FILE NAME: Monsanto (MON)

DATE: 1925 May

DOC#: MON101

DOCUMENT DESCRIPTION: Magazine Article - Change of Clothes and Showers Provided for Workers Using Deadly Chemical

"It's Dangerous To Be Too Good a Loser!"

This is the advice of John F. Queeny, president and largest stockholder of the Monsanto Chemical Works, at St. Louis, one of the biggest industries of its kind in the world—Mr. Queeny has twice been beaten to a finish financially; but his spirit is simply unbeatable—When he is knocked down he gets up, dusts off his hat, and starts all over

By Harry A. Stewart

JOHN F. QUEENY was working at his desk in St. Louis one day in the year 1897, when the telephone rang. He took the receiver from the hook and said, "Hello."

In an agitated voice, the man at the other end of the wire reported:

"Mr. Queeny, your sulphur plant caught fire as soon as it started to operate. It's burning fiercely now. Nothing can save it!"

Queeny hesitated a moment, then he replied, "All right," and hung up the receiver. He turned back to his papers and resumed work. Every dollar he owned in the world was going up in smoke. He was nearly forty years old.

As purchasing agent for a large St. Louis wholesale drug house, Queeny, in the course of years, had become familiar with sulphur. In those days it all came to this country from Sicily in lumps, just as it was taken from the mines. Before it could be used it had to be refined. There was a good market for refined sulphur, and Queeny decided to go into business for himself. Accordingly, he invested all his money, a few thousand dollars, in a refining plant.

The money he had was sufficient to purchase apparatus and a stock of crude sulphur; but nothing was left for operating expenses. So Queeny kept his job as purchasing agent, intending to devote part of his salary to his plant until the new business should begin to pay its way.

Nights and Sundays he worked on his plans, wrote letters to prospective customers, and scanned machinery catalogues. At last, his new plant was ready to start. The night before, he had gone over everything, talked with his employees, and satisfied himself that all was well. The next morning, with the first turn of the crushing rolls, the plant had burst into flames.

Sulphur is very inflammable. In those days, the refining process consisted of crushing the sulphur ore to a fine powder between heavy rollers, and melting the powder in huge kettles. The impurities sank to the bottom and the pure sulphur was drawn off at the top. Then it was cast into molds, and became the product commercially known as brimstone.

It was a hazardous business. In the crushing process, if a nail or flint or other hard substance got into the rolls, it was likely to strike sparks, and these sparks exploded the sulphur dust which hung suspended in the air. This was probably what had happened in Queeny's plant. At any rate, Queeny was broke.

Under the circumstances, he might have thrown down his pencil, pushed back his work, and gone to brooding. Some men would have rushed to the scene of the fire and vented their disappointment and bitterness in complaints to others. Queeny did none of these things. When he got the news he said, "All right," and went on with the work for which he was drawing a salary.

He continued to work until his usual hour for leaving his desk. His wife had arranged a little party for that night. Queeny said nothing about the fire, either to his wife or to their guests. He took his usual quiet part in the evening's gayety. If he had a weight upon his mind, nothing in his appearance or in his actions betrayed it.

The next day he was plugging away at his job again. It took him *four years* to save enough money to make a new start; and saving was only a mild preliminary to the real fight of getting established in business.

IN THE language of the prize-ring, Queeny lost his first bout with fate by a quick knockout. In his second, he was twice beaten all over the ring, but he won out. At no time did anyone ever hear John F. Queeny "holler!"

He is now president and chairman of the board of the Monsanto Chemical Works, Incorporated, in St. Louis. The value of the plants owned by this company, in which he is the largest stockholder, runs into millions. It is one of the largest industries of its kind in the United States.

Through the window of his office, where I talked to him, came intermittently the rattle of motor trucks and the soft breathing of some giant machine in the works. The room in which we sat was a very large one. In the corners were gigantic vases of pierced and carved bronze, the work of old Japanese craftsmen. On the walls were many paintings.

Queeny sat at a big mahogany desk, but the man dwarfed the desk. He is more than six feet tall and he is strongly made. Sixty-five years have whitened his hair and his close-clipped mustache, but time has not lessened his fighting spirit. The same man who refused to be whipped at forty reëstablished his claim to unbreakable courage *nearly twenty years* later, when he was in his sixties. I will tell you all about those two fights further on in this article.

