

THE AMERICAN

ELEVATOR AND

GRAIN TRADE



Printed in U. S. A. Entered as second-class matter June 26, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879. Established 1883

PUBLISHED BY
Mitchell Brothers Publishing Co.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

One Dollar Per Annum
SINGLE COPIES, 15 CENTS

VOL. XLI

431 South Dearborn Street, Chicago, Ill., January 15, 1923

NO. 7

WE ARE PROGRESSIVE ENOUGH
TO BE AGGRESSIVE FOR YOU

McKENNA & DICKEY
Grain

60 BOARD OF TRADE
CHICAGO

For your
Business Sake
Communicate

Consign Grain and Hay to

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GRAIN—HAY—STOCKS—BONDS—PROVISIONS

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FEED SYSTEM ENGINEERING

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THE ILLINOIS SEED CO.

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HAMILTON'S Levator BELTING

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IT LASTS FOR YEARS

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OF CHICAGO

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Surplus and Profits - 10,000,000.00

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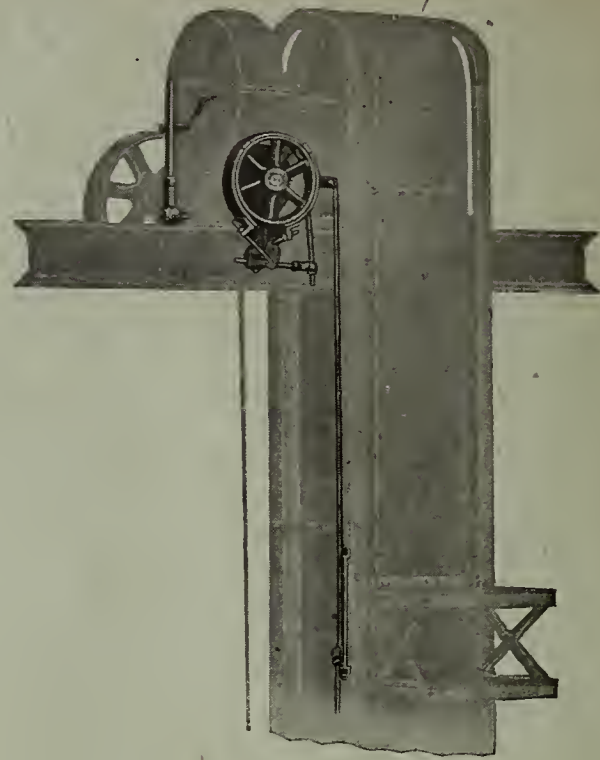
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Accounts of grain elevator operators and commission men throughout the country respectfully solicited



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WITH the upper terminal automatic stop in operation there is no danger of being carried overhead and injured. The weight of the passenger after the top floor is reached automatically throws a lever, shutting off the power and applying the brake, thereby locking the belt and steps against movement in either direction.

The automatic stop mechanism furnished with the Nordyke & Marmon Company service elevator adds the vital feature of safety to the elevator's other excellent qualities of reliability and utility.

Send for Service Elevator Circular.

NORDYKE & MARMON COMPANY

Established 1851

INDIANAPOLIS

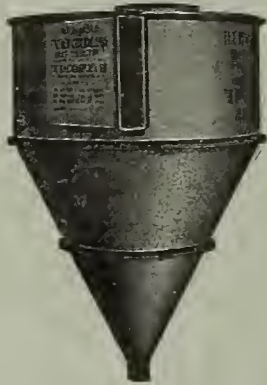
INDIANA

AMERICA'S LEADING MILL BUILDERS

The "Knickerbocker Cyclone" Dust Collector



For Grain Cleaners
ALL STEEL



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Jackson, Mich.

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Be it the pronunciation of Bolshe-
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ing of blighty, fourth arm, etc., this Supreme Authority—

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Complete Elevator Equipments

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JOHN J. GRUSSING

Elevators
Royal—C. & E. I. R. R.
St. Joseph—Big Four

BEAR & GRUSSING
GRAIN, COAL, SEEDS

Union Iron Works,
Decatur, Ill.

St. Joseph, Ill., Feb. 10, 1922.

Gentlemen:

We certainly appreciate the quick service given on our order for transmission rope yesterday morning. Ten years of observation leads us to believe that no other concern dealing in elevator machinery and supplies can come anywhere near equalling your courtesy and service to your customers.

Yours truly,
BEAR AND GRUSSING,
Per Otis J. Bear.

Let us extend this service to you

Drag Chains
Elevator Buckets
Elevator Boots
Turn Heads
Power Shovels
Grain Conveyors

Belting
Feed Gates
Distributors
Manlifts
Car Loading Spouts
Car Pullers
Iron Pulleys

Elevator Heads
Idlers
Trippers
Post Hangers
Pillow Blocks
Shafting

UNION IRON WORKS

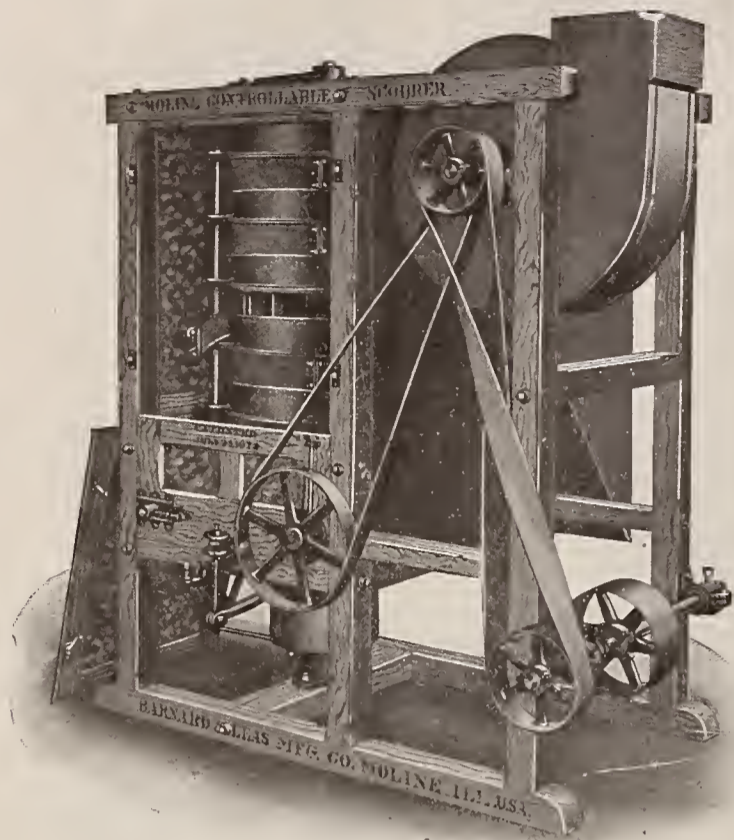
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ILLINOIS

Write for Catalog No. 27



**BARNARD—
MOLINE
UPRIGHT
CONTROLLABLE
SCOURER**

Scours Wheat As Hard As Its Nature Will Permit

This machine enables you to control the degree of scouring all grades of wheat as hard as its nature will permit. It operates upon the only correct principle, that of adjustable beaters. We lay great stress on the fact that whether scouring hard, medium or mild the same amount of grain is always passing through the machine, and receives the same number of blows or impacts. In no sense is the grain hurried through.

This machine consists of a number of narrow unperforated, corrugated scouring rings. Each kernel slides horizontally down the longer slope of corrugations so that the hardest scouring comes on the end of the grain where it is most needed.

In its spiral travel around the case, the grain finally reaches a ventilating ring, and by the fan-like action of the beaters all loose scourings and dust are blown through the rolled wire sections almost as soon as rubbed off the grain; the grain therefore issues from the machine in a bright, polished-smooth condition.

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BARNARD & LEAS MFG. CO.
MILL BUILDERS AND
MILL FURNISHERS
ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.

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The Better Kind of Grain Handling Machinery

Installed in your elevator will help you to operate at full capacity. Frequent shut downs and waiting for repairs dissipate your profit. Weller Made Machinery is made by men who know its application and the conditions under which it is to operate—it proves its merit because quality is built into it.

You owe it to yourself when building or making repairs to get our prices.



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We make a complete line of:

- | | |
|------------------|-----------------|
| Apron Conveyors | Elevator Spouts |
| Belt Conveyors | Loading Spouts |
| Drag Conveyors | Dock Spouts |
| Pan Conveyors | Chain |
| Mixing Conveyors | Grain Cleaners |
| Spiral Conveyors | Grain Driers |
| Trippers | Truck Dumps |
| Bucket Elevators | Wagon Dumps |
| Elevator Buckets | Track Hoppers |
| Elevator Boots | Power Shovels |
| Elevator Casing | Car Pullers |
| Elevator Heads | Rope Drives |
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Power Transmitting Machinery
Coal and Ash Handling Machinery



CATALOGUES

Tell us the kind of equipment you are interested in. Catalogue showing illustrations also giving data that will help in making your selection will be sent. Experienced engineers are also at your service.

SAVES \$3408 A YEAR

HANDLING COAL WITH WELLER MADE EQUIPMENT

M. J. Cahill & Co., Boston, Mass., says:—

Our Weller Bucket Elevator has proved the finest system of handling our coal. With this equipment we unload a 50-ton car in less than two hours; in the past month and a half it has handled 50 cars of coal and on the average it will handle about 12,000 tons or 240 cars a year.

Coal arrives at our yard in hopper-bottom cars, from which it is dropped into a hopper beneath the track. From this hopper it is fed by a reciprocating feeder into a boot—and the Weller Buckets turn into this boot, take the coal out and elevate it about 35 feet to a trough from which it goes to various bins through 5 chutes. This system causes no breakage of coal, and we handle nut, egg, stove, soft, and pea coal.

Formerly, we used a portable belt conveyor. This method necessitated loading our wagons by hand and required trimming at the bin, both running into considerable expense. In fact, our figures show a cost of \$19.20 a car or \$0.3840 per ton for handling with the belt conveyor, while with our Weller System our cost is only \$5.00 per car or \$0.10 per ton. A saving each year as a result of the Weller installation of \$3,408. No trimming is necessary with this equipment.

Our Weller Bucket Elevator has been satisfactory in every way. It has given no trouble—and the dealer service could not be improved. It is economical to operate and the machine is constructed of heavy material that wears. Everything is sturdy and well built.

IF YOU HAVE A COAL OR MATERIAL HANDLING PROBLEM, WRITE US



WELLER MFG. CO.

Main Office and Works,

1820-1856 N. Kostner Ave.

Chicago, Ill.

SALES OFFICES:

NEW YORK

BOSTON

BALTIMORE

PITTSBURGH

CLEVELAND

SALT LAKE CITY

SAN FRANCISCO

Indianapolis—Your Market

Indianapolis is known as the largest inland railroad city in the country and is the natural destination for shipments of grain from Indiana, Illinois, Ohio, Michigan, Wisconsin and states adjoining.

Its geographical location together with its railroads radiating to all sections of the country, makes it a logical outlet and distributing point to the East, South and Southeast.

These splendid railroad facilities assure quick handling of shipments with prompt returns on same.

Indianapolis also takes a natural



The Indianapolis Board of Trade

pride in having the largest corn mills in the country which, together with its flour mills and vast array of manufacturing industries, creates an exceedingly large local consumption of wheat, corn, oats, rye and hay annually.

This local and foreign demand makes for top prices on all shipments.

The market's adequate weighing facilities, its efficient inspection department, and increased elevator storage and drying equipment makes Indianapolis more and more important each season as a market for shippers and buyers of grain, hay and feeds.

Route your grain and hay to any of the following firms, all devoted to your interests and all members of the

INDIANAPOLIS BOARD OF TRADE

CLEVELAND GRAIN & MILLING CO., Grain Commission

P. M. GALE GRAIN CO., Grain, Feed

H. E. KINNEY GRAIN CO., Receivers and Shippers

BERT A. BOYD GRAIN CO., Grain Commission

BINGHAM GRAIN COMPANY, Grain Merchants

DALE MILLER GRAIN CO., Receivers and Shippers

LEW HILL GRAIN CO., Strictly Commission

McCARDLE-BLACK CO., Grain Commission and Futures

THE EARLY & DANIEL CO., Grain Commission Merchants and Buyers

HEINMILLER GRAIN CO., Receivers and Shippers

FRANK A. WITT, Grain Commission and Brokerage

URMSTON & SON, INC., Grain Commission

LAMSON BROS. & CO., Grain, Seeds

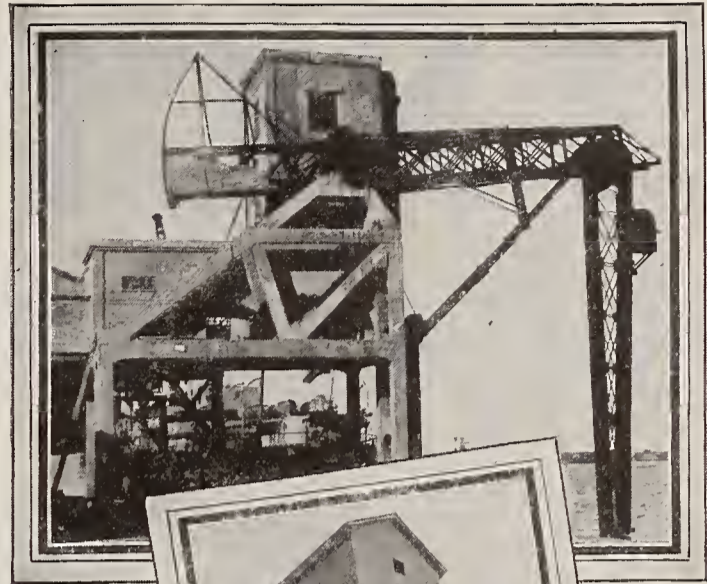
WEBSTER MARINE LEGS

WEBSTER MARINE LEGS are the most successful form of installation for efficiently handling the grain from the ship hold to the elevator with the greatest facility. They are sturdily built and mechanically correct in design, thus insuring years of reliable and dependable service.

The extensive operation of Webster Marine Legs in some of the largest grain elevators in the United States, Canada, and foreign countries, proves their adaptability.

Webster Grain Handling Equipment, not only includes marine legs, but a complete line of equipment: Belt Conveyors; Trippers; Elevators; Buckets; Power Transportation Machinery; Loading Hoppers; Power Shovels; Spouting, etc.

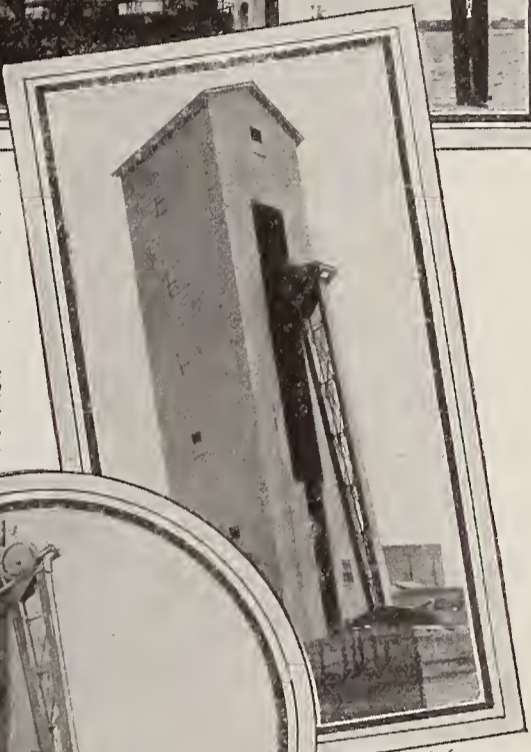
Let Webster Engineers give you the benefit of their experience.



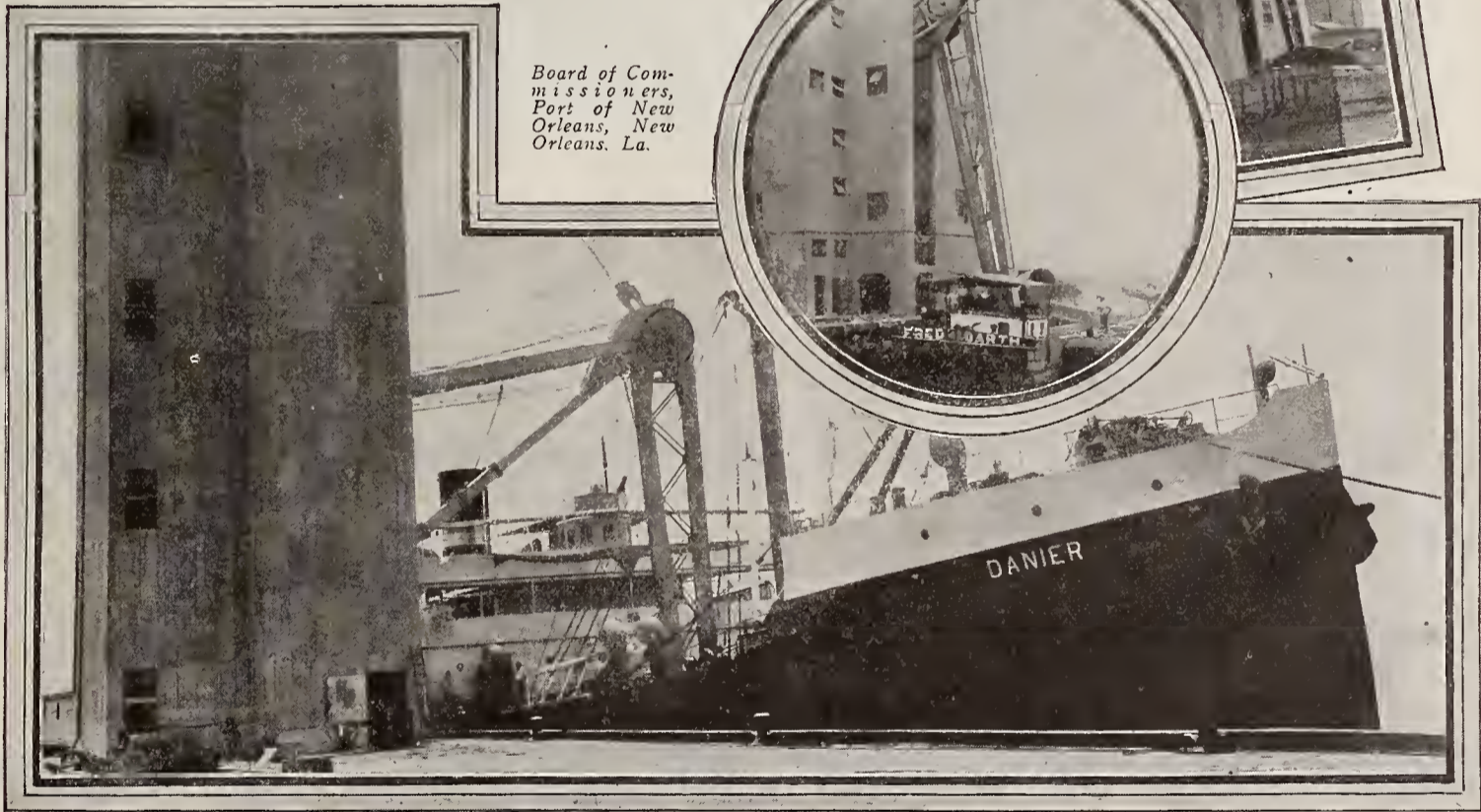
Sociedade Anonima Grandes Moinhos, Pernambuco, Brazil

Corn Products Refining Co., Edgewater, N. J.

New York Barge Canal Elevator, Gowanus Bay, Brooklyn, N. Y.



Board of Commissioners, Port of New Orleans, New Orleans, La.



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CINCINNATI

THE GATEWAY TO THE SOUTH AND EAST

Has the "square deal" plugging system for hay.

Has reconsignment and transit privileges and other favorable points which insures most successful handling of grain or hay shipments.



Home of the Cincinnati Grain and Hay Exchange

Is the terminal point for 200,000 miles of railways and therefore a convenient shipping point for the country dealer, and local buyers are enabled to distribute all products quickly and to best advantage. Has weighing and inspection service second to none and up-to-date grain and hay merchants constantly safeguarding their patrons' interests.

Those are just a few of the reasons why you should ship your Grain and Hay to Cincinnati. Ship to any of the following responsible grain and hay firms, all members of the

Cincinnati Grain & Hay Exchange

T. M. DUGAN & CO., Hay and Grain
CLEVELAND GRAIN & MILLING CO.,
Grain

CURRUS GRAIN CO., Grain and Hay
MUTUAL COMMISSION COMPANY,
Strictly Commission

DE MOLET GRAIN CO., Grain and Hay

FITZGERALD BROS. CO., Grain and Hay
THE McQUILLAN CO., Grain, Hay, Feeds

SCHOLL GRAIN CO., Grain Exclusively
PERIN, BROUSE, SKIDMORE GRAIN &
MILLING CO., Grain, Hay, Feed

EARLY & DANIEL CO., Hay, Grain, Feed

When the Gong Sounds



THE floor of the Chicago Board of Trade is the auction place for the grain crop. Here are gathered hundreds of buyers and sellers. The seller, representing the producer, seeks the highest possible price; the buyer, representing the consumer, seeks the lowest price. Surplus or shortage sits as final arbiter of values. And prices represent the composite opinion of the world.

The futures market, part speculative, provides hedging, or price-insurance facilities. Hedged grain protects the owner against losses through price fluctuations. Such insurance may cover the grain from the time it is grown till it reaches the mill. Like fire insurance, it removes the speculative risk.

This very removal of the speculative risk, made possible by the modern grain exchange system, results in the farmer receiving more for his grain, and the consumer paying less. Thus a tremendous economic service is performed by the futures market.

In the cash market of the Board four hundred million bushels of grain are handled in a year, making Chicago a giant granary.

The Board of Trade is an association of merchants. It neither buys nor sells grain. It simply furnishes a market place and enforces the most rigid rules known in the realm of commerce. For three-quarters of a century it has provided a continuous market in which the producer could dispose of his grain at any hour of any business day. Grain is one of the few commodities which has an open continuous market.

When the trading gong sounds for the day's business it is heard throughout the grain world. It means that the law of supply and demand still rules.

The Chicago Board of Trade



You are invited to visit the center of world grain trade. Literature descriptive of the grain exchange system may be had on request, either in person or by letter.

The First National Bank of Chicago

(CHARTER NO. 8)

Statement of Condition at Close of Business December 29, 1922

ASSETS	LIABILITIES
Loans and Discounts .....\$151,070,360.36	Capital Stock Paid In.....\$ 12,500,000.00
United States Bonds and U. S. Certificates..... 29,967,598.35	Surplus Fund 12,500,000.00
U. S. Bonds to Secure U. S. Postal Savings Deposits 625,000.00	Other Undivided Profits 4,680,301.95
Other Bonds and Securities (market value).... 10,551,364.94	Discount Collected But Not Earned..... 840,902.30
National Safe Deposit Co. Stock (Bank Building) 2,729,000.00	Dividends Declared But Unpaid..... 2,321.00
Federal Reserve Bank Stock..... 750,000.00	Reserved for Taxes 2,473,500.31
Customers' Liability Account of Acceptances.... 10,843,086.53	Bills Payable with Federal Reserve Bank..... 3,500,000.00
	Rediscounts with Federal Reserve Bank..... 4,275,000.00
	Cash Letters of Credit and Travelers Checks.. 1,180,815.98
	Liability Account of Acceptances..... 11,038,281.38
	Time Deposits\$ 10,885,193.80
	Demand Deposits 212,313,084.84
	223,198,278.64
Cash Resources—	
Due from Federal Reserve Bank..\$25,491,715.67	Contingent Liability of Other Bank Bills Bought 165,000.00
Cash and Due from Banks..... 45,197,491.58	Liabilities Other Than Those Above Stated.... 937,000.48
Other Assets 65,784.61	\$277,291,402.04
\$277,291,402.04	Contingent Liability under Commercial and Travelers' Letters of Credit Guaranteed by Customers\$ 5,134,600.45

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 Hats and Caps
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 John N. Ott, Attorney
 Harold V. Amberg, Attorney
DISCOUNT AND COLLATERAL DEPARTMENT
 A. V. Dillon, Manager



First Trust and Savings Bank

Statement of Condition at Close of Business December 29, 1922

ASSETS	LIABILITIES
Bonds\$ 37,646,206.54	Capital Stock\$ 6,250,000.00
Time Loans and Discounts..... 32,368,576.52	Surplus Fund 6,250,000.00
Federal Reserve Bank Stock 375,000.00	Other Undivided Profits 2,939,911.17
Customers' Liability for Acceptances..... 2,235,400.00	Reserved for Interest and Taxes..... 2,899,454.83
Demand Loans .....\$26,210,134.38	Acceptances Executed for Customers..... 2,294,350.00
Due from Federal Reserve Bank.. 6,104,471.77	Unearned Discount 29,788.46
Cash and Due from Banks..... 14,162,512.52	Time Deposits .....\$73,462,403.63
	Demand Deposits 26,945,144.80
Other Assets 2,215,312.94	100,407,548.43
\$121,317,614.67	Liabilities Other Than Those Above Stated.... 246,561.78
	\$121,317,614.67

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 Roy C. Osgood.....Vice-President
 John C. Mechem.....Vice-President
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Asst. Manager Bond Dept.
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 W. W. O'Brien.....Asst. Trust Officer

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Asst. Manager Real Estate Dept.
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Manager Real Estate Loan Dept.
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 Asst. Manager Real Estate Loan Dept.
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 Walter Lichtenstein.....Exec. Secretary
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 John N. Ott.....Attorney
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 Silas H. Strawn
 Bernard E. Sunny
 Melvin A. Traylor

Wm. J. Watson
 Frank O. Wetmore
 Thomas E. Wilson
 William Wrigley, Jr.

Combined Deposits of Both Banks, \$323,605,827.07



Manchester Ship Canal Elevator
Manchester, England
Capacity 1,500,000 Bushels
Completed 1914



Buenos Aires Elevator Co.
Buenos Aires, Argentina
Capacity 750,000 Bushels
Completed 1920



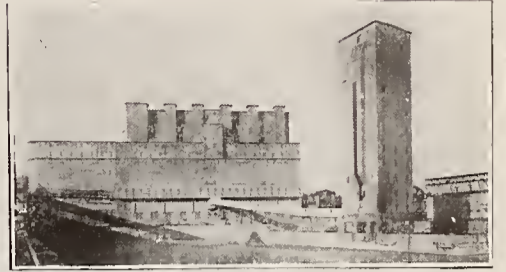
John S. Metcalf Co. Grain Elevator Engineers



Chicago & North Western Railway Elevator
South Chicago, Illinois
Capacity 10,000,000 Bushels
Completed 1920

OFFICES:

- Chicago, Illinois, - - - 108 S. La Salle Street
- Montreal, Canada, - 54 St. Francois Xavier Street
- Melbourne, Australia, - - 395 Collins Street
- Buenos Aires, Argentina, S. A., 639 Calle Maipu



Harbour Commissioners Elevator No. 2
Montreal, Quebec
Capacity 2,600,000 Bushels
Completed 1912



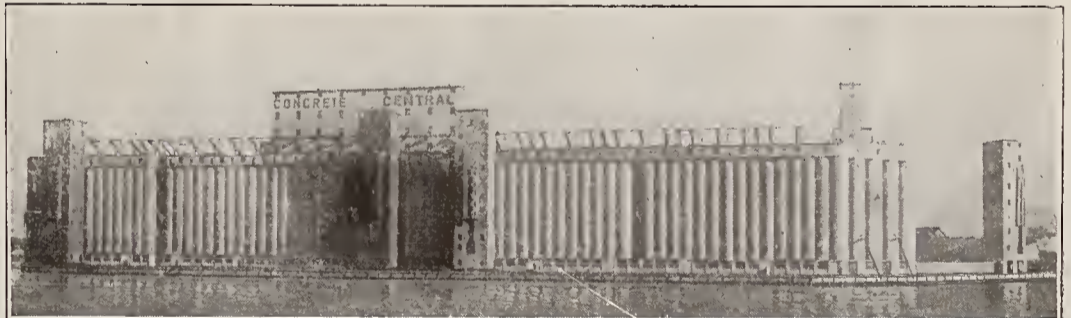
Sydney Terminal Elevator
Sydney, Australia
Capacity 6,400,000 Bushels
Completed 1921



MONARCH

Built Elevators
Assure You
Economical Design
First Class Work
Efficient Operation
and
Satisfaction
Let Us Submit
Designs and Prices

One of the Modern Houses Which Has Made a Record
for Rapid and Economical Handling
CONCRETE CENTRAL, BUFFALO, 4,500,000 Bu.



MONARCH ENGINEERING CO. - - - BUFFALO, N. Y.



The Barnett & Record Company

GENERAL CONTRACTORS

Designers and Builders of

Grain Elevators, Flour Mills and Heavy Structures

Reinforced Concrete and Steel Ore Dock constructed at Superior, Wisconsin, for the Allouez Bay Dock Company. Entirely Fireproof.

Write for Designs and Estimates

OFFICES:

Minneapolis, Minn.

Duluth, Minn.

Fort William, Ontario

MACDONALD ENGINEERING CO.
CONSTRUCTING ENGINEERS

New York Chicago San Francisco
90 West St. 53 W. Jackson Blvd. 149 California St.

DESIGNERS AND BUILDERS
OF

GRAIN ELEVATORS, FLOUR MILLS, WAREHOUSES,
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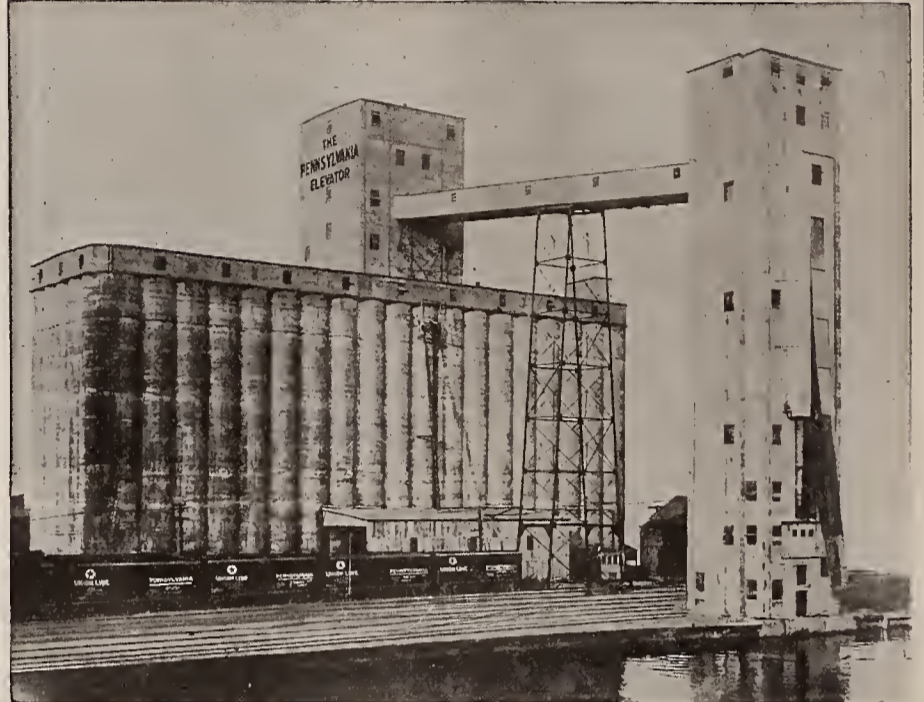


