"More than an office building"

THE FIFTH AVENUE BUILDING

The best-known office building in America. Situated at the intersection of two world-famous streets, it is an easily remembered location. Besides this advantage, occupants enjoy conveniences, comfort and service not usually found in a business building.

Broadway and Fifth Avenue at Madison Square New York

Business Men's Investments

WHAT ARE business men's investments? Many people think of this term when they have junior types of securities in mind. They think that a "business man" can watch his investments better than other people, and can therefore take risks to secure high income yields.

But every business man knows that his own business is his real speculation, and that his surplus capital should be invested with unusual security. A true business man is too busy to "watch" fluctuating values. He should put his money into securities which do not require "watching."

Our service shows him how to do this successfully. Let us tell you all about it.

MOODY'S INVESTORS SERVICE
35 Nassau Street, New York City
BOSTON 101 Milk St. PHILADELPHIA Real Estate Trust Bldg. CHICAGO First National Bank Bldg. LOS ANGELES Pacific Mutual Bldg.

Bulletin No. 6

The Commonwealth Light & Power Company
Situations Controlled

No. 2. MICHIGAN UNITED LIGHT & POWER CO.
Property Value $1,721,109
As Established by Sanderson & Porter and Company figures
Miles High Line 53 Earnings 1921 $185,716 K.W.H. 7,000,000

DEMAND in the 8 growing communities served by Michigan United Light & Power Company and opportunity for profitable line extensions into new territory, necessitated the construction last Spring of an entirely modern Central Station at Ludington costing approximately $400,000. The plant, now practically completed, is rated as among the most efficient and economically operated stations of its type in the Middle West. Immediate extensions of service and increased earnings will result. Descriptive circular on request.

"As long as Communities live and thrive so long will Public Utilities be a necessity"

FAIRMAN & COMPANY
ESTABLISHED 1902
Drexel Building, Philadelphia, Pa.

WM. C. HESSE, JR. & CO.
Announce that
Mr. Mark W. Dohan
Is now associated with them.
REAL ESTATE TRUST BLDG., PHILADELPHIA
Members Philadelphia Stock Exchange

Would you
like to receive regularly our special bulletin
"Today's Market Feature"
discussing the most active New York Curb Exchange stock of the day?
This is a feature of our extensive information service to customers.
Sample copy free
Also ask for report on the active stocks that interest you.
JONES & BAKER
Members New York Curb Exchange
Direct Private Wires
New York Chicago Boston Philadelphia Pittsburgh Detroit Baltimore Cleveland
PHILADELPHIA OFFICE
Widener Building
Telephones Bell - - Locust 4710 Keystone - Race 5861
BALTIMORE OFFICE
Emerson Hotel
Telephone - Plaza 8451

WANTED
MAN OF CHARACTER WITH STOCK-SELLING EXPERIENCE
An old and conservative New York Stock Exchange house needs high-class man for work on new and attractive stock issue.
Plenty of live leads will be furnished for the right man.
Liberal commission and opportunity for permanent connection.
Write for interview.
C 316, LEDGER OFFICE

$25,000 at Fifty!
Are you systematically building an estate and an assured income?
Babson's REPORTS
If you are interested in a working plan for your money that will build an estate of $25,000—and an assured income of $100 a month — on as little as $50.00 a month — merely
Tear out the Memo—now—and hand it to your secretary when you dictate the mornings' mail.
MEMO
For Your Secretary
Write the Babson Statistical Organization Wellesley Hills, 82, Mass., as follows:
Please send me Bulletin 34KD and booklet "Getting the Most from Your Money" —gratis.