Queeny's face tells nothing unless he wishes it to. Words come from him meagerly and slowly, but every syllable has a punch in it. Consideration and reflection are powder; words are bullets. Queeny isn't loaded for anything but big game.

WHEN he told me about the fire which in a few moments had wiped out his first business venture, I asked, "Why didn't you tell your wife what had happened?"

He considered my question, and then replied slowly:

"I suppose I didn't want to spoil her evening."

"Why didn't you say something besides 'All right' to the man who called you up and told you about the fire?"

"What was there to say?" he countered. "I knew that there was nothing to be *done*, so there was no use talking about it."

"You're a good loser," I remarked.

"Not too good, I hope," he retorted. "When you meet a backset it's all right not to whine about it. But this business of being a 'good loser' can be carried too far. You can get in the *habit* of losing. You can *resign* yourself to a loss, and then, the next time something upsets your plans, why, you sort of take it for granted. Finally, you get so you *expect* loss. And we usually get what we expect, don't we? No, I don't want to be too good a loser."

"Well, at any rate," I remarked, "you don't talk about your losses. Why not? Sometimes it does a man good to unburden himself."

"I know it does," he replied; "but did you ever think about what it does to the other person? Isn't it a selfish sort of relief—to unload your troubles on somebody else?"

"Where did you get that idea?" I asked.

He considered again, his blue eyes fixed on vacancy. When Queeny thinks, he devotes everything (*Continued on page 193*)

The Art of Dusting

By Mrs. Mary Ellen Lang

Every particle of dust sticks to my home-made 3-in-One Dustless Dust Cloth until I shake it out doors. Not a bit is stirred into the air to settle again on furniture and drapes.

My 3-in-One Dustless Dust Cloths are made in a jiffy out of a yard of cheese cloth by sprinkling it lightly with

3-in-One Oil

Then I roll it tight and lay it down for half an hour while I do something else. The oil has now permeated all through the cloth and my wonder worker is ready for use.

3-in-One Dustless Polish Mops are economically made by cutting off the strands of an ordinary twine mop about eight inches from the handle and permeating with 3-in-One.

3-in-One is sold at all good stores in 1-oz., 3-oz. and 8-oz. bottles; also 3-oz. Handy Oil Cans. The 8-oz. bottle is the economical Household size. Contains most for the money.

FREE—Generous sample and illustrated Dictionary explaining 70 uses for 3-in-One in the home. Make your request on a postal.

THREE-IN-ONE OIL COMPANY
130 D. William St. New York, N. Y.
Factories: Rahway, N. J. and Montreal
HR651

Easy to Play
Easy to Pay

BUESCHER
True-Tone
Saxophone

BENNIE KRUEGER
Director Bennie Krueger and his Orchestra. Brunswick Records.

Easiest of all instruments to play and one of the most beautiful. Three first lessons sent free give you a quick easy start—in a few weeks you can be playing popular tunes. No teacher necessary. You can take your place in a band or orchestra in many days if you so desire. Most popular instrument for dance orchestras, home entertainments, church, lodge and school. A Saxophone player is always popular socially and has many opportunities for extra money. SIX Days' Trial and easy payments arranged. 105

Free Saxophone Book shows all Buescher models and gives first lesson chart; also pictures of famous professionals and orchestras. Just send your name for a copy. Mention any other instrument in which you may be interested.

BUESCHER BAND INSTRUMENT CO.
Everything in Band and Orchestra Instruments

"It's Dangerous To Be Too Good a Loser!"

(*Continued from page 37*)

he has to the job. He doesn't move a muscle; he hardly breathes. Then, when he has carried his thought to a satisfactory conclusion, he moves just a trifle and his eyes come back to you. When the answer comes, it is always complete and sufficient.

"Well," he said, slowly, "when I was six years old I had my right arm and leg broken. I was playing tag at school, and, without looking where I was going, I ran out in the street directly under the feet of a team of truck horses.

"It was a pretty painful experience. They got me home and set the broken bones and made me as comfortable as possible. My mother hung over me, doing everything she could. I did a good deal of crying and fussing, which was, perhaps, not unnatural under the circumstances, but it hurt her.