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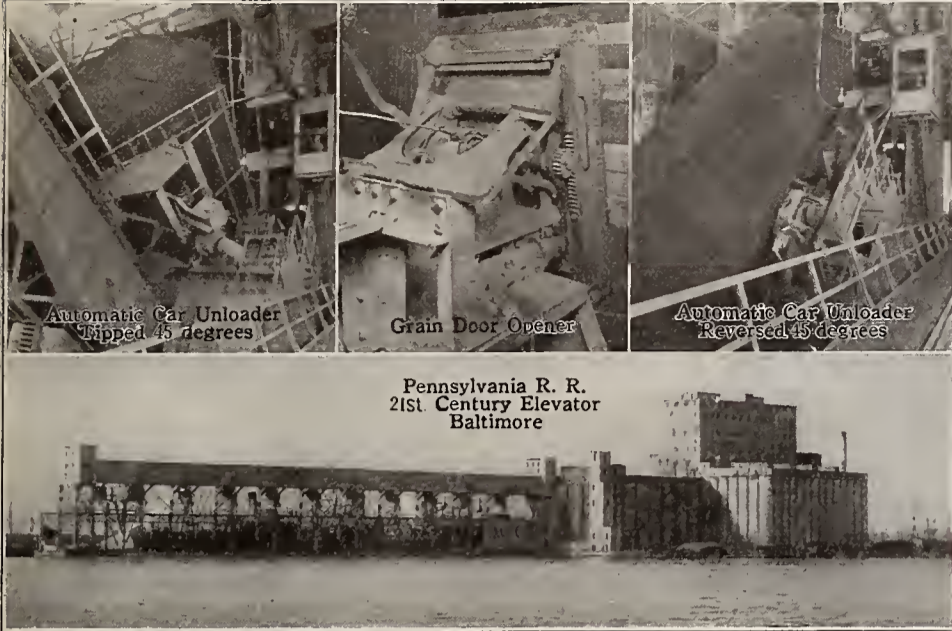
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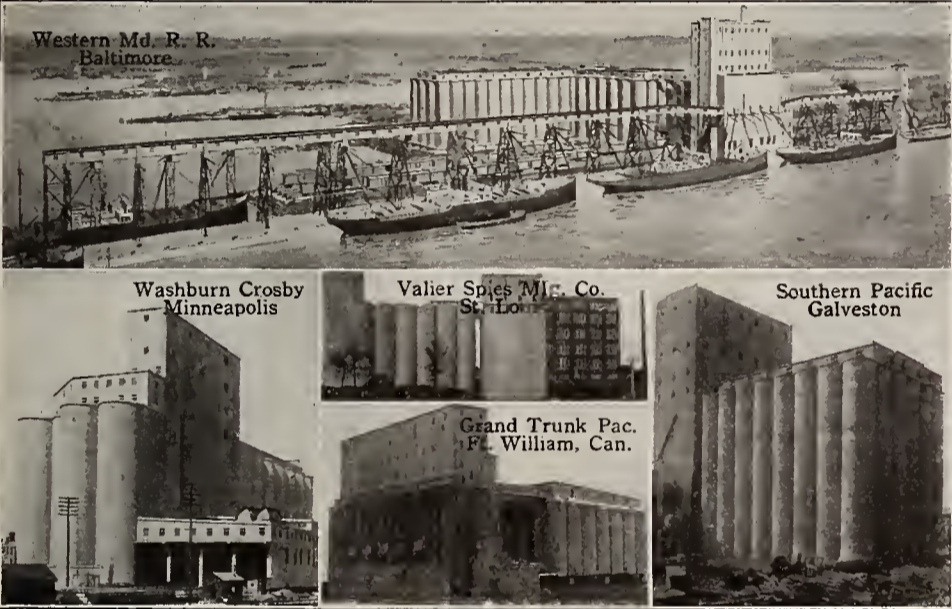
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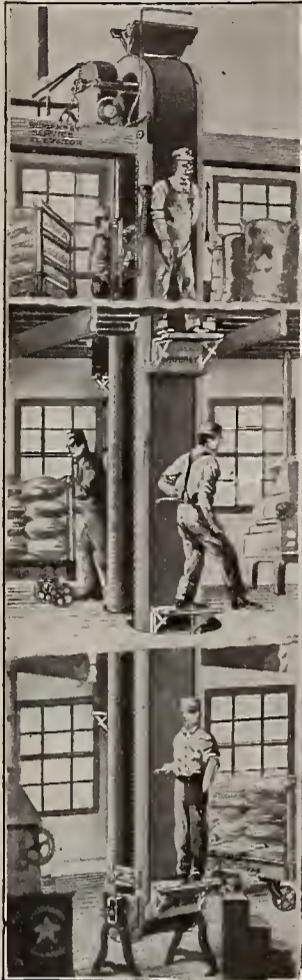
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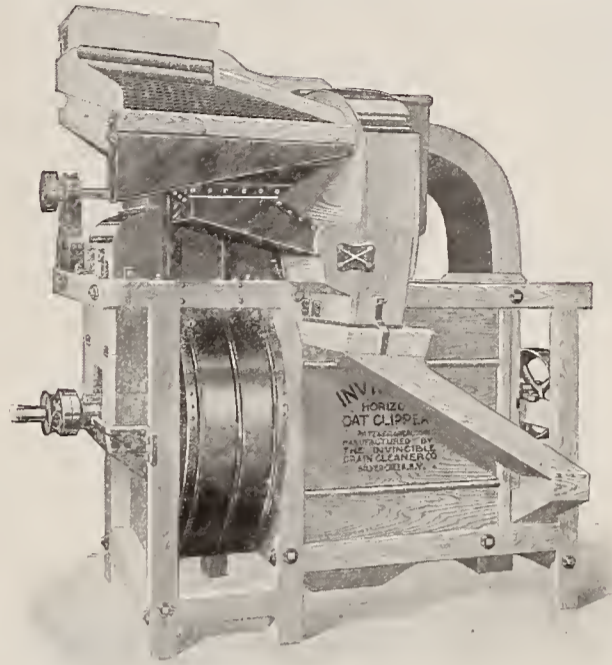
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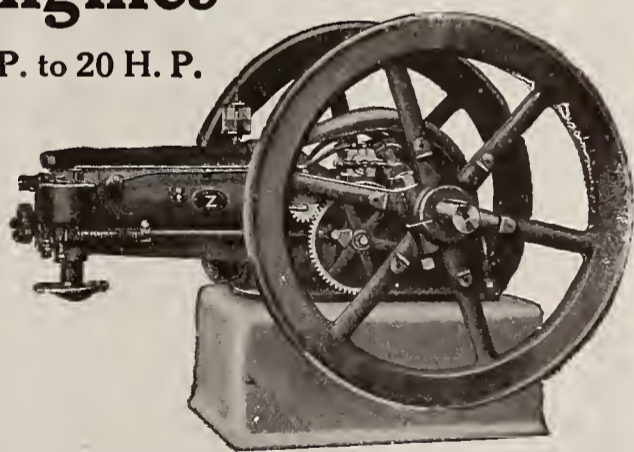
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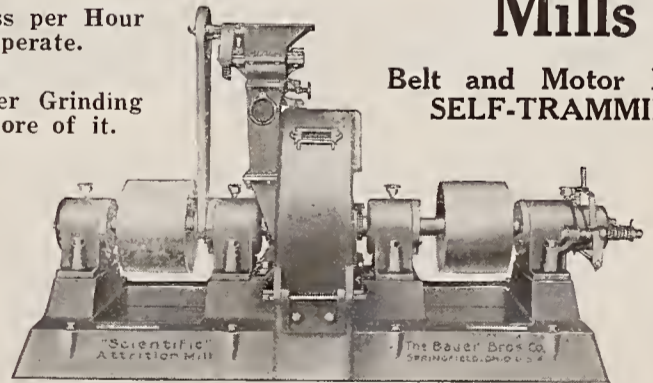
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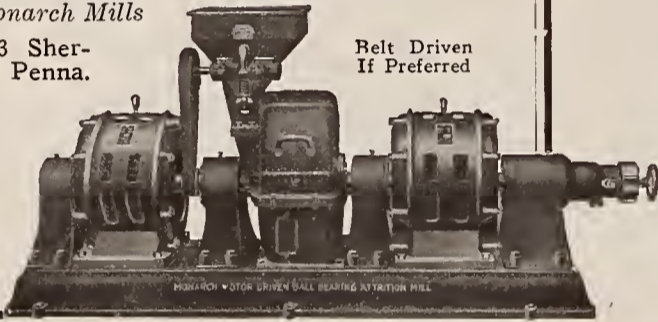
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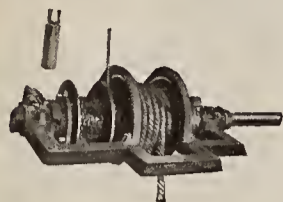
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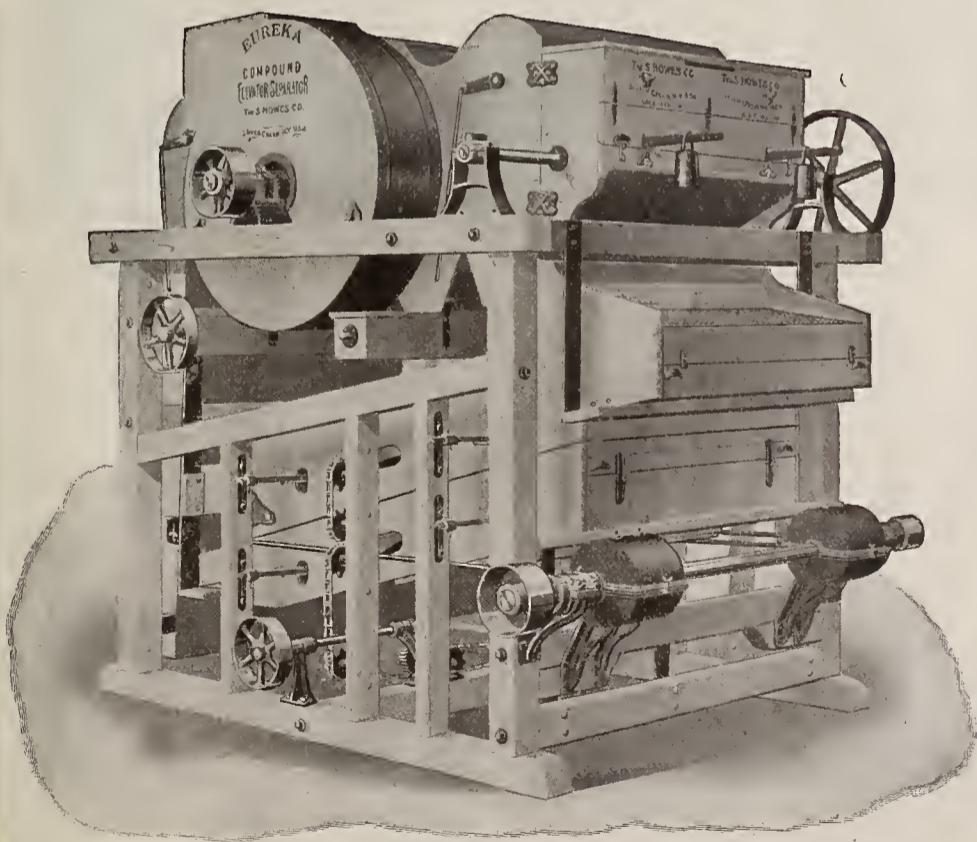
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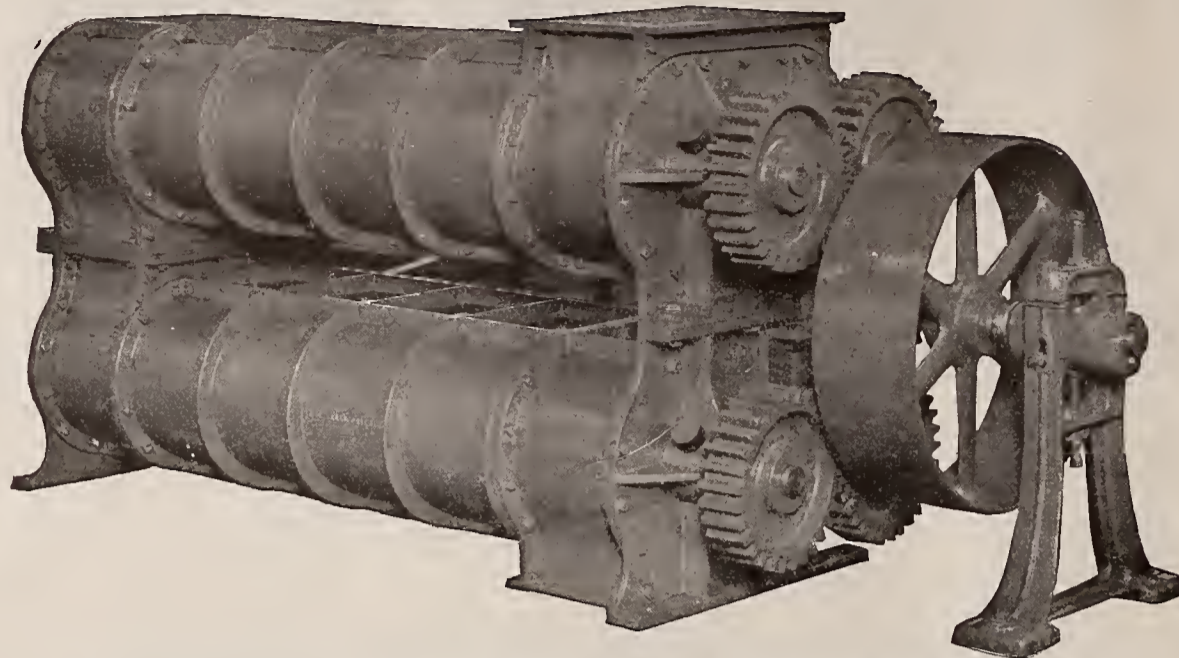
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The Ellis Molasses Mixer eliminates the sticky nature of the product by mixing the feed and molasses under pressure. As a result the molasses is forced or pressed completely into the structure of the feed. The stickiness disappears and the feed is quite granular and free from lumps.

It is not unusual to add 40 per cent of molasses with an Ellis Mixer and produce a feed in excellent condition for indefinite storage.

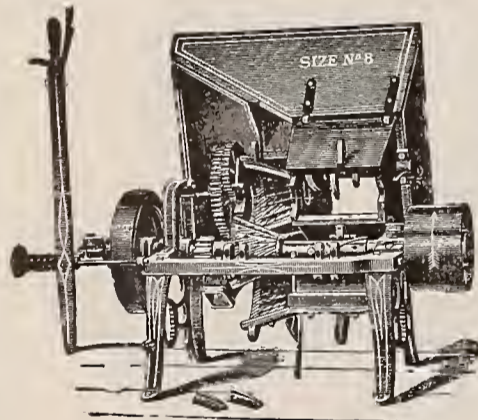
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Because their large capacity, cone-shaped grinders and positive self ear feeders are properly designed to direct every ounce of power energy to the actual reduction of the grain.

Crush and Grind ear corn, husked or unhusked, alone or mixed with any kind of small grain in any desired proportion. Reduce the material to any fineness desired for feeding purposes.

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Dust Collectors alone do not prevent explosions in elevators, but Day Dust Collecting Systems do when properly installed.

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Experience Teaches a Lesson at Baltimore

Latest Addition to Elevator Facilities on the Chesapeake Follows Precedent set by other Baltimore Plants by Installing Morse Chain Drives for Important Power Transmission

THEORETICAL instruction will never have the convincing power of experience. We are strongly impressed only by the things which touch us personally. That is the reason that the most useful inventions make their way slowly. Years after the cotton gin was invented, cotton weavers and spinners were bending their backs over the hand spindle and loom; the telephone was an object of suspicion to many business men after it had demonstrated its usefulness over long periods to others; even today the arrival of a telegram in many households can only mean calamity of some kind. And yet how much better off the world is with these and countless other inventions which our conservative minds refuse to accept un-

til their benefits have come within the range of our own observation.

art & Co., Inc., and brings the capacity of the house up to 5,000,000 bushels. The new Annex No. 2 has a capacity of 1,335,000 bushels distributed through 90 cylindrical tanks and 70 interstice bins 125 feet high from mat to cupola and occupying a ground area of 240 feet 6 inches by 195 feet. The tanks proper are 92 feet 6 inches high. During the erection of this unit all speed records, so far as we can learn, were broken for concrete pouring on a large scale.

The grain handling facilities at Baltimore, somewhat cramped by the fire which destroyed the B. & O. Elevators last July, are adequate only because the elevators now operating are unusually speedy and flexible in their work. The Northern Central

operation must be performed at a minimum cost, and this the Morse Drive insures.

All the grain movements are directed from the grain dispatcher's office which contains a chart of every bin in the house. The dispatcher decides upon the route, and then with a telautograph instructs every man who is concerned in the movement. They all read the message duplicated in each operating station, and when each one has done what is required of him, he presses a button which lights a lamp in the dispatcher's office. When all the lights are lit he knows absolutely that the way is clear for the grain and that it will reach its destination. Then he starts it on its way. By this system there is no chance of error; no



NEW ANNEX OF THE NORTHERN CENTRAL ELEVATOR AT BALTIMORE, MD.

til their benefits have come within the range of our own observation.

The same experience attended the introduction to elevator operators of the Morse Silent Chain Drive. Old power transmission systems were clung to because they were familiar, and the time and money and worry saving characteristics of the new drive made but little impression. Where an owner was induced to try it out as a dubious experiment, the efficiency of the Morse Drive immediately demonstrated itself, and other builders who saw it in operation quickly availed themselves of its advantages. This is particularly noticeable at Baltimore, Md., where the drive was used as an experiment many years ago, and now the newer elevators are almost all equipped with the Chain Drive. Personal experience has been the teacher and all Baltimore houses are thoroughly convinced of its superiority.

The latest installation of the drive in Baltimore is in the new annex of the Northern Central Elevator at the Canton terminal. This annex was just completed for the Pennsylvania Railroad by James Stew-

has been a large factor in filling up the gap. It was built for speed and many times since it started operating has it had opportunity to prove that the confidence placed in its speed of operation is not misplaced. Some of the factors which make for this rapidity are the four Stewart-Link Belt Car Unloaders which take a car on a platform, clamp it into position, and then tip it at various angles until the grain is run out, the whole process, including the spotting and removal of the car, taking from 7 to 10 minutes.

Another speed factor of importance is in the dependable character of the power transmission through the Morse Chain Drives. The finest design and the most improved machinery would be impotent in the face of a break-down in transmission. Nor is mere ability to keep going the whole story. To make an elevator profitable every

danger of mixing with any other lot of grain.

Throughout the house are interlocking and safeguarding devices, so that no elevator can choke, no bin overflow, and if an elevator stops the belt is held securely so the loaded side cannot slip back and the feed to the elevator is stopped. The Zeleny Thermometer System registers in the dispatcher's office the temperature of all grain and if it shows inclination to heat it can be turned immediately or otherwise disposed of. The plant is electrically operated with 150 motors totalling 7,500 horsepower. While some of the motors are direct connected, those which are not, a total of 2,270 horsepower, are driven by Morse Silent Chain Drives.

The elevator has about nine miles of conveyor belting, there being 69 conveyors in all. The new annex has five conveyors above the tanks and five below. All of the conveyors in the cupola can be reached by the 13 cross conveyors. Each of the new conveyors is about 1,000 feet long and is operated by a 60-horsepower Westinghouse Motor with Morse Silent Chain Drive.



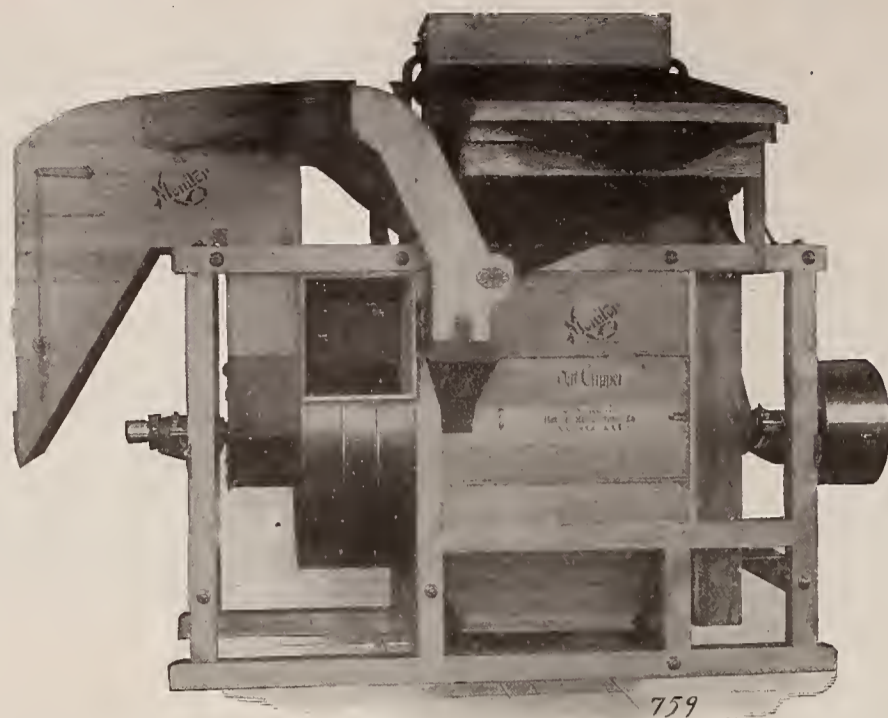
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Is It a Mistake to Clip Oats?

Our opinion might be considered biased—let's look at it from another angle.

Why do all the big grain handlers put in oat clippers unless it's the thing to do. They all do invariably—you could not induce them to operate without one.

As an example—take the large elevator at Erie, Pa. It has just been taken over by Armour Grain Co. It had no clipper. The first thing they did was to order a MONITOR Oat Clipper shipped to that house. They operate too many plants not to know the advantages. And because a majority of their plants are MONITOR equipped—for instance, the Calumet at Chicago, operated by them, contains 12 MONITOR Clippers,—they selected the MONITOR for the Erie plant.

This proves two things—that in the estimation of the big grain dealer, an Oat Clipper is indispensable and that experience shows that the MONITOR is the worth while machine.

→ YOU MAKE A MISTAKE IN NOT USING MONITOR CLIPPERS

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A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

Established in 1882.



Published on the fifteenth of each month by Mitchell Bros. Publishing Co., 431 So. Dearborn St., Chicago, Ill.

Subscription price, \$1.00 per year. English and Foreign subscription, \$1.75 per year.

Established in 1882.

VOL. XLI

CHICAGO, ILLINOIS, JANUARY 15, 1923

NO. 7

A New House at the Canadian Head of the Lakes

The Parrish-Heimbecker Elevator at Port Arthur Completes Its First Season with Reason to be Proud of Its Performance

WHEN you start to build an elevator, would you think of sending your surveyors out on snow shoes and skis over five feet of ice to lay out the house? That is what the James Stewart & Co., Inc., through its Dominion branch, the Canadian James Stewart, Ltd., did when the new elevator of Parrish & Heimbecker, Ltd., of Port Arthur, Ont., was started last February. The concrete dock was laid out on top of the ice, the position of all the piles was indicated by a spike with a red flag tied to it, driven into the ice. When the position of each pile was marked a hoist engine on skids was drawn out on the ice to furnish steam for taking out the ice cores. A circle of steam pipe about 18 inches in diameter with an extended cylindrical iron jacket was laid around one of the flags, steam was turned on and the cylinder of steam melted itself through the ice in no time, the core of ice with the red flag in the middle leaping up through the cylinder as soon as released. A hole for each of the 70-foot piles was cut in this way, both for the dock foundation and for the elevator proper.

Rapid progress was made in spite of cold which drove the thermometer to 30 to 45 degrees below zero, and with the coming of spring the head house and tanks rose above the steel and concrete

mattress as if by magic. When the new crop began to move last fall the elevator was ready for it and a considerable amount of grain was handled in and out before the season closed on December 15.

The new elevator is of reinforced concrete construction throughout. It is on the water front with a slip which can accommodate the largest lake vessel. When the house was planned, it was decided to erect an initial unit of 300,000 bushels and add the main 1,000,000-bushel storage unit afterwards. This was done with the intent of offering immediate

receiving and shipping capacity, which was needed at the Head of the Lakes even more than additional storage. The storage unit has already been ordered built, and the illustration on this page is the architect's drawing of how the completed structure will look next fall. At present the elevator consists of a head house, train shed, drier house, transfer house and six storage tanks with interstice bins.

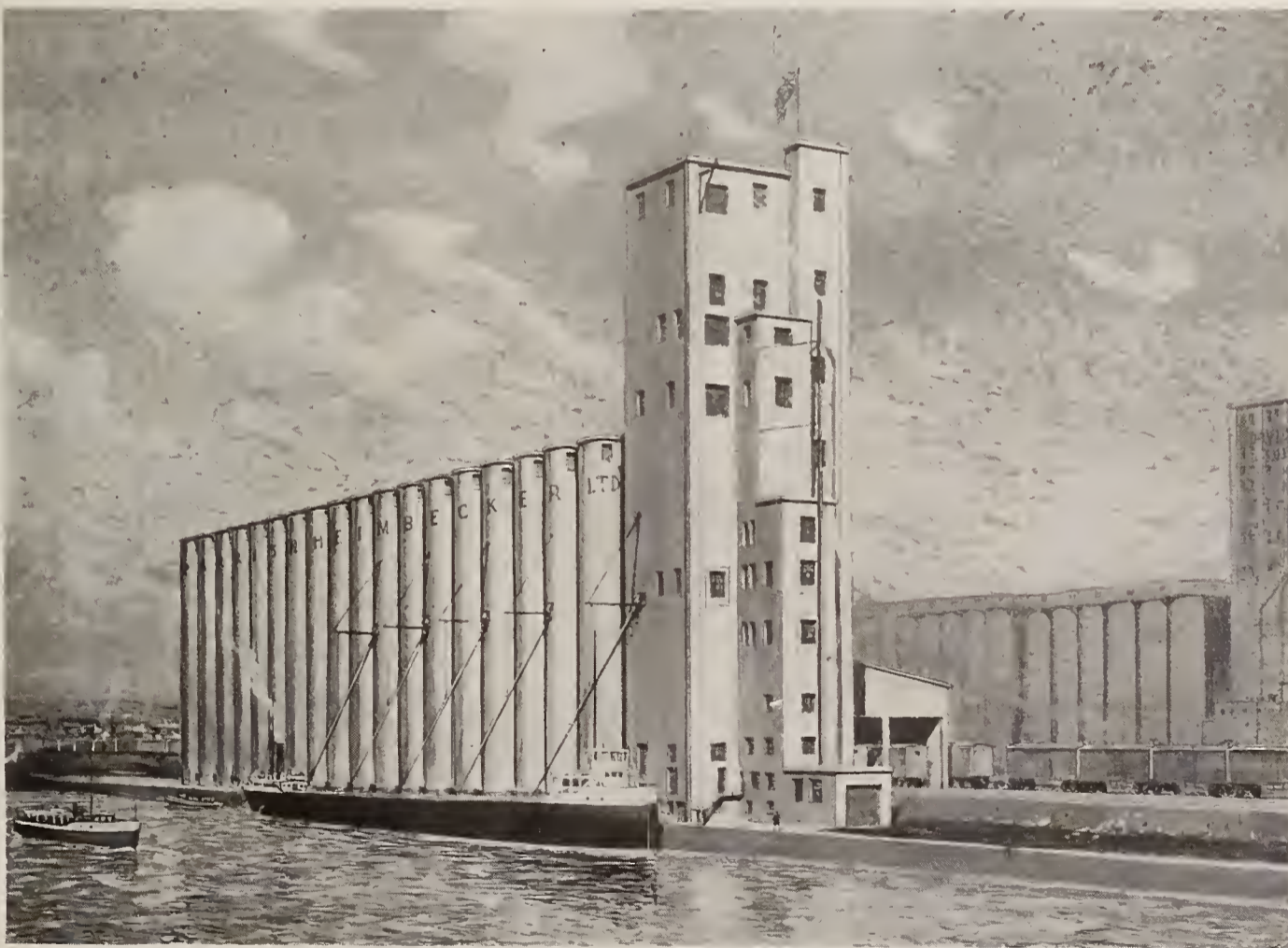
The head house is 42 feet 9 inches by 46 feet 3

have a capacity of about 30,000 bushels per hour.

The scale floor is interesting, for the entire scale installation is above the floor and every working part is easily accessible. This is clearly shown in the illustration on the following page. The steel hopper of the scale empties into a spout which leads through the concrete floor to the distributing spout below. To get from the scale floor to the distributing floor one has to go through fireproof doors to the stair well and through a similar door on the

floor below. This stair well extends from the first floor to the cupola. There is also a passenger elevator through the entire building so that employees have greatest facilities in getting about and the maximum safety in case of fire. This latter is a remote possibility for there is a complete dust collecting system from the Cyclone Blow Pipe Company of Chicago.

The drier house is all ready, but as yet no drier has been installed. In fact there was little need of it last year for grain was harvested under favorable conditions in most districts of the prairie provinces. Of the wheat already inspected about 70 per cent has graded No. 1 Northern; 16 per cent, No. 2 North-



THE PARRISH-HEIMBECKER ELEVATOR AT PORT ARTHUR. AS IT WILL APPEAR WHEN FULLY COMPLETED

inches on the ground plan and 203 feet high to the top of the stair well. At present two tracks serve the house but a third is to be installed. A receiving pit on each track empties to a 36-inch receiving conveyor which serve the boots of the three elevator legs. The elevators discharge to three hopper scales and these, in turn, to the two 36-inch belt conveyors which lead over the storage tanks, to the drier or to any of the bins in the working house. On the work floor is an automatic scale for bagging grain or screenings. There are two loading spouts for cars, but of course the great bulk of shipments will be made by boat, and the loading spouts to vessels

ern; and 9 per cent, No. 3 Northern, only 5 per cent falling into the lower grades. A year ago, on the other hand, heavy rains at harvest time brought a great quantity of grain to market damp and tough. In such a year a drier is almost essential for the proper handling of the crop.

The high grade of wheat this year has made the work of the cleaners also unusually light, but in this respect the new house was prepared. There is a No. 1 A Monitor Screenings Separator; four No. 10 B Monitor Warehouse Separators; and one double Carter Disc Separator. This equipment is sufficient to take care of the requirements of the completed

house. As yet the new prairies of Canada are not as weed infested as in our Northwest, but the percentage of screenings is increasing each year.

The concrete storage tanks are 20 feet inside diameter and 107 feet 6 inches in height. They have the Stewart Steel Bin Bottoms which leaves the entire basement floor clear with ample room to move about the conveyors. An illustration of one of the two basement or shipping conveyors is shown, giving a good view of the tank hoppers. This type of construction was developed by the James Stewart company and has been used successfully in a number of large elevators.

The interstice bins are quartered, providing nearly twice the number of bins in the house. This was an important consideration as grades are kept separate more carefully in Canada than in this country, and while wheat is by far the largest part of the grain crop, oats, barley, flax and even corn are received and must have their own place.

Above the tanks is a concrete gallery which houses two storage conveyor belts. All the belts in the house are 36 inches wide and operate with a uniform speed so that the grain movement through the house operates as a unit without congestion or waste of power.

The power is entirely electric with individual motor drive and silent chain transmission. The

ports of American grain will be shown separate from Canadian grain shipped in transit through American ports.

These statements will be based on telegraphic reports from collectors of customs at 18 principal ports, including six on the Atlantic Coast, four on the Gulf, three on the Pacific, and five on the Great Lakes. The reports will be compiled from the outward foreign vessel manifests filed at the custom house for clearance. They will include whole cargoes and large lots that can be readily located without laborious search through extensive general cargo manifests.

HEDGING

BY TRAVELER

There is no phase of the country elevator business so much neglected, or, if not neglected, so badly handled as the matter of hedging cash grain. It is safe to say that not more than half the operators of country elevators hedge their grain systematically or intelligently, yet it is the one sure way of clinching their profits and guarding against a possible big loss.

If the co-operative elevator companies, which sprang up everywhere during the war, had not incorporated in their by-laws a clause prohibiting

when it was not possible to buy futures in lesser quantities than 5,000 bushels; but, today, the dealer who has bought say 3,000 bushels of wheat from farmers can at once wire his broker to sell for him "3 jobs" of some wheat future on the Board of Trade. This means that they will make three separate sales for him of 1,000 bushels each. Later, as he sells his cash wheat, this hedge can be bought in 1,000 bushels at a time. As carloads of wheat run somewhere between 1,100 and 1,800 bushels, the elevator man should have very little trouble in keeping his purchases and sales about even. The cost of this service is quite reasonable,—usually about one quarter cent per bushel.

The important thing in hedging is to do it systematically, otherwise its value becomes nil. A very good plan is to have a small ledger, and open indi-



FIRST UNIT OF PARRISH-HEIMBECKER ELEVATOR, NOW IN OPERATION

power house has its own transformers and condensers with a switchboard controlling all the grain movement through the house.

In every detail the elevator meets the requirements of the operating company who are highly pleased with the performance of the house during its first season and look forward with the utmost confidence to a continued success when the 1,000,000-bushel storage annex is added later in the season. There is reason for confidence, as the growing production of the Canadian West will tax the capacity of all the storage and handling plants at the Head of the Lakes, and it will be many years before a balance is reached that will put the terminal elevators at a discount. The new routes for export grain which have been started or suggested, at best can take care of only a small part of the growing surplus, and the Head of the Lakes will continue to be, for all time to come, the natural outlet for the bulk of Canada's grain crops. The St. Lawrence waterway will intensify the interest in the twin ports, for vessels from all nations will take on grain to be carried to export without breaking bulk.

WEEKLY STATISTICS OF GRAIN EXPORTS

Beginning with the new year the Department of Commerce will issue on Monday of each week a statement showing the exports of barley, corn, oats, rye, wheat, and wheat flour during the preceding week. The exports of grains will be stated in round numbers of 1,000 bushels and of flour in 100 barrels. Besides the total exports of each grain, separate figures showing the amounts shipped to a few leading countries will be given. The ex-

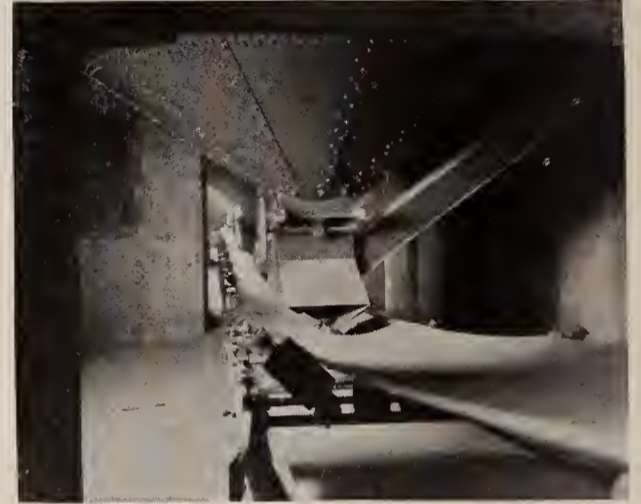
hedging, there would be less of them today on the verge of bankruptcy.

There are two ways in which the elevator man can use the hedging market to advantage. One of by selling a future against purchased grain which he is unable to ship or sell on account of car shortage, etc. The other is to buy a future against stored grain which he has been forced to ship, owing to lack of room, shrinkage or fear of grain getting out of condition.

The fault with most elevator men who have tried hedging for a while and then given it up, is this: They pursue no method in placing and taking off their hedges. They may have sold a future of say 5,000 bushels against a purchase of a similar amount of cash wheat. Later, when the cash wheat is sold, they get a notion that wheat is going lower, and, instead of buying in the future and "cinching" a reasonable profit, they gamble on the short end of the hedge. Sometimes they hit it right and make a profit both ways; but more often than not their judgment is wrong, and they get whip-sawed on both ends. At other times, they take the hedge off first, thinking that the market will go higher and they will later get that much more profit on the cash grain.

Both of these methods are wrong and bound to bring disaster upon those who follow them. There is only one safe rule for hedging, and where it is followed religiously it practically eliminates all element of risk for the elevator man. He can at least be assured of a reasonable profit, providing he has bought his grain on a proper margin.

The Board of Trade, today, furnishes most adequate and complete facilities for the elevator man who wishes to hedge his grain. There was a time



SHIPPING GALLERY UNDER STORAGE TANKS
Parrish-Heimbecker Elevator, Port Arthur

vidual accounts for Cash Grain and for the various months in which hedges will be made for wheat, corn, oats, etc. Use the debit side of a page for purchases, and the credit side for sales. Each day, enter on the debit side of Cash Grain the amount of your purchases, and if you have made any cash sales, enter them on the credit side. If there is any



SCALE FLOOR IN PARRISH-HEIMBECKER PLANT
Showing All Working Parts of Scale Above Floor Level

difference in the totals, it will of course be the amount you are "long" or "short" on cash grain. If you are long say 2,000 bushels, you will no doubt have made a sale of a future of this amount, which would be entered on the credit side of the page set aside for that particular option. The debit on your Cash Grain would now be balanced by the credit on the option page. In other words, you would now be even on the market. This plan could be carried out with wheat, corn, oats, seed or any other grain, the option at all times being made to balance against the cash grain accounts.