SPECIALISTS
We make a dependable market in all issues of
UNITED STATES GOVERNMENT SECURITIES
COMMERCIAL TRUST COMPANY
Member Federal Reserve System
City Hall Square

Service and Stability
Personal Attention
is given to the wants of our depositors. Any matter that is of importance to them, is of interest to us.
We try to eliminate all needless formality and "red tape." If you have a proposition to submit, you have direct access to our Officers, and are assured of a prompt and decisive answer.
Integrity Trust Company
Fourth and Green Streets
Capital $500,000
Surplus and Profit....$1,900,000

Special List of Canadian Bonds
We have prepared a comprehensive list of Canadian Government Bonds, Railroad Bonds guaranteed by the Canadian Government, and bonds of the more important Canadian Provinces and Municipalities, at prices to yield from
5% to 5.50%
Write for Bond List P-10
Wood, Gundy & Co.
Incorporated
14 Wall Street, New York
Toronto London, Eng. Winnipeg Montreal

WANTED BY
Man of 30, position as assistant to department head or executive, experienced in detail, selling and banking.
C 310, Ledger Office

HORACE P. GRIFFITH & CO.
Certified Public Accountants
FINANCE BUILDING, Philadelphia
Horace P. Griffith, C. P. A.
Willard R. Glinder, C. P. A.
Wm. Lewis McGee, C. P. A.

Stockwell Wilson & Linvill
CERTIFIED PUBLIC ACCOUNTANTS
Land Title Bldg., Phila.

Unlisted Bonds
Fabian F. Levy
Drexel Building
Bell Lomb. 7046 Keystone Main 5573

FINANCIAL

TO THE HOLDERS OF PHILADELPHIA RAPID TRANSIT COMPANY EQUIPMENT TRUST CERTIFICATES SERIES "C"

Notice is hereby given that the certificates hereinafter enumerated, issued under the Equipment Trust Agreement above mentioned between Wm. P. Gest, Fidelity Trust Company, Trustee, and Philadelphia Rapid Transit Company, Lessee, dated May 1, 1913, have, in accordance with the terms and provisions of said Agreement, been called for redemption and payment on November 1, 1922, and that said certificates, being all of the outstanding Equipment Trust Certificates of said issue which shall mature subsequent to November 1, 1922, will be redeemed and retired on said date regardless of the due date thereof, and all dividend warrants maturing after said date will become void and the holders of said certificates hereinafter enumerated will be entitled on presentation thereof only to the par value thereof and to a premium of 2½% thereon together with the dividend due on said date but without any dividends accruing thereafter. The holders of the said certificates are required to present them for payment and redemption with the November 1, 1922, and all subsequent dividend warrants attached at the office of Fidelity Trust Company, Trustee, 325 Chestnut st., Phila., on November 1, 1922, from and after which date dividends upon the said certificates will cease.

The certificates called for redemption are:
Nos. 1540 to 1620, inclusive, due May 1, 1923
Nos. 1621 to 1701, inclusive, due Nov. 1, 1923
Nos. 1702 to 1782, inclusive, due May 1, 1924
Nos. 1783 to 1863, inclusive, due Nov. 1, 1924
Nos. 1864 to 1944, inclusive, due May 1, 1925

FIDELITY TRUST COMPANY, Trustee
WM. P. GEST, President.
325 Chestnut street, Phila.
September 13, 1922.

GIRARD POINT STORAGE COMPANY
Sinking Fund Notice

Sealed proposals for the sale to Fidelity Trust Company, Trustee under the mortgage of the Girard Point Storage Company, dated April 1, 1910, of a sufficient number of bonds issued under said mortgage to invest the sum of $20,389.72, will be received at the office of said Trustee, No. 325-331 Chestnut street, Philadelphia, until Monday, October 16th, 1922, at 12 o'clock noon. The right is reserved to reject any and all bids.

FIDELITY TRUST COMPANY, Trustee
WM. P. GEST, President.
Philadelphia, September 28, 1922.

Proposals

NOTICE
SALE OF UNSERVICEABLE STATE PROPERTY

The Superintendent of Public Grounds and Buildings will offer at Public Outcry, on the premises on Saturday, October 7th, 1922, at ten (10) o'clock A. M., the Brown Stone steps and Side Walls contained in the Approach to the Capitol Grounds at Third and State streets and at Third and North streets, Harrisburg, Pa.

The Purchaser shall pay in United States Currency, at the time of sale twenty-five (25%) per cent of the purchase price and the balance before removing any part of the material purchased, from the premises. All of the material purchased shall be taken down by the purchaser and removed not later than thirty days after day of sale.

