business Reply Envelope" being assumed by the advertiser upon receipt. Naturally, every business man receives many business reply envelopes which he does not use. Dealers in notions, and small merchandise collect these envelopes, insert their own advertising matter

W. F. HENNESSY DEAD



Members of the Mueller organization received the news of the death of William F. Hennessy with deepest regret. "Billy," as he was known to us and to the trade, was for many years one of our New York City salesmen, and

had a wide acquaintance and many warm friends in the trade. His death at his home, 19 Grand Terrace, Baldwin, L. I., was sudden and unexpected, resulting from a heart attack. Services were held at the family residence Wednesday evening, April 11th, at 8 P. M.

Mr. Hennessy was a salesman for this company for twenty years and made many visits to Decatur to attend sales meetings. He was a general favorite, his keen sense of humor and his unvarying good nature were most likeable traits which his friends will long remember. His wife survives him.

DICKENS' BROTHER IN ILLINOIS

Lovers of Dickens will be interested to learn that a brother of the great author, Au-gustus Dickens, lived and died in Illinois. Dickens addicts will also be interested in knowing that "Boz", the pseudonym adopted by the great novelist, was the family nick-name of this brother, Augustus. The latter, like his distinguished brother, had an itch for writing and was in a sense a traveling correspondent. He was attracted to Illinois by the land boom which developed through the building of the first link of the now great Illinois Central system. The rattle snakes in the grass and the malaria in the swamp lands, may have been the reason for his change of mind. In any event, he settied in Amboy, Illinois, then an important division point of the Illinois Central, and became an office clerk, later taking a position as correspondent in the road's land development plans. In making this change he moved to Chicago, where he died October 4, 1866. His body now fills an unmarked grave in Graceland cemetery beside that of his wife and three children born triplets.

While a resident of Amboy, he edited the first weekly paper established in that town.

Now the lowly postage stamp steps from the ranks of presidents and warriors into avenues of art and sentiment. On May first a new three cent specially designed stamp went on sale in honor of Mother's Day. Whistler's famous "Portrait of My Mother' furnishes the central motif. Two hundred nillion of these stamps have been printed.

and return them to the original sender who is then compelled to pay postage on the "slicker's" advertising.



BUSY DAYS AT CHATTANOOGA

Columbian Iron Works continues to be a scene of much activity these spring days. The first half of the new machine shop mentioned in our last issue is now under roof and enclosed in glass. Continuous sash along the walls and upper ventilating windows are set with a new kind of glass made in California. The surface is somewhat uneven and the light is thus broken up and casts no sharp shadows. It gives a beautiful, soft il-lumination with just a tint of violet, which is restful to the eyes. It is claimed that this glass admits the ultra-violet rays which scientists tell us are so beneficial to the health. The contrast between the old shop and the new is striking indeed. The big planer mentioned in the last Record is now in place and the foundation for the big boring mill has been completed. The mill has not yet been received.

Billy Mason and his gang are busy moving the other machines from the old portion of the shop into the new. Some of the equipment is running. Through all the activities of moving, the shop has been able to machine the castings for the goods sold. Credit for this achievement is due Plant Engineer Jacka, W. T. Mason, and B. Burt, foreman of the Machine Shop.

Meanwhile, the foundation of the other half of the shop has been poured, and brick work will start soon. The old shop will be torn down and be ready for occupancy this summer.

The old building stood over a hole which is being filled by loads of rock being hauled from Lookout Mountain. There is a spur from the mountain which is composed of disintegrated rock which is lifted out with a steam shovel and dumped into trucks and hauled about town for just such purposes as Photo by E. H. Langdon.

this. When the work of rebuilding is finished, the general ground level of the plant where Columbian Iron Works stands will have been raised two or three feet, and in some places much more.

The overhead crane has been taken down, repaired and cleaned, and mounted in the new shop. Concrete foundations for various pieces of heavy equipment are being prepared. One of the air compressors is now in place. The wash rooms which we described last month are yet to be built.

Along the entire length of the foundry on the east side is being built an addition similar in construction to the new shop. It will be used as a cleaning department. The old department has been dismantled and the equipment junked.

In the foundry will be placed new sand handling machinery and conveyor systems which will greatly increase the output of this unit.

While construction is thus under way, work in the foundry has been discontinued. Castings are being made in another foundry in Chattanooga.

The new bins for the storage of pig iron, coke, sand and other materials have been in the main completed.

The Tennessee Power Company has put in a new high line to the plant, has placed transformers, and the electrical equipment will be quite modern.