It is true that this plan cannot be worked out in its entirety at a time when grain is coming in very slowly; but in such an event the quantity involved would be almost negligible, and the need for protection likewise.

A Symposium for 1923 Grain and Hay Association Officers Review the Outlook for the New Year

IN RESPONSE to our request the officers of some of the leading grain and hay associations of the country have given their outlook for the coming year in their respective territories. The problems in each locality differs somewhat from the others, but a note of optimism runs through all the communications which should afford encouragement to the trade. The dark years have passed. They have left their mark indelibly on the grain and hay dealers; many have given up the fight, and those who have weathered the stress of the economic battle are wiser than before, and stronger to carry on in the brighter future.

GRAIN TRADE HAS SHOWN ITS STRENGTH

BY F. E. WATKINS

President Grain Dealers National Association

In the territory coming under the observation of the writer, conditions are certainly improved over those in effect a year ago. While the grain trade as a whole received very severe punishment and sustained a drastic wringing out during the period of liquidation, it has made a considerable recovery from the low point of the period of depression. It is gratifying to note how large a proportion of grain dealers have been able to win through to the present time and continue in business against such adverse conditions. This fact speaks well for the inherent financial strength of the grain trade and the courage and ability of the individuals engaged in it.

There is no occasion to be over-sanguine or foolishly optimistic about the immediate future of the business. However, there is ever increasing evidence that the grain trade is gradually, but surely pulling out of the "Slough of Despond" and getting onto firmer and higher ground, and there is much reason to anticipate that this improvement can be continued throughout the new year, barring some catastrophe which would be world wide and involve all business in its disastrous effects.

That the trade will be the target of some inimical legislation seems probable, but this has become one of the concomitants of the business, and we would feel lost without these efforts to impede and hamper legitimate enterprise.

A consistently and courageous and intelligent attitude toward our business affairs should enable us to look back on 1923 as one of the good years in the history of the business. That this expectation may be realized by each reader is the most sincere wish of the writer.

RESPONSIBILITIES AND OPPORTUNITIES

BY E. J. CUSTENBORDER

President Ohio Grain Dealers Association

At best, the business of merchandising grain at the average country point is not a lucrative one. Our competitors, whether independent or farmer company operated, require us to buy grain and sell supplies on such a narrow margin that unless we speculate and win we are seldom ever able to show much, if any, profit after all necessary expenses are paid. Our operating expenses do not vary much from year to year, while the volume and quality of the grain we buy, and the demand for the supplies we handle are almost continuously shifting. These hazards have been with us through all the years, and it is quite probable that these or similar problems will continue to vex us. What the year 1923 has in store for the average country grain dealer is at best only conjecture at this time.

However, I can see or think of no reason why the outlook of the country grain dealer is not as promising for next year and for the years to come as it has been this year and in the years of the past. Our business—like our lives—is about what we make it. We need more "Business" in our business, more confidence in ourselves and in our competitors, convictions and the courage to stand by them.

I, too, think that much depends on the educa-

tional work of the various state and national organizations and on our trade journals. If our patrons were more familiar with the costs and hazards of merchandising grain and supplies at country elevators, they would not be so easily influenced by the Farm Bureau and other needless agitators. Secretary Lincoln of our state Farm Bureau, in a letter to me, says that the farmers of Ohio pay for every elevator in the state, including the Union Elevator at Cleveland, many times over in the margins charged for the handling of their crops, and has made similar statements in reference to excessive margins taken by dealers on coal, fertilizer and other farm supplies.

What do the managers of farmer elevator companies, especially those promoted by the Farm Bureau, think of that statement? For the various independent and farmer company organizations to permit such statements to go unchallenged is equivalent to pleading guilty to their charge of inefficiency or profiteering or both. To apprise our patrons of the motive and object of the commercial farm bureau, and kindred organizations, will be mutually beneficial to both country dealers and their patrons.

The success of the country shippers during the year of 1923 and the years to follow depends largely on their ability and willingness to meet squarely and fearlessly the numerous problems with which they are being continuously confronted. The sooner they recognize their duties and responsibilities to themselves, to one another, and to their patrons, and earnestly endeavor to live up to their opportunities, the sooner success will crown their efforts. 1923 will be a happy and prosperous year to those who earnestly and honorably strive to make it such.

THE OUTLOOK IN TEXAS

BY R. I. MERRILL

President Texas Grain Dealers Association

Conditions in Texas are very much improved over last year. This is largely attributable to the fact that cotton, which is the money crop of the state, was marketed at a very high price, making it possible for the farmers to liquidate their indebtedness to the banks and build up bank deposits so that there will be no difficulty about the farmers borrowing sufficient funds to put in next year's crop.

Owing to cotton being on a much higher basis, relatively, than grain, it is only reasonable to expect that a very large acreage will go into cotton in the spring.

The grain acreage in the north central part of the state will be reduced probably, but the north west section, commonly call the Panhandle of Texas, so far as our information goes will be about the same as last year.

The condition of wheat and oats, in the section of the state first mentioned, is only fair, and somewhat below normal for this time of the year, due to the lack of moisture. This also applies to the Panhandle where they have had a very dry fall, and the wheat is beginning to need moisture very badly.

Our winter season has been abnormally mild with a minimum of moisture, dry freezes and winds.

Generally speaking, and I believe I am correct in stating that I voice the sentiment of the majority of the grain trade, we feel that 1923 should be a good year for business with a showing of great improvement over conditions prevailing in 1921 and 1922, and if the 1923 cotton crop can be marketed at around a 20-cent level, it will mean great prosperity throughout the South, which would not only benefit the grain trade, but other lines of business as well.

Speaking of Ft. Worth as a grain center—I have no hesitancy in stating that this is one of the fastest growing grain markets in the country, and with the additional elevator and mill storage now

contemplated and in process of construction, Ft. Worth, in the course of the next 12 months, should be second only to Kansas City in the distribution of grain products, mill feeds, etc. The records of the inspection department of the Ft. Worth Grain & Cotton Exchange, show a total of something over 21,000 cars having been inspected during the past 12 months, and an increase of nearly 7,000 cars over the previous year.

This market is also growing very rapidly as a consignment market, and shortly after the first of the year the Ft. Worth Grain & Cotton Exchange plan to install a sample table market along the lines now prevailing in large terminal grain centers, making it possible for the country shipper to receive the benefit of the highest competitive bids, and for Texas mills to buy their wheat by sample off the tables according to their requirements.

HAY TRADE HOPES FOR BETTER TIMES

BY RUDOLPH RAABE

President National Hay Association

This has surely been an up-hill year for the hay shippers and dealers in general. Early in the season we had plenty of cars and no market. Hay was hard to sell. The last two months we have had just the reverse. Markets are available but no cars to load. I have never seen such adverse conditions as we are having at present. The crop of hay was considerably larger in our section of the country than we have had for several years. The quality is only fair. I look for prices to hold fairly steady if this car condition lasts as it is. Should we have a gradual easing of the car supply, we will have a fairly good market. Should this condition open suddenly toward spring, there will be a lot of hay thrown on the market and I am afraid it will depress conditions, thereby causing the producers to lose considerable money.

The situation with many farmers in this locality is very serious. They have taxes to pay, interest payments are due and they cannot move their hay which they figured would meet these obligations. I understand in some eastern parts of our country, cars are more plentiful than in this section and further west. This being true, the eastern farmers are better able to put their products on the market than in many other sections. Conditions are surely very much unbalanced and it has caused many failures and many to retire from the business. However, I anticipate a much better year than we have had in the past owing to the fact that local banks will have more available money, due to War Saving Stamps and Victory Loan Bonds being due.

If the country in general could increase the production of horses, it would be a wonderful help to growers of Timothy and Light Mixed hay especially.

Our Association is doing everything possible to encourage the raising of good farm horses and we trust in course of time to increase this production to such an extent that it will help the producer.

CONDITIONS SHOW BASIC IMPROVEMENT

BY L. W. RAILSBACK

President Illinois Grain Dealers Association

Although the effects of the so-called readjustment period have been too drastic to permit of undue optimism, there appears to be no question but that there is sufficient improvement in industrial and agricultural conditions at present as compared with those of a year ago to warrant a spirit of hopefulness, if not indeed of confidence, each in turn an essential precursor of a revival of prosperity.

Whether or not the recent marked advance in the price of grains to a level more nearly commensurate with the cost of production has been the result of artificial stimulation rather than of fundamental principles, as some observers profess to think, it has had none the less a most gratifying effect upon the psychology of agricultural communities, more particularly of strictly grain producing sections, where farmers fared worse than those in localities engaged in diversified farming. Coincident with an increase in prices has come an improvement in credit and a cheapening of interest rates, each one a factor vital to the farmer's welfare. It is small wonder, therefore, that the farmer has taken on a more cheerful mien. His

most commonly voiced complaint now is that farm expenses are out of proportion to prices obtainable for his products, and he argues that no basis of permanent prosperity can be established until a proper relationship shall have been effected between the two. Another problem which he must solve, the existence of which is a significant comment on improved industrial conditions, is a recurring drift of potential farm labor to industrial centers.

A disappointing feature of marketing conditions has been an unprecedented scarcity of cars. Thus far, as a result of it, the benefit of higher prices to many agricultural communities is apparent rather than real. While it cannot be denied that a plentitude of cars would have influenced the farmer to market his grain at lower prices, then attractive, so that he would not now have it on hand, unsold, at an increased value, he appears about as far as ever from realizing on it, a predicament which is reflected in the financial stringency affecting numerous country banks. The situation, while not wholly without its obvious beneficial features, serves to emphasize an urgent need for expansion of railroad facilities.

So stupefying to the country grain trade was the ruin wrought by the collapse of prices that many grain merchants are just beginning to sense the fact that certain factors inimical to the welfare of their business were in many instances either curbed or destroyed in the same process. A chronic curse to the country merchant has been the reckless, unintelligent competitor whose senseless methods precluded a reasonably profitable conduct of business anywhere in his vicinity, yet for whose case there was discoverable no effectual remedy. His course was inevitably suicidal, but the process was often slow and seldom sufficiently striking to point a convincing moral, so that the conservative merchant was discredited by contrast. As a result of the intensive operation of economic laws during the past two years, however, the fate of unintelligent business has been writ large across the page, so that while the intelligent operator has gained in prestige, many of the worst offenders have been thoroughly discredited; wild cats becoming the tamest of goats.

Perhaps no one would venture the unqualified assertion that business is once more securely established on firm ground, and it is likely that for a considerable time to come we shall not have passed beyond the range of apprehension created by occasional disquieting echoes arising from the wreckage. Moreover, recovery is hardly likely to progress either rapidly enough or far enough to save the unfortunate victim of over-speculation during a period of the most hectic inflation that the country has ever known; but as the discarded traits of caution, thrift, and economy reassert themselves their inevitable effect is seen in an increased power of recuperation, and a more cheerful attitude apparent on every side is everywhere interpreted as indicative of better times.

OPTIMIST IN THE NORTHWEST

BY J. WATKINS

Secretary-Treasurer Northwestern Grain Dealers Association

Montana is such a large state that it is difficult to cover it all in a statement which will truly reflect conditions as they relate to the grain business. The Great Falls territory and north to the Canadian line and east as far as Blaine County has been very dry this fall and has gone into the winter with but little moisture in the ground. The Judith Basin, the Gallatin Valley and the eastern part of the state from Billings east have had good fall moisture, leaving the ground in good condition. The Flathead territory and south has also been dry, but is now well covered with snow.

Much of our farming in Montana in past years has been on a "trust to luck" basis, the soil not having been properly prepared to conserve moisture. A great improvement is noticeable in the past two years in this respect and many acres have been summer-fallowed and summer-tilled, which will no doubt have its effect the coming season in increased yields.

The last few years it has been clearly demon-

strated that corn can be grown successfully in this state and the acreage is increasing each year. This will also add to our wheat yields as wheat will follow the corn acreage. The low value of most of the farm products has been discouraging, but our people are optimistic and feel that the worst has passed and are looking to the future with confidence.

GOOD BUSINESS TO CONTINUE

BY A. H. MEINERSHAGEN

President Missouri Grain Dealers Association

The outlook for 1923 taking the year as a whole, looks better than the past year has been. I do not look for any greater activity than has been witnessed the past few months. The grain business in this locality has been very good during the last quarter of 1922.

I look for this activity to continue the first part of 1923, but we must not forget that we are not through the readjustment period, and as soon as this period of readjustment is completed we can expect a period of good business.

We have had a good advance in farm products, but farm products must advance more, or the manufacturer must produce his wares for less. This condition is out of proportion and the readjustment will not be complete until these prices get together.

Conditions in Missouri, as a whole look good for the wage earner. Millions of dollars will be spent for the building of good roads. Four bridges will be built across the Missouri River and work on several of these bridges is already in progress, and the others will be started shortly. This means a lot of work. If one line of business is benefited, other lines will get some benefit, if not directly, indirectly. So naturally the grain business will get its share. Wage earners are bread eaters and with plenty of work they can afford to pay higher prices for the products raised by the farmers.

Everybody realizes that we must get back to the sound pre-war basis of doing business. The present price for farm products is satisfactory to the producer, providing he can buy his wares in proportion. With plenty of work for labor it will be a hard matter to reduce wages.

Summing up, business in 1923 should be better than in 1922. There will be plenty of opportunities to make money. I do not expect any great boom, however, although attempts at artificial stimulations may be made. The most optimistic point of the present outlook is that business readjustment will be carried and foundation laid for real prosperity. Here is hoping with confidence, which must exist to make a general advance in business.

DIFFICULTIES BEING SURMOUNTED

BY R. E. NELSON

President Oklahoma Grain Dealers Association

To summarize as briefly as possible, we would place as outstanding, and by far the most far-reaching, disastrous and hurtful factor in the welfare of our farming interests and to the grain dealers in Oklahoma, the unnecessary curse of so-called heat damage grading of our wheat by our Federal Inspection Department.

Within the last 18 months, for some reason we have not been able to fathom, this iniquitous, totally impractical and pernicious system of grading on heat damage was injected into Federal Grading. This thing alone caused such staggering losses to our dealers that a big percentage of them have literally been facing financial ruin.

A very strong fight has been waged to get a fair and common sense basis worked out by the inspection bureau, making such modifications and broadening their interpretation of what heat damage is as would permit uniformity between the different inspectors and enable the dealer to buy from the farmer with a reasonable certainty that his grade might properly be reflected. This fight has centered in Oklahoma and it is unquestionably through the persistent and very able work of our secretary, Mr. G. F. Prouty, and the close personal work of members in Oklahoma that very definite relief has been obtained. This work has been done without any effort or desire on our part to overturn or change the Federal grading system, for it has only been in its application of this heat damage fac-

tor, in such a way as to literally condemn millions of bushels of perfectly good milling wheat in the hands of our dealers and farmers, that it has been a menace. Hence, when we have succeeded in getting this thing removed which has threatened our very existence, a good work has been done and of which we are justly proud.

A cause for some anxiety for the future of the grain business has been expressed by some of our dealers in the co-operative marketing propaganda that is continually being put out; however, among those inclined to view this in a clear-thinking way, no alarm is felt, but rather that time will disclose the fallacy of most of these schemes and prove that the middleman after all has a very definite place in our economic scheme and that the service he renders in the interchange of farm products from the soil to the ultimate consumer must be performed, and that the facilities he has for rendering it and the price he takes for the service cannot be done cheaper or more efficiently.

We condemn as ruthless and unfair the efforts on the part of our Government departments to discredit this long established and useful structure in our economic life and the lending of aid and resources to another visionary co-operative plan which comes marching across the dead bones of 60 years of failure and financial loss to farmers with no single instance of success, so far as the marketing of grain has been concerned, having ever been recorded.

We feel that if this thing can work out successfully, well and good, we are for it, but until it becomes an institution of proven benefits to our farmers we say our departmental resources are being misused and perverted to exploit the selfish ends of organizers and propagandists.

Our state has suffered severely from the short wheat crop of 1922 together with the effects of the drought which cut off the corn and feed crops, and our volume of grain has been below the profit line; however, we have good moisture in the state now with a good wheat prospect for the coming year and we feel very hopeful that the coming crop year will bring us both a larger volume of grain to handle and better working conditions in which to operate.

THE FOREIGN GRAIN CREDITS BILL

Grain dealers, wherever the matter has been called to their attention, have generally endorsed the principles embodied in the Foreign Grain Credit Bill, which was introduced by Representative N. J. Gould as an amendment to the War Finance Corporation Bill. The Gould Bill provides, in substance as follows:

War Finance Corporation is empowered to purchase, without recourse against the drawer thereof, from any person of the United States producing or dealing in foodstuffs, wool or cotton products or any articles manufactured therefrom in the United States; drafts or bills of exchange secured by bills of lading or other instruments in writing conveying or securing merchantable title to said food or other products when such drafts or bills of exchange are drawn against sales of said food or products, by any such person to a foreign buyer or buyers established and doing business in foreign countries to be secured by proper and sufficient collateral or by guarantee of a legally established foreign government or by both such collateral and guarantee as may be deemed advisable in the judgment of the directors of the War Finance Corporation.

No such drafts shall have a maturity of more than six months from time of purchase—in the discretion of the directors of the war finance such maturity may be fixed not to exceed nine months. Provision is also made whereby bills of lading, etc., may be purchased by the corporation from any bank, banker or trust company under the same conditions as apply to individuals. The aggregate amount of such purchase authorized under this section of the act shall not at any time exceed \$250,000,000. The bill enlarges the discount service now done by private banks and would be temporary.

THE OUTLOOK AS VIEWED BY JULIUS H. BARNES

A survey of the grain trade and the course of grain prices during the past year leads irresistibly to certain conclusions. For example, there is the clear indication in price course that the law of supply and demand, while making prices, can be influenced by intelligent marketing action. Every one knows that overanxious sellers depress a market price, but efforts to protect the grower of various farm commodities in this country against this overanxious pressure have been confined principally to attempts at setting up farm monopolies rather than to relying on the aggregate influence of many thousand growers guided by accurate information.

The monopoly-by-combination idea leads ultimately to disaster. This is clearly shown by the disastrous operation of the Raisin Growers' Association in California. On the other hand, with no combination or concerted action in the grain country, we have witnessed a price advance in grains in the last two months approximately 20 to 25 cents per bushel.

This advance has largely come about because supply and demand, evenly balanced in the world, were influenced by self-restraint in farm marketing, and this again probably affected by the courageous and outspoken faith of a few in the grain world with vision enough to see that the depression of two months ago was utterly unwarranted.

The grain grower today lacks proper leadership and organization. He lacks also leaders in whose business judgment and good faith the grain grower could rest with entire confidence. The leadership placed in charge of the national co-operative movement a year ago failed utterly, with a lasting discredit to a very proper field of grain grower co-operation. Today the farm leadership is still short visioned and futile, and largely because these men either lack judgment to analyze the great ground swells of agricultural economic fundamentals or lack the courage to tell the facts.

It has been so easy to get a farmer-following by picturing that industry as abused and mis-served by all the agencies which touch the farms. The railroads are pictured as demanding unjustifiably high rates for inadequate transportation. Marketing channels, through which grain reaches the ultimate consumer at trade tolls that are the despair of Argentina and India and Russia, are pictured as absorbing the profit of grain production, and the ever-present marketing opportunity which daily and hourly serves the farmer with exact information and immediate marketing facilities, through the future trading markets, is pictured as always manipulating against his interest.

This false reasoning often proceeds to the extent of picturing as a farm disability the fact that in 1920 there were 1,700,000 fewer persons engaged in agriculture than in 1910. A moment's thought on any industry would rate as evidences of growing efficiency, increased production obtained with fewer persons employed. The fact is that although agriculture is not a highly mechanized industry it is being served by mechanical production with increasing economies and at the same time served with improved facilities for instantly realizing on better informed judgment as to proper marketing times and prices. The hard surfaced road and the motor car and motor truck, together with cream separators, mowers, reapers, tractors, and the gasoline power which the tractor furnishes many farm activities have strengthened the position of agriculture enormously.

Improved methods of farming and improved strains of seed show a constantly increasing average and per capita yield, and that means lower production cost. A few items show this encouraging tendency in agriculture.

With practically the same number employed in agriculture in 1920 as in 1900, the food needs at home of an increased population of 30,000,000 people were supplied, and yet in 1920 the largest export surplus of grain (500,000,000 bushels) was furnished for overseas export.

The number of farms increased 12 per cent. The average size of the farm increased. The average

farm acreage under cultivation increased. The production of wheat, corn, cotton, cattle, and hogs increased from 35 to 70 per cent. Farm property rose in these 20 years from \$20,000,000,000 to \$78,000,000,000. These are the high marks that show the great resources built into America's chief underlying industry.

CLEAN YOUR WHEAT AND SAVE MONEY

Large savings in the cost of transporting grain to terminal markets would be effected if farmers and country elevators would ship only clean wheat to market, in the opinion of Robert H. Black, in charge of grain cleaning investigations for the United States Department of Agriculture.

The average carload of Spring wheat received at Minneapolis during October contained over 1½ tons of screenings. These screenings have no market

per cent in 1921. On this basis the 1921 Spring wheat crop contained more than 10,000,000 bushels of dockage, the transportation cost on which was a total loss to the shippers. Mr. Black states that when the cleaning is done on the farm, or at the country elevator, the cleaned wheat will bring a better price on the market, the freight on the dockage will be saved, more cars will be available for hauling wheat, and the screenings will be available for feed. When finely ground the screenings can be substituted for the higher priced feeds, such as oats, corn and commercial mill feed.

WHEAT PRICES FOR 40 YEARS

In a bulletin under the above title, the First National Bank in St. Louis, gives the yearly range in wheat price since 1882. The highest figures for the year (calendar year, not crop year) were recorded in January six times; February 4; April 2;



TWENTY OF THE MOST COMMON SEEDS WHICH MAKE UP WHEAT DOCKAGE
Reproduced in Natural Size and Also Enlarged to Show Structure of Seeds

value so that the cost of transporting the material was a total loss to the shipper. The result not only was a waste of transportation space but increased considerably the transportation costs on the grain.

Minnesota grain inspection records for October show that Minneapolis received 11,332 cars of Spring wheat during that month containing an average of 4½ per cent of dockage. The transportation space occupied by this foreign material in the wheat required 450 cars more than would have been required had the dockage been removed before shipment. For the shipping season up to November 21 this year nearly 650,000 bushels of dockage or foreign material in the wheat was shipped to market, the records show. During the 1920-21 crop year the quantity of dockage or foreign material in the wheat shipped to market was so great that more than 14,000 additional freight cars were required to haul the wheat than would have been necessary had the wheat been cleaned before shipment.

Minnesota grain inspection records for the past 18 years show a marked increase in the percentage of dockage in wheat arriving at terminal markets, ranging from 2 per cent in 1903 to more than 5

May 12; June 3; September 1; October 2; November 1; and December seven times. The lowest prices for the year fell in January seven times; February 3; April 1; May 1; June 4; July 11; August 7; September 3; October 1; November 4; December 2. This proves little for in each year two crops are involved. In the whole 40 years neither the highest nor the lowest price of the year fell in March.

The lowest price recorded for No. 2 Soft Red Winter wheat at St. Louis during the 40 years, was in July 1894 when 47¼ cents was recorded. In January of the following year 48¾ cents was reached and 52½ cents was recorded in July of 1893 and in June and July of 1896.

In 1894 the highest price recorded was 60½ cents and in 1893 71½ cents. These years were the worst for agriculture in our history and must have been even worse than 1921. The highest price made during the 40 years, previous to the war, was in 1909. \$1.66 was the high mark and \$1.02 the low for the year. The next highest point was reached in 1882 at \$1.43½; while in 1898 it reached \$1.40. The high mark of the year has been over \$1 in 27 years out of the 40. The low mark was over \$1 only one year before 1915.

Moving Canada's Great Grain Crops

An Account of the Facilities Which Permit the Grain of the Dominion to Reach the Consuming Markets of the World

CANADA has risen to second place among the wheat growing countries of the world, and is now surpassed in this regard by the United States alone. The vaunted slogan "Granary of the Empire" has come to justify a greater expansion in signification, for the golden fields of the Canadian West are going a long way towards feeding the people of the entire world, Canada having become one of the great traders in grain with nearly all consuming countries.

The history of the growth of Canadian agriculture and wheat growing constitutes a marvelous record of consistent progress. In a very short space of time the territory which so many said could grow no wheat has become the second in the world in the quantity produced and the first in quality. Since the Confederation of Canadian provinces in 1867, at which time the history of Canada as a modern nation may be said to have commenced, while the population of Canada has trebled, the value of her field crops has multiplied 12 times and that of her annual wheat crop 20 times, which is illustrative of the healthy state of agriculture and leaves no apprehension of the country's suffering at the expense of the rural sections in the building of urban centers.

Agriculture is Canada's first industry and though other branches of national activity are rapidly increasing in importance, the pursuit of farming maintains a lengthy lead which it will no doubt maintain for many generations to come in spite of the extensive exploitation of resources which assuredly lies in Canada's immediate future.

Of the rich fertile plains of the Canadian West only about one-fifth of the area which has been declared fit for cultivation is occupied, and roughly, 300,000,000 acres west of Lake Superior await parceling out into farms and homesteads for the millions of immigrants to come. The cultivation of this area at the same rate of production would give Canada an annual wheat yield of something around 1,400,000,000 bushels, or twice that of the present production of the entire United States, and would make Canada the world's leader in this respect.

The Canadian wheat crop has of recent years come to play a much larger part in the world's trade, to what extent may be judged from the fact that while at the beginning of the century the average amount of this crop annually available for export was about 24,000,000 bushels, it now averages about 225,000,000 bushels. The tremendous increase is, of course, due to the phenomenal development of the prairie provinces, which account for by far the larger part of production as well as the bulk available for export. The movement of the wheat, which pours from the prairies over the railways to various outlets as soon as the crop is threshed and continues in lesser volume practically until the succeeding crop is harvested, constitutes a real problem in transportation, and it is interesting from many points of view.

A brief consideration of the facilities for handling and transportation of the crop may serve to indicate the strong and weak points in the chain.

In Manitoba, Saskatchewan, Alberta and British Columbia there are 3,855 country elevators having a total storage capacity of 130,600,000 bushels as well as 11 interior public and private terminal elevators which add another 12,100,000 bushels to the storage capacity available at or near the farms, all of which could be used to store farmers' deliveries.

From interior points there are at present two principal transportation routes. The important route is the shortest to the European markets via the two railway systems, the Canadian Pacific and Canadian National Railways to the Head of the Lakes. At present the extreme capacity of the railways is some 2,400 to 2,500 cars every 24 hours, as all cars have to be opened for the taking of samples by the Government inspectors and re-sealed again in the Winnipeg yards. Whilst the number handled in

Winnipeg is capable of extension there are but three lines thence to Fort William-Port Arthur, all of which have grades which will not permit of such heavy trains as are hauled across the prairies. The alternative route is that to Vancouver where there are two elevators engaged in handling grain for shipment overseas—the Government Public Terminal Elevator—having a storage capacity of 1,250,000 bushels at present—and the elevator of the Vancouver Milling & Grain Company, which has a storage capacity of 200,000 bushels for its own grain only. During the past year some 7½ million bushels of wheat were shipped through Vancouver for Europe and Japan. This route is capable of enlargement by the use of the Government interior terminal elevators at Calgary, Saskatoon, and Moose Jaw in cleaning or sacking grain en route for ocean shipment thus relieving the Vancouver elevator to that extent.

At Fort William-Port Arthur the elevator storage capacity is the largest in the world, viz.:—57,300,000 bushels. There under normal conditions 240 cars per hour can be unloaded, weighed and binned if all elevators have a full supply ahead of them to work upon. The greatest number of cars unloaded in a single day prior to this year was 2,169 on October 26, 1915 when both handling and storage facilities were far below the present capacity. Facilities for shipping to lake steamers are most up-to-date so that if sufficient vessels were in port with orders placed so that every elevator could be shipping simultaneously 850,000 bushels per hour could be shipped without hindering unloading operations at all. In the winter season well over 100 cars can be loaded per hour without hindering unloading operations. The record day's shipping took place on December 1, 1915, when 5,603,360 bushels of all grains were loaded on vessels and 74,700 bushels into cars.

Shipments by vessels from Fort William-Port Arthur are made in Canadian and United States vessels to both Canadian and United States ports on the lower lakes. Export shipments via Canadian lower lake ports usually find their way through Montreal whilst that port is open and after the closing of navigation on the St. Lawrence via St. John, Halifax, Portland or Philadelphia. From Georgian Bay ports it is carried by rail to the seaboard but from Port Colborne it is carried on canal-size vessels of all kinds. Shipments via United States ports are carried by rail from the unloading point to the Atlantic Seaboard in bond, thence finding their way to Europe. The choice of routing depends principally upon one of two circumstances provided transportation costs do not enter into consideration as an additional factor. These are availability of facilities and ocean tonnage. There may be ample facilities to handle all shipments rapidly right through to Montreal but ocean tonnage may be booked which is due at one of

the United States Atlantic Seaboard ports or vice versa. It is essential that all factors are fully considered to enable a shipper to obtain the advantage of rapid transportation and handling with a minimum of cost in order to compete in the world's markets.

Elevator handling and storage facilities at Montreal are at present inadequate to properly handle a heavy movement of grain. Two elevators are principally concerned, the Harbor Commissioners and the Montreal Warehousing Company, having two elevators each and between them a storage capacity of 9,000,000 bushels; but the Ogilvie Flour Mills Company, Ltd., operates two of its elevators as public elevators adding 1,000,000 bushels more to the public storage capacity of the port. The total capacity of the port for receiving and shipping through the elevators is said to be 24,000,000 bushels per month. This may be augmented in emergencies by the use of floating elevators which transfer grain from canal boats to ocean steamers direct.

For the purposes of the grain trade, Canada has been divided into two main inspection divisions, the western and the eastern, the dividing line falling just east of Port Arthur. Of the Canadian wheat crop of 1920, amounting to 263,189,300 bushels, which is the latest to have been analyzed in its distribution, a total of 235,059,827 were produced in the western division. Stocks on hand were 4,580,228 bushels, and imports amounted to 269,892 bushels, making a total flow into the western pool for the crop year of 239,909,947 bushels. The quantity of wheat disposed of for commercial purposes in the western division—that is, shipped out of, or milled within, the division—amounted to 187,998,634 bushels. Shipments out of the division amounted to 163,964,892 bushels, distributed as follows:

Exports to the United States, 46,272,438 bushels; exports to the United Kingdom and other countries, 37,717,742 bushels; exports to the eastern division, 79,668,536 bushels. The quantity milled for consumption in Canada amounted to 21,404,712 bushels, and 2,935,179 bushels were milled but exported in the form of flour. In addition it is estimated that 38,900,000 bushels were retained for seed and 5,257,073 bushels carried in store to the following year's crop.

The primary movement of western wheat is from the farms to the terminal elevators at the Great Lake Ports of Port Arthur and Fort William. From here 24,239,986 bushels were moved by rail and 123,059,577 by water. Of the latter, 55,270,869 went to the Canadian ports of Goderich, Midland, Montreal, Port Colborne, Port McNichol, Quebec and Tiffin, and 67,788,708 to United States ports—Buffalo, Chicago, Cleveland, Duluth-Superior, Erie, Port Hudson and Toledo. A total of 37,251,394 bushels were exported direct from Fort William and Port Arthur to countries other than the United States via United States seaboard ports. A similar analysis of the 388,773,000-bushel crop of 1922 would show proportionate figures. The preliminary report for 1922 is contained in the table below.

The Twin Ports cannot be left out of any consideration of the present leading place Canada occupies in the world's grain trade. Though separately

BOARD OF GRAIN COMMISSIONERS FOR CANADA

Preliminary Statement—Showing the total quantities of each kind of grain shipped from Fort William and Port Arthur by vessels during the period between September 1 and the closing of navigation December 16, 1922.

	WHEAT bus.	OATS bus.	BARLEY bus.	FLAXSEED bus.	RYE bus.	Sample Mixed Grain lbs.	Elevator Screenings tons
Canadian Vessels, 389 cargoes	65,402,929-00	3,367,546-11	3,438,173-01	402,049-49	1,052,776-22	3,961,521	42,500-0730
United States Vessels, 432 cargoes	100,800,667-55	4,060,024-31	3,987,679-08	1,222,433-33	4,775,782-52	145,181,631	35,902-0170
Total, 821 cargoes	166,203,596-55	7,427,571-08	7,425,852-09	1,624,483-26	5,828,559-18	149,143,152	78,402-0900
To Canadian Ports (as destined)	64,788,558-30	3,367,546-11	3,438,173-01	402,049-49	669,976-18	3,961,521	12,055-1130
To United States Ports (as destined)	101,415,038-25	4,060,024-31	3,987,679-08	1,222,433-33	5,158,583-00	145,181,631	66,346-1770
Total	166,203,596-55	7,427,571-08	7,425,852-09	1,624,483-26	5,828,559-18	149,143,152	78,402-0900
Same period 1921	116,397,624-40	14,120,085-03	5,622,720-20	2,173,725-12	1,769,343-08	50,160,500	20,709-1990
Same period 1920	85,528,385-40	7,119,065-10	3,598,595-39	1,353,782-46	1,414,368-53	.....	41,940-1130
Same period 1919	52,902,883-50	9,145,176-01	3,676,987-45	319,170-34	500,327-30	4,011,661	22,154-0030

existing cities, their boundaries are so contiguous as to make it only a matter of time before they will overlap; their interests are so common and their welfare and progress so inseparably bound together that issues affecting one inevitably react to the benefit or detriment of the other; though divided in civic rivalry they are united in forming together the connecting link between eastern and western Canada, the bulk-breaking point for much incoming and outgoing freight of western Canada.

Fort William and Port Arthur were first developed as the most expeditious landing places for the early voyageurs who, by way of the Kaministiquia River and the Lake of the Woods, penetrated the fur-bearing areas of the Great North-West. With the remarkable development of the prairie provinces and the increasing volume of grain they have for export each year, these two ports have developed into great ports as constituting the Great Lakes' outlet for the great transcontinental railways, bearing their freights of grain and other produce on by more expeditious and economic routes to Montreal and the Atlantic Seaboard.

Here, nearly a thousand miles from the nearest salt water, are to be found modern ports with huge terminals, excellent freight handling facilities and docks at which come and go vessels equal in size to Atlantic liners. Here are to be found the greatest grain storage accommodations in Canada with 32 grain elevators capable of holding 57,300,000

the British Empire in the thoroughness and efficiency of her grain handling system.