"Finally she burst out, '*Please* don't cry so, Son! It just breaks Mother's heart to hear you!'

"I stopped crying and began to think. Dimly I understood that my complaints were actually *hurting* my mother. After that, when the pains grew severe, I just set my teeth and kept my mouth shut. I've been doing it ever since.

"Probably I got well the quicker for it," he went on, with a half smile. "I've noticed that if you keep your troubles to yourself you will try pretty hard to remedy them. Sometimes a fellow who gets into a little difficulty enjoys the sympathy he receives from his friends so much that he doesn't get out of his difficulty as quickly as he might otherwise."

TWO conflagrations have played an important part in Queeny's life. One of them I have told you about. The other occurred in Chicago—where he was born—when he was twelve years old. His father was a contractor and builder who had made a moderate fortune, and retired. His savings were all invested in houses. The family lived on the rents.

On the night of October 8th, 1871, occurred the great Chicago fire. People say that it was started by a cow belonging to a widow named Mrs. O'Leary. The story runs that the cow kicked over the lantern when the good woman went out to the barn to milk. At any rate, when the smoke stopped rising, John Queeny's father was penniless. Every house he owned had burned down.

John had to go to work. He got a job as errand boy in a wholesale drug house, worked there for eleven years, and rose to be city salesman at eighteen dollars a week. Then, through the chance remark of a traveling man, he heard of a job as purchasing agent in another drug concern, in New Orleans. He held this job down another eleven years, until he was thirty-three years old.

One day his boss called him into the office: "John," he asked, "how much money are you getting now?"

The best stories are never written

HOW many times have you said, "This would make a wonderful short story"? But you didn't write it, and the inspiration was soon forgotten.

"Many a story banged off hot on my Corona in a front-line dugout would never have been written if I had waited to reach a spot of greater convenience." — *Louis R. Freeman, War Correspondent, Explorer, Traveler.*

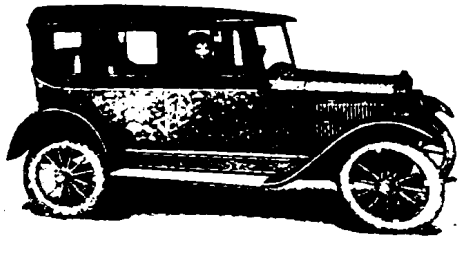
* * * *

The advantage of owning a Portable Corona is that you can write your best thoughts as they come to you, anywhere, any time—and that's the secret of successful writing! The newest Corona (Model Four) has the standard keyboard used in offices everywhere.

Corona Four costs only $60. Easy terms if desired. Look for Corona in your phone book or write Corona Typewriter Co., Inc., 102 Main St., Groton, N. Y.

CORONA

FORD & CHEVROLET CALIFORNIA TOPS



Cool in summer. Warm in winter. Your health will be protected. You will enjoy closed car comfort at a reasonable price. KOUPET California Tops for Ford Roadsters, Chevrolet and Ford Touring Cars.

Quality High. Price Low.
Write factory Today.

Koupet Auto Top Co.
Belleville Illinois

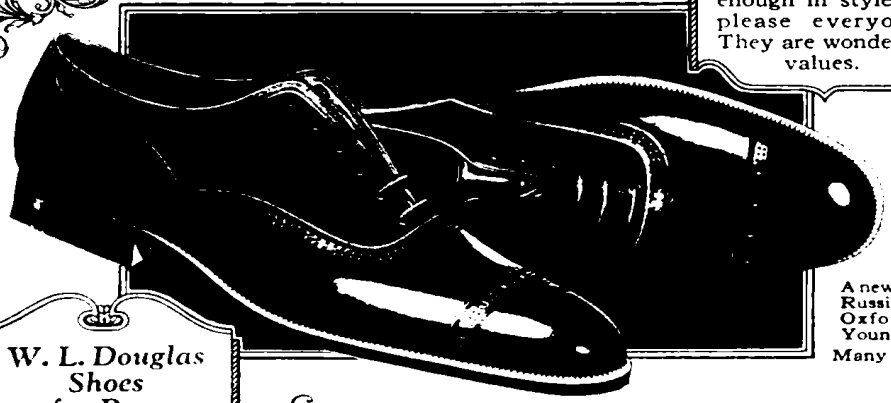
W.L.DOUGLAS

$5, $6, $7 & $8 *Shoes*

Built on the broad standard of style, comfort and service. They are the most economical shoes for you to buy.