An interesting sales experience came to light in conversation with the foreman in charge of the power company crew. These maintenance crews work out in the town and they take with them electric irons which they sell when they have opportunity to in the neighborhood where they work. One colored boy sold five irons,

WATER WORKS MEN AT BANQUET



The four state section of the American Water Works Association met at Philadelphia, March 7th and 8th. One of the pleasant social features was the banquet given delegates at the Hotel Adelphia. Mr. H. M. Lofton of the Columbian Iron Works attended the meeting.

SAFETY

Accident is the cause of death in every nine persons between the ages of twenty and fifty. Most of these accidents are preventable. Carelessness is responsible for most of them. A little thought, a little care, and caution are the best preventives. A careful person is ever thoughtful that there is danger in such a common and natural act as walking. even when the danger is not increased by If you are engaged in any kind of a task, remember that in a moment of thoughtlessness you may suffer an injury that might lay you up for weeks. Measure the possible hazard in any task upon which you are engaged and be prepared to avoid it.

Ask the Dentist

"I went to the dentist yesterday."

"Does the tooth still ache?

"I don't know; he kept it."-Auckland (New Zealand) Weekly News.

The Gentle Reply

Young Mrs. Newlywed (holding up new hat): "You wouldn't think such a simple thing would cost so much money, would you?

Preoccupied Husband: "I'm not so sure I'd call you a simple thing, my dear."-Answers (London).

Constant Reminder

"Did you ever hear anything of that money you lent your neighbor?" "Rather! He bought a phonograph with

it."-Nebelspalter (Zurich).

ALWAYS SOMETHING NEW

Heretofore it was only possible to salvage the rubber from automobile tires. Now the cotton fibre by reason of a mechanical device can also be salvaged.

A check writer operated by keys instead of the usual levers is now offered business men.

An electric desk clock for timing long distance telephone calls is a new device. Touch a button and colored lights flash around the dial at fifteen second intervals. When the three minutes are up a red light appears.

There is a new portable electric light which attaches to any wood or plaster surface by a push pin. Handy for closets and dark corners.

A new carpet sweeper has a window top through which its operations may be observed. It also has two fixed steel combs which automatically cleans the brushes.

A metal sheet placed beneath the pad of an ironing board is said to reflect the heat of the electric iron. It is said to save time, effort, and current.

The old railroad safety device is adapted as an emergency road flare guarding stalled trucks on the highway. It burns twenty minutes and should not fail to warn drivers of the danger.

Milk can now be pasteurized by passing an electric current through it. The apparatus is said to be simple, compact, and efficient.

IN THE SCHOOL ROOM

Night Breathing

Teacher: "Every day we breathe oxygen. What do we breathe at night, Willie?' Willie: "Nitrogen."

One of the Best Known

Teacher: "Can any little child give me a commandment with only four words in it?" Nellie: "Keep off the grass."

Advertising Genius "Now, Jimmy, what happened Teacher when the cow jumped over the moon? Jimmy: "Somebody got an idea for vanishing cream."

Two Too Many

Professor: "What is the penalty for bigamy?"

Bright Student: "Two mothers-in-law."

She Said It

Professor: "What did Juliet say to Romeo when she saw him in the balcony?

Freshman: "Why the hell didn't you get seats in the orchestra!"

Inside and Out

Teacher: "If I put cleven nuts in your hands, and you eat four, how many will you have?

Arthur: "Eleven." Teacher: "But can that be true if you've eaten four? Think again."

Arthur: "I'll have eleven. Four inside and seven outside."

Hearing Restored

Judge: "So you tried to drive by the of-

for after he blew his whistle?" Motorist: "Your honor, I'm deaf." Judge: "That may be, but you'll get your hearing in the morning. Next case."

Professor Might Get By?

"I heard the absent-minded Professor Jones driving his car into the garage at day-break this morning. Where do you suppose he had been all night?" "Well, Mrs. Jones told my wife that he

saw a red lantern beside that excavation down the street and had sat there waiting for it to change to, green."

Australia, with a population only slightly exceeding two persons per square mile of area, has more automobiles per capita than any other country except the United States and Canada.

Tests of waters that flow from springs in Stone Mountain, Ga., have shown that they contain almost twice the radio active properties of Germany's most famous radium-fed springs.

SMALL BOY AND HIS DOG WIN BATTLE WITH EAGLE

The eagle may be the king of birds and monarch of the air; he may sit in solitary grandeur on a mountain crag, lord of all he surveys, and may even hold a place of distinction on the coin of the realm, but when he tackled eleven year old Doye Smith, this bird of fight and freedom bit off a larger chunk than he could chew. That's why this particular eagle is now over-stuffed sitting on a perch instead of a mountain crag.