Some appreciation of this fact is obtained as we remember that other great and progressive countries, like Australia, has only within very recent years begun to study up-to-date methods of storing and moving her grain crop. A large proportion of this is still handled by the cumbersome and costly method of bagging, with no better storage facilities than the vast stacks of bags with all the attendant wastage and loss from damp and vermin, and with primitive methods of grading and marketing the wheat. This involves all the difficulties of maintaining the identity of the grower from the point of shipment to purchaser and with its lack of economy of labor, car capacity and storage space, loss to the purchaser (bag being sold as wheat) and other defects too numerous to mention.

Or again, the movement of a consignment of wheat by the clean-cut, up-to-date bulk-handling system of Canada, from the grower to the hold of an ocean steamer, whereby taking advantage of the flowing properties of grain, it is loaded, cleaned, weighed, moved, stored, reloaded and transhipped without once calling upon the "main strength and outwardness" of hand labor, and may, with pardonable pride, be compared with its too frequent fate on discharge at an European port where it is dumped on a filthy floor of a freight shed, thence to be laboriously shoveled into a horse-drawn wagon for

at Western and Eastern ports. There is also another auxiliary transportation link by canal and river barge. At all ports of transshipment large storage units are provided, thereby relieving congestion and the tying up of railroad cars and allowing grain to be held at suitable points so as to prevent flooding of tide-water facilities.

As many interior and terminal houses, cleaning and drying machinery is installed which increases the keeping properties and market value of the grain. All the above facilities are therefore of the greatest mutual benefit to the producer, the transportation companies, the purchaser, and the ultimate consumer.

An echo of the tremendous Canadian crops of 1921 and 1922, which, diverted from the usual channels which took them across the border, rushed to Canadian, Atlantic and Pacific Ports, taxing their capacities to the limit, is being heard in the demand



CANADIAN NORTHERN ELEVATOR AT PORT ARTHUR

for increased elevator accommodations. A new factor has entered into the situation giving Canadian ports greater control of the traffic and export of her own crop, and it is recognized that vastly increased storage space is going to be needed to accommodate future crops pending their shipping.

The consistent annual increase in the volume of Canada's grain crop has rendered imperative a corresponding yearly increase in elevator storage capacity, and each year sees new elevators dotting the grain growing provinces. The insistent demand at the present time is not at railway shipping points, but in the expectation of handling a greater proportion of Canadian grain at Canadian ports these terminals are facing the need of greater storage fa-



TYPICAL HARVEST SCENE IN THE CANADIAN NORTHWEST

bushels, including, at Port Arthur, one of the largest grain elevators in the world, with a capacity of 7,500,000 bushels. The present capacity at the two ports, with that planned for the immediate future is as follows:

		Capacity bushels
Public Terminals	12	43,100,000
Private Terminals	20	14,200,000
Total	32	57,300,000
To Be Constructed—1923		
*Elevator for N. Bawlf Grain Co.....		1,500,000
*Elevator for J. Stewart & associates..		1,500,000
Addition to Western Terminal Elevator Co.		1,000,000
Addition to Mutual Elevator Co.....		1,000,000
		5,000,000
Also Under Construction		
Elevator for W. D. Staples.....		2,000,000
Addition to Parrish & Heimbecker.....		1,000,000
Addition to another (not yet announced).		2,500,000
		5,500,000

(*Piles are already being assembled on the sites of these two and work will commence very shortly.)

The Port of Montreal achieved a record in 1921, but in 1922, this was surpassed, 154,550,000 bushels having been handled. Vancouver, which in 1920 accounted for paltry shipments aggregating 446,329 bushels of wheat, shipped more than 7,000,000 bushels in 1921, half of which went to England via the Panama Canal route.

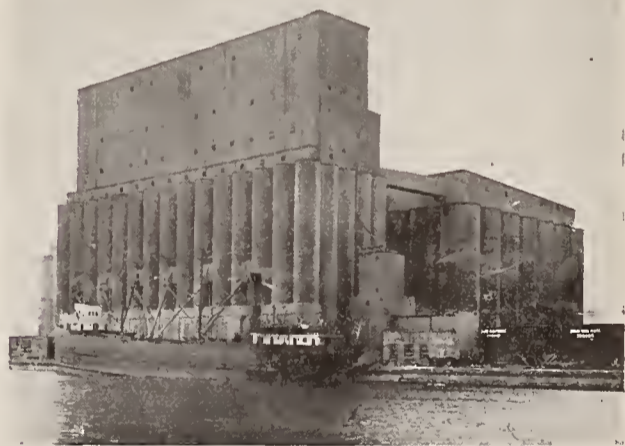
To collect, sort and distribute to the world this vast annual grain crop from the wide flung areas of its origin to the distant seaboard, whence ocean liners may carry it to feed the millions of densely populated overseas countries, Canada has built up a gigantic system and plant, and perhaps few realize that Canada now outstrips all other countries of

trans-shipment to ancient rat-infested warehouses.

It is of interest, therefore, to inquire into what constitutes this chain of machinery which, by way of railroad, lake, canal, and dockside, connects the Prairie Provinces with the ocean and the world.

This great Canadian bulk-handling system starts right from the wheat field, at the thresher which spouts the grain into the farm wagons, by which it is drawn either to the farmer's private storage bin (or silo), or to the country elevators, scattered on railroad points throughout the wheat growing country of the West. The farmer delivers his grain, subsequently the Government inspector classifies it into one of the several grades and issues to the grower a certificate which will entitle him to the market price of that quality and quantity when the certificate is sold on the grain exchange. (Note that all further necessity for maintaining the identity of the grower of any particular parcel is thereby obviated, in which particular the bulk-handling system differs from any other.) Those scattered elevators, with capacities from 15,000 to 50,000 bushels, are supplemented by large interior houses at big railroad centers such as Winnipeg, where inspected grain is accumulated for train-load shipments, and then again by the great terminal elevators, where grain may be stored for transshipment as ordered for sale or exportation.

To relieve congestion on the connecting links of these systems (the railroads) during the rush season following the western harvest, an intermediate link has been introduced in the steamship routes across the Great Lakes, where specially constructed vessels carry the grain from and to terminal houses



GRAND TRUNK ELEVATOR AT FORT WILLIAM

ilities. Though 1921 was for Canada a record grain handling year, more traffic would have accrued to her could more have been handled, and on both the Atlantic and Pacific a certain amount of business had to be refused. It is in this direction that expansion is planned.

Montreal, Vancouver, the Twin Ports at the head of the lakes, and other storage and re-shipment points are all feeling the urgent need of great storage facilities. These items refer only to a somewhat extraordinary demand for terminal elevator accommodations brought about by sudden conditions, and do not specially take into account Canada's own growing demand, as her extra acres are brought under the plow and harvested. At the same time the ordinary increase of country elevators and interior elevators contiguous to the harvest fields, made necessary by the annual swelling grain crop, is being met. And all this is making for increased activity in a hundred and one industrial lines in which this progress is reflected.



Published on the Fifteenth of Each Month

BY

Mitchell Brothers Publishing Co.

OFFICE:

Manhattan Building, 431 South Dearborn St.
CHICAGO, ILL.

A. J. MITCHELL.....Business Manager

Subscription Price - - - - \$1.00 per Year
English and Foreign Subscription 1.75 " "

ADVERTISING.

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We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., JANUARY 15, 1923

WESTERN GRAIN RATES

SHIPPERS had no difficulty in proving before the Interstate Commerce Commission in the Western Grain Rate hearing, that rates were too high from the farmers' standpoint. It was shown that in 1916 the equivalent of one bushel of wheat would transport 17.24 bushels from Huron, S. D., to Minneapolis, while in October, 1922, a bushel of wheat would carry only 6.19 bushels. A bushel of corn would transport 9.48 bushels of corn between the same points in 1916 and only 3.75 bushels in 1922.

It was also shown that the percentage of increase on grain between 1913 and 1922 was greater than on such other basic commodities as coal, coke, cement, salt, cotton, lumber, glass and pig iron. The revenue per car-mile on all traffic increased 44.1 per cent during the period 1913-1921, but in the same period the revenue per car-mile on grain increased 91.2 per cent. It has been much harder in the past for farmers to present a united front in transportation matters than it has been for other industries, such as lumber, iron, cement and glass, which have had strong organizations to present their claims. The granger states have taken the initiative in this hearing and the Farm Bureau Federation is backing them strongly. The farm bloc has not yet taken official action in the matter, but we are expecting daily that Mr. Brookhart of Iowa or Mr. Shipstead of Minnesota will come forward with a proposal to make freight rates a certain percentage of the market price of grain on the day received. This would be about in line with other proposals

of theirs and would not require more than double the office forces now employed by the railroads.

The fact that grain, which is economically and quickly handled, should bear so great an excess charge over other commodities should be given serious consideration by the Interstate Commerce Commission. We believe that the railroads should be permitted to be profitable enterprises, but there is no reason why some industries should be favored at the expense of others.

THE GRAIN FUTURES ACT

ATORNEYS for the Chicago Board of Trade on January 11 presented its case on the Grain Futures Act before the U. S. Supreme Court. The brief declares that the Act is unconstitutional on three main counts: It interferes with the discretion of the states respecting their intrastate commerce in violation of the Tenth Amendment; it violates the due process of law provision in that it attempts to create a crime and vests in a commission power to try and punish such crime; the provision requiring exchanges to admit co-operative associations deprives the exchanges and the individual members of their property without due process of law.

If the court upholds these contentions the Act will be practically void just as the former Act was. The Supreme Court has held on former occasions that future trading is not inimical to the best interest of producers and consumers, so that the elaborate preamble to the Act which attempts to upset this judgment will need some able defense to make it stick. There are some in the trade, in spite of this, who predict that the Act will be declared constitutional. If it is, the exchanges will doubtless operate as usual but will lose much of their efficiency and usefulness and may eventually be seriously attenuated in the services they perform to the country at large. Politics will be permanently in the saddle of the grain trade and politics and efficiency have always been and will always be a contradiction of terms.

A DIVISION IN THE RESERVE BOARD

THE farm bloc bitterly opposed the reappointment of W. P. G. Harding as chairman of the Federal Reserve Board, because he occupied that position when the banks began squeezing inflated values out of commodities, industry and real estate. The result was a drastic cut in values all along the line, attended with hardship, losses, and in some cases, disaster. The effect was no more severe on the farmers than it was on manufacturers and merchants, but the farmers have laid at Mr. Harding's door the cause of many of their troubles. They do not consider that, because of the drastic action of the Federal Reserve Board, conditions in this country now are better than anywhere in the world. We have gone through the worst phase of our reconstruction program. Many of the other countries have yet to face it. In America we can look forward to increasing prosperity and a gradual balance of values

which will bring better times on the farm as well as in the cities.

Financial experts are generally agreed that the action of the Federal Reserve Board was wise; that conditions did not warrant compromise, and that half way measures would have landed us in a mire of uncertainties which would have greatly prolonged deflation and would not have prevented eventual catastrophe. A reflection of this attitude by bankers is shown in the recent appointment of W. P. G. Harding as governor of the Federal Reserve Bank of Boston. This is a direct challenge to the farm bloc and to the political members of the Board.

If the Federal Reserve Board becomes a mere tool of politicians, basing its policies on the vote catching principle rather than upon fundamental economics, our banking system will be in far worse condition than it was before the Reserve Bank Act was adopted. The Reserve Board of necessity must consider the interests of every group in our diversified national life; farm blocs, labor blocs and other class conscious groups are intensely selfish and consider only their own interest irrespective of the effect on others.

In the division of the Reserve Board, which is sure to take place, we believe that the conservative banker element will prevail and that we may look forward to a continuation of our useful and constructive banking system, which is the foundation stone of our security and prosperity.

THE EFFECT OF AGITATION

RECOVERY of agricultural values in the past has always been effective in killing off the radical measures that hard times suggested as cure-alls for the trouble. Innumerable dangerous remedies have been advanced, but prosperity has brought reason in its wake and the threat has always evaporated. While agriculture cannot be ascribed as prosperous today, conditions are so much better than they were last year that we might reasonably look for a diminution of radical proposals for the aid of the farmer. For instance the crop values in Iowa this year are \$480,142,000, compared with \$305,359,420 last year, an increase of 57 per cent, and yet Iowa sent Mr. Brookhart to the U. S. Senate, one of the most radical and economically ignorant members of that august body.

There is little indication that the farmers are any more willing to accept the working of economic law as a cure for their troubles than they were two years ago at the height of the depression. In fact they are less willing for the leaven of propaganda is only beginning to get working. The so-called farm bloc in Congress is merely an organized propaganda. Its false doctrines of cause and effect were systematically planted for the selfish ends of the politicians. Now the politicians are fighting among themselves, the very existence of the bloc is threatened, but the seeds of discontent, of paternalism and socialism are growing and spreading. The farmers are reading and thinking and the stuff they feed on is mental poison.

The most hopeful outlook is in the inher-

ent conservatism of the farmers and the wholesome mental effect of hard work. The dangerous man is the idle man and socialism makes but small appeal to the honest, hard working citizen of which the farmer has always been among our best examples. These native characteristics may lead him through the maze of turgid radicalism through which he is wallowing at present to the height of sane thought and economic truth which are just beyond. But these heights cannot be reached without constructive leadership and helpful information, which must come largely from the non-political farm press, and from those who are in close touch with the farmer and in whom he has confidence. There are many grain dealers who occupy this position and they have a great responsibility in the present crisis, requiring tact, courage and above all, sound knowledge and correct information.

CAPPER'S VERACITY CHALLENGED

CHAIRMAN LASKER of the Shipping Board recently challenged certain statements which appeared in *Capper's Weekly* in regard to the costs which would accrue to the Government under the terms of the Ship Subsidy Bill. He pointed out an error of about half a billion dollars in Senator Capper's statement, under the impression that a few paltry hundred millions might be of concern to a politician in an argument. Senator Capper might have found plenty of arguments against the ship subsidy bill without garbling his figures on the cost. But he has contracted careless habits in this respect and apparently prefers to exaggerate.

The grain trade has been the target for Senator Capper's misstatements for some years. His favorite epithets of the grain exchanges, "gambling hells," "dens of vice," "worse than the Louisiana lottery," etc., are familiar to the trade and are ignored as the vaporings of an ignorant or an unscrupulous man. It is rather a relief therefore, to have his statement challenged by the head of a Government agency, and it may call to the attention of the public that the statement of even a Senator cannot be taken at their face value.

BUILDING COST AND INSURANCE

IT COSTS a great deal more to build an elevator now than it did six years ago and it will be some time before costs are materially less. From the standpoint of your business, your elevator is worth to you what it would cost to rebuild. Whether or not your mutual company or any fire underwriter agrees with your estimate of its value, depends largely upon yourself.

The personal equation is almost as important in writing insurance as it is in banking. A banker gives credit first on character and second on security. An insurance inspector who sees that the little things are taken care of around a plant will recommend a larger and more favorable policy than on a more modern and more expensive plant under careless management. Your plant should be

protected as fully as possible and if it is kept up properly, if bearings are in alignment, oil kept in the bearings instead of on the floor, elevators running true, power plant kept in shape, and the house inspected thoroughly each night before closing up, you will have little difficulty in getting full coverage from your insurance company. Then if fire comes, as it does to from 20 to 40 elevators each month, you will be well repaid for your trouble and care.

FARM PRICES NOW AND THEN

WE STILL hear occasionally the statement that farm conditions were never as bad as they were last year. And even now it is suggested that the purchasing power of farm commodities is lower than in any pre-war year. No doubt such statements are made in good faith, but the makers of them are laboring under two handicaps—short memory and the comparative glamour of war time peak prices.

To be sure the purchasing power of farm products is low, far lower than it should be, but the price of farm commodities is high enough. The effort should be, not to raise farm prices, but to lower the prices of manufactured articles and transportation. It is, of course, easier said than done, for organized labor says no and labor cost is the main factor. Labor also forgets everything that preceded the war boom. Its ideas are distorted and prejudiced by the abnormal years of war, and the advantages it gained in those days, both in wages and in favorable legislation, will be hard to recover.

But even the present inequality of values is not as difficult for the farmer to stand as the conditions of 25 years ago, as recently recalled by a contributor to a farm paper:

For example, I can remember when corn was sold from my grandfather's farm, now a part of the Nichols farm northwest of Buffalo, Kan., for 13 cents a bushel; this was in 1895. Wheat in those "good old days" sometimes sold for as low as 35 cents a bushel. Livestock prices were on about a relative basis. From \$13 to \$15 a month and board were common wages for farm hands. A little later than this, in 1899, my father bought 80 acres, now a part of our place and containing some fairly good land, for \$10 an acre. Even as recently as 1902 he purchased what is our best land for \$27.50 an acre.

Compared with the nineties present farm prices are fabulous, but also compared with the nineties transportation and manufacturing costs are more than fabulous. Prices are always relative and it takes both memory and judgment to see relations properly.

THE EXPORT SITUATION

OUR exports of wheat last year were about 100,000,000 bushels less than in 1921. The crop of 1922 was the larger of the two, but in the first six months of 1921 we were sending out the tail end of the big 1920 crop, which amounted to 967,979,000 bushels, as against 833,027,000 in 1921 and 856,211,000 last year. A large part of the exports of 1922 were of the new crop wheat after the harvest. Goodman estimates that there are 130,000,000 bushels left in the country for export in the next six months, an average of less than

22,000,000 bushels per month, as against the monthly average for the past four years of about 25,000,000 per month.

Europe is short of bread grains and would normally require more than the monthly average, but economy of consumption is general and substitutes are being resorted to. Potatoes, the most common substitute, are of poor quality and not too plentiful, so it is almost certain that the spring demand from Europe will be larger than it has been of late. Regardless of financial difficulties people must eat, and in view of the political situation none of the nations involved will want to be caught with empty larders. International war credits are not held in any too high esteem at present in this country, but necessity provides ways and means that were thought impossible before such necessity arose and financing will be accomplished somehow. It looks as though the people who hold the grain late in the spring will be in a comfortable position.

THE WEEKLY EXPORT FIGURES

WEEKLY reports of grain exports was begun by the U. S. Department of Commerce on January 8, for the week ending January 6. An idea of what this service includes can be gathered from the initial report:

Barley, 28,000 bushels, all of which went to Europe; corn, 229,000, of which 99,000 went to Germany, 88,000 to the United Kingdom, 20,000 to other parts of Europe, and 65,000 to Canada; oats, 1,000 bushels, all to Cuba; rye, 171,000 bushels, of which 32,000 was exported to Germany and 139,000 to other Europe; wheat, 1,578,000 bushels, exported as follows: Italy, 287,000 bushels; United Kingdom, 281,000, and other Europe 732,000; flour, 89,500 barrels—7,300 to United Kingdom and 37,200 to other Europe.

The following grains were exported from Canadian ports through the United States: Oats, 66,000 bushels; rye, 68,000 bushels; wheat, 957,000 bushels; and flour, 21,400 barrels.

The next report will include comparative figures of the week before. The weekly exports have been available at the expense of considerable trouble to those who were interested enough to gather the statistics from all the ports, but the trade at large has not had this information, and the published report by the Department of Commerce has usually been two months in preparation. This new service will be appreciated by many traders as the foreign business in grain is an important factor in its value to domestic consumers.

Too much must not be expected from these reports. It takes considerable experience to extract the real significance of the figures given, and the inexpert grain dealer or the layman will be no wiser than before. It is a step in advance however, and is a healthy indication of willingness to help by the Department of Commerce.

A journal in the west suggests that the grain trade have a Czar or high commissioner, such as baseball has in Judge Landis, the movies in Will Hays, and the theaters in Augustus Thomas. The duties of these Czars are rather nebulous, but our understanding was that the chief duty of each is to deodorize

the pastime or industry with which he is connected. They all smelled to Heaven when the respective Czars were appointed. The case of the grain trade is hardly parallel, for any odor there is in connection with it has its origin in the nostrils of the politicians and demagogues who belabor the grain trade to catch rural votes or small change.

FINGERS OF LIGHT

DID you ever see the sun break through purple cloud masses after a storm. The hidden source of light finds one rift in the cloud bank and sends down a shaft of gold, then, another and another until these glorious fingers of light brighten and warm the country side. A similar effect on the mental darkness is pictured by the letters from the officers of our various associations, appearing on another page.

It was to be expected that a note of optimism should have been struck by all; but the particularly encouraging feature is the number of specific causes that are stated, which are conducive to better times. These are the fingers of light which brighten the prospects for 1923.

To summarize briefly the causes that are to bring improvement in 1923 we find—Better feeling among the farmers and less interest in crazy schemes of credit and marketing; demonstrations that cooperative enterprises are not, per se, gold mines, and require efficient management to succeed; improvement in railroad service and a hope for lower rates; less public sympathy with political schemes for the interference of Government in business; better understanding of Federal grading rules, in respect to heat damage; easier credit; prospect of export aid; better understanding and feeling between farmers and grain dealers.

Here is a list of contributing causes of optimism, any one of which would have an effect, and all of them together a certain and material benefit to the trade.

EDITORIAL MENTION

With very general Hessian fly infestation and a wet spring in prospect, conditions are ripe for heavy grain losses this year.

When the wheat pools demonstrate that they are a success, they will be so deluged with grain that they will no longer be a success.

The decreased acreage in Winter wheat looks as though the farmers had little confidence in the wheat pool to better their condition.

Representative Steenerson of Minneapolis made a good impression with his report of the Congressional committee inquiry into farming conditions, but that is largely effaced by his bill to provide a wheat price insurance with a Government revolving fund of \$100,-

000,000. He evidently could not stand the adverse pressure from farmers following his honest and able report. He is back again into petty politics.

Overheated stoves are causing their usual quota of elevator fires. This is a fire cause within the control of an operator, and is usually inexcusable.

With Seattle and Portland fighting for rate advantages on the west coast and Boston and Philadelphia at loggerheads on the Atlantic, rail rate experts are having their hands full.

The term "orderly marketing" as used by Julius Barnes and other leaders means one thing, but to the average farmer it means speculating by holding his crop for higher prices.

The state grain inspection law of North Dakota has been put under injunction by the Federal Courts and now will go to the Supreme Court again. The question often arises, Why is North Dakota?

Putting the Government into the banking business is the latest proposal of G. J. Jewett, general manager of the Northwest Wheat Growers' Association. G. J. has much to learn about the function of Government under our constitution.

The reduction in grain rates from Montana points to the West Coast have put Montana millers at a serious disadvantage, amounting to about 25 cents a barrel over coast mills. The silver lining for the grain shippers still looks like a black cloud to the millers.

Now comes the proposal for a law allowing the warehousing of grain on farms and issuance of negotiable certificates therefor. This would be fine. Only a few thousand grain inspectors and farm warehouse inspectors would be required.

The Federal Reserve Board has made a ruling increasing the maturity date of some agricultural paper to six months. This will relieve much of the agricultural financial burden, and except for provision for live stock paper, will make special legislation unnecessary.

Of the Government loans on seed grain made in 1921 and 1922 and amounting to \$3,500,000 in the Northwest, up to November 4, 31.1 per cent of the loans had been collected, leaving a total of \$2,154,827 to be collected of which \$1,123,703 is of the loans made in 1921.

The state mill and elevator at Grand Forks, N. D., were built at state expense, but the building bill provided no working capital to run them when completed. The Bank of North Dakota advanced \$100,000 to start operations, but that is only about one-tenth the sum required. That is one of the problems that the state legislature will have to settle. Socialistic experiments usually require more financing than is expected. A business under

the control of the people is supposed to run itself, but unfortunately business has to have oil for its machinery whether it is socialistic or capitalistic business. You can't change the character of an industry merely by changing its name.

A law to forbid the sale of stored wheat is on the legislative program of North Dakota. When the farm leaders of that state advise holding \$2.50 wheat for higher prices such a law would rather cripple the flexibility of the grain handling system. The early harvesters could get their grain under cover; all the rest would be out of luck.

One of the mysteries of the grain trade is why any credence should be put in estimates of future values made by a man who is known as a large speculator. And yet wide publicity was recently given the opinion of such a man who was reported to have commitments of several million bushels of grain. Probably many suckers believed this to be an unbiased judgment.

Stewart Browne of New York states that the St. Lawrence waterway is bound to come and that the country will need all the facilities which the New York State Canal can offer in addition. At its present rate of progress, increased production in the northwest will have outgrown the St. Lawrence waterway before it is even started, so Mr. Browne's prediction seems well within the mark.

The Chicago Board of Trade's new radio station on the Drake Hotel, under favorable atmospheric conditions will be audible from coast to coast. The half-hour reports will be the basis of grain trading throughout the country, and a moderate expenditure will put the most remote farmer on an equality with the private wire branch. The farmer will have the facts, whether he will have the knowledge of how to use the facts is a different matter.

If there is a fly in the ointment of 1923 prosperity it is the threat of strikes. We are short of labor and the unions propose to make the most of it. Already demands are being made in various industries for wage increases and if these are granted the spread between raw material prices and manufactured products will widen. No permanent return to prosperity can be made until the cost of manufacture is decreased. Some day the issue will be clearly raised as between producers on one hand and organized labor on the other.

The Senate Committee on Agriculture and Forestry in its report recommending the passage of the Grain Futures Bill, bases its decision largely because "The facilities for study and investigation offered by this bill will enable the Secretary of Agriculture to remove or confirm the suspicions which exist in the minds of the producers and the public with respect to future trading on the boards of trade." The politicians first create the suspicion and then put the grain trade out of business to see if the suspicion is well founded.



D. H. HOPKINS
Cincinnati

NEWS OF THE TERMINAL MARKETS



C. W. URMSTON
Indianapolis

BROKERS ORGANIZE

Brokers on the Board of Trade of the city of Chicago, have organized an association which has for its principal object the care of their interests as brokers and with the view of watching taxation and other conditions that place undue burdens upon the brokers. Horace L. Wing is president of the organization and Robert Boylan, secretary and treasurer.

GOOD MARKET EXPECTED

At the present time buyers appear to be quite anxious for grain of all kinds and are not getting sufficient to fill their requirements. The car shortage, of course, is the biggest factor right now in the grain business particularly from the Middle West where grain normally moves in this direction. We are looking forward to a good market here during the near future.—E. P. Bacon Company, Milwaukee, Wis. Market letter of January 13.

THE ELECTION AT KANSAS CITY

Harry J. Smith will head the Kansas City Board of Trade, Kansas City, Mo., the coming year. He is president of the Federal Grain Company and served as second vice-president in 1921 and first vice-president the past year, Allen Logan, second vice-president becomes first vice-president. H. C. Gamage of Moore-Seaver Grain Company was chosen second vice-president.

New directors were chosen as follows: F. B. Godfrey, W. C. Goffe, C. M. Hardenburgh, J. J. Kraettli, F. W. Lake, G. A. Moore.

PRICES ADVANCING

Our receipts of corn for some time past have been moderate and prices have been advancing in sympathy with other markets; and ruling values here at the present time are in line. However, the demand for shipment is not so brisk, especially for domestic purposes. While some corn has been sold to go South for export, stocks in the East appear to be fairly large and they are not taking on any fresh supplies to amount to anything at the moment. However, the situation may change at any time and we look for a better demand before long particularly from that section. Country acceptances on bids and advices of consignments are light. Information we receive from the country indicates that farmers are not inclined to sell even at the advanced prices the past few days.

Receipts of oats have been fair and prices have been holding strong and in line with other markets. The bulk of the arrivals are going South, very few being worked for domestic purposes East.—Mueller Grain Company, Peoria, Ill. Market letter of January 13.

WILL INTEREST FOREIGN NATIONS

George S. Bridge, chairman of the Grain and Hay Show Committee of the Chicago Board of Trade, left that city January 8, for a trip around the world. During the journey he will arrange with a number of foreign countries to enter exhibits this year at the International Grain and Hay Show which is made possible by a \$10,000 premium list donated by the Board of Trade.

Mr. Bridge will confer with leading agricultural authorities in Havana, Panama, Honolulu, Japan, China, the Philippines, India, Egypt, Holland, Italy, France and England. He will return next June.

"The big annual show," he said, "has clearly proved the tremendous value of bringing farmers together for a comparison of their crops and their methods of production. It is our hope to link

American farmers and farmers of the chief producing nations of the old world together. It will permit exchange of ideas on everything from treatment of soil to the world competition in foodstuffs."

DEATH OF HONORED WEIGHMASTER

Henry A. Foss, weighmaster and custodian of the Board of Trade of the city of Chicago, died suddenly at his home, 4812 Woodlawn Avenue, Chicago, on the evening of December 20. He was on the way from the house to the garage when death came and his sudden passing was attributed to heart failure. His death came as a shock to countless friends for there was



THE LATE HENRY A. FOSS

no man who, through so long connections with a leading exchange, had so largely enjoyed the friendship and esteem of his associates or who had gained so wide a reputation as a leader in his particular office. "Gus" Foss stood at the head of his profession as weighmaster and for years the Chicago Board of Trade stood like the Rock of Gibraltar for everything that was highest and best in the question of its grain weights.

Mr. Foss was the ideal weighmaster. Of rugged honesty, he brought to the office a spirit of justice and fairness that spread through every department from the general offices in the Board of Trade Building to the remotest tally men in the outlying grain elevator districts. He kept close to his men and with this idea of a closer acquaintance and fuller co-operation he inaugurated about 1902 an annual dinner to his men, given the middle of January. This dinner brought the men of all departments together and there was also present the weighing committee of the Board, its president and a few of the close friends of the weighmaster as well as out-of-town guests. The greatest good will was seen to prevail between Mr. Foss and his men at these dinners which were continued up to the time of the Great War. An invitation to the dinner was held in very high appreciation.

Mr. Foss also kept close in touch with country shippers by attending state conventions of grain

dealers and was constantly looking for complaints with the idea of greater co-operation and elimination of errors. He would let nothing interfere with these opportunities of meeting the country grain trade and appeared frequently on the program at these conventions. He also brought out from 1900 to 1910 various booklets and pamphlets designed to improve the weighing service at terminals and country points. Among the most important of these booklets were, "Facts and Factors in Weighing"; "Scales, Estimating and Coopering," and others.

It was in his friendly, democratic spirit, however, that Chicago's weighmaster will be best remembered. He had an especial faculty for making and keeping friends. Mozart had a genius for music; Shakespeare had a genius for the drama; Gus Foss had a genius for friendship. The statement could be made without fear of successful contradiction that no man associated with the grain trade had a larger number of true friends both within and outside the industry. He gave his friendship freely, basing this priceless gift solely upon the moral worth of the individual. The friendships once made were never sundered.

Mr. Foss was born in Campton, N. H., March 17, 1859, and when four years of age was brought by his father to Chicago. He was educated in the Chicago Public Schools and took a course also in Hillsdale College at Hillsdale, Mich. He gained his first knowledge of the grain business with the grain commission firm established by his father and uncle, known as Foss, Strong & Co. Later he became an inspector in the state grain inspection department and afterwards acted as receiver's agent in the Illinois Central Railroad. It was from this office that he was appointed weighmaster by the Board in 1898 and has been reappointed to the office each year since that time.

Mr. Foss was married in his early twenties to Miss Mirriam A. Rambaugh. The widow and their seven children survive. These are Vera, Elizabeth, now Mrs. Harry Clifford Brown of Roselle, N. J., Charlotte and Margaret. The sons are Marion, Samuel and Frank. Mr. Foss was for many years a member of the Union League, the Calumet and the Question Club.

The funeral was held in the First Presbyterian Church at 2 o'clock, December 22, and was attended by a large number of Board of Trade members, employes of the weighing department, delegates from outside exchanges and friends from various parts of the country. The interment was at Oakwoods Cemetery.

ENDORSES AID TO FARMERS

A plea for quick congressional action on bills intended to aid the farmer is contained in a resolution adopted by the Chicago Board of Trade and which it was announced will be forwarded to all members of Congress.

After pointing to the serious distress of post-war readjustment through which agriculture is passing, the resolution declares that until this distress is relieved "the prosperity of the entire nation is threatened."

"Agricultural interests should be assisted in a way commensurate with their great need and in every way consistent with sound business principles. Certain bills providing relief are now pending, one bill providing for more liberal farm credits and other for extension of foreign credits to promote the exportation of foodstuffs.

"It is the sentiment of the directors of the Chicago Board of Trade that these or similar measures be and hereby are heartily endorsed with the recom-

mentation that prompt and adequate relief be provided, and that a copy of this resolution be forwarded to each member of Congress."

The resolution declares that agriculture, "the most important basic industry, now represents in value \$78,000,000,000 more than the combined wealth of all of our railroads, our manufacturing industries, coal mines and quarries." Its importance on world affairs is indicated by the fact that the "United States produces more than one-fourth of the world's wheat crop, three-fourths of the world's corn crop, and one-fourth of the world's oats crop."

"Upon the welfare of agriculture," continues the resolution, "depends the welfare of this nation. Agriculture and commerce represent a partnership and their interests are so closely allied that a dissolution of the partnership would mean the bankruptcy of both."

NEW GRAIN INSPECTOR AT TOLEDO

H. J. Brundage has succeeded the late E. H. Culver as chief grain inspector on the Toledo Produce Exchange. Mr. Brundage has been assistant grain inspector since January 1, 1922. He has been identified with the grain interest of Toledo since 1909, when he became employed by the East Side Iron Elevator. He left the elevator in 1914 to become a grain inspector for the Produce Exchange and is fully qualified by knowledge and experience to maintain the high standard for which the inspection department of the Toledo Produce Exchange is known.

FEEDING OPERATIONS ON HEAVIER SCALE

Our spot market has ruled very dull the past two weeks, the usual holiday dullness having extended over into the new year. Receipts of rail grain continue about sufficient to supply the demand which remains normal. Local stocks of oats are decreasing slowly and corn is not accumulating as it usually does at this season, so that any change to more severe weather or a further tightening in the rail situation would undoubtedly create a more active demand for spot supplies. Feeding operations in the country east of Buffalo are on a heavier scale than for the past several years and this will no doubt result in local stocks of grain being well cleaned up before spring.—*J. G. McKillen, Inc., Buffalo, N. Y. Market letter of January 13.*

DEMAND BETTER THAN RECEIPTS

We continue to have an excellent demand for Soft Red Winter wheat from southern outlets, at fancy premiums over other western markets.

Mixed wheat, with a larger percentage of Soft, is selling at a very narrow discount under straight Red wheat. Receipts continue very light and not enough arrivals to supply the demand.