W. L. Douglas Shoes for Women

Pretty, and varied enough in style to please everyone. They are wonderful values.



A new Light Russia Calf Oxford for Young Men

Many Others

W. L. Douglas Shoes for Boys

Boys require good substantial shoes. We have them at $4.00 & $5.00

ENORMOUS purchases of leather, coupled with manufacturing on a large scale to supply our 120 Exclusive Retail Stores and 6,000 Retail Shoe Dealers, enables us to give you the greatest possible shoe value for your money.

Name and retail price stamped on every pair at the factory.

W. L. DOUGLAS SHOE COMPANY, Brockton, Mass.

Learn PHOTOGRAPHY at Home

Hundreds of big paying opportunities for you in this fascinating profession. Earn $3,000 to $10,000 a year. Study how under a leading photographer right in your own home. Write at once for my special offer of Professional Camera FREE. Open for limited time. Internat'l Studios, Inc. Dept. 1185 3601 Michigan Ave., Chicago, Ill.

Salesmen Wanted

In every county to give all or spare time. Position pays $1500 to $3600 yearly. We train the inexperienced.

NOVELTY CUTLERY CO. 80 Bar St., Canton, O.

New way to make unruly hair lie smooth

HERE'S the secret of the recent amazing improvement in the appearance of men's and women's hair:—Stacomb.

Stacomb will keep even the most unruly hair in place *all day long*. It is actually beneficial. It helps prevent dandruff, keeps your scalp cleaner and healthier than ever before.

Not sticky or gummy. In jars and tubes or in liquid form, at all drug and department stores.

Stacomb

FREE OFFER

Standard Laboratories, Inc., Dept. T-20
113 West 18th Street, New York City

Please send me, *free*, a sample tube of Stacomb.

Name.....

Address.....

KEY TO A PRACTICAL UNDERSTANDING of ELECTRICITY

Audel's Handy Book of Electricity, Price $4.

A quick simplified ready reference, giving complete instruction and inside information. Handy to use. Easy to understand. For Engineers, Professional Electricians, Students and all interested in Electricity. A reliable authority and a handy helper for every electrical worker.

INFORMATION

The 1040 pages and 2600 diagrams give accurate, up-to-date and complete information on—Rules and Laws, **RADIO**, Storage Batteries, **WIRING DIAGRAMS**, Power and House Wiring, Automatic 'Phones, Auto Ignition, Motor Troubles, **ARMATURE WINDING**, Cable Splicing, Elevators and Cranes, Sign Flashers, Transformers, Practical Management, Modern Applications—READY REFERENCE on every electrical subject. ***Pocket Size***, handsomely bound in flexible Red LEATHER. Easy Terms. Shipped for ***Free Examination***. No obligation to buy unless satisfied.

FREE EXAMINATION COUPON

The. Audel Co, 65 W. 23 St, New York
Please send me Audel's Handy Book of Practical Electricity for **free examination.** If satisfactory, I will send you $1 in 7 days, then $1 monthly until $4 is paid.

Name.....
Address.....
Occupation.....
Employed by 5F 328

"I considered this remark highly superfluous," said Queeny to me. "He knew as well as I did how much I was getting. However, I answered him.

"'I am getting five thousand a year,' I told him.

"'Well, you'll never get any more,' was his astounding comment. 'Do you want to know why? Because you don't save your money!'"

Queeny hesitated a moment, and then said:

"My chief was right, of course. Money means opportunity, and there is no use wasting opportunity on a man who doesn't make any use of it."

"Weren't you saving any money then?" I asked.

"No," Queeny responded; "and what my boss told me then did not begin to bear fruit until I had settled down."

SOON Queeny was offered a larger salary by the Meyer Brothers Drug Company, in St. Louis, and he promptly took it. He was having a pretty good time, he says, and hadn't really thought about the future at all.

He stayed a year in St. Louis, and then went to New York as sales manager for another concern. Here he met and married his wife. After three years in New York, he came back to Meyer Brothers, in St. Louis again, and, as I have already told you, in 1897 made his first independent business venture. You know how the plant burned down, taking all his savings with it, on the day it started operating.