Last month the early spring sunshine tempted Dove Smith to a walk across the field. He discovered a commotion in a patch of weeds and aided and abetted by his young master, Caesar the accompanying dog, led the investigation. Caesar surprised the eagle enjoying a feast of young pig, and manifested his displeasure and disapproval by circling the eagle with vicious yips and velps. The eagle accepted the challenge and tied into the dog, much to Doye's alarm and consternation. The boy could find no weap-on but a stick, which he grabbed and with it whacked the eagle over the head, body and wings. The eagle ignored Caesar and devoted his energies to Doye, which enabled Caesar to attack from the rear. One of Doye's blows with the stick crippled a wing of the eagle and the battle finally ended by a lucky blow on the bird's head.

The spread of the eagle's wings was four feet and eleven inches. Dove was the hero of the country side. Eagles may be numerous in this country, but visual evidence is generally limited to occasionally seeing them high in a dead tree or sailing majestically through the air.

PNEUMONIA FATAL

John E. Tackaberry

Members of the Mueller organization heard of the death of John E. Tackaberry with deep regret. It was by reason of his coming to this company for special sys-temizing work in 1909 that he became a citizen of Decatur. He was on the job for some two years and during that time made many friends here. Afterward he was with the South Bend (Indiana) Watch Company for two years, but when he finished his special work there he came back to Decatur to make this city his home. "Ned" Tackaberry as his intimates knew

him was a most likable man. He was a thorough easterner by birth and breeding, but the middlewest had a stronger appeal for him. As a member of the Decatur Club, he became prominent in that organization's affairs and for the past few years acted as manager. For several days he fought a stubborn cold, yielding finally to the pressure of friends and entered the Decatur and Macon County Hospital, dying four days later at the age of 58 years. He was unmarried,

SHOWS SKILL WITH PENCIL



Mr. D. A. Beebe is superintendent of the Water Works at Paw Paw, Michigan. Mr. Beebe does not confine his talents to hydraulics. In idle moments he takes out his pencil and makes off hand sketches of objects that attract him or to illustrate some popular subject, or perhaps some whimsy of the mind. He did the accompanying lead pencil sketch for W. F. Aaron, Mueller Co. representative in Michigan, who sent it to the Record for reproduction. Accompanying the sketch, Mr. Beebe penciled these lines:

This young lady so sweet,

Took a ride on her horse up the street, When she came back,

She said with a smack,

Don't feed him any more buck-wheat."

STANDING WITHOUT LEGS

"Com-pa-nee atten-shun," bawled the sergeant to the awkward squad. "Com-pan-ee, lift up your left leg and hold it straight in front of you."

By mistake, one member held up his right leg, which brought it out, side by side, with his neighbor's left leg.

"And who is the galoot over there holding up both legs?" shouted the hardboiled sergeant.

IN A NICE QUIET WAY

A minister on a west-bound train was reading his Bible when a man leaned over the back of his seat and said, "I don't believe a word in that book." The minister ignored the remark. Presently it was repeated in a louder voice: "I don't believe a word in that book." Losing his patience, the minister turned and looked at his interrupter. "My good man," he said, "would you mind going to hell quietly?"

ON THE FIRING LINE

Mueller Pacific Coast Factory Has Experienced Sales Force

In launching the Mueller Co. Pacific Coast Factory at Los Angeles, some rearranging of territory and reassignment of salesmen was necessary.

Tom Leary, of course, remains at San Francisco as manager of the Mueller branch there. Tom has had quite an extended residence there and has a wide acquaintance in the trade. For many years Tom has been connected in some way with plumbing, water and gas brass goods, and most of that time has been in promoting our line.

W. L. (Billy) Jett is "at home" again in his beloved Los Angeles. He is covering the metropolitan district and the valley from Los Angeles to and including Fresno.

J. L. Logsdon, who has also been with the company for a long time, is covering the metropolitan area of San Francisco.

Jack Boyle has been transferred from the Utah. Idaho, Wyoming, Montana territory to the Oregon, Washington territory which now includes western Idaho, formerly covered by Jean Langford.

Montana and Wyoming become a part of Decatur territory.

Charlie DuBois, who formerly was a member of the Mueller sales force in the central west, has been recalled to the ranks and is now covering Utah. Arizona, and southern California, except that portion assigned to Billy Jett referred to above.