White corn is again commanding premium due to the very light movement and an excellent demand from mills. It is selling here today at 1 cent premium over Yellow. Our spot market continues at a premium of from 1 to 2 cents over other western markets due principally to the light movement of grain from Indiana points.

Oats on southern billing are bringing from 1 to 1½ cents premium with an excellent demand for heavy No. 2 White oats which are being accumulated for seed purposes.—*McCardle-Black Company, Indianapolis, Ind. Market letter of January 13.*

CHICAGO BOARD OPERATES OWN RADIO STATION

On the evening of January 11, the Chicago Board of Trade took over the big radio station, WDAP, which it recently purchased, located on the Drake Hotel. It was nearly a year ago that the Board began to radio distribution of grain quotations and statistics which going to hundreds of towns has been of great value to farmers and those interested in marketing grain and its products. The service from the new station will be operated at 30 minute intervals during market hours on a wave length of 360 meters.

At 9:30 a.m. there is broadcasted the receipts and shipments, estimated car lots, local weather report, opening futures market of wheat, corn, oats, rye,

barley, pork, lard and ribs followed by futures' quotations every half hour. At the close of the Board there is sent at 1:20 p.m. the closing future quotations and high and low for the day; also the cash grain price and gross bids for cash grain to arrive.

Robert McDougal, ex-president of the Board of Trade, was the guest of honor at a dinner at the Drake Hotel, inaugurating the service and delivered a radio address which was listened to by thousands in central territory. Alluding to the service he said:

"In this manner, we shall give to the entire radio public the official prices and other valuable information in connection with all commodities handled through this channel, thus serving the public from the farmer to the customer. We hope to broaden our acquaintance and demonstrate our proclamation that the Chicago Board of Trade is an open book that he who runs may read, and that prices are not made behind closed doors and available only to the few."

JOHN J. STREAM ELECTED PRESIDENT

It is not often that the office seeks the man. In fact such a departure from the almost universal custom of office seeking is so great an exception to general rules as to be a negligible quantity. The Chicago Board of Trade, however, has always proved the rule by the exception. It wanted a man to serve



JOHN J. STREAM

as its head during 1923, of the broadest understanding of grain affairs and of the highest ethical character. The Board therefore sought and chose John J. Stream for the office. He was elected president of the Board, without opposition, at the annual election held January 8.

Mr. Stream is one of the principals in the commission firm of Shaffer & Stream, besides being a member of the J. C. Shaffer Grain Company. He has been a member of the Chicago Board of Trade since 1902. Besides serving as director he was elected vice-president of the Board in 1917 which office he resigned in November of that year having been appointed by Herbert C. Hoover head of the Coarse Grains Division of the Food Administration.

Mr. Stream is one of Chicago's native sons and was born in that city in 1870. After having fully profited from the advantages of the public schools he entered the Chicago College of Law from which institution he was graduated in 1892 with the degree of Bachelor of Laws. He was admitted to the bar of Illinois but applied his legal knowledge to his business activities rather than to the general practice of his profession. He was for years associated with the grain firm of Charles Counselman & Co., and became president and treasurer of the Chicago Grain & Elevator Company in which dual office he continued until 1906. This company operated an extensive line of elevators in Iowa along the line of the Chicago, Rock Island & Pacific Railroad. Since 1906 his activities have been mainly centered in the two firms before mentioned.

Mr. Stream is a member of leading grain ex-

changes and holds membership also in the Union League, the Chicago Athletic and Westmoreland and Chicago Yacht Clubs.

PEORIA BOARD HOLDS ELECTION

The annual election on the Peoria Board of Trade took place January 8. The following were chosen officers for the coming year: President, E. R. Murphy; vice-presidents, T. A. Grier, L. H. Murphy; treasurer, Wm. C. White; secretary, John R. Lofgren.

The directors elected are: Wm. S. Miles, Louis Mueller, H. H. Dewey, F. C. Haefner, G. A. Peterson, N. R. Moore, J. M. Van Nuys, F. L. Wood, J. C. Luke, W. T. Cornelison.

Committee on Arbitration: E. W. Sands, L. H. Ward, B. E. Wrigley.

INSOLVENCY RULE AMENDED

The Chicago Board of Trade has adopted an amendment to the rules of the Board giving to the Board officials enlarged powers toward promptly suspending any member who may become insolvent. The rule as amended reads: "Whenever the secretary of the Board claims and insolvency committee shall ascertain that a member has failed to meet his obligations, or is insolvent, or that a firm or corporation registered upon the Exchange has failed to meet its obligations, or is insolvent, the Board of Directors, on presentation and confirmation of the evidence, shall suspend from membership in the association such member, partner in such firm, or any officer in such corporation."

NEW OFFICERS TOLEDO PRODUCE EXCHANGE

Kenton D. Keilholtz was re-elected president of the Toledo Produce Exchange of Toledo, Ohio, at the annual election of officers held January 10. Jesse D. Hurlbut was chosen first vice-president, Frank R. Moorman, second vice-president, Fred W. Jaeger, treasurer and Archibald Gassaway, secretary.

The directors are: David Anderson, Jesse W. Young, John C. Husted, Harry R. DeVore, Chas. W. Mollett, Raymond P. Lipe, Fred O. Paddock, W. A. Boardman, H. W. Applegate, John Wickenhiser.

Committee of Arbitration: C. S. Coup, John W. Luscombe, Jr., G. R. Forrester, L. A. Mennel, E. A. Nettleton, Henry Hirsch, G. C. Eicher.

FEEDING REDUCED

Corn receipts have been about meeting the requirements of the trade and no surplus is noted. Elevator stocks light and all arrivals are meeting ready sale at values that are well in line with other markets. Natural corn arriving in good condition and very few cars mis-grading. Country offerings and consignments in fair volume.

Oats are in more plentiful supply and western terminal markets underselling offerings of country points in nearby states. Receipts have not been burdensome but consist principally of shipments from western terminals. Ohio and Indiana points marketing oats very slowly and are reported to have considerable oats yet to market.

Movement of cars very good. Most of them arriving quicker than buyers have anticipated. The very mild weather conditions so far this winter has reduced feeding to a minimum—*Harper Grain Company, Pittsburgh, Pa. Market letter of January 13.*

IMPROVED DEMAND FOR CORN AND OATS

With reference to the cash grain situation here, it is our pleasure to report that the demand for both corn and oats is very much improved and indications are, that we will encounter a very heavy demand from this time forward, in the territory that is served by this market, it being almost bare of stocks and just now going into their real feeding season.

So far as wheat is concerned, there is very little being handled here now with the exception of, for export, via the barge line. There has been a continued and heavy movement of both corn and oats, some rye, moving through this port for New Orleans for export.

The river business is, generally speaking, heavy and indications are that western shippers, not only

of grain, but other commodities, are going to use the Barge Line to a greater extent from this time forward than heretofore.—*Halliday Elevator Company, Cairo, Ill. Market letter of January 13.*

MERCHANTS EXCHANGE ELECTS OFFICERS

At the annual election on the St. Louis Merchants' Exchange the following were chosen to serve for the coming year, President, W. J. Edwards; first vice-president, Samuel Plant; second vice-president, W. K. Woods; directors for two years are, Geo. F. Powell, Louis F. Schultz, Julius J. Albrecht, Charles E. Valier, J. B. Horton.

Committee of Appeals, J. Paul Berger, E. C. Dreyer, A. H. Beardsley, F. H. Barkley, W. H. Toberman, Wm. T. Brooking, John H. Herron, Logan M. Baxter, Ralph H. Baumgartner, M. R. Parrott, J. A. Bushfield, and Al. V. Imbs.

Committee of Arbitration, Daniel S. Mullally, Harry A. Adam, Herbert N. Manning, Henry Burg, Harry W. Daub, A. C. Bernet, A. J. Rogers, John H. Caldwell, Robert W. Pommer, and Harry L. Bourdreau.

J. A. SCHMITZ, SUCCEEDS AS WEIGHMASTER

Joseph A. Schmitz has been appointed weighmaster and custodian of the Chicago Board of Trade to fill the unexpired term of the late weighmaster

H. A. Foss. Mr. Schmitz has been connected with the weighing department of the Board for the past 23 years. He has always been a close understudy of Mr. Foss and his methods and as assistant weighmaster must be given no small credit for the high state of efficiency which has characterized this important department of the Boards

operations. Mr. Schmitz has every qualification necessary to take over this work. In experience, in moral qualities, in justness and in technical and practical acquaintance with every branch of weighing he measures up to a very high standard. Like the late weighmaster, his friends are legion who unite in congratulating the Chicago Board of Trade in having so able a man to take charge of the weighing department. Offices remain in the Board of Trade Building.



THE ELECTION AT CHICAGO

In addition to John J. Stream and Joseph Simons, who were elected without opposition to the presidency and second vice-presidency of the Chicago Board of Trade, the following directors and committees were chosen:

Directors—Frank L. Carey, Edward D. McDougal, Edwin A. Doern, J. Edwin Wynne, Parker M. Paine.

Nominating Committee—H. N. Sager, C. H. Canby, Edward Andrew, Jos. P. Griffin, John A. Bunnell.

Appeals Committee—Harry C. Schaack, H. B. Godfrey, Roland McHenry, Walter Metcalf, W. B. Paige.

Arbitration Committee—George E. Booth, Phillip J. Reddy, James N. Begg, Jas. A. Creighton, John J. McCormick.

Joseph Lamy, second vice-president in 1922, becomes first vice-president for the coming year under the rules of the Board.

CHANGES AND MEMBERSHIP

Chicago.—New members on the Board of Trade are: Alvah R. Ford, Edward S. Westbrook, Lester Armour, Thomas B. Phillips, Harold K. Copenhaver, Jacob F. Goergen and Richard V. McNellis, Jr. The memberships of the following have been transferred: Estate of John Gillies, P. D. Norcom, C. W. Cones, Charles E. Kuh, B. W. Frank, Edwin J. Mahoney and John W. Radford. Reported by Secretary John R. Mauff.

Duluth.—Douglas C. Moore was recently elected to membership on the Board of Trade. John H. Ball and W. J. McCabe, Jr., have withdrawn their mem-

berships on the exchange. Reported by Secretary Charles F. MacDonald.

Cincinnati.—Fred W. Scholl Grain Company is a new member of the Cincinnati Grain & Hay Exchange. Reported by Executive-secretary D. J. Schuh.

TERMINAL NOTES

The Moffitt-Napier Grain Company of St. Louis, Mo., has increased its capital stock from \$50,000 to \$70,000.

Gill & Fisher, grain exporting firm of Baltimore, Md., admitted Edward L. Davis to partnership on January 1.

The Brooks Elevator Company of Minneapolis, Minn., has increased its capital stock to \$750,000 from \$100,000.

Walter H. Wilson retired from the grain and stock firm of Harris, Winthrop & Co., of Chicago and New York on January 1.

Owing to ill health, William Stude severed his connections on January 1 with the grain firm of Otto Stude & Co. of Baltimore, Md.

Herbert C. Monks, of Goffe & Carkener Company, Kansas City, Mo., was married early in January to Miss Sylvia Tucker of that city.

Pittman & Harrison Company, wholesale grain and seed dealers of Sherman, Texas, have mailed their friends an attractive calendar for 1923.

Thompson & McKinnon of the Rookery Building, Chicago, Ill., recently established direct wire connections with Mendoza & Co., of Havana, Cuba.

W. H. Ulring, formerly with Lamb, McGregor & Co. of Minneapolis, Minn., has taken charge of the consignment department of the Peavey Company.

A good motto, "If you cannot win, make the one ahead break the record," appears on the Pope & Eckhardt Company, Chicago, calendar for January.

C. A. Fisher, who has been for some time associated with Dennis & Co., Inc., of Baltimore, Md., has been appointed as an assistant secretary of the company.

Harry G. Schaub, traffic manager of the Young Grain Company of Toledo, Ohio, was united in marriage on December 30 to Miss Genevieve De Shettler of that city.

Louis G. Graff, well known in grain circles of Philadelphia, Pa., has planned a five months' tour around the world. He will be accompanied by his wife and daughter.

The John Wahl Commission Company of St. Louis, Mo., has increased its capital stock from \$200,000 to \$350,000. Liabilities are listed at \$240,000 with assets of \$432,074.

The Dixie Grain & Feed Company of Kansas City, Mo., has been organized to conduct a general grain and mill feed business. Offices are in the Board of Trade Building.

H. W. Bernhardt, grain buyer for the Purity Oats Company's plant at Davenport and Keokuk, Iowa, has moved his office from Davenport to the Peoples Life Building, Chicago.

Toberman, Mackey & Co., the popular hay and grain firm of St. Louis, Mo., have sent out a large wall calendar for 1923 with distinguishing features including the Weather Forecasts in United States for the year.

Carl A. Holton, recently manager of the Flanley Grain Company's office at Milwaukee, Wis., has assumed the management of the grain consignment department of the La Budde Feed & Grain Company of that city.

The Board of Directors of the North American Grain Company of New York City recently chose the following officers: Charles Griffith, president; E. L. Kimball, vice-president; W. E. Clarkson, secretary and treasurer.

The Port Arthur Chamber of Commerce and Shipping, Port Arthur, Texas, has sent out a card to its members and friends inviting them to make larger use of the facilities of the Chamber of Commerce in 1923. This service includes, General Information Bureau, Traffic Bureau and Rate Mat-

ters, Grain Inspection Department, Travel Bureau, Bureau of Statistics, Advertising Matter of City, Port and Shipping Records, Research Department, Library of City Directories.

William S. Doyle has opened a grain and feed brokerage and commission business at Buffalo, N. Y., with offices in 316 Chamber of Commerce Building. Mr. Doyle starts with all necessary facilities for rendering efficient and satisfactory service.

The Sawers Grain Company, having found its former quarters in the Postal Telegraph Building, Chicago, Ill., inadequate for the accommodation of its expanding business moved early in January to new offices in Rooms 617 to 623 the same building.

At the recent annual meeting of the Memphis Hay & Grain Association of Memphis, Tenn., C. S. Kennedy of the Quaker Oats Company was unanimously elected president, S. F. Clark vice-president and Walter J. Fransioli was re-elected secretary and treasurer.

The directors of the Chicago Board of Trade have adopted an amendment to the rules making the time for delivery on the last day of the month one hour later, thus giving more time to those with large quantities of grain and provisions to get notices out more promptly.

Allen M. Clement, a director of the Chicago Board of Trade and member of the grain and stock firm of Clement, Curtis & Co., gave his annual beef steak and onion dinner to the officers of the Board late in December. A special feature of the dinner was that Mr. Clement acted as chef.

Edward F. Catlin, member of the St. Louis Merchants Exchange was suspended from membership on December 27 for a period of 30 days. The action resulted from his having been found guilty of uncommercial conduct and of committing an act detrimental to the interest, welfare and dignity of the Exchange.

J. S. Bache & Co. of Chicago announces the discontinuance of their cash grain receiving department. Fred S. Smith, who has been connected with the cash grain end of the business for many years, and Edward A. Praeger, who is well known and has very many friends among western grain shippers have formed a connection with McKenna & Dickey, grain receivers with offices in the Board of Trade Building.

The announcement has been made of the engagement of Miss Hazel McQuillan, vice-president of the McQuillan Company, well known hay, grain and feed firm of Cincinnati, Ohio, to Harold A. White of Springfield, Mass. Miss McQuillan is a very popular young lady who made a notable success in newspaper work with the Cincinnati *Enquirer* before engaging in the grain business in which she has been equally successful. The wedding will take place in May.

Dilts & Morgan, grain merchants of Kansas City, Mo., closed their office January 12 pending appointment of a receiver. The firm's trouble was said to be due to bad accounts and frozen credits. The company was incorporated for \$300,000. A statement issued from the office said that although no definite list of assets had been prepared they would be considerably less than the liabilities. The firm had branch offices in Salina, Wichita, Enid, Okla., and Oklahoma City. W. C. Goffe of Goffe & Carkener Company was named as receiver by the court.

Owing to ill health, F. W. Hartwell retired on January 1 from the firm of H. Verhoeff & Co., of Louisville, Ky. The death of W. L. Verhoeff, who was also in poor health occurred January 9. The business is continued under the same firm name of H. Verhoeff & Co., by the remaining partner, R. M. Hartwell who has associated with him John S. Green and W. C. Hartwell, both of whom have been connected with the business for a number of years. They announce that the same policy of fair dealing which has been followed by the firm during the many years of its existence will be strictly adhered to. John S. Green is a director of the Grain Dealers National Association and for years has been on various committees and is otherwise prominent in its councils.

TRADE NOTES

The Union Iron Works of Decatur, Ill., report a steady improvement in orders for grain elevator equipment for the past six months with indications for a good business the coming year.

W. S. Sewell, for several years traveling superintendent for the Sperry Flour Company, and more recently with the Federal Mill & Elevator Company at Mansfield, Ohio, has joined the staff of the B. F. Gump Company, Chicago, as traveling representative.

The Link-Belt Company of Chicago, Ill., has mailed a wall calendar to their friends and patrons wishing them at the same time success and prosperity for the coming year. A feature of the calendar is space for pictures and descriptions of the line of Caldwell conveyors, boots, buckets, etc., for the grain elevator and mill trade.

Thos. E. Casady, president and manager of the Barnard & Leas Manufacturing Company of Moline, Ill., was a recent visitor at Seattle, Portland and other points on the Pacific Coast. Mr. Casady's visit was made necessary by the company's increasing Pacific Coast business, which has grown to very large volume during the past few years. The large plant at Moline has been operating at full capacity and orders booked ahead show there will be no cessation of activity during 1923.

The Burrell Engineering & Construction Company of Chicago, Ill., express themselves as well pleased with the volume of building of mill and grain elevators which they did last year and that indications point to a record of building the coming year. They say that mill buildings and elevators are much better designed now than formerly and that there is a demand for higher class buildings as well as better machinery equipment. They point out also that prospective builders, for the new year, had better get their orders in early as the spring rush will make it more difficult to secure materials and prices have already commenced to advance with indications they will go higher.

W. P. Buchan has resigned his position as director and Minneapolis branch manager of the Richardson Scale Company to join the staff of the Strong-Scott Manufacturing Company of Minneapolis, Minn. He will be in charge of the company's Bird Scale Department. Mr. Buchan was with the Richardson Scale Company 16 years, starting in their drafting room rising to be chief draftsman, went on the road for some time as troubleman, was their first Kansas branch manager for over three years and in 1913 was transferred by them to Minneapolis and became their first branch manager at that place. He was one of six scale experts appointed amongst others by the Grain Dealers National Association and the National Council of Farmers Co-operative Associations, through Mr. Goeman's committee, to draw up the grain scale specifications which were adopted by the Interstate Commerce Commission in Docket 9009 without a change. He is also one of the oldest members of the National Scale Experts Association, and thus goes to his new place well equipped to render all customers reliable service.

The Dodge Sales & Engineering Company, Mishawaka, Ind., which has for the past eight years been operating as the selling subsidiary of the Dodge Manufacturing Company and Dodge Steel Pulley Corporation, has now been consolidated with the parent company, Dodge Manufacturing Corporation, which was organized and began business last July. The Dodge Manufacturing Corporation at that time took over the two long established manufacturing concerns: Dodge Manufacturing Company organized in 1880 and Dodge Steel Pulley Corporation organized in 1917 as the successor of the Oneida Steel Pulley Company which began the

manufacture of steel pulleys in 1900. Since July 1922 the manufacture of Dodge, Oneida and Keystone power transmission appliances and Dodge Heavy Oil Engines has been conducted by Dodge Manufacturing Corporation. The distribution of Dodge products, which has heretofore been done under the name of the Dodge Sales & Engineering Company, will hereafter be conducted by the sales department of the Dodge Manufacturing Corporation with Duncan J. Campbell, general sales manager, in charge and John A. Beynon, assistant general sales manager. The advertising department of the Dodge Manufacturing Corporation remains under the direction of William W. French, advertising manager.

The Weller Manufacturing Company of Chicago, Ill., manufacturers of extensive lines of machinery for mill and elevator equipment, reports having finished a very excellent year's business with January 1, 1923. During the year, besides keeping the plant at its usual high state of efficiency, the company added a building 100x50 feet on the west front besides installing a number of important tools and machines in the chain, bucket and conveyor departments. It was found necessary during the year to triple the engineering force and new men were taken on in the various shops as needed. The new year finds the company in excellent shape to take care of the expanding business which will undoubtedly be theirs in 1923.

The Western Fire Appliance Works, Chicago, Ill., reports a constantly increasing interest in the Zeleny Thermometer System for keeping the elevator superintendent acquainted at all times with the exact temperature of the grain in the storage tanks or bins. A number of large installations were made the past year. These included: Reinstallation of Chicago & Northwestern Railroad Elevator at South Chicago, Ill., 360 tanks; installation for H. C. Cole Milling Company, Chester, Ill., 39 tanks; Galveston Wharf Company, Galveston, Texas, 50 tanks; Gooch Milling & Elevator Company, Lincoln, Neb., 16 tanks; Commissioners of Port of Norfolk Public Elevator, Norfolk, Va., 35 tanks; International Milling Company's Mystic Mills, Sioux City, Iowa, 46 tanks; International Milling Company's Robin Hood Mills, Moose Jaw, Sask., 26 tanks; Mill & Elevator Association, Grand Forks, N. D., 53 tanks. In addition to these contracts, installations are now being made in S. Zorn Company's elevator at Louisville, Ky.; Pittsburgh Glass Company's elevator at Newark, N. J.; Iglehart Bros. elevator at Evansville, Ind. During the past few years the company has been allowed four new patents on improvements for the Zeleny Thermometer. These had to do with improved switching device, pipes and cables, which give better service than under the old style.

WHEAT CORNER IN MEXICO
CHARGED

It is charged in a protest which the flour manufacturers of Mexico have submitted to the Government that a group of grain speculators has cornered the domestic wheat supply of the country and that unless the duty on American wheat is lowered or temporarily suspended many of the flour mills will have to close down for lack of grain supply. The wheat famine is particularly felt in Northern Mexico. Flour mills that were shut down during the long period of revolutions were rehabilitated and resumed operations about two years ago, but the supply of wheat has run so short that some of them have already been forced to materially reduce their output. The importation of wheat from the United States is the only thing that will remedy the present situation, it is asserted. While it is not known how large are the stocks of wheat now being held

by speculators, an investigation which was recently made shows that the bulk of last season's crop in the states of Coahuila, Nuevo Leon and Zacatecas was purchased by dealers who have hoarded the grain in anticipation of higher prices. It is expected that the Government will grant the request for relief and that the bars against importing American wheat will be let down temporarily.

LINK-BELT COMPANY LOSES VALUABLE AID

Grain dealers who have had dealings with the Link-Belt Company of Chicago, may have come in contact with Fred A. Marsh, general purchasing agent of the company. If so they will remember him as a courteous gentleman who impressed upon all with whom he came in contact his wide knowledge and ability. They will learn with regret and sorrow of the untimely death of Mr. Marsh, which occurred at his home, 6436 Greenwood avenue, Chicago, on the evening of December 11, 1922, at the age of 52 years.

Mr. Marsh was a member of the Link-Belt organization for over 33 years; was one of the organizers of the Purchasing Agents Association of Chicago, and served ably as the first president; has been for some years a director in the National Association



THE LATE FRED A. MARSH

of Purchasing Agents; and will be remembered by his large circle of business acquaintances as a particularly well informed man in his line, of sterling character, absolutely impartial in his treatment of sellers, buying on merit, and an honor to the important business profession of Purchasing Agent.

KANSAS AGRICULTURAL REPORT

The reports of the Kansas State Board of Agriculture are always interesting for, as a rule, conditions in Kansas reflect the country in agriculture as accurately as Indiana does in politics. The final inventory for 1922 is as follows:

The gross value of this year's farm productions in Kansas, exclusive of livestock on the farms, amounts to \$357,256,774, as against \$351,121,242 in 1921, or an increase of slightly more than \$6,000,000 but is under the five-year average by \$222,000,000. Both in the aggregate and acre-yields, crop productions averaged less than last year, although the acreage in crops was increased, and the gain in total values this year is due to better prices received for all farm crops with the important exceptions of wheat and potatoes. Corn has been selling at a price this fall averaging 54 cents a bushel, while a year ago, it was 29 cents. Oats brought 12 cents more a bushel than in 1921, barley 12 cents more, Kaffir 35 cents more, Alfalfa \$1.60 more a ton, and Prairie hay, \$1 more. Wheat, however, which is the state's principal crop in respect to acreage, has averaged 6 cents less per bushel, and potatoes 32 cents less.

This year's wheat yield of 116,744,459 bushels is the state's fifth largest crop, and ranks seventh in value. The corn yield of 95,311,582 bushels was slightly under last year's, but is 6,700,000 bushels

more than the annual average production for the five years, 1917-1921. Oats is the smallest crop since 1916. Alfalfa shows another decrease in acreage, and for the first time in a decade has fallen below a million acres, the total now being 910,631 acres. A larger acre-yield however, held up production to 2,313,023 tons, or about 50,000 tons less than in 1921, and the Prairie hay yield of 957,839 tons is less by 81,500 tons. The total value of all field crops is \$246,309,608, as against \$221,353,161 last year.

While this year's agricultural inventory for Kansas shows improvement over the low ebb of 1921, it should be borne in mind that so long as the disparity between the prices of farm products and the cost of production continues so great, the farmer is a long way from "normalcy".

GRAIN TRADE REVIEW

BY JOHN R. MAUFF

Secretary Chicago Board of Trade

The sunshine of prosperity is driving out the industrial gloom of the last two years. America turns to the new year with new hope, new courage, new determination. For there are indisputable signs of bright days ahead. By careful study these signs may be found in all basic industries.

Agriculture is at last creeping out of its unhappy state of depression. And when agriculture has returned to normal the whole country again will have attained a prosperity devoid of war-time influences, a prosperity built on solid ground.

Value of the 1922 crops at the farm has been placed at well over \$6,000,000,000. That is good news. Final calculations may show that the farmers will receive a total of \$2,000,000,000 more than they received last year. That, too, is good news, news of paramount interest. Taking a most conservative view of the situation then, it can be seen that most farmers will net 30 per cent more than during the preceding year, considering the somewhat lower producing expenses,—for which the whole nation rejoices.

Money is easier; banks have greatly strengthened their positions during the last 18 months; Federal Reserve Banks are reported to be rediscounting only about a fourth as much as they were a year ago, and member banks have trimmed their loans to a tremendous degree. Business houses, too, are decidedly better off. Failures are fewer; inventories have been reduced; the flood-tide of losses seems to have passed, and prices are becoming stabilized. Government officials report that virtually all basic industries are showing increased productive activity.

During the year the grain trade extended every effort to aid the farmer and has attained unusual success. Reviewing the wheat trade for the crop year 1921-22, George H. Broomhall, the economist, declares "at no time in the year have importers been unable to obtain all the wheat they could pay for. The steady flow of supplies from the ends of the earth and their distribution in deficiency lands," he says, "have borne striking testimony to the efficiency of modern commerce."

Some 650,000,000 bushels of wheat and flour were shipped in the crop year referred to, from exporting countries and distributed in countries having deficient supplies. This tremendous quantity would fill 2,600 tramp steamers carrying 250,000 bushels each. As most shipments are in much smaller lots, two or three times this number of vessels was employed. Practically every hour during the entire year wheat or flour left an exporting country. These exporting countries included United States, Canada, Argentina and Australia, and, for smaller quantities, such widely distributed countries as Manchuria, India, Algeria, Tunis, and Chili. Voyage time varied greatly.

Nevertheless, as Mr. Broomhall declares, at no time was any importer unable to obtain all the wheat he could pay for. Besides handling these vast supplies between exporting and importing countries, the grain trade distributed some five times that quantity in domestic trade of wheat growing countries. As leading economists declare, the world's grain trading system has no equal in

efficiency in the whole realm of commerce. The crop year review is pointed to as a tribute to the Chicago Board of Trade. It is through untiring labor of Board of Trade leaders of the last 75 years that the present economical grain distribution system has been developed. It reduces grain marketing cost to a minimum.

Like many other industries, the grain trade has been harassed by political critics and professional agitators. During the distressing period of price deflation, at the very time when the grain exchange system was providing a continuous market for the farmers' grain and saving him from utter ruin, political crusaders and professional agitators were garnering votes and dollars by the simple method of denouncing the middleman in the grain business.

To these vicious attacks the grain trade could merely point to indisputable facts, but the agitator sought not facts, but personal aggrandizement and the spotlight. Time and again the whole marketing system has been upset by these unfair attacks and threats to enact legislation destroying the exchanges. How much money such attacks have cost the farmer through disturbance of his market may never be known, but any trained economist can trace the disastrous effects.

Such broad-visioned men as the Secretary of Agriculture Wallace are now explaining the true causes for the low grain prices—the causes which the grain trade ineffectively urged agitators to recognize. Overproduction, Secretary Wallace recently declared in a speech, has been chiefly responsible for the low prices during "the most severe agricultural depression the country has ever experienced."

"In times past," he said, "we have had lower prices, measured in dollars and cents, for most farm products, but we never have gone through a period when prices for farm products were so low, measured in what they would buy."

"During the war years farm production had greatly increased. The average production of cereal crops for the five years, 1910-1914, was 4,500,000,000 bushels. Stimulated by war needs, the production of these crops had increased to about 5,500,000,000 bushels in 1918 and 1919 and almost to 6,000,000,000 bushels in 1920.

"This year the production of cereal crops was almost 5,500,000,000 bushels. While agricultural production had greatly increased, production of other things the country needs—such as houses, roads, railway equipment, manufactured goods of almost all kinds—had decreased.

"Consequently deflation hit the farmer first and hardest. Farm prices dropped with a thud. Prices of other things resisted. Wages in industry remained and still remain high; freight rates are high; taxes are high; almost everything the farmer buys is still considerably higher than pre-war prices. The year 1923 should see a more nearly normal relation between things produced on the farm and things produced in the cities and industrial centers."

The present grain exchange system which has functioned so successfully down through the years, again is attaining full confidence of the producer. For he knows that it is the most economical food distributing agency in the world and that it serves both producer and consumer. The grain trade approaches the new year with greatest optimism.

GALVESTON AS A GRAIN PORT

BY W. D. HORNADAY

Total grain exports through the port of Galveston for the year 1922 were 18,009,988 bushels, of which 17,213,669 bushels were wheat and 795,319 bushels were rye. The grain exports for the calendar year just ended are just about one-fourth of what they were during the unprecedented grain export year of 1921, when Galveston achieved first place as a grain loading port. The total grain exports for that year through the port of Galveston totaled 76,340,188 bushels.

Grain exporters here are looking forward to a material increase in exports beginning about the middle of January. Much grain is now in the hands

of farmers and interior elevators in this trade territory, having been stored there in anticipation of being consumed on domestic demand. It is expected that more of this grain will begin to come to the Gulf for export during the next few months.

Exports of grain for December were 1,277,000 bushels. Grain exports for November totaled 1,511,104 bushels, of which 1,429,676 bushels were wheat and 1,428 bushels were rye. Exports of rye individually showed an increase last month, having totaled 171,000 bushels, according to loading figures.

"JIM DUNN"

BY HOOZUS

Jim Dunn, who runs the elevator at Sperry Sid-ing, says: "You can talk 'bout your new-fangled mem'ry tests all ya wanta; but th' things that ya really remember are th' things that ya get handed t' ya in th' rough.

"I remember one time I shipped a bulk-head car o' Red an' White wheat. I put th' Red wheat in th' small end with a bulk-head o' bags of White wheat, an' then put th' balance o' th' White wheat in th' big end o' th' car.

"A cupla days later I had a call on th' firm I shipped th' car t', an' when I comes int' th' office th' boss says t' me, he says: 'You must be some mind reader. Our elevator foreman is jest a-dyin' t' see ya. Jump int' th' car an' we'll run over t' th' elevator an' see him.'

"Afore we got inside th' elevator ya could a' heard that foreman. He was only a-swearin' by ear, but it was all high-class stuff, I'm a-tellin' ya. He'd jest got th' White wheat out o' th' big end an' shifted his spouts for Red wheat, when he found out there was White wheat in th' bags.

"'What'd ya shift your spouts for 'till ya em'tied th' bags?' I says.

"'What'd I shift 'em for?' he yelled. 'Howinell ya s'pose we could tear down that bulk-head 'ith-out mixin' that Red an' White wheat? You— you—'

"'Cut that out, Murphy!' says th' boss, real quick like. 'This here is one o' my best customers.' An' that's all saved me from findin' out jest what I was.

"But ya couldn't make me forget nowadays t' fill a bag bulk-head with th' kind o' grain that goes int' th' small end o' th' car."

LITTLE TIPS FROM "JIM DUNN"

Elevator men oughta put their corn an' rye in good shape afore shippin'. Th' whiskey nowadays is bad enuff ennyhow.

Th' man with th' truck is got it over th' other feller. When th' elevator bizness is dull ya can allus find somethin' for th' truck t' do: haulin' your mother-in-law's toomstone, for instance.

There's a lot o' folks in bizness that'll some day be in jail. Look out they don't put ya in th' poor house afore they go.

Presents and entertainin' is one way t' get bizness; but ya gotta give service t' hold it.

Ya gotta put it in shape if ya want it t' grade. Get that cleaner now, ya're thinkin' 'bout gettin' next year. It'll pay for itself by that time.

Play a little "broom-corn golf" in your elevator every day. You'll be in better condishun, an' so'll your elevator.

Th' Lord helps them that helps themselves—an' others. Give a little of it back this time o' year— t' th' Red Cross an' such.

Look after th' sills under your elevator. If ya're a'goin' t' do bizness on th' level, ya've gotta keep your house on a even keel.

Most elevator men can either make a good impreshun on a farmer or make some money off o' him; but th' trick's t' do both at th' same time.

EASTERN PORTS TO ORGANIZE

Frank S. Davis, Manager of the Maritime Association, Boston Chamber of Commerce, has invited port organizations at the several North Atlantic ports to convene for the purpose of organizing a North Atlantic Ports Association. The meeting will probably be held in New York City in the near future.

LIABILITY OF RAILROADS FOR FAILURE TO FURNISH CARS

BY OWEN L. COON

In a previous article, it has been pointed out that railroads are liable for all loss caused a shipper through failure to furnish cars, even in times of car shortage, provided discrimination in the distribution of such cars can be shown. It was also pointed out that grain cars in times of car shortage are to be distributed on the basis of the grain on hand in the elevator or "convenient for prompt loading," the shipper having the largest amount of grain on hand, receiving the largest number of cars.