Like many another man, as soon as he was married he began to save. He was drawing a high salary, too. But children began to come, a boy and a girl, and savings accumulated slowly. It took him until 1901 to gather together fifteen hundred dollars. Then he decided to make a new start.

At that time, saccharine, which is three to five hundred times sweeter than cane sugar, was made only in Germany. It was discovered, however, in America, in 1879, in a very strange way. A German student, who had come to Johns Hopkins University to learn what he could under Professor Ira Remsen, the famous chemist, had been working all day with coal tar, seeking a new chemical compound. When he left the laboratory that night to go back to his lodging, he had to cross a bridge. A high wind was blowing. The student, after the fashion of those days, wore a long, flowing mustache. As he opened his mouth to breathe, a gust tossed the end of his mustache over his tongue. To his surprise, he tasted an intense sweetness.

He turned round and hastened back to the laboratory. On the table were all the chemicals and reagents he had been using in his experiments. He began to try all sorts of combinations, seeking the cause of that sweetness, and eventually he discovered saccharine.

With characteristic German canniness, he said nothing to Professor Remsen about his discovery, but took it back to Germany, where he patented it. By 1884 the process had been so far perfected as to make commercial manufacture profitable.

There was a good deal of saccharine used in the United States. Queeny decided to undertake its manufacture. He

did not know the process, for the Germans guarded the secret carefully. But they were willing to start the process, carry it to a certain intermediate point, and ship the result to Queeny to be completed.

The late Jacob Baur, founder of the Liquid Carbonic Company, was a large buyer of saccharine. Queeny went to him, explained his plans, and Baur let him have thirty-five hundred dollars to add to his fifteen hundred.

With the five thousand dollars, Queeny rented a small building in St. Louis, bought what apparatus was absolutely essential, and incorporated his business. He chose his wife's maiden name, "Monsanto" for his firm name. As in the time when he started his sulphur refining plant, he had not enough capital for operating expenses. Therefore he kept his job, and worked nights and Sundays on his new venture.

Queeny's real troubles, however, did not begin until nearly a year after he had started. By almost superhuman industry, he had succeeded not only in holding down his job satisfactorily but also in extending the market for saccharine until the business should turn the corner and begin to show a profit. He had just begun to feel that soon he would be able to resign his position and devote all his time to his own business. Then the Germans threw a bomb at him.

They were envious of the profitable market that Queeny had built up. So they sent a man to tell him that they had decided to limit him to a certain number of pounds of the intermediate, and that in the future they would supply the surplus themselves. This meant that Queeny's business would be so limited that he would be working for practically nothing. Queeny replied that he would accept no such terms.

THEN the struggle began. He discovered in Switzerland a new source of intermediate. Then his Teutonic competitors built a factory of their own in the eastern part of the United States, and began to cut prices. When Queeny started to manufacture saccharine, it sold for six dollars a pound. Before the price-cutting was over, it was down to *sixty cents!*

This lasted for three years, during which Queeny was so constantly on the edge of bankruptcy that it became an old story for him. Every cent of his salary which was not necessary to keep his family going went into the business. But he hung on and he hung on! And he told *nobody* how near to ruin he actually was.

"There were times," he told me simply, "when I was so near failure that one more little punch would have sent me over. But I kept a bold front and, somehow, they never delivered that final shove!"

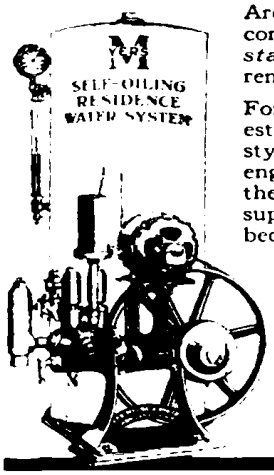
Queeny won his victory by strictly American tactics. He so improved methods of manufacture that, at the end of four years, he was able to meet at a profit the lowest prices his competitors were willing to make; and the tide began to turn. Prosperity began to come his way. His few employees were increased to hundreds. And, as soon as the battle was won, the Germans capitulated completely.