The right is reserved to accept or reject any or all bids.

By order of the Board of Commissioners of Public Grounds and Buildings of the Commonwealth of Pennsylvania.

T. W. TEMPLETON, Superintendent.
SAMUEL B. RAMBO, Secretary.
Auctioneer—A. H. Shrenk

DEPARTMENT OF PUBLIC SAFETY
DIRECTOR'S OFFICE

Philadelphia, October 2, 1922.

Sealed proposals will be received at this office, Room 215, City Hall, until 12 o'clock noon, Monday, October 16, 1922, for the following:

BUREAU OF FIRE: For furnishing and installing one (1) 10h D. C. Electric Cable Hoist at repair shop, 1117 Reed street.

Specifications to be had at Fire Headquarters, 1328 Race street.

The Director reserves the right to reject any or all bids or parts of bids as may be deemed best for the interest of the City.

JAMES T. CORTELYOU, Director.

Annual Meetings

THE ANNUAL MEETING OF THE Stockholders of the Germantown Trust Company will be held at the office of the Company, Chelten and Germantown Avenues, Philadelphia, on Thursday, October 19, 1922, at 4.30 o'clock P. M., to receive and act upon the report of the Board of Directors, to elect four Directors to serve for a term of three years and a Treasurer to serve for one year, and to transact such other business as may come before the meeting.

The transfer books will be closed from October 7th to 19th, both inclusive.

JAMES A. KELL, Assistant Secretary.

THE PEOPLE'S FORUM

Letters to the Editor

Letters to the Editor should be as brief and to the point as possible, avoiding anything that would open a denominational or sectarian discussion.

No attention will be paid to anonymous letters. Names and addresses must be signed as an evidence of good faith, although names will not be printed if request is made that they be omitted.

The publication of a letter is not to be taken as an indorsement of its views by this paper.

Communications will not be returned unless accompanied by postage, nor will manuscript be saved.

The Price of Anthracite

To the Editor of the Evening Public Ledger:

Sir—When anthracite prices get too high, said a Scranton writer in the PUBLIC LEDGER recently, the public inevitably will turn to the use of bituminous coal or other fuels. He reminds the public that innumerable inventors are now making a study of possible substitutes for anthracite for domestic use and mentions both the recent adaptation of oil for furnaces and the prospects for success of the gasified oil and disassociated water gases.

Consumers will not buy anthracite when the differential between that and bituminous amounts to $3 or $4 a ton, he says. Some years ago, when he gathered statistics on the subject, the average consumption in cities was 1.60 tons if the differential was $2 to $2.50 the ton, but the average dropped to 1.20 tons when the differential was from $2.50 to $3 and to .12 tons when the differential was $4 or more. He suggests that the consumers will turn to bituminous and its by-products or other substitutes if the price of anthracite continues to rise. That probably will be the effect this winter unless there is a runaway market.

With miners getting the same wages now as they did before the strike, and with other mine costs down only slightly, if at all, the tendency of anthracite prices is toward higher, rather than lower, levels. But the growth of the use of substitutes and their increasing efficacy will act as a deterrent to high prices under otherwise normal conditions. The facts as here stated even suggest that anthracite prices must drop if the industry is to survive.

HOUSEHOLDER.
Philadelphia, October 2, 1922.

His Feet Still on the Ground

To the Editor of the Evening Public Ledger:

Sir—One of the few men who still keep their feet on the ground and whose mental operations remain sane and sensible is Calvin Coolidge, Vice President of the United States. Modestly, from time to time, he makes public addresses, in the course of which he customarily gives fresh-minted courage to ideas of goverment that recall attention to the fundamental and concrete principles which actuated the founders of the Republic. Here is a recent example and one well-worth remembering:

"The world today is filled with a great impatience of the things that are, and is credulously turning toward those who expect that a change of institutions would somehow bring about perfection. It is not a change that is needed so much in our Constitution and laws as there is need of living in accordance with them."