Jean Langford has been transferred to the Los Angeles office as order interpreter and clerk.

RAILROADS PROMISE CHEAP RATES

The second year of A Century of Progress Exposition will open at Chicago, May 26th, and continue until November 11th. This is the first major American exposition to attempt a second season. The promoters and are predicting that the second season will surpass the first in every way. Naturally a great many displays and special features will be repeated, but there will be a great many new features. Changes in the arrangement of the grounds will be made, which will add to the comfort and convenience of visitors.

It is announced by the Chicago papers that the railroads will make more favorable rates this year than they did last, and the auto travel promises to be very large.

Some of the railroad rates will range from two cents a mile for tickets good in all classes of equipment, with a 30 day return limit, to one cent a mile for day coach tickets sold at week-ends with return limits ranging from 10 to 14 days.

CLARENCE ROARICK WINS FIRST PRIZE

The Mueller Bowling League for the season of 1933-34 closed April 4th with C. C. Roarick of the Tool Room the all around champion. In total number of pins he toppled over 15,578, leading the next highest man by 1,139 pins. He divided honors with J. Bain in a record of not missing a single game scheduled. Taken as an entirety, it was the best sea-

son the league has enjoyed since the bowling fever infected the force. There was more interest and there was a general improvement on the part of nearly every member. The season may have closed but interest is still rampant with members looking eagerly forward to the cool days of next fall when activity on the alleys will be resumed.

The Tool Room team was awarded the championship emblem—a gold bowling ball suitably engraved "Champions of 1933-34". C. C. Roarick, as captain of the team, wears the emblem on his watch fob and everytime he looks at his watch it is noted that he fingers the emblem affectionately.

The statistical record of the season follows:

TEAM STANDINGS

		L.		Avs.	H.G.
Tool Room	52	38	.578	817	981
Specialty Division	49	41	.544	859	1021
Pattern Makers	47	43	.522	818	1001
Works Mgr. Office	44	46	.489	803	949
Ground Key Division	42	48	.467	810	986
Utility Engineers	37	53	.411	778	1033

INDIVIDUAL AVERAGES

Tool Room

1	····	Room				
C. C. Roarick F. Galka F. A. March W. Smith J. Pollock	88 86 87	Ave. 192 164 161 158 140	H. G. 279 237 218 226 195	H.(3)G. 684 579 585 569 499		
Speci	alty	Division				
K. Blankenburg A. Flaugher R. Hill E. Hartwig C. Hill A. Grossman	77 72 83 72	Ave. 188 172 170 168 167 167	H. G. 268 233 224 231 226 230	H.(3)G. 671 620 606 607 592 584		
Pattern Makers						
G. Krag C. Morenz H. Leipski A. Lindamood R. Lusk O. C. Keil	81 75 79 82	Ave. 177 173 169 158 153 136	H. G. 223 245 267 201 214 177	H. (3) G. 621 645 703 530 553 477		

Works Mgr. Office

	G.	Ave.	H. G.	H.(3)G.
C. F. Roarick		174	230	618
L. Wiant		170	248	610
J. Bain	. 90	167	258	633
I Morrison	81	154	225	554
M. Curry	. 21	151	200	513

Ground Key	Division		
	Ave.	HG	H.(3)G.
E. C. Stille 74	187	246	643
W. Behrns	183	244	635
A. Radke 87	168	217	595
J. Taylor 39	157	217	536
H. Gragg 73	157	235	
C. Rubican 75			568
C. Kuuldan /3	. 129	172	462
Utility Eng	gineers	TT C	11 (1) (2)
F. H. Mueller 60	Ave.	H . G.	H.(3)G.
	187	277	678
	170	245	619
B. Mason	166	235	590
O. C. Draper 77	143	217	511
W. Robinson	129	175	467
J. Wilkins 53	128	175	497
	OWLER	S	
G.	Ave.	H. G.	H.(3)G.
C. C. Roarick	192	279	684
K. Blankenburg	188	268	671
F. H. Mueller 60	187	277	678
E. C. Stille	187	246	643
W. Behrns	183	244	635
G. Krag	177	223	627
C. F. Roarick 90	174	230	618
		245	645
A. Flaugher 77	173 172	233	620
R. Hill 72	170	224	606
L. Wiant	170	248	
W. Gould	170		610
PRIZE WIN		245	619
		(0) 1	
Individual (1) H. Game I	naividual	(3) 1	1. Game
C. C. Roarick	1. Leips	k1	
K. Blankenburg 268	C. C. Ro	arick	684
K. Blankenburg 268	. н. м	ueller	678
HIGH AVERAGE			
C. C. Roarick			192
K. Blankenburg			188
F. H. Mueller			187
E. C. Stille			
W. Behrns			183
Third and fourth prize to be	divided	equally.	
Team (1) H. Game Utility Engineers 1033 H Specialty Division 1021 7 Pattern Makers 1001 V	Team (3) H.	Game
Utility Engineers 1033 H	attern M	lakers	2933
Specialty Division 1021 7	ool Roo	m	2828
Pattern Makers 1001 V	Vorks M	gr. Of	2785
	8.4		