In 1907 he was able to resign his position as a buyer, and devote all his time to his own business. By 1913 he had one of the most complete plants in the coun-

Water in Abundance—for Homes, Farms, Country Estates

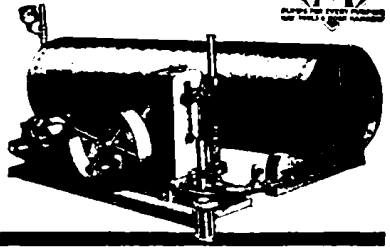
WATER—fresh, pure and plentiful—is Nature's greatest boon to mankind. And the development of the dependable, modern water system now makes an abundant water supply available wherever men live—in the suburbs—in the small town or village—on the farm—at summer resorts—even in the most remote districts. And at startlingly low cost.

MYERS Self-Oiling Electric Water Systems



Are made for deep or shallow well service. They are automatically controlled, conserve power and are wonderfully efficient. *Self-starting—self-stopping—self-oiling.* Require no attention and remain in perfect order for years without repairs or adjustments.

For the summer cottage, suburban home or large or small country estate a Myers "Self-Oiling" Electric Water System or any other style of Myers Water System for operation by hand, wind or gas engine, with capacities to 10,000 gallons per hour, offers the *best way* to secure a generous and dependable water supply that is *instantly available*—at all times—and at bed-rock cost of operation.



See your dealer today. Write us for catalog and complete details. We are world's headquarters for pumps for every purpose.

The F. E. Myers & Bro. Co.
115 Orange St. Ashland, Ohio

Manufacturers, for more than 50 years, of Myers Pumps for Every Purpose, Hay Tools and Door Hangers.

Personal Stationery 100 four-page sheets and 100 social size envelopes, both heavy linen paper, printed with your name and address on both in rich blue, postpaid $1. Sample if desired. E. C. Harmon & Co., Brooton, N. Y.

DISTRIBUTORS Amazing New Invention selling $4 seals, 3500 envelopes hour! Tremendous Demand! Exclusive Territories Now. Write Red-E Co., 6 Colonial Bldg., Boston, Mass.

"Say, Where's Your Manners!"

"The way you pups grab every time I bring you SPRATT'S, *anyone would think you had no bringin' up at all!"*

SPRATT'S food keeps dogs healthy and vigorous. When it is fed regularly, no additional food is required. Economical—clean—convenient.

Your Grocer, Druggist, Pet-shop and Seed Dealer sell SPRATT'S or can get it for you. Insist on the *genuine*—your dog knows the difference.

SPRATT'S PATENT LIMITED
Newark, New Jersey
San Francisco St. Louis

This valuable book tells how to raise better and healthier dogs. A 2c-stamp brings you a copy by return mail. Ask for Book No. A-55.

SPRATT'S
DOG CAKES AND PUPPY BISCUITS

This artistic and cozy little house in Portland, Oregon, has a roof of Cabot's Creosote Stained Shingles, and wall shingles stained in Cabot's Old Virginia White. Harold Doty, architect, Portland.

Cabot's
(Genuine Creosote)
Stained Shingles

The Standard Red Cedar Shingles: All Cabot Shingles are selected stock Pacific Coast Red Cedar, made under the most exacting specifications of the Shingle Associations. Sound lumber, straight grain, non-warping, uniform, durable and full count.

The Standard Creosote Stains: Cabot's Creosote Shingle Stains have been the standard for forty years. Rich, velvety colors that wear as long as the best paint, compounded with Real Creosote that thoroughly preserves the shingles.

This combination of standard shingles ready-stained with Cabot's Standard Stains can now be promptly shipped from staining stations at central shipping points.

Send for stained cedar samples and full information—FREE

SAMUEL CABOT, INC., MANFG. CHEMISTS, 135 Milk St., Boston, Mass.
342 Madison Ave., New York 5 So. Bloomingdale Ave., Chicago Hibernia Bldg., Los Angeles

Cabot's Old Virginia White, Dexter's White, Wet-proof Stucco and Brick Stains, Master Colors, etc.

Get back your winning muscles

These are the muscles kept constantly fit with Absorbine, Jr.—a rubdown that acts at once.

If you are muscle sore, a rubdown with Absorbine, Jr. will take out the stiffness, and put back the old strength.

It's a liniment that heals strains. An antiseptic that kills germs. It is stainless, agreeable and stimulating.