Here we have the secret of genuine and healthful progress. The institutions of this Nation are sound. They are based on fundamental principles of right and justice. Upon them the Nation has risen to greatness and its people have lived in comfort and plenty, envied by the inhabitants of every land.

ERNEST K. SNELL.
Philadelphia, October 1, 1922.

Punishment of the Insane

To the Editor of the Evening Public Ledger:

Sir—How much should a man be punished who lacks the faculty of discerning wrong? Those who make a study of crime and criminals have determined that a very large number of those who break the laws are subnormal. The recognition of the fact that many who make the courts most trouble, cost the taxpayers most money and are responsible for continued repetitions of crimes, are not wholly responsible for their acts, giving rise to the demand for psychopathic service in connection with the courts.

This fact gives force to a recommendation made recently by the head of the State Department of Health of another State that the State should have a psychiatric unit to examine such persons committed to State institutions as might appear to be in need of special care and attention. Obviously a person who is mentally deficient, especially a victim of dementia, should be subjected to different treatment from that given another wholly responsible for his conduct. If it were merely a matter of prison discipline, the examination would be justified. It is besides a matter of humanity, justice and protection to property and life.

DR. SYNTAX.
Philadelphia, October 2, 1922.

A Potent Memory

To the Editor of the Evening Public Ledger:

Sir—There will be no searching of suspected rum-vessels beyond the three-mile limit. The dry navy was called off some days ago. Seizure of any vessel beyond the three-mile limit, the President and his Cabinet declared, would not be justified unless it was established that the vessel had made connections with the shore by means of its own boats.

Ardent prohibitionists receive this news with chagrin, wets construe it as glad tidings, but most citizens should welcome the intelligence with satisfaction that President Harding and his advisers have not been stampeded by dry lobbyists into ignoring one of the most important features of international law.

The usage of centuries has established that the territorial rights of any country do not extend more than three miles beyond its coast line. Beyond the three-mile limit the seas are free; the rights of all nations are equal in time of peace, at least. There was not the flimsiest excuse for the claim of the dry-law enforcers that they had a legal right to search vessels within twelve miles of the coast.

The United States, of all nations, should not violate this principle of international law unless we want every one to forget that we once went to war with a nation the government of which was assuming that it could board and search United States vessels on the high seas.

The year 1812 is only a memory, yet there are living today descendants of patriots of a century and a decade ago who regard it as a potent memory.

VETERAN'S GRANDSON.
Philadelphia, October 2, 1922.

"The Lady in the Case"

To the Editor of the Evening Public Ledger:

Sir—From Doorn not long ago came information that the former German Emperor was about to remarry. On the heels of this an astonished world was notified that he was encountering opposition in his nuptial plans. However, William caused the said plans to go forward uninterruptedly, and a recent cable dispatch designated November 5 as the date of the marriage.

When the news that Herr Hohenzollern's purpose to attach to himself a new wife had met disapproval in his immediate family was bruited abroad, up rose a certain element of the general public to inquire why this lonely old man should be denied the boon of individual freedom in his declining years. All his life, until November, 1918, they went on to argue, he has been hedged about with a wall of formality, rules laid down, precedents prescribed, so that even in the hour of his mightiest power as Kaiser he yet had to be circumspect and regard the conventionalities.

When William fled from the wrath of the people he had plagued beyond human endurance, he shed all that sort of thing—by compulsion, to be sure—but Hohenzollerh's apologists argue that since it fell away from him as a worn-out garment when he abdicated, the people had no further interest in him or his affairs. They relate the fact that Holland provides him asylum, American publishers afford him an income, and he is able to support a wife.

So, these curious-minded persons urge if the lady in the case is willing whose business is it if the head of the Hohenzollern family wants to wed once in a ceremony where no political or dynastic considerations enter or have to be consulted? Wilhelm, they conclude, is now a free moral agent, in this matter at least, and "should be required to consult nobody save the bride-to-be and the parson."