EDGAR HARTWIG WINS HANDICAP

Clarence Rubican One of the Low Average Men, Captures Second Prize.

The Mueller League sweepstakes were bowled Tuesday evening, April 10, 1934. Edgar Hartwig rolled games of 182, 215,

Edgar Hartwig rolled games of 182, 215, and 179 for a nice 576 series, which with his 54 pin handicap totaled 630 pins, giving him first place.

first place. C. Rubican received 142 pin handicap and with games of 167, 148, and 167, total 482, (Continued on Page 32)

A fire engine of German invention pumps streams of carbonic acid powder that smothers flames, instead of using water.

To prevent soap from slipping out of metal holders, rubber insets have been invented.

In Trinidad, there was four times as much petroleum produced last year as there was ten years ago.

The government of Argentine has prohibited the exportation of scrap metals in an effort to establish an iron and steel manufacturing industry.

A Writhing Pile of Rattlers



Live rattlesnakes-about 1,400 of 'em-caught by A. M. Jackley of Pierre, S. D., who ships them and their venom by express.

In the last Record we printed a story of the unusual occupation of A. M. Jackley of Pierre, South Dakota, who catches live rattle snakes, selling them to universities and big laboratories for development of serum from their poison for use in treating yellow fever, tuberculosis, and snake bites. The in-formation was obtained from the "Express Messenger", a publication of the Railway Express Company. During a season, he captures from 1200 to 1400 and while awaiting shipment he keeps them in his cellar. Through the courtesy of the Express Mes-senger, we present a picture of Mr. Jackley's stock and also an illustration showing him in the act of snaring a rattler.

Missouri's Stand on Mules

Teacher: "Johnny, why does Missouri stand at the head of mule-raising of the United States?"

Johnny: "Because the other end is dangerous.'

Teacher: "Why did Joshua command the sun to stand still?"

Tommy: "I guess it didn't agree with his watch."

Red Hot Stuff

"Willie," said the Sunday School teacher severely, "you shouldn't talk like that to your playmate. Have you ever thought of heap-ing coals of fire on his head?" "No, I haven't," said Willie, "but it's a great idea."

Just Another Triangle

Teacher (in grammar class): "Willie, please tell me what it is, when I say, 'I love, Willie: "That's one of them triangles

where somebody gets shot."



How Mr. Jackley snares live rattlers.

BIRTH ANNOUNCEMENT

The formal birth announcement did not appeal to the Faucette family, so they stepped outside of conventional lines and broke the glad news in this fashion accord-ing to the Portland Traffic Manager. THE FAUCETTE PRODUCTION CO, Announces the 1934 Faucette "Baby Boy"

Model No. 2

Don Faucette, Designer and Chief Engineer;

Martha Faucette, Production Manager; Dr. Raymond E. Watkins, Technical Assistant.

Model released January 8, 1934.

Two lung power-Free squealing-Scream line body—Economical feed—Water cooled —Changeable seat cover. The management assures the public there will be no new models during balance of year.

Easy to Check Up

Professor Boreleigh: "If I have talked too long, it's because I haven't my watch with me, and there's no clock in this hall." Raspberry: "There's a calendar behind

vou.

WEDDING



Olsen-Ward

This fine looking young couple were mar-ried at 1197 W. Green Street, Thursday evening, April 19th, at 7:30. The groom, Axel Olsen, is employed in the regulator department and the bride is Miss Ruth Ward. The ceremony was performed by Rev. Empson of the First English Lutheran church in the presence of a small company of friends and relatives of the couple. The groom is a son of Lawrence Olsen, who has a long service record with our company. Axel began work here as a messenger boy and then entered the factory. When the depression was at its worst, he entered a reforestation camp and spent several months in Oregon. He came back in January and was reemployed and now he is happy—he has employment and a new wife. Their friends wish them happiness and prosperity.