In other words, the shipper with 20,000 bushels of grain on hand should receive twice as many cars as the shipper with only 10,000 bushels of grain on hand. Lastly, it was pointed out that if these rules as to car distribution are not complied with, then discrimination exists and a claim for loss arising through failure to furnish cars becomes good. There remains to be pointed out in this article, some suggestions as to the best manner of enforcing this undoubted liability of the carrier under the above rule.

In general, to effect a recovery, discrimination must be shown. To prove the discrimination, it must be shown that one of two things has existed:

First: That other shippers tendered more grain than they had on hand and "convenient for prompt loading," which tenders the railroad accepted and acted upon in the distribution of cars. Second: Or that, admitting the amount of grain tendered by other shippers was correct, they received more cars than they should have received on the basis of grain they actually tendered as compared with the grain you tendered.

If your contention is that the first situation outlined above exists,—namely, that the railroad accepted wrong tenders as to the amount of grain on hand from other shippers and acted in the distribution of cars on such tenders, then you must prove the amount of grain that *should* have been tendered by the preferred shippers. If you knew that the elevators of the preferred shippers were full to the roof,—you can easily ascertain, especially by the use of experts, the approximate capacity of each house and know the amount of grain that should have been tendered as compared with the amount that actually was tendered.

In times of car shortage, most elevators are full to the roof and this capacity of the elevator, therefore, should approximate in many cases the actual number of bushels of grain that should have been tendered each week. If, however, the elevators receiving preferred attention were not full to capacity, then you must by an inspection of the bins of the preferred shipper, either yourself or by a party who will act as a witness in your behalf, and by watching the approximate intake and outgo, be able to prove that the amount of grain tendered by the shipper and accepted by the railroad was incorrect. All the records of the preferred shipper can be brought into court to prove your contention later if it is desired.

If it is the second situation outlined above, that exists, namely, that the tenders as made by all shippers were correct, but that even on such a basis certain individuals received a larger number of cars than they should have received, then you have only to compel the railroad to produce in court its books and records showing the tenders of grain by all shippers and the number of cars they received on such tenders as compared with the number you received. In other words, you can make the railroad prove up the case for you.

Remember that the discrimination claimed may be between yourself and other shippers at the same station, or it may be between all or any number of shippers at one station as compared with all or any number of shippers at stations adjoining. It is wise to make a chart recording the facts supporting the discrimination. On the chart, show in different successive columns: (1) the number of cars you received each week during the period of discrimination; (2) the number of cars re-

ceived by the preferred shipper each week during the same period; (3) the amount of grain actually tendered by you each week; (4) the amount of grain that *should* have been tendered by the preferred shipper each week; (5) the number of additional cars you should have received each week on the basis of grain tendered by you and by the preferred shipper. If several shippers have been preferred over you, such a chart should be drawn up, showing the comparison between yourself and each preferred shipper.

When these charts are completed, you will have a definite record of facts to support your contention that additional cars should have been allotted to you and when you should have received them.

You must then ascertain the definite amount of the loss you have sustained. You can easily ascertain from the chart above mentioned when you should have received a car, and approximately when it should have arrived at destination. The price at which the grain should have sold had the cars been furnished without discrimination can then be easily ascertained. The difference between this price and the price actually received for the grain when it was shipped out and cars eventually furnished, is, of course, the amount of your loss. To this should be added the additional interest on the money that has been lost through having it tied up in the grain for a longer period of time, together with any additional profits that might have been made through the handling of more business if you had received your proper share of cars.

The facts in support of the discrimination claimed and the facts showing the amount of your loss should be filed in proper form as a claim with the freight claim agent of the railroad on which you are located. This should be done as soon as possible. Duplicates of the paper filed should be retained by you.

Your claim in the first instance will be declined by the carrier. Suit will be necessary to effect a recovery. Suit should be started, in fact, a few days after your claim is filed. It is useless to expect such claims will be compromised or settled without the institution of suit. Trial of the suit will be necessary in many cases. The assistance of an attorney is absolutely essential to the successful handling of such a claim. You will find an attorney in the same county you are located in of far more assistance to you in the handling of such a claim than any of the attorneys at the various terminal markets making a specialty of handling shortage and delay claims. To handle a claim of this character requires work,—thorough investigation and careful assembling of the facts above outlined, but the liability of the carrier exists as indicated, and can be enforced.

In the next issue, the subject "Basis on which Delay Claims should be Filed," will be considered.

WHEAT EXPORTS

In spite of the fact that Russia, one of the largest exporters before the war, is now an importer, the world export figures for 1920, 21, and probably for 1922 are greater than the average 1909-1913. During the five years before the war an average of 745,194,000 bushels of wheat was exported, of which Russia furnished 161,766,000 bushels. In 1920 total exports were 790,259,000 and in 1921, 758,485,000 bushels.

The exports from this country before the war averaged 100,310,000 bushels. In 1920 they were 307,630,000, and in 1921, 355,661,000 bushels. In 1920 Argentine was the second largest exporter with 198,906,000 bushels, and Canada third with 144,345,000. Australia trailed with 87,340,000. In 1921, however, Canada was second, 179,606,000 bushels; Australia third, 115,999,000; and Argentine fourth, 62,399,000.

The United Kingdom has always been the largest importer and in the last two years the second place was taken by France in 1920 and Italy in 1921. Belgium imports only about half as much as she did before the war.

PERMANENT CHANGES IN EUROPE'S GRAIN TRADE

"Greatly reduced consumption of wheat in Western Europe may somewhat offset the drop in the world's exportable surplus of wheat of more than 3,000,000 bushels in the Danube basin of Europe resulting from the breaking up of the former large wheat areas into small general-purpose farms, the discouragement from producing cash crops by the continual depreciation of currencies, and the general tendency toward larger live stock production," according to Louis G. Michael, economist in foreign agriculture just returned from a study of agricultural economic conditions in Europe for the United States Department of Agriculture.

There is a large curtailment in consumption of flour in Austria and other wheat importing countries as compared with pre-war consumption, and a corresponding increase in consumption of potatoes and other substitutes, while in excess producing districts the reverse is true, Mr. Michael said.

"Formerly Roumania was a great wheat exporting country, 59.3 per cent of production finding its way onto the Western European market to compete with American-grown grain. This export of grain was possible only because wheat bread eating was restricted to city population and the upper classes, who consumed about 792 pounds per capita per year. Had the peasants consumed a like amount of wheat there would have been little for shipment abroad.

"In all countries in Southeastern Europe, with the exception of Bulgaria, this same condition of affairs obtained—the peasant was undernourished, his diet was without variety, and food that he should have consumed to keep himself in good physical condition was taken from him to meet excessive taxes or exorbitant land rents. He was the actual slave of the large land owner and the state.

"Today that is changed, the peasant is beginning to eat bread, after centuries of submerged individuality he is taking his place among his own peoples as a man, despite the obstructions of the great lords and the opposition of the cities. The peasant's wife is demanding to be better clothed, even buying satins that she calls 'the cloth that goes swish-swish.'

"The fact that the peasant is eating bread is causing a revolution throughout Southeastern Europe that extends even into Middle Europe. This revolution is better known as the land reform. The peasant, brought to a realization of his power by the great war, demanded enough land on which to produce a decent living for his wife and children. His demand was a threat and he got the land. He has begun to feed his wife and children not only bread, but also meat—a former Sunday luxury. He is growing upon his land the things he wants to grow for his own use. He isn't growing these things the way the American farmer would grow them; but he's doing the best he can according to his lights—lights that have been intentionally dimmed by those in power for centuries.

"All this is having a peculiar effect upon the natural economics of the various countries in which he lives. The big estate organized their operations about wheat production as a center, the wheat to be sold for cash and the cash to be expended in the great luxury centers of Paris, Venice, Berlin, but not in the country where the wealth was produced. Consequently these countries were left poor, their resources being pumped out annually to give a few weeks of pleasure abroad to the upper classes. These countries were undeveloped industrially; their industrial development was in no way commensurate with their resources of raw materials and labor. The result was that they imported most manufactured necessities, depending upon grain exports to balance their trade.

"Then the great change came. The peasant, who had formerly slaved to produce the exportable grain excesses, began to work for himself and in the interest of his own immediate family. The great excess acreage seeded to wheat was cut down to more nearly that required to meet local needs. Naturally also there was a drop in the yield per acre and then on top of this the peasant and his family

began to eat wheat. This has played the mischief with export wheat and upset the balancing of trade deficits and made national budgets knotty problems for overwrought finance ministers.

"The drop of about 9,000,000 bushels exportable wheat in the Danube basin alone is a serious matter for those nations, especially Roumania, which depended upon wheat more than any other product to keep its money at par. But when one considers that these governments were not of the people, but were for and by the ruling class, and when one realizes that the peasant, the common man, is better off today than he has ever been before, one can not help but feel that the time has come for the governments to adjust themselves to the new order.

"Czechoslovakia, followed by Bulgaria, is making rapid adjustments and Jugo-Slavia is a close third. Hungary, Roumania and Austria have been slower in realizing the changed conditions. But in any case of adjustment, the vast areas devoted to wheat, in the far southeast, barley and oats are things of the past. They are being replaced by small general farming units with fields of fodder, beets, forage, and, in some places, corn replacing wheat. In the far southeast, barley and oats are the favorite substitutes for the chief bread cereal.

"To some extent, wheat will regain a portion of its lost area in years to come, but this gain will be proportionately small. We can expect that, when conditions have reached their post-war normal, the exportable wheat excess of the Danube basin will be from 8,000,000 to 9,000,000 bushels below the pre-war average of these territories."

WINS SUCCESS IN EXPORT TRADE

The grain exporting business expertly conducted calls for not only knowledge of the technique of exporting, but also quite accurate information regarding the exchange situation, and in view of the fluctuations now being far greater than before the World War, this is a matter of much importance. The availability of shipping space, the fluctuations in ocean freights, knowledge of differentials in domestic rates, are factors in the business. To all this must be added reliable information regarding the supplies of various kinds of grain for export,



GEORGE W. EDDY

and the stocks of grain in the principal countries. Granted that a company can measure up to the requirements, then comes the business of buying and selling, financing, and the employment of the facilities for hedging which the grain exchange provide.

Among the men who have given freely of their time to further the interests of the Port of Boston and to aid in its development is George W. Eddy, a Director of the Boston Chamber of Commerce, a member of the Board of Governors of the Maritime Association and chairman of its Transportation Committee. Mr. Eddy is president of C. F. & G. W. Eddy, Inc., a corporation long time established in the ex-

port grain business. The company has offices in the Chamber of Commerce Building where it has wire connections with the principal markets in the United States and Canada. Although the company in its early years shipped only from Boston, its activities now are by no means confined to that port, for as a result of the energy applied by the management and a vision that enabled it to succeed, it is today shipping through all the other principal Atlantic Ports, from Montreal and the principal ports in the Gulf of Mexico. Originally known as a local house the company now has an international reputation and is well known not only throughout the United States and Canada but in all the principal buying centers of Europe.

Mr. Eddy has for years been interested in, and has worked hard for, the abolishment of the rate differential that has so favored the South Atlantic Ports at the expense of Boston and if the recent efforts that have been made toward that end are successful, Mr. Eddy may well feel that the efforts which he contributed had much to do with its accomplishment.

Notwithstanding that Mr. Eddy gives unstintedly of his time to matters not directly connected with his company's business, he nevertheless keeps in closest touch with its affairs and directs all its activities.

IMPRESSIVE CORN FIGURES

The total area planted to corn during 1922 in 13 countries amounted to 131,893,000 acres compared with 133,613,000 acres for the same countries in 1921 and an average of 133,639,000 acres for the period 1909-13.

The corn production of 16 countries this year amounts to 3,455,712,000 bushels, as compared with 3,792,537,000 bushels for the same countries last year, and an average of 3,573,096,000 bushels for the five years 1909-13. Decreases were shown for all countries reporting except Canada, Hungary and Chile. The production of the United States, Canada and Mexico this year is 2,972,077,000 bushels as compared with 3,166,281,000 bushels in 1921 and 2,894,318,000 bushels for the period 1909-13. Six European countries produced 273,554,000 bushels in 1922, as compared with 324,530,000 bushels last year and 459,494,000 bushels for 1909-13. Five countries in the southern hemisphere produced 195,160,000 bushels this year, as compared with 284,638,000 bushels in 1921 and 210,377,000 bushels for the period 1909-13. Reports are not available for many of the tropical corn producing countries of which Brazil is probably the most important. The Brazilian corn crop for 1920-21 was estimated to be about 186,450,000 bushels.

The United States and Argentina supply approximately 80 per cent of the corn entering into the world trade. Argentina frequently exceeds the United States in the quantity of corn exported, but in 1921 shipments from the United States exceeded those from Argentina by 21,000,000 bushels. In 1920, exports from Argentina were 50 per cent more than the prewar average, but in 1921 were slightly less than for the period 1909-13. The United States exported 132,000,000 bushels in 1921 as compared with 45,000,000 bushels during the period 1909-13, an increase of 193 per cent. Exports from Rumania show a decided decrease, amounting to 17,000,000 bushels and 30,000,000 bushels in 1920 and 1921, respectively, as compared with the prewar average of 39,000,000 bushels. Imports into the United Kingdom, France, Germany and Belgium show a decrease over the prewar years. In 1921 the United Kingdom took 78,000,000 bushels as compared with 83,000,000 bushels during 1909-13, France 12,000,000 bushels as compared with the prewar average of 19,000,000 bushels; Belgium 19,000,000 bushels as compared with 26,000,000 bushels during the prewar period, and Germany took 16,000,000 bushels or about half as much in 1920 as during 1909-13. Imports into Canada and the Scandinavian countries show an increase over the prewar average. Imports into Denmark were 19,000,000 bushels in 1921 as compared with 11,000,000 bushels during the period 1909-13 or an increase of over 70 per cent.

A NEW 1922 ELEVATOR

A model concrete elevator built in 1922 is shown in the accompanying illustration. It was designed and constructed by Townsend B. Smith of Decatur, Ill., and is owned by the Canton Co-operative Elevator Company of Canton, Mo. Its 10 bins give a capacity of 24,000 bushels and with a two-story concrete office and one-story concrete warehouse, 20x70 feet, holding nine cars, there is a compact elevator and warehouse plant that is seldom equaled for economy of operation and handling capacity.

The machinery equipment includes feed mill, two Westinghouse Motors, Western Sheller and Western Cleaner, Western Truck Dump, two elevator legs,



THE CANTON COOPERATIVE ELEVATOR, CANTON, MO.

and automatic grain scales. A special feature of the elevator is the arrangement of the cob and dust house which is of concrete and built on top of the warehouse. The dust and cobs are spouted to it inside the elevator. From the cupola a modern distributor sends grain to any of the bins.

AN IMPORTANT CONSERVATION MEASURE

(From the Southwestern Wheat Improvement Association.)

The Southwest burns, or allows to go to waste, in the neighborhood of \$60,000,000 worth of straw every year; basing its value on the fertilizing elements only, and to say nothing of the enormous amount of vegetable matter lost.

Since nearly one-third of the virginal fertility of the soil in this region has already been lost and since it has been declining at a rate somewhat in excess of one-half per cent a year, no one interested in the future welfare of this territory can view such unnecessary losses without concern. The figures of course are not strictly accurate. Accurate figures cannot be obtained; but if anyone doubts that the fertility of the soil of the Southwest is being lost, at a rapid rate, he has only to go into the wheat belt about the time the wheat is jointing, or in the boot, and compare the average field with one that has been just recently broken from the sod, or with the wheat along a recently broken out fence row. The most casual observer will not fail to note the better growth, the greener, healthier color and later the better yield and quality of the wheat from the newer land.

Restoring the straw will not entirely solve the problem, but it will remove one of the important

leaks that have been responsible for the losses of fertility and humus. But it is neither an easy nor a simple matter to restore the straw and, at the same time, secure enough better wheat to pay for the extra labor. The straw may even result in lower yields, if not judiciously applied. Where combined harvester threshers are used this problem is automatically solved in perhaps the best possible way.

No doubt the best practice, where a considerable quantity of straw is to be disposed of, is to use as much as possible for feed and bedding and see to it that all the manure is applied to the land. Probably the second best method is to apply it as a thin top dressing immediately after harvest and before plowing. In dry climates this may not be advisable because of leaving the ground too loose, but it is a satisfactory method where the summer rainfall is adequate and there is sufficient help to get it onto the land early.

Another and probably the most generally practical way is to apply the straw as a top dressing in the winter. It may be applied in this way to

land intended for spring crops, or as a top dressing on growing wheat. In either case the application should be a light one: 1 to 1.5 tons per acre. Straw applied in this way greatly retards soil blowing and decreases winter-killing, if the winter be a severe one. If applied too heavily, however, it will retard the growth of the wheat in the spring and result in decreased yields.

In Kansas, it has been estimated that the wheat straw stacks that are scattered and allowed to stand from year to year on wheat farms cover fully two acres, on an average, on each farm. This acreage covered with straw stacks represents lost use of thousands of acres of good wheat land, but it does not equal the loss in fertility represented if the stacks are burned. As far as possible, wheat straw should be stacked in corrals or feed lots, where the feeding and tramping of the livestock will assist in the rotting. Straw that cannot be spread over the fields at once or cannot be handled in connection with feeding should be stacked on waste land and in places where it can remain until ready to haul out as manure.

European Crops and Import Prospects

Representative of Food Research Institute of Stanford University
Sees Large Need for American Grain

By JOHN LOWREY SIMPSON

LOW crops of bread grains and strong import demands for 1922-23 are striking features of the economic situation in Western Europe. During a recent trip through Germany, France, Italy, England and Denmark I was able to ascertain that the governmental announcements regarding inferior harvests and considerable deficits of wheat and rye, which have been made public during the last month, are generally substantiated by the opinion of the trade and of agricultural experts in Europe. Differences of opinion exist, it is true, as to the degree of shortage in production, and especially in certain cases regarding the quality of the crops. In some countries, Italy for instance, peculiarities in the relationships between recent production figures and grain imports make it difficult to judge the true proportions of present requirements. But throughout numerous conversations and discussions with representatives of the grain business and associated branches, the great weight of testimony was that heavy imports of bread-making cereals are no fiction but an iron necessity.

The observations regarding these matters which I was able to make, and which are summarized in the following paragraphs, furnish a series of mere notes or suggestions and not at all a comprehensive review of the problem. My chief concern while last abroad was with certain technical aspects of European agricultural statistics, rather than immediate crop prospects and import needs. Information on the latter points was therefore assembled as a by-product, and without attempt to cover the subject in a complete or systematic manner. Inasmuch, however, as contacts with both the government authorities, and importers and millers, gave particularly favorable opportunity to throw the official forecasts into relief against trade opinion, it seems possible that some of the results may not be entirely without value.

In Germany, where financial preoccupations sharpen the problem of agricultural production and food imports, the Government figures for this year's cereal crops are generally held to understate the facts. No such unanimity of criticism is to be found in France; particularly is there in that country a divergence of view relative to the quality of the wheat crop. This divergence translates itself into a variety of estimates of French wheat imports for 1922-23, ranging all the way from less than 50 million bushels up to 110 million. In Germany contradictions in import calculations are less extreme since everyone assumes that about 75 million odd bushels of wheat and rye, the Government program, will be imported during the crop year, if finances permit. The quality of the home

grain just harvested in England is poor, and imports will doubtless run relatively strong. Fluctuations in British import figures are never so important as on the continent, however, due to the minor rôle the domestic crop plays in national consumption. Italy presents a curious dislocation in its figures which lends special concern to a comparison of recent production and importation of bread grains, but makes extraordinary caution necessary in predicting future requirements. In Denmark, on the other hand, feeding-stuffs dominate the field of interest and will perhaps be less heavily imported as a result of the conditions under which this year's wheat was harvested.

GERMANY

Opinions ascertained through conversation with high officials at Berlin indicate that this year's wheat and rye crops in Germany have yielded 75 to 80 per cent of last year's quantities. The official figures published in the Government's bulletin, "Wirtschaft und Statistik," for 1922, with those of 1921 for comparison, are:

	1921	1922
Wheat	107,000,000 bushels	70,000,000 bushels
Rye	270,000,000 bushels	211,000,000 bushels

Allowance must be made, however, for a tendency to understatement which everyone in Germany, both in the Government and out of it, admits brings the official figures below the actual facts. A prominent member of the Hamburg grain trade believed that wheat and rye would turn out this year 80 to 85 per cent of the pre-war normal raised on the present German territory. If allowance is made for exaggeration which undoubtedly occurred in the pre-war official figures and the understatement which obtains at present, and which will be discussed below, this estimate may not differ greatly from the one first cited. Calculations based on the opinion of the Hamburg imported mentioned, seem to point to a total of over 40 million bushels of wheat and rye in excess of the preliminary figures quoted from "Wirtschaft und Statistik." On the other hand, there is unanimity of opinion that the quality of the grain this year is extremely poor. For each two bushels of quantitative deficit another bushel must be deducted on the score of softness and dampness of the grain.

The German Government is attempting this year, as it did last year, to obtain by a procedure resembling requisition against payment some 96 million bushels of domestic grains. This constitutes more than half the total calculated ration needs of the country under the Government's bread-card program, 171 million bushels. The latter figure is itself based upon a ration of 4.2 pounds of bread per week, delivered to practically the entire popu-

lation exclusive of the producers, i. e., to nearly 50,000,000 bread-card holders. The calculation is supposed to involve a strictly technical consideration of nutrition requirements and crop figures. As a matter of fact, however, this ration is the lowest the urban population will accept and the 96 million bushels required from the producers is the largest quantity which the agrarian parties in the Reichstag can be persuaded to ratify.

It is noteworthy that corn imports have picked up enormously since 1920 and will probably continue to run high. German farmers had been accustomed to Russian barley for cattle feed and have only unwillingly adapted themselves to corn. This prejudice, however, has now largely vanished and corn, according to the best information obtainable in Hamburg, is likely to be imported subject only to price and financing conditions.

If the foregoing observations are trustworthy, it appears that German bread grain crops are small in quantity and poor in quality this year, though the shortage is not so great as the official figures would indicate. Between one-fourth and one-third of the crop will be obtained by the Government for fulfilment of the bread ration obligations. This will be insufficient to meet those requirements; the deficit will not be made up, however, by further requisitions, but by Governmental imports which are estimated officially at 75 million bushels and may run as high as 100 million bushels.

FRANCE

In France it is the quality of the wheat crop, rather than the quantity, which provokes greatest discussion. The Government places production at 235 million bushels; M. Hitier, secretary of the Société des Agriculteurs de France and one of the most eminent agriculturists in the country, believes this to be fairly accurate. Last year's crop, it will be recalled, was estimated at 323 million bushels, practically the pre-war average.

While everyone is in agreement as to the quantitative deficit in the output, about the quality of the wheat itself opinion varies widely and the exact truth is still uncertain. Wheat is the great mainstay of French bread consumption. Rye, of relatively minor importance, is estimated this year at less than 40 million bushels, or about three-quarters of pre-war normal production. The other cereals have shown fair outturns, oats particularly being much better than last year. The potato crop in France, as throughout Europe generally, is large. Despite the fact that its quality is not all that could be desired, it will doubtless tend in some measure to offset the wheat shortage.

In view of the wide-spread apprehension regarding the wheat deficit, of the exchange situation, and of the unpopularity of the large millers and other so-called "profiteers," the Government has set up by law and decree certain milling restrictions. The original object of these was to effect the utilization in break-making of a fixed percentage of grains other than wheat. Due to a storm of protest from milling and associated interests, however, these regulations have been greatly modified and the only purpose left in them seems to be that of requiring the mixing in the mills of all flour grades into one standard flour. Millers claim this to be quite fantastic due to the variations in the wheat and for other reasons. The best judgment seems to hold that while the measures may effect some economy, the gain is not likely to be considerable.

Imports of wheat into France during the crop year ending July 31, 1922, were relatively small, scarcely exceeding 18 million bushels. This was due principally to the fact that the 1921 crop was an excellent one. Quite the contrary is the prospect for the crop year August, 1922, to July, 1923. The lowest estimate for prospective wheat imports given by any member of the trade was 44 million bushels and this was before the Government's announcement of the crop. Opinion scattered from that figure up to as much as 110 million bushels.

Before concluding that a quantity as large as 110 million bushels is likely to be imported, it is necessary to consider several factors which tend to overturn paper calculations. One of these is the

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element of stocks and carryovers, which probably affect adjustments from one year to another. No account of them is kept in France, and I have never been able to obtain satisfactory information on the subject. Consumption on the part of the producers themselves may vary appreciably with the crop outturn, but this is another question on which few data are available and whose importance is undetermined. Unfavorable exchange rates have the effect in France of increasing the price (in francs) of imported wheat. If, therefore, the franc should continue its present decline, without the offset of a fall in world prices of wheat, it would become important to consider how far high prices would exert a normal restraining influence on consumption,—with a corresponding diminution of imports.

Those who take the extremely pessimistic view regarding the quality of this year's crop, contend that this will more than offset other factors. I believe the decided weight of intelligent opinion in France would forecast the wheat imports for the coming year as likely to exceed 75 million bushels.

ITALY

A striking fact is that, although Italy's wheat crop increased remarkably from 1920 to 1921, the imports of wheat for the crop years following these crops increased slightly in the second period, instead of decreasing as might have been expected. The situation is summarized in the following few figures:

	Average 1915-16 to 1919-20, bu.	1920-21 bu.	1921-22 bu.
Estimated Production	168,000,000	141,500,000	193,000,000
Imports 12 mos.	68,000,000	97,500,000	100,000,000
August-July	236,000,000	239,000,000	293,000,000

The detailed figures for the 12-month period from August, 1921, to July, 1922, show a diminution in the last three months from the rate of imports of the first nine months, and the total is scarcely larger than that of the preceding crop year. But that does not alter the outstanding circumstances that combined production and importation of wheat in 1921-22 exceeded by far the corresponding figures for 1920-21. The statistics would seem to point to a consumption of wheat for 1921-22 54 million bushels greater than that for 1920-21.

One immediately seeks other items to offset and account for this apparent anomaly, but they are difficult to find. Signor Longobardi of the International Institute of Agriculture at Rome has thrown some interesting light on this problem by an examination of the corresponding figures over a considerable period. He compares wheat imports with production during a series of crop years, and shows that:

1. There is some tendency for imports to decrease as production increases, and vice versa.
2. The decrease in imports (or increase) is generally not so good as the increase (or decrease) in production.
3. The relationship is very irregular.

Another of his tabulations shows the net annual quantity of wheat available for consumption over a period of crop years (after deducting seed and adding net imports), as well as the variations from year to year. These variations are sometimes quite considerable. From 1908-09 to 1909-10 the increase was 18 per cent about the same as the present increase which is puzzling us.

The probable elements in the solution of the problem seem to be that the 1920 wheat crop was appreciably understated. This was due, if it occurred, to the fact that it was the last crop to be requisitioned and that the price for 1921 had already been fixed with a decided advance. The writer is disposed to believe that the 1920 crop was understated.

Another suggestion is that an actual increase in Italian consumption has occurred coincident with a general rise in the standard of living. This, in the opinion of Signor Longobardi, is probably the most important explanation. He believes that slackening of restraints of thrift and habit was encouraged by the war psychology and that this, coupled with wage conditions and farmers' profits, reached a point of culmination in the period under

consideration and brought about a real and substantial increase in consumption.

It is apparent that no direct relationship is at present to be traced between Italian figures for production and importation of wheat. The fact that this year's crop is announced as 17 per cent less than last year's, cannot therefore be applied with any exactitude to the 100 million bushels of imports in 1921-22 to arrive at a forecast of imports during the crop year ending next July. The U. S. Department of Commerce estimates a considerable carryover and believes these imports will be somewhat less than 90 million bushels.

DENMARK

That wet weather and storms during the harvest period had rendered 60 to 70 per cent of the Danish wheat crop unfit for bread-making, was the opinion of a well-informed American official at Copenhagen. On the other hand, the oats and barley crops were expected to be large. As a result of these facts, there may be anticipated an increase in the imports of wheat and rye for bread, and at the same time a possible decrease in the imports of American cotton seed oil cake and corn. Wheat which is unsatisfactory for human consumption can be used as feed for cattle and hogs, with corresponding reductions in the demands for feeds.

Another factor which will tend to diminish the imports of cotton seed oil cake is the favorable condition of the root crops in Denmark. In this case moisture which has been excessive for wheat has favored a high out turn. Roots play an important part in Danish agriculture and animal feeding, and the success or failure of these crops has an important bearing on the imports of cattle feed.

All the foregoing considerations would seem to indicate a tendency to lower oil seed cake and corn imports. On the other hand, however, it must be remarked that the entire wheat crop of Denmark, normally about seven million bushels, is not a prominent factor in the country's economy. The number of hogs in Denmark was 2,500,000 before the war and fell in 1918, due to scarcity of feeding-stuffs, to scarcely more than half a million. The number has now increased again to a million and a half and people talk of two million by the end of this year and the pre-war normal figure by the middle of 1923.

Coincident with this rise in the number of hogs from the pre-war slump and the activity of the bacon trade, corn imports have been increasing. About 9 million bushels were imported in the first six months of 1922 as against some seven million bushels in the corresponding period of 1921. Over half of these quantities came from this country.

If, therefore, the hog industry continues its up-

ward swing (as there is reason to believe it will) and the dairy industry maintains itself, demands for feeding-stuffs will be created which will tend to counterbalance the cause of lower imports mentioned above.

The general prospect seems to be that wheat and rye imports into Denmark are likely to increase, whereas some slight decrease, or at least check on the relative rate of increase, in the imports of cotton seed oil cake and corn may follow from the use of wet Danish wheat and animal feed.

**WIDE FLUCTUATIONS IN GRAIN
PRICES**

During 1922 cash wheat at Chicago had a range of 69 $\frac{7}{8}$ cents, while the May future was 50 $\frac{1}{2}$ cents between the high and low points. These fluctuations, greater than the average, were still considerably less than in 1921, the cash spread for wheat being 95 $\frac{1}{2}$ cents, and the May spread being 83 $\frac{3}{4}$ cents. The spread in cash corn prices for the year 1922 was 30 $\frac{3}{4}$ cents, and in oats it was 19 cents.

From the farmer's standpoint the greatest improvement of the year was in livestock. Maximum prices were generally better than in 1921 and the minimum price was way above. Following are the comparative high and low prices for the principal farm products during 1922 and 1921:

	—1922—		—1921—	
	High	Low	High	Low
Flour—				
Sprin pat	\$8.25	\$5.75	\$10.25	\$7.00
Hard w. pat	8.25	5.50	10.40	6.25
Soft w. pat	7.35	5.20	10.50	6.25
Wheat—				
No. 2 North	1.73	1.03 $\frac{7}{8}$	1.98	1.12 $\frac{1}{2}$
No. 2 red	1.47 $\frac{3}{4}$	1.00 $\frac{1}{2}$	2.06 $\frac{3}{4}$	1.15
No. 2 hard	1.51 $\frac{1}{2}$	1.00	1.96	1.00 $\frac{1}{2}$
May	1.49 $\frac{7}{8}$	.99 $\frac{3}{4}$	1.87	1.03 $\frac{3}{4}$
Corn—Cash .....	.76 $\frac{3}{4}$	.46	.78	.42
May .....	.74 $\frac{3}{8}$	.52	.76 $\frac{5}{8}$	.50 $\frac{1}{2}$
Oats—Cash .....	.50	.31	.49 $\frac{1}{2}$	.32
May .....	.46 $\frac{1}{4}$	.35 $\frac{1}{2}$	.50 $\frac{1}{4}$	.34 $\frac{1}{2}$
Rye	1.11	.68 $\frac{3}{4}$	1.73	.73
Barley .....	.75	.54	.90	.45
Flax	2.70	2.15	2.17	1.20
Timothy	7.00	4.00	6.75	3.75
Clover	25.00	9.00	18.50	13.00
Pork	27.00	17.50	25.00	17.50
Lard	12.37	8.00	13.30	8.50
Ribs	13.50	7.25	12.75	5.50
Butter .....	.56 $\frac{1}{2}$	.30 $\frac{1}{2}$	.54 $\frac{1}{2}$	.28
Eggs .....	.54	.19	.72 $\frac{1}{2}$	.19 $\frac{1}{2}$
Timothy hay	28.00	12.00	30.00	20.00
Prairie hay	21.00	13.00	20.00	17.00
Beef steers	14.00	9.00	12.50	1.00
Cows & hfrs.	12.00	7.00	11.00	4.00
Feeders	8.75	6.25	10.25	3.50
Hogs	11.50	5.50	11.00	5.00
Sheep	11.00	5.50	7.85	3.50
Lambs	16.65	11.50	13.00	4.50

THE South African Maize Breeders, Growers, and Judges Association is planning to send to the United States true to type maize for seed purposes and expects ere long to develop quite a business in furnishing this country seed corn of guaranteed purity, soundness and of high germination.