Ah, to consult the bride. The question arises among hard-headed folks hereabouts, what's to be thought of the moral courage of a woman who's ready to sacrifice her own individual freedom to the caprice of a man whose whole life has shown him to be the quintessence of a selfishness that led him to plunge civilization into a frenzy of despair, and whose chief memorial will be the millions of lives sacrificed to his lust for dominion? The "lady in the case" is almost as much of a curiosity as the prospective bridegroom is a tragic burlesque of the lover that all the world loves.'

JOHN SMITH.
Philadelphia, October 3, 1922.

Questions Answered

Marmalade and Jam

To the Editor of the Evening Public Ledger:

Sir—Can your knowledge man or any of his army of friends explain to me the difference between marmalade and jam? My wife sent me to the grocery store a few evenings ago for one of the other of these compounds. I forget which, but I know I brought back the wrong one.

PATERFAMILIAS.
Philadelphia, September 29, 1922.

The Forum had to go afield to get the correct answer to this problem, which should have been addressed to Mrs. Wilson or to Cynthia or some one far better qualified in marmalade making than the editor of this department. But this is what was learned on the subject and is given for what it is worth:

As a rule, only the small fruits of which the whole may be used are utilized in jam-making. The fruit is crushed in the juice so as to produce a homogeneous mixture. For marmalade larger fruits than those for jams are used. Fruits whose pulp will not produce too smooth consistency are best. For example, if peaches are cooked until soft before adding the sugar, the resulting consistency is that which is called "peach butter." If the sugar is added at the beginning of the operation the pulp is preserved in small pieces rather than being reduced to a smooth puree. This results in a marmalade.

Pure Drinking Water

To the Editor of the Evening Public Ledger:

Sir—Sometimes we see the expression "pure drinking water." Now, as all water contains bacteria, how can any be called "pure."

WILLIAM LAURENCE.
Camden, N. J., Sept. 27 1922.

According to the United States Bureau of Fisheries, and its dictum is probably acquiesced in by medical authority, pure drinking water may be defined as that which does not contain any substance injurious to the health.

New York's Public Schools

To the Editor of the Evening Public Ledger:

Sir—Please state the public school attendance in the city of New York.

XYSTOS.
Philadelphia, September 29, 1922.

In September of last year 838,569 pupils attended the public day schools in New York, while this year the Bureau of Education prepared for 1,000,000.

Henry Ford's Address

To the Editor of the Evening Public Ledger:

Sir—Please print in the EVENING PUBLIC LEDGER Henry Ford's correct address.

C. M.
Philadelphia, September 29, 1922.

"Who's Who in America," for 1922, gives Henry Ford's address as Dearborn, Mich.

Poems and Songs Desired

Supplies Missing Lines

To the Editor of the Evening Public Ledger:

Sir—I think these are the lines asked for by Mrs. J. Royle in a recent issue of the People's Forum:

Life has a burden for every man's shoulder.
None can escape from its trouble and care.
Miss it in youth and 'twill come when you're older
And fit you as close as the garment you wear.
Sorrow comes into our lives uninvited,
Robbing our hearts of their treasures of song.
Lovers grow cold and friendships are slighted.
Yet somehow or other we worry along.

Somehow or other the pathway grows brighter;
And just when we think there is none to befriend,
Hope in the heart makes the burden seem lighter,
And somehow or other we get to the end.

Can any one supply the missing line of the following verses:

"Leaves have their time to fall and
Flowers to wither at the north wind's breath,
Thou hast all seasons for thine own, oh, death.

MRS. W. H. WEBER.
Norristown, Pa., September 30, 1922.

The lines are from Mrs. Felicia D. Hemans' poem, "The Hour of Death." Their correct reading is as follows:

Leaves have their time to fall
And flowers to wither at the north wind's breath, * * * but all
And stars to set, but all,
Thou hast all seasons for thine own, oh death.

"We Are Coming, Sister Mary"

To the Editor of the Evening Public Ledger:

Sir—Long ago I used to hear a song, rather sad in tune and in sentiment also, of which I can only remember the refrain. It was like this:

"We are coming, Sister Mary,
We are coming by and by,
Be ready, Sister Mary,
For the time is drawing nigh."

Can the Forum or one of its readers supply me with the words of this sad old ballad?