Worse and More of It

"Troubled with dyspepsia in Father: school today? Why, that's a strange thing

Johnny: "I didn't have it: I had to spell it."

The teacher was giving the class a lecture on gravity.

"Now, children," she said, "it is the law

"But, please, teacher," inquired one small child, "how did we stick on before the law was passed?"

Precaution

"I have had my cashier arrested." 'Has he robbed you?"

"Not yet, but afterward would be too late." -Gente Nostra, Rome.

(Continued from Page 30)

his grand total was 624 and he won second place. This second place was quiet an honor for Clarence, as his average is one of the lowest in the league, and during the league play did not have much chance of capturing any of the prizes. Clarence Roarick bowling from scratch had

games of 165, 253, and 194, for a total of Ğ12.

C. F. Roarick received a 41 pin handicap and this with a 567 series gave him a total of 608 good for fourth place.

K. Blankenburg and A. Flaugher were tied for fifth place with 607. The complete record follows:

Name	1st	2nd	3rd	Tot.	Hep.	G.T.
E. Hartwig		215	179	576	54	630
C. Rubican		148	167	482	142	624
C. C. Roarick	165	253	194	612		612
C. F. Roarick		177	169	567	41	608
K. Blankenburg		205	217	598	9	607
A. Flaugher		244	148	562	45	607
R. Hill	185	189	180	554	50	604
L. Wiant	205	166	181	552	50	602
O. C. Draper	168	173	148	489	110	599
A. Lindamood		187	165	518	77	595
J. Bain	203	178	151	532	56	588
F. A. March		176	161	498	70	568
W. Gould	179	180	157	516	50	566
B. Mason	210	123	168	501	59	560
G. Krag		206	162	522	34	556
A. Grossman		168	166	499	56	555
W. Smith		149	159	475	77	552
A. Radke	131	198	145	474	54	528
W. Behrns		149	158	505	20	525
H. Gragg	126	152	159	437	79	516
F. Galka	134	163	152	449	63	512
J. Morrison J. M. Wilkins	139	141	137	417	86	503
J. M. Wilkins	106	97	144	347	144	491
C. Hill	158	147	130	435	56	491
H. Leipski		129	131	436	52	488
E. C. Stille		155	139	475	11	486
C Morenz		132	159	429	43	472
J. Pollock	167	166	122	455	******	455

LOWER AUTO LICENSE FEES

Secretary of State Hughes makes acceptable talk to Illinois motorists. He says they pay too much license for driving pleasure cars. In Illinois motorists pay according to horse power, eight dollars being the minimum fee.

Fifteen states have already cut their license fee, some as low as \$3.00. He names Arkansas, California, Delaware, Florida, Georgia, Idaho, Kansas, Montana, Michigan, Nebraska, Nevada, Oregon, South Carolina, Tennessee, and Vermont.

The secretary will meet no opposition from auto owners. The only free thing about driving a car is the air. In 1933 according to a report made to the auto industry, taxes reached a new high average of \$56 a car.

In that year Illinois auto taxes amounted to \$50,000,000.

Secretary Hughes does not expect as much in 1934. It has been found that many auto drivers irritated by high tax and insurance rates in Illinois, buy licenses in states where the cost is not so high.

Going into the subject a little farther, the secretary says the automobile has ceased to be a luxury and is now a necessity. It is his thought to take into consideration pleasure cars only and not buses and trucks.



"AT HOME"

Mueller Artcraft Staple Line is "at home" in cottage or mansion. A perfect Artcraft pattern within the limits of the modest purse without the slightest sacrifice of Mueller quality.

Only a little higher in price than old style fittings and MUCH LOWER than the average Artcraft pattern. This brilliant, flashing, modernistic Artcraft fitting has a compelling appeal as the "latest thing" in plumbing fittings.

EVERY PLUMBER SHOULD KNOW THIS NEW AND POPULAR LINE Write us today for illustrated circulars and prices.

MUELLER CO., Decatur, Ill.

Your Faithful Servant, Sir

This spring type service regulator, Style 50, with mercury seal is ready to do your bidding, faithfully and dependably with unerring accuracy for an indefinite period.

Style No. 50 will reduce an inlet pressure up to 125 pounds to an outlet pressure anywhere from $2\frac{1}{2}$ " to 7". With a combination dead weight and spring, it will reduce same to a constant outlet pressure of 3" to 12".

It is equally dependable for manufactured, natural or liquefied gases.

This is only one of the many Mueller-Groble gas regulators, every one of which is guaranteed to do the work for which it is recommended.

Ask for catalog and complete information.