WHEAT CROP OF THE WORLD

	1921 Bushels	1920 Bushels	1919 Bushels	1918 Bushels	1917 Bushels	1916 Bushels
United States	794,893,000	833,027,000	968,279,000	917,100,000	636,655,000	639,886,000
Canada	330,000,000	300,000,000	196,000,000	189,400,000	234,000,000	263,000,000
Mexico	12,000,000	10,000,000	8,000,000	8,500,000	8,500,000	6,000,000
Argentina	*187,000,000	184,000,000	210,000,000	184,000,000	219,000,000	77,400,000
Chile	25,000,000	22,000,000	21,000,000	24,000,000	24,000,000	20,000,000
Uruguay	14,000,000	10,000,000	8,000,000	12,300,000	7,500,000	8,800,000
Austria	16,000,000	16,500,000	16,000,000	16,000,000	16,000,000	50,000,000
Hungary	144,000,000	138,000,000	32,000,000	28,000,000	125,000,000	130,000,000
Croatia-Slavonia	10,000,000	12,000,000	15,000,000	8,000,000	8,000,000	10,000,000
Czecho-Slovakia	40,000,000	26,000,000	.....	.....	.....	.....
Bosnia-Herzegovina .....	.....	1,000,000	1,500,000	1,500,000	1,500,000	1,500,000
Belgium	11,600,000	10,000,000	9,000,000	6,000,000	8,000,000	8,000,000
Bulgaria	42,400,000	40,800,000	34,000,000	25,000,000	34,000,000	35,000,000
Denmark	8,000,000	7,000,000	5,200,000	6,000,000	5,500,000	6,000,000
Finland	250,000	200,000	200,000	200,000	150,000	125,000
France	323,000,000	232,000,000	178,000,000	183,500,000	144,000,000	215,000,000
Alsace-Lorraine	7,000,000	6,000,000	.....	.....	.....	.....
Poland	34,792,000	18,000,000	23,000,000	.....	.....	.....
Germany	108,000,000	83,000,000	83,000,000	90,304,000	104,000,000	140,377,000
Greece	11,200,000	12,600,000	12,400,000	3,500,000	4,000,000	5,000,000
Italy	188,000,000	141,000,000	169,000,000	175,000,000	140,000,000	176,000,000
Montenegro	100,000	100,000	100,000	100,000	100,000	200,000
Holland	8,000,000	6,600,000	6,000,000	5,000,000	4,000,000	5,000,000
Norway	1,000,000	1,000,000	1,000,000	1,000,000	250,000	400,000
Portugal	8,000,000	7,000,000	6,400,000	8,000,000	7,500,000	7,200,000
Roumania	175,000,000	141,000,000	50,000,000	20,000,000	70,000,000	80,400,000
Russia-63 Gov.	†528,000,000	†450,000,000	†465,000,000	†485,000,000	650,000,000	767,000,000
Jugo-Slavia	\$44,000,000	\$43,000,000	\$50,000,000	4,000,000	6,000,000	8,000,000
Spain	143,000,000	138,000,000	139,000,000	135,000,000	141,000,000	153,000,000
Sweden	12,500,000	11,000,000	8,000,000	9,000,000	7,500,000	8,000,000
Switzerland	4,000,000	4,000,000	4,000,000	6,600,000	4,500,000	4,300,000
Turkey, European	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
United Kingdom	72,000,000	56,000,000	70,000,000	92,000,000	64,000,000	60,000,000
India	256,000,000	377,000,000	279,000,000	373,000,000	380,000,000	323,000,000
Cyprus	2,800,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Japan	28,000,000	27,000,000	30,000,000	31,500,000	35,000,000	30,000,000
Persia	8,000,000	8,000,000	13,000,000	13,600,000	13,600,000	14,000,000
Turkey-Asiatic	10,000,000	15,000,000	25,000,000	30,000,000	28,000,000	30,000,000
Africa	65,000,000	57,000,000	72,000,000	100,000,000	83,000,000	72,000,000
Algeria-Tunis	51,000,000	14,000,000	26,000,000	49,000,000	23,000,000	29,000,000
Australia, New Zealand..	*140,000,000	148,000,000	46,000,000	86,000,000	115,000,000	152,000,000
Total	3,663,535,000	3,371,827,000	3,292,079,000	3,340,104,000	3,369,255,000	3,547,588,000

Some countries estimated. *Estimated 1921-22. †Formerly included Servia. ‡New boundaries—Roumania. †Russia, early estimates; reports vary. —From Soil Products Bulletin of First National Bank in St. Louis

NEWS LETTERS

PHILADELPHIA

T. A. SIEBER - CORRESPONDENT

ACCORDING to the monthly statistics of the Commercial Exchange, the stocks of grain in public warehouses in Philadelphia on January 2 were: 1,766,470 bushels wheat, 396,423 bushels corn and 516,440 bushels oats, compared with 1,754,593 bushels wheat, 170,372 bushels corn and 416,585 bushels oats on December 1, and 2,771,834 bushels wheat, 150,056 bushels corn and 186,802 bushels oats on January 2, 1922. Receipts of grain at Philadelphia during the month of December, 1922, were: 5,857,598 bushels wheat, 855,459 bushels corn, 348,437 bushels oats, 82,222 bushels rye and 51,225 bushels barley. Exports from this port during the month of December, 1922, were: 5,365,826 bushels wheat, 295,086 bushels corn, 19,966 bushels oats and 140,000 bushels rye.

John Kellogg of the Armour Grain Company and Herman F. Wright of the American Hominy Company, both of Chicago, Ill., were visitors on 'Change during the past month.

G. Percy Lemont of the firm of E. K. Lemont & Son, grain, flour and feed merchants in the Bourse, left the latter part of December with his wife and daughter for Pinehurst, N. C., where they will stay for the winter.

Milton F. Baringer, head of the grain and feed firm in the Bourse which bears his name, left a few days ago with his wife on a trip to the Pacific Coast and will return by way of Chandler, Ariz., where they will stay for several months before returning to this city.

Adam D. Bahmer, hay merchant in the Bourse, has been confined to his home in this city where he accidentally fell and sprained his ankle.

A cribbed, ironclad elevator of 17,000 bushels capacity, has just been completed by the Spencer Construction Company of Baltimore, Md., for the Newville Warehouse Company at Newville, Pa., and feed grinding equipment will be installed later.

The capitalization of the South Jersey Farmers' Exchange has been increased from \$225,000 to \$500,000 which will be used as working capital, as there is a general increase in the demand from the farmers for supplies of feed and fertilizers.

About two cents a hundred pounds has been cut from the rates on grain to principal continental ports from Philadelphia by lines booking cargo for the first half of January sailings, according to reports of shipping agents.

S. F. Scattergood II and Morris P. Hallowell have been elected to membership in the Commercial Exchange.

The grain end of the business of the McCaskey Willets Company of Pittsburgh, Pa., has been temporarily discontinued and their interests will now be confined to the flour trade.

The Minnesota visitors on the Commercial Exchange floor during the past month included Benjamin Stockman, manager of the Duluth Superior Milling Company, Duluth; H. P. Gallaher, vice-president and general manager of the Northwestern Consolidated Milling Company, Minneapolis, and W. H. Sudduth, vice-president of the Empire Milling Company, Minneapolis.

The Pennsylvania System embargo No. 32, covering all wheat consigned to North Philadelphia and Keystone Elevator, when originating in Pennsylvania, Delaware, New Jersey and Maryland, has been cancelled. Embargo No. 42, of this company, has been modified to accept shelled corn, consigned to North Philadelphia and Keystone Elevator, but the embargo on cob corn is still in effect to these points, as well as Embargo No. 29, covering shipments of wheat from these four states, consigned to the above sta-

tions and destined for Girard Point Elevator, Philadelphia. Application for permits should be addressed to A. J. Dando, agent, Girard Point Elevator, Bourse Building, Philadelphia, Pa.

On account of accumulation at the Merchants Warehouse, Kensington Sta., Philadelphia, the Pennsylvania System has issued an embargo No. E170 on all shipments from all points for all consignees at that point; principally on shipments from nearby points in Pennsylvania, Delaware, Maryland and New Jersey.

Louis G. Graff, former president of the Commercial Exchange, left last Monday with his wife and daughter for a five-months' cruise around the world. Mr. Graff is a retired grain exporter, having formerly been the head of the firm of L. G. Graff & Son in the Bourse, which business is now being continued by the Barnes-Irwin Company, Inc.

The number of cars unloaded at the Girard Point Elevator during the month of December, 1922, were: 1,644 wheat, 341 corn, 49 oats and 43 rye; at the Port Richmond Elevator, 2,237 wheat, 35 corn, 10 oats, 58 rye and 28 barley; at the Twentieth Street Elevator, 2 wheat, 12 corn, 42 oats, 2 rye, 1 barley and 4 buckwheat.

On account of the reported presence of the corn borer in Pennsylvania and other eastern states, Governor Small, of Illinois, has placed a quarantine on corn shipped from these points into Illinois.

J. Roberts Linton, aged 48 years, died January 6 in the Lankenau Hospital due to an internal hemorrhage. Mr. Linton for many years had charge of the accounts of the Philadelphia Grain Elevator Company, who operate the Port Richmond and Twentieth Street Elevators, but had not been at his office in the Bourse for several months, having been confined to his home during this period. His widow, Elizabeth Sterling Linton, survives him.

John Chambers, of the grain firm of S. K. Chambers & Bros., is now recuperating at his home in West Grove, Pa., having been confined to the hospital with a lacerated head.

All "Floor Rules" were broken on 'Change the last day of the Old Year when some of the members were dressed as convicts with Wesley Williams, representative of the Delaware, Lackawanna & Western Road, imitating a "cop;" although the real fun began when Wesley was made a target for samples of feed and grain and upon his recovery was booking trainloads of wheat and feed via the port of Philadelphia. Emanuel H. Price, the watch-dog of the Exchange's money, gave out good cigars and cigarettes to the members.

Frank M. Rosekrans, a director of the Commercial Exchange, was tendered a testimonial luncheon in the Bourse Restaurant on December 28 by nearly 50 grain merchants. Mr. Rosekrans recently accepted a position as grain buyer for the Pratt Food Company at Hammond, Indiana, and has given up his grain and feed business in the Bourse, which has been in operation for many years. He was a member of the Commercial Exchange for the past 15 years and Walter K. Woolman, president of the organization, acted as toastmaster at the luncheon.

John B. Matthaei, traffic manager of the Commercial Exchange, has received a notice, which is of interest to the hay trade, that the Official Classification Committee will hold a meeting in New York, Room 408, 143 Liberty St., on January 16, at which time consideration will be given to revising the minimum carload on hay from 20,000 pounds to 22,000 pounds in machine pressed bales. A meeting was held in Chicago, Ill., on January 9 for the Western Committee and there will also be a meeting at Room 215, Transportation Building, Atlanta, Ga., on January 23, for the Southern Committee. Hearings are by appointment and application should be made for the New York hearing to F. W. Smith, chairman; and for the Atlanta hearing, apply to E. H. Dulaney, chairman, for assignment.

In accordance with an article of the by-laws, a meeting of the Commercial Exchange for nominations for officers and directors, will be held on the floor, Saturday, January 29, 1923, at noon. Nominations will

include the offices of president, vice-president and treasurer, to serve one year; and six directors, to serve two years; all to be voted upon at the ensuing annual election, which will be held on the thirtieth instant.

Accord to the Department of Agriculture, unfavorable weather conditions caused a decrease in the acreage seeded of Winter wheat and rye this fall in Pennsylvania. The area of Winter wheat seeded this fall is estimated at 1,336,000 acres or 96 per cent of last year's seeded acreage. The condition of the crop on December 1 was 79 per cent of a normal, as compared with 95 per cent last year and 93 per cent, the average condition for the past 10 years on December 1. The acreage of rye seeded this fall is estimated at 216,000 acres or 98 per cent of the revised area seeded a year ago. The condition of the crop on December 1st was 83 per cent of a normal, as compared with 96 per cent last year and 94 per cent, the average condition for the past 10 years on December 1. The average yield per acre of straw this season is estimated as follows: Wheat, 1.20; oats, 1.02; rye, 1.50; barley, 0.80 tons. Due to the extremely dry weather it is estimated that only 12 per cent of farm land has been plowed this fall as compared with 21 per cent last year and 15 per cent in 1920. There has been a very slight decrease in the price of male farm labor since last year. The average per month when hired by the year, with board this year is \$33, last year \$35. The average wage per day for harvest work, with board, this year is \$2.50, last year \$2.60.

At a meeting of the Commercial Exchange held January 9 the United States grades of hay as recommended by the Department of Agriculture as well as the regulations governing the inspection of hay, as issued by the Secretary of Agriculture, were adopted and will become effective 10 days thereafter or January 19, 1923, and will be in use in the Philadelphia district. The inspections will be made here by Charles Molin who has been employed by the Commercial Exchange and who is located at Room 587 Bourse Building. Mr. Molin has been under instruction of the Government at the Hay Standardization Laboratory at Alexandria, Va., and has qualified as a Federal hay inspector.

NEW YORK

C. K. TRAFTON - CORRESPONDENT

IN ACCORDANCE with a precedent of many years' standing the huge trading floor of the New York Produce Exchange was dedicated on the last day of the old year to the great Year-End Entertainment which is looked forward to so eagerly by several thousand poor children living on the lower end of Manhattan Island. During the last week of the year the members had patiently endured the inconvenience caused by the erection of long rows of circus seats, being well repaid by the evidences of keen enjoyment displayed by the many young guests who took their places after one o'clock when business was suspended, as usual on that day. The customary varied program was arranged, including a military band, trained animals, fancy skaters, acrobats, jugglers, and clowns. While the children enjoyed the whole program as keenly as usual, there was an element of pathos in the affair as far as practically every member of the Exchange was concerned, namely that their esteemed and beloved old friend George W. Blanchard, who had played the part of Santa Claus for many years, was no longer with them, having passed away late in December. The task of donning the time-honored Kris Kringle regalia and distributing the packages of assorted gifts to the children was assumed by Frederick A. Colby of Lunham & Moore.

Members of the New York Produce Exchange, and especially those in the flour and grain trade, were surprised and sorry recently to learn that their old associate Frank K. Miller, had resigned his membership. Mr. Miller was frequently active in the local flour market, although his business was primarily in Philadelphia where he made his headquarters. Still, he had long been in the habit of coming to this market sometimes once a week, or possibly

two or three times a month. It was stated that he had retired from the flour trade.

Charles Rockwell, for many years a member of the New York Produce Exchange and an active distributor of feedstuffs throughout eastern markets, but who is now sales manager in eastern territory for the J. J. Badenoch Company, grain and feed shippers of Chicago, received a cordial welcome recently from his many old friends.

Among the recent visitors on the New York Produce Exchange were the following member of the Chicago trade:

George E. Fuller, formerly an active member of the commission house of the Bartlett Frazier Co.; Fred S. Lewis of F. S. Lewis & Co.; W. J. Farrell, broker in the cash grain market for Jackson Bros. & Co.; Thomas M. Howell, C. H. Klein, and A. N. Adams, grain brokers.

James Carruthers, who has been well and favorably known for many years in practically every North American grain market as head of James Carruthers & Co., Ltd., the big grain house with offices in New York, Montreal and Winnipeg, spent a short



JAMES CARRUTHERS

time in the New York office in December prior to sailing for Europe on the *S.S. Adriatic*. At that time it was his intention to spend from three to four months on an extended trip, going as far as Egypt, as well as visiting Germany, Austria, and Italy.

Stanley Jackson, son of Arthur F. Jackson and a representative on the floor of the Chicago Board of Trade for the well-known commission firm of Jackson Bros. & Co., spent a few hours on the Produce Exchange floor early this month. Mr. Jackson was accompanied by his bride, with whom he sailed on the *SS. Majestic* for a honeymoon trip to Europe.

The Board of Managers of the New York Produce Exchange have elected the following applicants to membership: Edgar H. Myers of the Brinkley-Evans-Leverich Company, grain merchants; F. Darnbacher of Wm. H. Muller & Co., Inc., grain exporters; Albert E. Scoltock, Jr., of the Norris Grain Company, Chicago and New York; George Dudman of Dudman & Co., flour and cereals; Raymond F. Kilthau, flour distributor.

The following applications for membership have been posted on the bulletin boards of the New York Produce Exchange: Charles D. Kroncke of Milmine, Bodman & Co., Inc., grain exporters; Warren S. Moore of the W. S. Moore Grain Company, New York and Duluth; Charles L. Dreyfus and Louis L. Dreyfus of Louis Dreyfus & Co., grain merchants of Paris; Richard D. Patton of the Ansted & Burk Company, flour millers, Springfield, Ohio; Homalo Angelone of the Italian Government Commission.

Frank Losee, for several years chief representative on the New York Produce Exchange for the Schilthuis-American Trading Company, has severed that connection and become associated with the Melady Grain Company as secretary. This change was partly brought about by the fact that the Schilthuis concern has gone into liquidation here, but will continue in business in Holland, where they will be agents of the Melady Grain Company. To all essential purposes there will be no change in the Melady concern of which John Melady continues president and W. F.

Rosar, treasurer. Another new addition to the firm is H. E. Sellers, who has for years been manager of the firm's Minneapolis office. Mr. Sellers was among the recent visitors on the Exchange floor.

As a result of the sudden and greatly lamented death of George W. Blanchard, who was for many years president of the North American Grain Company, Ltd., it was necessary to hold a special meeting of the directors of the company to elect new officers. As had been generally expected, Charles Griffith, who was Mr. Blanchard's lieutenant and chief assistant for 25 years, was elected president. E. L. Kimball was elected vice-president, and W. E. Clarkson, secretary and treasurer.

According to a notice posted on the bulletin boards of the New York Produce Exchange, The Raymond-Hadley Company, Inc., had been formed to succeed The Raymond-Hadley Corporation, which has long been a large exporter of foodstuffs, and especially of flour. It was stated that this change was made for technical reasons only as there were no other important changes, the officers being the same as formerly, namely: F. E. Hadley, president; Charles Sloane, vice-president and treasurer, and W. H. Leggett, secretary.



TWELVE candidates for directors of the Cincinnati Grain & Hay Exchange have been named by the Nomination Committee. They are: Elmer H. Heile, H. Edward Richter, Ralph W. Brown, Robert L. Early, B. H. Wess, John H. Dorsel, D. W. Hopkins, E. H. Smith, Frank R. Brown, Fred W. Scholl, Frank J. Currus and William R. McQuillan. Six of these candidates are to be elected and will serve for three years. They will fill the vacancies caused by the retirement of the following from the directorate according to the constitution: John E. Collins, Edward H. Heile, H. Edward Richter, Ralph Gray, B. H. Wess and William G. Steuve. All of the above directors' terms expire with the exception of Mr. Collins who has retired from the grain and hay business. The election will be held on the floor of the Exchange and the results announced at the annual meeting of the organization late this month.

Notices have been sent to members of the Cincinnati Grain & Hay Exchange that the Executive Committee and Directors have fixed the membership dues for principals at \$150 a year for 1923. A letter from President John De Molet which accompanied the notice, said that the new membership fee would in all probability not be effective until next June, and as long as possible the dues would be held at \$75. The new dues are double the old dues, but President De Molet explained that the directors thought they might have to charge the extra \$75, if certain plans now under consideration are matured. The membership dues for clerks and associate members were not raised.

John E. Collins has resigned from Collins & Co., grain dealers, to become secretary of an oil concern at Milford, Ohio.

D. J. Schuh, executive secretary of the Cincinnati Grain & Hay Exchange, will represent that organization at the annual convention of the Indiana Grain Dealers Association.

Perhaps never in the history of the grain and hay business have Cincinnati dealers in those commodities witnessed conditions paralleling the year 1922. This statement was made by D. J. Schuh, executive secretary of the Cincinnati Hay & Grain Exchange, in a review of the market during the past 12 months, which is as follows:

"The close of 1921 and the dawn of 1922, held great promises for material increases in receipts and shipments. Prices were beginning to display a steadier tone, so that shippers of grain and hay could with some degree of certainty provide for the demands from consumers, while manufacturers of feeds, flour and other grain products felt that they were not liable to meet with violent fluctuations placing themselves subject to losses on the manufactured products, and there were general indications of abandonment by consumers of the 'hand to mouth' buying policy which had taken the place of the war-time spirit.

"The early part of 1922 compared very favorably with previous years. Following upon the heels of this encouraging outlook the railroad strike paralyzed the local trade in all of its branches during the harvest period. The railroad situation caused short run periods and in some cases shut-downs of mills in the South, while the eastern demand for export could not be met,—all of this despite heroic efforts on the part of the railroads and priority orders from the Interstate Commerce Commission. The rainbow, which came in the shape of settlement of the railroad strike vanished when the railroad equipment situation, became acute, in fact, the car

shortage proved itself quite as disastrous as the strike. Despite these conditions Cincinnati enjoyed a good volume of business during the year.

"Without attempting a statistical review, an exposition with comparative figures of the 'in' and 'out' movement of the important grains should prove interesting.

"As compared with 1921 there was a decrease of three cars in receipts of wheat, while the 1922 outbound movement exceeded by 263 cars the previous year's record.

"Movement of shelled corn into this market was seven cars in excess of 1921, while the outbound movement showed an increase of 67. Receipts of ear corn increased 102 cars.

"Oats and hay proved to be the disappointments. The latter fell off 1,512 cars, total receipts aggregating only 6,753 cars, as compared with 8,265 during the previous year. During the railroad strike the car receipts of oats were 768 cars below 1921.

"Receipts of feeds increased steadily, until at the close of the year this market had received 193 cars more than during 1921. With the exception of shelled corn, the falling-off in receipts took place during the car shortage, while the receipts of all commodities showed improvement at the close of the year.

"Government reports reflect large quantities of grain and hay now at country points, all of which must be moved. Cincinnati cannot fail to receive its share.

"Records of the closing weeks of 1922 reflect increased prices with the necessity of replenishing stocks. The new year for Cincinnati's grain and hay interests comes to us holding wonderful promises of activity and prosperity as should be evident when the following five points are considered:

- "Improved railroad situation.
- "Vast quantities of grain and hay to be moved.
- "Attractive prices.
- "Cincinnati's incomparable position as the gateway of the South.
- "A group of aggressive, responsible and energetic grain and hay merchants."

Following an absence of two years, L. W. Perkins has returned to the Cincinnati Hay & Grain Exchange and assumed charge of the traffic department. He succeeds B. J. Drummond who resigned as traffic manager two months ago, to engage in the transportation coun-



L. W. PERKINS

seller business for himself in this city. Mr. Perkins left the Exchange in November, 1919, to take charge of the traffic department of the Cincinnati Abattoir Company.

Joseph Lackey, assistant to E. B. Terrill, general manager of the Early & Daniel Company, spent the holiday season with relatives in southern Illinois.

Henry M. Brouse of the Perin-Brouse-Skidmore Grain & Milling Company has been nominated for the directorate of the Chamber of Commerce. John De Molet, president of the Cincinnati Grain & Hay Exchange, was a member of the committee that nominated Mr. Brouse.

Members of the Cincinnati Grain & Hay Exchange held their annual New Year's Eve party at the Hotel Gibson. The affair was arranged by "Bill" Riley of McQuillan Company, hay dealers. Following the dinner there was a vaudeville show made up of entertainers appearing at the local theaters during the holiday period. The ballroom of the hotel, which was engaged for the evening by the grain and hay dealers, was elaborately decorated for the occasion.

"Gone but not forgotten."—This historic phrase came into the limelight once again on the floor of the Cincinnati Grain & Hay Exchange the Saturday before Christmas, when a collection was taken up among the members by Frank Currus for two former members who are no

longer active in the game. The fund was divided between John Lindsey who is seriously ill at his home in this city and Daniel Kelleher who is making every effort to regain his health at Asheville, N. C. Both of these men were conspicuous figures in the grain and hay trade in their youthful days. Mr. Lindsey was for nearly a quarter of a century connected with the Cleveland Storage Company, while Mr. Kelleher spent the major part of his life with the Costello Grain Company, which is no longer in business.

ST. LOUIS

S. F. LARRIMORE CORRESPONDENT

W J. EDWARDS, of W. J. Edwards & Co., was elected president of the Merchants' Exchange at the annual election held January 3. He succeeds George F. Powell, who has served for the past year. Samuel Plant of the George P. Plant Milling Company was elected first vice-president and W. K. Woods of the Ralston-Purina Company, was elected second vice-president. The new Board of Di-



W. J. EDWARDS
President Elect of the St. Louis Merchants' Exchange

rectors will consist of George F. Powell, Louis F. Schultz, Julius J. Albrecht, Charles E. Valier and J. B. Horton, new directors, and Messrs. Moffett, Niergarth, Langenberg and Hesse, holdover directors. Eugene Smith was reappointed secretary and Percy Werner reappointed attorney. President Edwards also appointed the standing committees to serve during 1923. The chairman of the more important committees are: Finance, Geo. F. Powell; Membership, Fred W. Langenberg; Traffic, W. K. Woods; Complaints, Ludwig Hesse; Rules, W. K. Woods; Future Delivery, H. W. Daub; Appeals, Roger P. Annan; Grain, W. J. Niergarth; Feed, Chas. E. Valier; Seed, R. W. Pommer; Hay, W. H. Toberman; Hay Arbitration, H. L. Boudreau; Legislative, Samuel Plant; Reception, N. L. Moffitt; Mississippi River, Marshall Hall; Elevator Construction, George F. Powell.

"Despite the shortage of transportation, both rail and river, the movement of grain in and out of St. Louis compared most favorably with the previous years," reports Eugene Smith, secretary of the St. Louis Merchants' Exchange. He goes on to say that "taken as a whole the gross volume of business transacted in 1922 by the grain, milling and allied interests of the Merchants' Exchange was again satisfactory, and demonstrated the important position of St. Louis as a grain and milling center.

"The receipts and shipments of livestock and other leading articles likewise illustrate the great volume of business handled through the St. Louis market, fully substantiating its claims as one of the foremost commercial centers of the country. Although the movement of wheat was below that of the preceding year, the receipts and shipments of corn and oats were the largest recorded in many years.

"The total receipts of grain for 1922 amounted to 102,791,799 bushels, as compared with 106,393,246 bushels in 1921. The total shipments for 1922 amounted to 79,474,015 bushels, as contrasted with 77,964,895 bushels in 1921. The importance of river transportation was again a marked factor in the grain trade of St. Louis the past year. The facilities provided by the Barge Line were far inadequate for

the handling of the tonnage offered by the grain interests, resulting in many thousands of tons of wheat, corn and flour being turned over to the railroads for transportation that otherwise would have been shipped by river."

"On the basis that all prosperity depends upon the products of the soil, I would predict improved business conditions for at least the next six months," said Nathaniel L. Moffitt, prominent member of the Exchange. "Grain prices are from 10 to 50 per cent higher than a year ago, the production is normal and, contrary to general opinion, there is an excellent demand for grain abroad. These conditions make the farmer prosperous, and what makes the farmer prosperous affects the entire country likewise."

Western railroads have made application to the Interstate Commerce Commission for an increase on their rates from Middle Western States to distribution points in the South. An examination before an examiner of the Commission was held in the Hotel Jefferson recently and the decision is to be handed down in March. The increase would have the effect of restoring the trade relation that existed last April between grain competitors in this district. The proposal would enable a grain dealer at Memphis to buy grain in Kansas and ship it to Mississippi via Memphis at the same charge that would apply if the grain were shipped directly from Kansas to Mississippi.

Plans for the erection by the Missouri Pacific Railroad of a 2,000,000-bushel grain elevator, which is expected to be completed in 1923 were announced recently by George F. Powell, 1922 president of the St. Louis Merchants' Exchange. Such a project, it is estimated, would cost between \$1,500,000 and \$2,000,000. At the offices of the Missouri Pacific, officials of the road declined to discuss plans for the elevator, declaring they are not yet far enough advanced to make public and that the carrying out of the project depends on several contingencies. St. Louis is badly in need of increased elevator facilities and, in addition to the proposed Missouri Pacific Elevator, it is understood that an appeal has been sent to the Secretary of War to provide for the erection of a public elevator in St. Louis.

Stocks of grain at St. Louis on December 30, 1922 in public elevators were as follows: Wheat, 1,054,164 bushels; corn, 694,571 bushels; oats, 253,369 bushels; rye, 6,015 bushels, and barley, 4,628 bushels. In private elevators: Wheat, 170,078 bushels; corn, 30,813 bushels; oats, 21,312, and rye, 2,331 bushels; 90,000 bushels of wheat and 370,000 bushels of corn were delivered in December on contract. Stocks of flour at St. Louis on January 1, 1923, were 70,760 barrels, on December 1, 1922, 60,900 barrels, and on January 1, 1922, 91,700 barrels. Some 93,000 bushels of wheat and 372,740 bushels of corn were shipped by barge from St. Louis in December.

The following have made application for membership in the St. Louis Merchants' Exchange: George P. Lamy, to be transferred from C. M. Woodward, and Chas. D. Sturtevant of Omaha, to be transferred from Frank S. Cowgill.

An attempt is being made to organize a "farm bloc" in the Missouri state legislature for the purpose of effecting economies in the State Government and reduction of taxes now levied on the property of the farmers. It is planned to pattern the "bloc" after the one now in existence in Washington. The movement is being promoted by the Missouri Farm Bureau Federation.

Patrick J. Flynn, native of Edwardsville, Ill. (near St. Louis), and a prominent and well known former miller of Edwardsville, died at Fostoria, Ohio, recently, where he has been superintendent of the Mennell mill.

Word has been received in St. Louis of the death recently in Pasadena, Calif., of William L. Green, founder and for many years president of the William L. Green Commission Company of St. Louis. He gave up his business in St. Louis in 1907 and went west to live. The commission company is now known as the Marshall Hall Grain Company.

The following firms recently filed applications with the state for permission to increase capital stock: The Schisler-Corneli Seed Company; assets of \$370,374, liabilities of \$4,436; increase from \$20,000 to \$300,000. John Wahl Commission Company, increase from \$200,000 to \$350,000. Moffitt-Napier Grain Company, increases from \$50,000 to \$70,000.

The following visitors were on the floor of the St. Louis Merchants' Exchange recently: H. J. Besley, of the Grain Division of the U. S. Department of Agriculture at Washington; E. J. Wulfekammer, Missouri State Grain Inspector of Sikeston, Mo.; J. N. Frankel of Omaha; P. F. Gault of Washington, D. C.; E. C. Bailey of Kansas City; P. V. Kelly of Salt Lake City; Lee Morse of Riga, Russia; J. L. Walkinshaw of Chicago; O. M. Welters of Quincy, Ill.; Charles F. Rock of Kansas City; H. C. Munn of Kansas City;

Geo. S. Green of Chicago; C. F. Wood of Chicago; W. H. Crossland of Milwaukee; A. H. Barlow of Chicago; A. J. Singer of New York City; T. M. King of Jackson, Miss; C. L. Payne of Atlanta, Ga., and many others.

The annual meeting and election of officers of the St. Louis Grain Club was held at the Chase Hotel January 9. The following officers were elected for the coming year:

Wm. Niergarth, president; George C. Martin, Jr., vice-president; Gene Gissler, secretary and treasurer. Executive Committee: Bert Collins, W. B. Christian, Ralph Baumgaertner, R. R. DeArmond, Harry Daub.

The secretary and treasurer read his report which indicated the club had 126 members in good standing at the end of the year with a surplus in the bank of \$1,393.99 and a \$1,000 Liberty Bond on hand. The dues for the coming year were reduced from \$15 to \$7.50.

The following persons were admitted to membership: Chas. E. Valier, Arthur Kilz, Louis F. Schultz, and Wm. F. Geigel.

Circuit Judge George E. Mix who for the past four years was judge of the City Court, gave a very interesting and instructive talk on Traffic Conditions and his experiences as judge of City Court.

KANSAS CITY

B. S. BROWN - - CORRESPONDENT

HARRY J. SMITH, head of the Federal Grain Company, has been elected president of the Kansas City Board of Trade for the coming year, succeeding James N. Russell of the Russell Grain Company. Mr. Smith was unopposed, his opponent, Oliver Denton, having withdrawn several days before the election. In addition to the present office, he was first vice-president in 1922 and second vice-



HARRY J. SMITH
Recently Elected President Kansas City Board of Trade

president in 1921. He was born in Washington, Kan., and is 39 years of age. He is married and has two children.

Mr. Smith began his career as a grain man here in 1904 with the Thresher & Fuller Grain Company. In 1908 he became a member of the exchange and later was connected with the old Lonsdale Grain Company. In 1917 he was appointed to the position of buyer of the United States Grain Corporation, serving until the expiration of Federal control in 1919. After this he assisted in the organization of the Federal Grain Company which succeeded the Aylsworth Grain Company in the management of the Murray Elevator in North Kansas City.

Allen Logan of the Logan Bros. Grain Company automatically advanced to the position of first vice-president. The principal contest was for the position of second vice-president, Harry C. Gamage of the Moore-Seaver Grain Company defeating W. B. Lathrop. The following directors were elected: Fred Godfrey of the Simonds-Shields-Lonsdale Grain Company; Wallace C. Goffe of Goffe & Carkener; C. M. Hardenbergh of the Southwestern Milling Company; J. J. Kraettli of the E. D. Fisher Commission Company; Fred Lake of the Hall-Baker Grain Company, and Guy A. Moore of the Moore-Lawless Grain Company.

The Arbitration Committee this year will consist of: J. S. Geisel, E. M. Jolley; F. T. Kane, W. H.

Marshall, and E. E. Roahen. Ben C. Moore, Charles Lonsdale and E. O. Bragg were elected directors of the Grain Clearing Association.

Samuel Hardin, a former member of the Kansas City Board of Trade, died here recently. He had been engaged in the feed business the past few years. He was 67 years old.

A dust explosion and fire destroyed the plant of the Schreiber Flour & Cereal Company in Kansas City, December 27. Twenty-seven employees who were in the mill at the time were injured, three of them dangerously although all are expected to recover. The plant of the J. G. Peppard Seed Company nearby was damaged to the extent of \$5,000 and numerous other buildings were endangered. The Schreiber mill was a 5-story structure and formerly was owned and operated by the Russell Grain Company. Loss was estimated at about \$125,000, of which \$81,500 was said to be covered by insurance. The fire probably started from sparks from a motor. A small blaze was extinguished several days before, resulting from friction from machinery. An investigation of the cause was to be held, it was said.

No announcement regarding the rebuilding of the mill has been made by C. T. Schreiber, manager. This was the first serious elevator loss since September 13, 1919, when a dust explosion wrecked the big Murray Elevator of the Federal Grain Company, killing 14 and causing property damage to the extent of \$500,000.

Final trade in December wheat at Kansas City was quiet, the market keeping within a range of several cents the last week of the month. Since early last June when trade first started there was an extreme advance of 23 cents, practically all of which was retained. Reports were current at Kansas City the latter part of the month that a large Chicago firm was taking liberal quantities of wheat at this market and Omaha for the purpose of preventing shipments to Chicago for December deliveries. The wheat was ordered to the Gulf ports, presumably against export business, but local dealers said at the time that there was no foreign demand of any kind in evidence.

A little export demand for wheat developed at the Gulf the first week in January, the first business of importance reported there in some time. Germany was said to be the main buyer. Over a period of several days transactions of about \$750,000 bushels were claimed. The revival in activity was said to be due to a decline in freight rates quoted by vessels that were anxious to get cargoes.

Receipts of wheat at Kansas City the latter part of December and the first part of January established a new high record for this season of the year and at most other winter markets the movement was far above the average for this season. After the Christmas holiday when a three-day accumulation was reported the total was 1,033 cars, a new high record for one day in mid-winter. The unusual winter marketing is attributed chiefly to transportation conditions. Since early in the season there has been a pronounced car shortage and, as farmers have generally been anxious to sell, stocks have steadily accumulated at country points. Recently there has been a seasonal increase in the number of cars available for grain loading and the accumulated supplies are now moving to market. The movement to Kansas City is expected to continue liberal for some time.