SENEX.
Philadelphia, September 29, 1922.

WE ARE COMING, SISTER MARY

On a stormy night in winter,
When the wind blew cold and wet,
I heard some strains of music,
That I never can forget;
I was sleeping in the cabin,
Where lived Mary, fair and young,
When a light shone in the window,
And a band of singers sung:

Chorus—
We are coming, Sister Mary,
We are coming by and by;
Be ready, Sister Mary,
For the time is drawing nigh.

I tried to call my Mary,
But my tongue would not obey,
Till the song so strange had ended,
And the singers flown away.
As I watched, I heard a rustling,
Like the rustling of a wing
And beside my Mary's pillow
Very soon I heard them sing,
Chorus—

Then again I called my Mary,
But my sorrow was complete,
For I found her heart of kindness
Had forever ceased to beat.
And I now am very lonely,
From summer round till spring;
And I oft, in midnight slumber,
Seem to hear the same ones sing,
Chorus—

Senator Pepper to Speak

Senator Pepper will address the Foremen's Club of the Philadelphia Industrial Association Tuesday in Stetson Auditorium. Others who will address the organization this season are: Gifford Pinchot, Elisha Lee, vice president of the Pennsylvania Railroad; Dr. Charles A. Eaton, president of the American Educational Association, and Roland S. Morris, former Ambassador to Japan. More than 2000 persons have asked for tickets to the first meeting.

W. C. T. U. TO MEET IN ERIE

State Convention Elects World and National Convention Delegates

Williamsport, Pa., Oct. 4. — Erie was selected as the place of meeting for the 1923 convention of the Pennsylvania Women's Christian Temperance Union at the closing session of the forty-eighth annual convention in this city yesterday.

Mrs. M. I. Jamison, president of the Lycoming County W. C. T. U., was elected by both the State and the county as a delegate to the world convention, and Mrs. S. I. Price, of this city, was named delegate to the national convention. Both of these meetings will be held in Philadelphia in the near future.

U. OF P. TO MEET OXFORD

Split Teams to Debate Question of U. S. Entry Into League

The University of Pennsylvania will debate Oxford University.

That announcement was made last night by the Debate Council following a month's negotiations. The debate will be staged somewhere in the central part of the city on October 11 and the subject will be:

"Resolved, That the United States should enter the League of Nations immediately."

The Pennsylvania representatives will be Carl Dow, Herman Hettinger and Patrick Malin, all seasoned debaters.

GRENFELL VESSEL SINKS

Mission Ship Goes Down, but Crew is Rescued

St. John's, N. F., Oct. 4.—(By A. P.)—The Grenfell mission steamer Strathcona, which has completed twenty years' service along the coasts of Labrador and northern New Foundland as a hospital ship, sank Monday a few miles off Cabot Island, it was learned here today.

A raging sea sprang a leak in the Strathcona last week, but this was not regarded as serious. Monday morning the vessel continued her voyage from St. Anthony to Bay Roberts. Ten miles out water began to pour in rapidly and the ship had to be abandoned. The ship sank within half an hour, the crew of six being landed at St John's by a schooner.

PEACEMAKER IS STABBED

Deaf Mute Slashed in Shoulder as He Tries to Separate Fighters

Joseph Carey, a deaf mute, forty years old, of 4119 South Second street, in passing Second and Lombard streets saw two men fighting and endeavored to separate them. He was told by one of the combatants to "beat it," but presumably he did not understand.

One of the men, who the police said was Otto Neimi, of South Second street, thereupon is said to have stabbed him in the shoulder. Carey was taken to the Pennsylvania Hospital and Neimi was arrested.

What This World Needs
more than anything else is
THRIFT
and what the world needs everybody needs.
If you have not already started a savings account, open one now in a well-known bank in the
Center of Things
Third National Bank
Opposite Broad Street Station

Remember the date!
October 17, 1922
Auction sale at Camp Dix, New Jersey.

Think right quickly
of some one thing you use in your business

THEN think of this:
"The War Department has it."

And the chances are better than 10 to 1 that the War Department has all the things for crowd-getting sales you can call to mind in an hour's steady thinking.