Get into form for golf, tennis and gardening, and long motor drives—with Absorbine, Jr.!

At all druggists, $1.25, or postpaid.
Liberal trial bottle, Dime, postpaid.

W. F. YOUNG, Inc. Springfield, Mass.

Absorbine Jr
THE ANTISEPTIC LINIMENT

try, and wealth was actually within sight. He was fifty-four years old; his son was in college, and his daughter was ready for higher education.

The future looked rosy. Then came another explosion, which looked, for a while, as if it would wreck beyond hope of repair everything that Queeny had done.

You must remember that, although by this time Queeny was manufacturing caffeine, vanillin, phenacetin, and other products, in addition to the saccharine with which he started, nothing originated in his plant. The German manufacturers were supplying him with intermediates for all of them.

In the latter part of 1914, after the Great War had been going on for a few months, Queeny got a letter from the people who were supplying him with intermediates. In substance it said:

"Unless you stop selling to England, and unless you agree to combat in every possible way any stories you hear that are to the discredit of Germany, *we are going to cut off your supply of intermediates!*"

"It looked a good deal like a smash to me," said Queeny; "but I would rather have been smashed than to have accepted such terms. I told them to go to blazes."

Other manufacturers were offered similar conditions. To the eternal credit of the chemical industry, they refused. Of all the products of which the supply was in this way suddenly cut off, the two most vital were phenacetin and phenol.

The other name for phenol is carbolic acid. It is one of the strongest disinfectants and germicides known and, in time of war, vital. While it plays a useful part in the manufacture of medicinal products, it is also the base for a high explosive, picric acid.

Phenacetin was also important. It was then being used extensively in the treatment of influenza. And now the supply of these vital products was cut off. Furthermore, *not one man in the United States knew how to make them!*

"THAT was the situation that confronted us," said Queeny. "It was up to us to discover those processes from the ground up.

"We decided to start with phenacetin. We had only a small amount on hand, and if a flu epidemic should break out the supply would soon be exhausted.

"We started to look for textbooks containing the laboratory formulas for the different stages of the production of phenacetin. A strange discovery resulted from this search: wherever such books were kept in libraries, or in other places to which the public had access, the leaves referring to the coal-tar derivatives *had been cut out!*

"You may draw your own conclusions about that. Evidently, the situation had been anticipated by months, perhaps by years, and every obstacle possible had been thrown in our way.

"However, it was not difficult to work out the formulas. But there is a big difference between producing a chemical in small quantities in the laboratory, and in manufacturing it on a large scale.

"We built and discarded one unsuccessful apparatus after another. We spent thousands of dollars on metals alone,

testing to determine which particular alloy could best resist the action of the different chemicals. You must remember that the Germans had been very careful to keep their manufacturing processes secret. They had done more than that: they had left in the way of the experimenter a pitfall, into which we fell. It nearly defeated us. What happened was this:

"In my plant, the men engaged in this work suddenly began to sicken with a mysterious disease. Three died and twenty-five were in almost a dying condition. Doctors examined them, but could not discover the cause of the illness. The sick men had no symptoms of any known disease; but in the men who died it was noted that the blood corpuscles had broken down into a sort of watery serum. They had literally bled to death without a wound.

"For a time we were completely baffled. Men who would have faced bullets without flinching recoiled from the mysterious terror of the chemical laboratory. It began to look as if we were going to be beaten.

"Then it was discovered that the poison was entering through the skin. Chemicals would slop over containers and get on the men's shoes and clothing. At a certain stage in the manufacture of phenacetin, we found that the product was intensely poisonous if allowed to remain on the skin. It penetrated and destroyed the blood.

"The remedy was easy: We installed shower baths and, when the men finished their work, they were bathed and treated under the scrutiny of physicians, and they were provided with new underwear, socks, and shirts *every day*. The strange sickness at once stopped, and from then on our only difficulties were those always connected with the production of a new chemical."

Queeny passed his hand over his forehead. Even after the lapse of ten years the remembrance of this fight in the dark moved him deeply.

"That was the hardest thing I ever had to go through," he said. "My struggle with poverty and adverse business conditions was as nothing compared to it. In my earlier battles I risked no man's life, and only my financial welfare."