What does this mean to you?

It means, simply, that the War Department Sales give you an opportunity to buy, for considerably less, the very kinds of commodities for which you are now competing in the open market. Such an opportunity is afforded you in this auction at Camp Dix, N. J., October 17.

A representative list of materials to be offered

Five-ton electric traveling crane, steam crane, stationary boilers (upright and horizontal), portable boilers, drum hoists (hand and power), 50-ton ice plant, ammonia compressors, hot-water tanks (350 to 1100 gals.).

Screen doors, window slides, sashes, wagons and parts, electric motors, electric trucks, harness.

Wood working machines, machine bolts, electric blowers, ventilating fans, transformers, 14-cell Exide batteries, desk fans, sterilizers, garment presses, hydraulic presses, shaving machine, iron working plants, steel shafting.

Grand pianos.

Shoe machinery, shoe findings, shoes, blankets, mattresses, gloves, cotton shirts, refrigerators, fly traps.

Augers, crowbars, files, hammers, dish washers, cafeteria equipment, scales (all types), buckets, knives, saws, picks, rakes, pokers, oil stoves, heating stoves and parts, hatchets, screw drivers, colanders, meat cleavers, poultry netting.

Food choppers, desk baskets, swivel office chairs, flat top desks, chiffoniers, filing cabinets, safes, lamp guards, reflectors, fuses, switches, general electrical supplies, plumbing supplies.

The Government reserves the right to reject any or all bids. Catalogs showing all offerings in this auction, offerings well worth the time to investigate, are ready for you now. Write Quartermaster Supply Officer, 1st Ave. & 59th St., Brooklyn, N. Y.

WAR DEPARTMENT

Through a Sieve Woven Finer Than Silk

Portland cement, to meet the exacting specifications of leading engineering societies and the United States Government, must be ground so fine that at least 78 per cent will pass a sieve having 200 wires per linear inch. A silk handkerchief has but 110 threads per inch—an excellent quality of silk dress goods 187 threads.

The watch in your pocket hardly calls for a more complicated and carefully adjusted process of manufacture than the making of cement.

Grinding is only one of the many operations required to make it. Yet in grinding alone, see what is required:

The rocks from the quarry, often as big as a piano and heavier, go first into a gigantic "coffee mill." It bites at these huge chunks, chips them, and finally crushes them—to pieces six inches or so in diameter.

Two finer mills follow, one after the other, reducing the stones to the size of coarse sand. After this, they must be ground in a great revolving cylinder half filled with steel balls, until every cubic foot of the rock has been reduced to 14 billion pieces—until 85 per cent of them will shake through a sieve that will actually hold water, a sieve with 40,000 holes to the square inch.

And all of this is less than half the necessary grinding. The coal must be ground. For the object of all this fine grinding of the raw materials is only that it may be fused into crystalline clinkers. And to fuse it requires pulverized coal—or its equivalent. Most plants use pulverized coal.

The coal must be ground as fine as the raw stone. Eighty-five per cent of it or thereabouts must go through the sieve that holds water. And that often means two grinding operations.

There is still the clinker to be ground. It is glass-hard to begin with. It must be ground first to the fineness of sand, and then ground and reground in another cylinder of steel balls—until at least 78 per cent of it will go through the sieve woven finer than silk.

Huge bowlders to an impalpable dust. Common coal to an impalpable dust, and finally, after the burning, glass-hard clinker to an impalpable dust. That is the making of cement. And eight heavy grinding operations are required in the process.

Grinding is only one of the lesser heat and power consuming operations in cement manufacture.

PORTLAND CEMENT ASSOCIATION
A National Organization to Improve and Extend the Uses of Concrete
Atlanta, Boston, Chicago, Dallas, Denver, Des Moines, Detroit, Helena, Indianapolis, Kansas City, Los Angeles, Milwaukee, Minneapolis, New York, Parkersburg, Philadelphia, Pittsburgh, Portland, Oreg., Salt Lake City, San Francisco, Seattle, St. Louis, Vancouver, B.C., Washington, D.C.