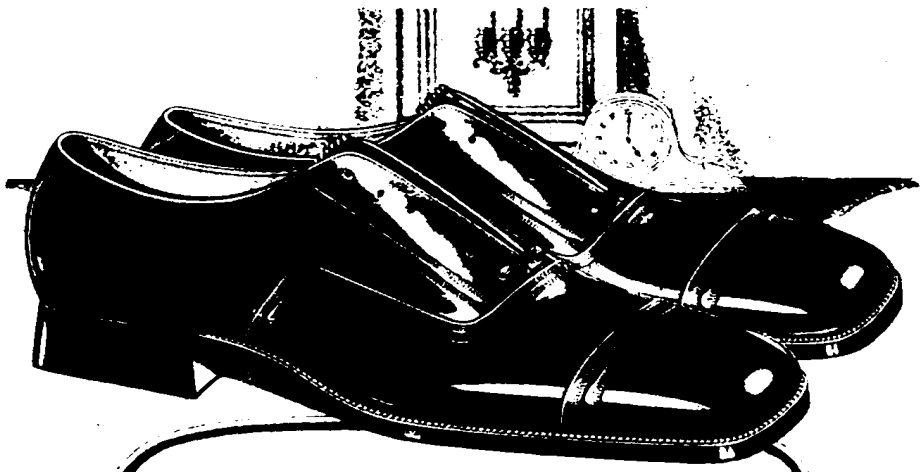
PHENOL, or carbolic acid, the other great coal-tar product of which the supply was shut off by the war, was first produced in America by Thomas A. Edison, and, second, by John F. Queeny.

On the wall of Queeny's office hangs one of his most prized possessions. It is a certificate from the United States War Department, testifying to the distinguished service rendered this country in its war against Germany by John F. Queeny and the Monsanto Chemical Works.

Queeny now is sixty-five years old. His company has emerged unscathed from the throes of the reorganization which followed the war. His son is assisting him in the plant. Once more he looks forward to an era of peaceful enjoyment of his home and the works of art with which it is filled. If the unexpected should happen again, Queeny probably won't have much to say. But he has not forgotten how to fight!

✣ ✣ ✣ ✣ ✣

The FLORSHEIM SHOE



Florsheim Shoes do more than protect your feet—they add the desired touch of refinement to your attire and give comfort that you enjoy.

THE VISTA – Style S-98

Most Styles $10 Booklet "Styles of the Times" on Request

THE FLORSHEIM SHOE COMPANY
Manufacturers ~ CHICAGO

"For the man" The Florsheim SHOE "who cares"

LAW IN YOUR SPARE TIME. Same course by correspondence as given for 15 years at classes of this college. LL. B. DEGREE CONFERRED. 3 year university course prepares for bar exam. Money back guarantee. Low fee, easy terms, includes 1924 12 volume library, lectures, lessons, all expenses. Write for free book. Hamilton College of Law, Dep. C-5, 431 S. Dearborn St., Chicago

Colson Wheel Chairs and Cripples' Tricycles
Models for All Needs
The COLSON Co.
745 Cedar St., Elyria, O.
Catalog Free

Curves—

NOTHING reveals dainty feminine curves in all the fullness of their beauty, like a pair of Iron Clads. Wear a pair and watch the magic of their silk. Each ray of light upon their lustrous surface stresses some lovely line or rounded curve—casting about it a soft glow of mystery. It is *not* magic really. It is the gently clinging texture of silken threads accentuating shapeliness and grace.

It isn't necessary to spend a lot to feel the charm of Iron Clad Silk. Style 801 is a glorious mixture of pure silk and artificial silk—23 inches of it, extending well beyond the knee to an especially elastic mercerized top, 4-ply heel and toe, and silk splicing in the heel and double sole. If you don't know where to get Iron Clads in your city, mail us your remittance ($1.00 a pair for style 801) and we'll supply you direct. State size (8 to 10½) and color (Black, White, Cordovan, Leather, French Nude, Mode, New Otter, Jack Rabbit, Gun Metal, Beige, Dawn, Russian Tan, Bunny, Rose Taupe, Atmosphere). We'll pay the postage.

COOPER, WELLS & CO.
204 Vine St., St. Joseph, Mich.

"Iron Clad"