Members of the Kansas City Board of Trade will vote January 15 on an amendment providing that official grades and weights at Kansas City should be used for settlement of contracts and bill of sale deliveries unless shippers' weights were agreed at the time of the transaction, such weights to be furnished the purchaser within 10 days of the time of the purchase.

Stocks of wheat in Kansas in the hands of farmers, independent elevators, mills and mill elevators on November 20, according to a comprehensive survey by Allen Logan, Kansas City statistician, were 55,911,300 bushels. Of this amount, 42,380,000 bushels, or 36.5 per cent of the entire yield of the state, was held by farmers. The 953 mills and elevators reporting to him had 11,531,300 bushels, to which was added 2,000,000 bushels for the 650 mills and elevators that did not make reports to him. The fall sown acreage, Allen Logan's figures showed, was reduced 1,200,000 acres or about 10 per cent from last year. On about 2,000,000 acres on the western part of the state the crop was reported late and in only fair condition, in the western central counties the condition was good and on 8,000,000 acres in the eastern counties the outlook was good to excellent.

The work of organizing a grain trade credit bureau, which has been under discussion for several months, has been turned over to Albert W. Orr, an attorney, formerly with the Armour Grain Company. The plan, which is similar to those in use at other markets, was outlined and accepted at a recent dinner of the Kansas City Grain Club. One feature will

be the handling of disputed freight claims. A committee consisting of George Carkener, E. O. Bragg and Harry Gamage from the Grain Club will serve in an advisory capacity.

Total deliveries on December contracts at Kansas City were 350,000 bushels of wheat, practically all of which was on the last day of the month; 99,000 bushels of corn and 170,000 bushels of oats were also delivered on contract.

The half rate from Kansas City to New Mexico stations on the Sante Fe Railroad published to expire January 1, has been extended to February 28, due to the difficulty in obtaining box cars for stock feed to New Mexico points and through difficulties feeders have in anticipating requirements in winter months when feed is most needed.

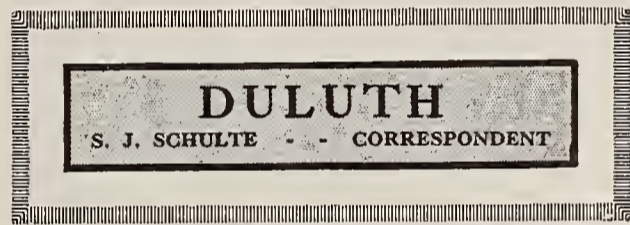
Kansas City received 114,000,000 bushels of grain last year, the third largest on record and about 17,000,000 more than the average for the past 10 years. Compared with the preceding year, which established a new high record by a big margin, there was a decrease of 26,000,000 bushels, and with 1916, the second largest year, there was a decrease of about 2,000,000 bushels.

The acute shortage of cars for grain shipments in the season, dating back to the early days of the season, limited wheat receipts and probably kept the total down a good many million bushels. Corn and oats receipts increased slightly over the preceding year and other coarse grains decreased moderately. All were a little under the average for the past 10 years.

Kansas City receipts of grain last year, with comparisons, are here shown in bushels:

	1922	1921	1920
Wheat	\$5,449,600	110,204,550	70,738,650
Corn	16,100,000	15,495,000	10,813,750
Oats	7,779,000	7,117,900	7,553,100
Kaffir, etc.	3,124,000	4,712,400	6,066,500
Barley	961,500	1,657,500	2,461,500
Rye	357,500	442,200	893,200
Totals	113,791,800	139,629,550	98,526,700

N. C. Campbell has been re-elected president of the Kansas City Hay Dealers' Association for the coming year. Other officers elected at the annual meeting of members were: Victor Fargis, vice-president; J. M. Hall, C. M. Funk and W. H. North, new directors; B. F. Tyler, J. D. Cole and E. A. Fitzgerald, members of the Board of Arbitration.



OPERATORS on this market have been interested in the move being made at St. Paul to bring about the establishment of Minnesota State Grain Grades. The promoters of the movement in the state legislature have hopes of succeeding in inducing the Washington authorities to amend the Federal grades in Spring wheat to make them conform with the state grading, but authorities in the market here are not at all sanguine on that score. They take it that the whole problem was threshed out two years ago and that no good can now be served by endeavoring to reopen it, as it is recognized that Federal grades must prevail in interstate business and conflicts in inspections avoided. Dealers here are anxious, though, to bring about special recognition of Durum wheat in the Federal grades in view of the remarkable expansion in the raising of Durum in the Northwest during the last few years. It was pointed out by specialists in that market that Durum accounted for about 55 per cent of the entire wheat production of the Northwest at last harvest, compared with around 10 per cent less than 10 years ago.

F. E. Hurley, representative on the Duluth market of the Occident Elevator Company of Minneapolis, has made his presence felt since coming up here a few weeks ago. He has won recognition as a well-posted handler of cash grain and he is credited with having put through a substantial volume of business since his advent here. He explained that he has been occupied in selling his house's grain and that from the indications he is sanguine that the tonnage of grain handled on this market will be in fair proportion to the quantity raised each season over the Northwest. He assumed that Buffalo millers will be led from now on to look to this market for their Spring wheat supplies for flour mixing purposes.

Mr. Hurley is strongly of the opinion that the raising of Red Durum should be curbed in the Northwest, as he feels that its presence on the market results in pulling down the returns received by growers for other wheats. In explanation, he drew attention to the point that Red Durum will not make bread or even macaroni flour. It has consequently come to be recognized that it must be used in mixing with other Durums with the result that the mixture is penalized in its grading and in the price quotations commanded by it. "If grain

growers over the Northwest will only look into the Red Durum problem I feel sure they will conclude to cut out planting that variety," said Mr. Hurley.

Few changes in the personnel of the executives of grain houses on this market have been announced recently. The most interesting one was the admittance of the Northwest Wheat Growers' Association to membership on the Board. The membership of George E. Ault was purchased by C. A. Jewett, the Wheat Growers' representative on this market.

A membership of W. J. McCabe was transferred to Douglas C. Moore, who is representing McCabe Bros. & Co. on the trading floor.

General regret was expressed in Duluth grain trade circles over the death of John Owens, member of the Minnesota State Board of Grain Appeals at Duluth after a short illness. He was appointed to the position six years ago and he won the respect of the trade by his painstaking attention to the details of the work. He came to this district in 1882 and for 40 years he was closely identified with the business and industrial life of this part of the state. It is expected the vacancy on the Board of Appeals will be filled shortly.

Elevator interests on this market were interested in the recent announcement that the Russell-Miller Milling Company of Minneapolis had purchased a site on Rice's Point, Duluth, covering an approximate area of 11 acres upon which it proposes to erect an elevator with a capacity of 1,000,000 bushels. The site selected will admit of the doubling the capacity of the elevator whenever the requirements of the business are considered to warrant it.

H. S. Helm of Minneapolis, general manager of the milling company, who came to Duluth to close the deal for the site announced that a modern fireproof elevator and storage tanks would be erected during the present year, and that a Chicago architect had been commissioned to prepare the plans for it. The plant will be electrically equipped throughout.

Grain men here believe that with Duluth gradually becoming more prominent as a grain shipping point by reason of the more advantageous freight rates now in effect that had been the case previously, Buffalo would score advances in the number of mills located there. The Russell-Miller Milling Company is closely associated with the Occident Elevator Company, which is now operating on this market.

H. F. Salyards, president of the Duluth Board of Trade, expressed the opinion in the course of an interview that the Duluth market had fared well during 1922 as regards the quantity of grain handled on it in proportion to the other markets. That he attributed to three causes: First, the increased acreage of Durum wheat in the Northwest, which grain goes out mainly for export; secondly, by reason of the more favorable freight rates which Duluth has been able to obtain, and thirdly, in the wonderful increase in the raising and handling of rye over the Northwest, that grain finding its outlet here to a great extent. He contended also that with the growing disposition of Minneapolis milling interests to establish plants at Buffalo, a larger handling of Spring wheat at Duluth might be expected to provide supplies for the milling center at Buffalo.

Mr. Salyards estimates that between 35 and 40 per cent of the 1922 Northwest grain crops still remains to be marketed, either in interior elevators or in growers' hands, so that a substantial movement should be brought about here up to the opening of navigation in the spring. He considered that the transportation trouble of last fall had made many converts for the Great Lakes to the ocean via the St. Lawrence project. "When we have a surplus to sell abroad, lower cost of transportation to the world's markets means higher prices to the producers," he said.

Recent nominations of officers, directors and members of committees of the Duluth Board of Trade for the ensuing year practically resulted in acclamations all along the line. Unless the unexpected happens no other candidates will be placed in the field at the election scheduled for January 16. The list is as follows:

- President—G. H. Spencer.
- Vice-president—Percy H. Ginder.
- Directors (three-year term)—G. G. Barnum, Jr., H. S. Newell, and Charles T. Mears.
- Director (one-year term)—W. C. Mitchell.
- Board of Arbitration—G. G. Barnum, Sr., E. A. Vivian, and M. M. McCabe.
- Board of Appeals—Thomas Gibson, F. E. Lindahl, and W. J. McCabe.

E. M. White of the White Grain Company expressed gratification over the broadening trade on this market in feed and coarse grains. In view of the large quantities of those grains still in growers' hands over the Northwest, he looks forward to a good movement to the terminals here during the balance of the winter.

An interesting development on this market recently was the shipping of a substantial tonnage of Spring wheat and Durum all-rail to the seaboard for export. The grain was loaded out from the Itasca Elevator at Superior and was upon a delivery contract made before the close of the lake navigation season by the Barnes-Ames Company. Other elevator interests on this market

are accumulating supplies of Spring wheat and Durum for May shipment down the lakes. Good premiums have been paid for choice wheats on the spot market here, but latterly a disposition has been shown to cut them down. That change of base has been attributed to the severe competition of Canadian grain at Liverpool, and to expectations of substantial shipments of new Argentine wheat coming into evidence in the near future. Operators in this quarter are not on the average as bullish as they were regarding price prospects.

The annual election of the Duluth Clearing House Association for the ensuing year resulted as follows: Directors, W. J. McCabe, E. N. Bradley, G. H. Spencer, B. Stockman, G. G. Barnum, Sr., and J. W. Galvin. Officers elected were; President, W. J. McCabe; vice-president, E. N. Bradley; secretary and manager, George F. Foster; assistant secretary and manager, H. Pfeifer.

Commission houses and elevator interests here fear that a considerable proportion of the wheat carried over the Northwest without proper protection from the weather owing to lack of storage facilities at many points will show deterioration through dampness. The quantity thus unprotected is estimated to aggregate up into the millions of bushels. Damp grain began to make its appearance to some extent just before the movement stopped prior to the Christmas holidays, and some of it has been showing again in recent marketings of wheat from sections of North Dakota.

MILWAUKEE C. O. SKINROOD - CORRESPONDENT

THE decisive slump in grain trade for the year, largely due to the great shopmen's strike on the railroads, is graphically described by Secretary Harry A. Plumb, in his annual report on the activities of the Milwaukee Chamber of Commerce for the year. Mr. Plumb asserts that this great strike put a dent in Milwaukee grain receipts for 1922 of no less than 10,000,000 bushels. The receipts of grain at Milwaukee for the past year were 61,491,000 bushels. This shows a decline of about 9,845,000 bushels from amount received in 1921. Mr. Plumb explains that while the shop strike was the main factor in the big slump in grain receipts, the twin trouble, the coal strike, also had much to do with the poor transportation service offered to the grain trade.

The lack of proper transporting facilities was shown at both ends of the grain movement, Mr. Plumb adds. It was shown in the lack of cars to bring grain from western fields and the facilities to carry the grain to eastern territory and for foreign export were also lacking, both by lake and rail.

The chief cause of the lack of cars was the fact that grain cars must be well repaired, must be in good condition to handle grain traffic, Mr. Plumb points out. Since the shopmen's strike deprived the railroads of repair men and thus prevented cars from being fixed up, the very brunt of the car scarcity fell upon the grain traffic perhaps more than any other industry, since most other industrial lines do not require cars of such a high standard to give the necessary degree of service.

Later in the season, Mr. Plumb explains, the big buyers of grain in Milwaukee had to stop their activities and reduce their purchases because they were unable to get an outlet for the grain to the eastern part of the United States and to the seaboard for shipment to foreign countries. This difficulty, he pointed out, was because Canada was monopolizing the eastern shipping facilities of the United States and shutting off our own American shippers.

Going back to the effect of all these troubles in the grain trade at Milwaukee, Mr. Plumb adds that this lack of facilities cuts down the shipments from Milwaukee by 2,961,000 bushels. He also says that the receipts of some 61,000,000 odd bushels in 1922 were not only 10,000,000 bushels less than they were in the previous year, but they were actually about 7,000,000 bushels less than the five-year average from 1917 to 1921 which was approximately 68,000,000 bushels.

The Chamber of Commerce reports on the receipts of grain in the opening week of the new year indicate that light receipts are to be expected in the near future, although steady improvement is reported in the supply of cars as railroads reduce the congestion on their lines. The first week of January showed receipts of 754 car loads of grain as compared with 891 car loads in the preceding week, 519 cars for the corresponding week a year ago and 734 car loads for the corresponding week two years ago. This indicates some improvement in grain offerings but not a large volume of receipts.

Grain traders assert that grain receipts should be much larger than in previous years to make up for the lack of receipts for several months. They point out that large quantities of grain are undoubtedly left in the country and that these should be mar-

keted very largely within the next few weeks. The receipts of grain for the past week were made up of 103 cars of barley, 301 car loads of corn, 176 cars of oats, 67 cars of wheat, 102 cars of rye, 2 cars of flax and 3 cars of miscellaneous. Almost half of the total receipts are made up of corn with relatively lighter offerings of the other grains.

The receipts of corn at Milwaukee for the past year are the largest of any of the grains, 24,428,000 bushels having been reported in 1922. These are the second largest receipts ever reported at Milwaukee, the other high figure being in 1921 when more than 29,000,000 bushels of corn receipts were reported.

Oats are given as the next largest item in the Milwaukee grain receipts for the year with a total of 22,190,000 bushels. The next in order in receipts were 9,378,000 bushels of barley in round numbers, 2,846,000 bushels of wheat, and 2,647,000 bushels of rye.

The shipments from the Milwaukee market during the year were given at 22,023,000 bushels of corn, 17,609,000 bushels of oats, 4,056,000 bushels of barley, 2,463,000 bushels of wheat and 2,099,000 bushels of rye.

Of the 48,000,000 bushels of grain shipped out, approximately 22,000,000 bushels went by way of the harbor, a small portion of it going to the east shore of Lake Michigan in railroad owned vessels, practically rail shipments, while the greater portion of it was cargo shipments to the lower lake ports, principally Buffalo and the Canadian ports of Georgian Bay, the terminal of the Canadian railroads. This grain was designed for consumption in the eastern and in New England States, but about 90 per cent of it was for export purposes.

The actual figures on cross lake shipments were 4,268,000 bushels of grain, mostly oats, which went out by the two car ferry lines, one the Pere Marquette to Ludington, Mich., and the other by the Grand Trunk Railway to Grand Haven, Mich.

The shipments from Milwaukee to the lower lake ports in 1922 were considerably less than for the record year of 1921, but this was expected because 1921 showed such a great volume of shipments and because the lack of transportation and other obstacles held down the shipping total for the year 1922.

The records of the Chamber of Commerce show that the shipments from Milwaukee to the lower lake ports of the United States were 8,402,000 bushels, and to the Canadian ports 9,677,000 bushels, making a total of a little more than 18,000,000 bushels.

The manufacturers in grain products in Milwaukee had a very active year, both the oat meal plants, the corn mills and the malting plants reporting in many cases an exceptionally large run of business.

The grain trade is getting keener and sharper every year, according to Secretary Harry A. Plumb who says that to avoid discrimination by grain markets farther west and to continue in business it is necessary for Milwaukee grain handlers to ask for changes in freight rates from time to time.

A case of this kind which is of extreme importance to Milwaukee, is now pending before the Interstate Commerce Commission. This case was brought to the attention of the Commission early in 1922 and alleged that rates on grain from certain sections of Iowa and Minnesota to Milwaukee are unreasonable in that they accorded undue preference to Minneapolis and Duluth. The complaint stated that the discrimination in favor of Duluth and Minneapolis and against Milwaukee amounted in some instances from a cent to several cents per 100 pounds and make it impossible for local grain men to get any shipments from this territory.

The Milwaukee complaint and subsequent hearing brought out the claim that the rates to Minneapolis and Duluth should be raised to get them on a parity with Milwaukee. However, no decision has been rendered as yet by the Interstate Commerce Commission.

The grain in store at Milwaukee at the opening of the new year showed totals of 150,000 bushels of wheat in round numbers, 266,000 bushels of corn, 714,000 bushels of oats, 188,000 bushels of barley and 345,000 bushels of rye.

The fall sown acreage of grains in Wisconsin shows a decrease of about 15 per cent, according to the reporting board. The decrease is given at 14 per cent for the acreage of Winter rye and a decline of 15 per cent in the area of Winter wheat. The decided cut in the acreage devoted to the two grains is ascribed to the excessively dry weather which prevailed during the seeding season in September and early October. The condition of rye was given as about the same as a year ago and about the same as the average for the last 10 years, while the condition of Winter wheat was reported at slightly below last year's condition and also a little poorer than the average for the last 10 years.

Milwaukee flour production fell off quite a little during the past year due to the fact that one of the largest mills of the city was not in operation. The flour production for the year 1922 was given at 250,000 barrels in round numbers and 66,000 barrels of

rye flour, which compares with an output of 358,000 barrels of white flour in 1921 and of 137,000 barrels of rye flour. The loss in white flour output was approximately 108,000 barrels and in rye flour of about 71,000 barrels. The rye flour output in fact was less than half of the production of the previous year.

The stocks of flour on hand at Milwaukee at the opening of the year were 18,000 barrels in round numbers, compared with 18,000 barrels a month ago, and 42,000 barrels a year ago for the corresponding date. The flour supply is small compared with the figures for the last two years, but larger than figures prior to that time.

The Chamber of Commerce, in accord with the usual manifestation of the holiday spirit, spent several hundred dollars in providing for 100 baskets of food for the poor. The baskets were distributed through the nurses' department of the city health authorities, the gifts going primarily to tubercular sufferers. William Young, Jr., is the chairman of the committee of the Chamber of Commerce which has this matter in charge.

Shipments of grain, according to the latest weekly report, are showing a fair volume with 344,000 bushels of oats, 274,000 bushels of corn, 46,000 bushels of barley, 50,000 bushels of wheat, 94,000 bushels of rye. This makes an aggregate of 811,000 bushels as compared with 735,000 bushels in the preceding week and 777,000 bushels for the corresponding week a year ago.

The January rate of interest on advances at the Chamber of Commerce has been fixed by the Finance Committee at 6 per cent, which is the same as the rate prevailing a month ago.

Milwaukee mills in the past week have made 3,000 barrels of wheat flour against 4,000 barrels in the previous week and 6,350 barrels for the corresponding time a year ago. The production of rye flour for the past week was 1,000 barrels against 1,000 barrels in the previous week and 2,000 barrels in the corresponding week a year ago.

Starting in September oats trading for 1923 delivery, contracts in futures at the Milwaukee market will be based only on Milwaukee warehouse receipts. The members of the Chamber of Commerce voted on an amendment in December of last year providing that all deliveries in September contracts for oats and all subsequent deliveries shall be only on the Milwaukee warehouse receipts. This resolution was adopted by practically unanimous vote of all Milwaukee grain men. Heretofore the rules of the Exchange have permitted the delivery of warehouse receipts of other markets in fulfillment of future contracts, but under the new rules adopted Milwaukee receipts only can be tendered a regular delivery in the sale of oats.

William C. Engel and Fred E. Schueler are among the members who have been elected to the Milwaukee Chamber of Commerce.

Among the new firms which have been organized to do a general commission business at Milwaukee in grains and provisions are A. W. Holmes & Co. The incorporators are Albert W. Holmes, George T. Grede and Herbert T. Ferguson. The latter is an attorney and the two first named will be active in the new company.

Hay dealers report that receipts of Timothy are light and that the demand is stronger. Fine Timothy is reported as very scarce and hard to get with top prices paid. The medium grades of good color are only in fair demand. Clover and Clover Mixed hay is in good demand and the market is firm. Timothy is quoted from \$14 to \$16 a ton and the Mixed and Clover hay \$12.50 to \$14 a ton.

Milwaukee's big \$5,000,000 harbor plan in which the grain men of the city are vitally interested has struck a new snag. The city had set out to issue \$500,000 in bonds every year for 10 years to build the new harbor. This policy has been followed for many years. Now the mayor finds that Milwaukee is so close to the debt limit that it will be hard to issue any harbor bonds.

The new scheme is to have a metropolitan harbor commission and a new area including Milwaukee and suburbs, to issue the bonds, as it is claimed that the entire Milwaukee area will reap the benefit from the new harbor work. In this way the harbor bonds would be issued by the new authority and thus the city would be able to dodge the legal debt limit. An enabling act by the state legislature will be necessary to bring about this change.

H. E. Byram, president of the Chicago, Milwaukee & St. Paul Railroad, gave a talk in Milwaukee recently in which he said that the farmers' clamor for lower freight rates on grains and grain products is wrong because such reductions at this time would do the farmers more harm than good. Mr. Byram pointed out that the farmers of the West have been suffering seriously because they could not get their products to market, especially grains. This was due,

he said, to lack of cars and equipment. If this agitation for lower freight rates keep up, it will intensify the car shortage, he asserted.

The freight rate on barley from central Wisconsin to Chicago was cited by Mr. Byram to show that freight rates are not the great bogey that they have been painted to be. This rate, he added, is 7 cents a bushel. The price of barley, he said in Chicago has ranged since last September from 52 to 67 cents. This is a fluctuation he pointed out, of 15 cents a bushel. This mere change in price levels is twice as high as the total freight rate from Wisconsin. The important thing, he said, is therefore the price paid rather than the size of the freight rate.

Mr. Byram also maintained that even if freight rates on grains were cut, the farmer would not have any assurance that a single dollar would be added to his revenues. The market price of his products, he said, might change so as to much more than absorb all that had been gained by the cut in freight rates. The cut in freight rates would not be likely to help the farmer at all, while it would mean a very serious damage to the railroad in its ability to supply transportation facilities. The freight rate does cost the farmer something, Mr. Byram said, but it is not the big factor that the politicians are trying to make out.

Charles F. Arthur and William Dunphie who were partners in the Power City Feed Company at Janesville, Wis., have filed a voluntary petition in bankruptcy with assets set at \$23,000 and liabilities at \$27,000.

Grain shows are being planned or carried out in many counties of Wisconsin indicating an intense interest in this subject at this time. One of these shows was held in Sturgeon Bay, Door County, under the auspices of the Door County Seed Growers' Association. The show was planned by the county agent E. G. Bailey and it is his intention to make it an annual affair because of the great success that it scored.

The North Wisconsin Grain Show was held at Park Falls, Wis., for three days early in January. The local business men contributed several hundreds of dollars to finance the display. Bayfield County alone gathered about 100 grain samples in the office of the county agent for showing at Park Falls. The silver loving cup for the county with the best exhibit aroused keen interest and the grain judging teams also competed for a cup. This show will also be made an annual affair.

TOLEDO C. O. BARNHOUSE - CORRESPONDENT

GRAIN receipts here are light. There is a keen demand for Soft Winter milling wheat and there is little to be had. The demand for the coarse grains is a little slow. Offerings of hay are more than equal to the demand. There is a good snow covering on the Winter wheat crop in this vicinity, but it needs all the encouragement possible as it got a poor start in the fall. Flour demand is getting under way since the holiday vacation but has not developed very much speed as yet.

The G. E. Conkey Company, with headquarters in Cleveland, have leased a site on Nebraska Avenue adjoining the T. St. L. & W. R. R., upon which they expect to erect a large mill and elevator for the manufacture of poultry feeds. It is reported that the plant and site will call for an outlay of about \$600,000. Construction work will be under way in the near future. They also operate the Haskell Mill on Nebraska avenue, which they purchased about two years ago.

Patrick J. Flynn, superintendent of the Mennel Milling Company's plant at Fostoria, died suddenly December 27 of neuralgia of the heart. He had been with the Mennel people since 1914 coming from Toronto, Ont., where he had been employed by the Canadian Cereal & Milling Corporation. He is survived by his widow, two sons and four daughters. E. T. Drake, head miller, has been appointed superintendent in Mr. Flynn's place.

The Eastern Steamship Company, of Toronto, Ont., is having 10 new ships built for the grain carrying trade on the Great Lakes which they expect to put into commission with the opening of navigation next spring. They will have a capacity of about 2,500 tons each.

The members of the Toledo Produce Exchange Traffic Association held their annual meeting at the Oriental Cafe, Tuesday evening, December 26, and elected the following officers for the ensuing year: President, W. G. Shepherd, of the Toledo Grain & Milling Company; vice-president, W. A. Boardman, of the East Side Iron Elevator Company; F. J. Larkin, of

Traffic Commissioner Macomber's office, secretary, and Ray Wick, of the East Side Iron Elevator Company, treasurer.

The following were among recent visitors to the Toledo Produce Exchange: J. W. T. Duval, Chicago; Wm. Cutler, Adrian, Mich.; Bert Osgood, Morenci, Mich.; J. L. Cruickshank, Fostoria, Ohio; John Dirk, Weston, Ohio; C. A. Hiegel, Leipsic, Ohio; Frank Woods, Chicago, and R. E. Croninger, Grand Rapids, Ohio.

George H. Dustman, secretary, treasurer and general manager of The Rockford Grain Company, a co-operative concern of Rockford, Ohio, was indicted for embezzlement by the grand jury in Celina which reported January 5. He is accused of embezzling \$5,233 of the company's funds.

Ormond H. Paddock, of The Paddock-Hodge Company, has been confined at home for several days with a severe attack of grip. He is said to be convalescent at this time.

Kenton D. Keilholtz, president of The Toledo Produce Exchange has just returned to the office after an absence of three weeks undergoing an operation.

Harry G. Schaub, traffic manager for The Young Grain Company and Miss Genevieve De Shettler were united in marriage on December 30.

The following officers were elected for the ensuing year by the members of the Toledo Produce Exchange, on Monday, January 8: President, Kenton D. Keilholtz; vice-presidents, Jesse D. Hurlbut and Frank R. Moorman; secretary, Archibald Gassaway; treas-



KENTON D. KEILHOLTZ
Reelected President Toledo Produce Exchange

user, Fred W. Jaeger; directors, David Anderson, Raymond P. Lipe, Jesse W. Young, Fred O. Paddock, John C. Husted, W. A. Boardman, Harry R. De Vore, H. W. Applegate, Chas. W. Mollett and John Wickenhiser. Committee on Appeals: S. L. Rice, O. H. Paddock, R. L. Burge, G. J. Rudd, J. A. Streicher, W. E. Stone, G. A. Kreaghloh, Paul M. Barnes, L. J. Schuster, C. E. Patterson and H. O. Barnthouse.

Alphonse Mennel, president of the Mennel Milling Company, is spending the winter at St. Petersburg, Fla. Col. E. L. Southworth is at Miami for the winter.

Cyrus S. Coup, vice-president and general manager of The Northwestern Elevator & Mill Company, is spending a few weeks in California.

A. J. Burkart, manager for J. S. Bache & Co., spent the holidays with his family at St. Petersburg, Fla. "Burk" sent several of his friends goodly samples of the grape fruit, oranges and tangerines from his ranch while in the sunny south.

Fred Camper, of The S. W. Flower & Co., offices at Indianapolis, spent the Christmas and New Year's holidays in Toledo.

About 50 representatives of co-operative elevators in Huron and the surrounding counties met in Norwalk recently and decided to affiliate with the state sales agency which was recently organized at Columbus.

The National Milling Company distributed Christmas bonus checks to their employes on Saturday before the holiday. Vice-president Harold Anderson made the presentation of the checks personally to the employes of the company.

LOUISVILLE A. W. WILLIAMS - CORRESPONDENT

THE general situation here at the present time is quite similar to what it has been for the past five months, daily handlings being very fair with the elevator companies, while storage grain is holding up, and there is fair amounts on long storage, especially wheat. Jobbers report a good demand for hay, grain and feed, the latter having been especially good, in both mill and manufactured. Retail business has been quite active, and the general outlook is promising.

Transportation conditions have shown improvement, much congestion has been cleared off, and shipments are making much better time. River shipments are also being made again after several months during which the Ohio River was so low that only small steamers and gasoline boats were able to operate.

Announcement was made the first of the year that Frank Hartwell and W. L. Verhoeff, had retired from the grain house of H. Verhoeff & Co., on account of poor health. The business of the firm will be continued as heretofore by the other partners who have been with the house for many years, and which include John S. Green, R. M. Hartwell and W. C. Hartwell. Mr. Green is a prominent operator, who for years has been active in the Grain Dealers National Association. Business will be continued under the old firm name.

Just following the announcement of the retirement, Mr. Verhoeff died at his home, 731 South Second Street, death occurring at 11:55 o'clock on the evening of January 9. Mr. Verhoeff had been in bad health for some years, and hadn't been active in the management of the company. Surviving are his mother, Mrs. Mary Park Verhoeff, three sisters, Misses Mary and Caroline Verhoeff, and Mrs. Frank N. Hartwell, and a brother, Dr. F. H. Verhoeff, of Boston. Death was due to bronchial pneumonia. Mr. Verhoeff was 60 years old, and was a son of the late Herman Verhoeff, founder of the concern, which for many years operated one of the largest elevators in Louisville.

The Louisville Board of Trade elected directors and named committees on January 9. Henry Fruechtenicht was named chairman of the Hay Committee; G. A. Breaux, of Ballard & Ballard, chairman of the Flour Committee and milling interests; R. Lee Callahan, of Callahan & Sons, chairman of the Grain Committee, and Arch Birch, of the Bourbon Stockyards, as chairman of the Livestock Committee. David C. Morton, of the Ballard & Ballard Company, was elected director of the Board.

Newspaper reports concerning a small fire at the grain elevator plant of Callahan & Sons, indicated a dust explosion and considerable loss, but the fire really started from friction caused when a conveyor belt jumped off, and ignited grain in a conveyor. The loss was small, and didn't give either the fire department or the company much trouble.

The Gold Proof Milling Company, Louisville, has increased its liability limit from \$50,000 to \$250,000 in connection with large additions to its grain elevator plant on Fourteenth street on the Illinois Central Terminal. The company for some weeks past has been erecting large concrete storage tanks. The plant is controlled by the Zorn & Co. interests.

Articles were recently filed by Callahan & Sons, Louisville, listing a capital of \$100,000, and liability limit of \$250,000. R. Lee Callahan, J. E. Callahan and W. C. Callahan are the incorporators. The company has been successfully operating a local elevator for many years.

F. C. Dickson, of the Kentucky Public Elevator Company, reports very fair movement and good stocks on storage. Present holdings will run about 400,000 bushels, of which about 250,000 bushels is wheat, and the balance divided about 50-50 corn and oats. Three-fourths of the total holdings are on long storage. Mr. Dickson reported that the past year had been a fair one, and that the outlook was promising.

Future distilling prospects at Louisville are generally considered poor, even for alcohol. The great Elk Run Distillery, of the Kentucky Distilleries & Warehouse Company, at Louisville, the largest distillery in the state, has been sold to wreckers and is now being dismantled, its output when running full being too large for merely medicinal purposes, while discussion of plans for turning it into an alcohol producing plant never seemed to get anywhere.

Leonard Hewett, of the Bingham Hewett Grain Company, Louisville, was one of two star performers at the Christmas frolic of the River Valley Club, which maintains a fine clubhouse on the upper river road. The Louisville Courier Journal in a column, front page story, telling of the entertainment, referred to the danc-

ing of Mr. Hewett, as taking an Isadora Duncan rôle,— as really and truly, Mr. Hewett was garbed in feminine attire, the upper half of which happened to be a red flannel shirt, padlocked in place. Newspaper headlines welcomed two new stars to the theatrical world.

Fire at New Haven, Ky., on December 28, burned the plant of the New Haven Mill Company, including elevators to the ground, loss being \$12,000, with \$4,000 insurance. The elevator adjoining the mill contained 1,600 bushels of wheat. The plant was owned by Joseph F. Boone and Howard Mather, who purchased it from Minor C. Beam last spring. New equipment had recently been installed.

The Perry Feed & Commission Company, Hazard, Ky., has filed amended articles increasing its capital stock from \$15,000 to \$25,000.

William L. Green, formerly a prominent St. Louis grain man, who died in California, at Pasadena, on January 1, where he had lived for 10 years since retiring from active business, was a native Kentuckian, and in his youth lived at Danville, Ky. Mr. Green moved to St. Louis shortly after the Civil War, and he built up one of the largest grain businesses in the West. Death was due to pneumonia, following a slight abdominal operation.

Edward C. Farmer, of Oscar Farmer & Sons, local feed and grain dealers, reported a big year in 1922 on manufactured feeds and specialty stock and poultry feeds, while he believes 1923 will be even better, as farmers are in better shape, better educated to feeds, and buying more liberally. Corn is also so high now that farmers are going to feeds more freely.

The Ballard & Ballard Company, on the evening of December 28, had the entire white organization and members of their families present, for a holiday celebration, there being a tree, and gifts for the children. The affair was held in the company's club rooms, over its cafeteria. A separate entertainment was held for the company's negro employees.

Glasgow, Ky., reports that due to very mild weather this winter wheat has progressed so fast that farmers are pasturing it for fear it might joint. So far the coldest weather of the winter in the Louisville section, which is north of Glasgow, has been about 15 above zero. There has been very little snow, and not much need for such snow as there has been.

BUFFALO

ELMER M. HILL CORRESPONDENT

GRAIN receipts at terminal elevators at the port of Buffalo during the season of 1922 were 264,347,121 bushels, the largest in the history of the port. In 1921, the largest previous year, receipts at terminal elevators were 220,354,916 bushels and in 1915, elevators handled 216,258,453 bushels. The flaxseed movement took a big slump as compared with the previous year, receipts in 1922 being 2,988,370 bushels as compared with 6,301,916 bushels in 1921.

A slight increase was recorded in flour receipts by lake from mills in the Middle West. During the year 6,696,689 barrels of flour were received at Buffalo as compared with 6,613,369 for 1921 and 4,510,408 barrels in 1920. The record season in the receipt of flour was 1897 when 12,440,617 barrels were received by lake at terminal warehouses.

Wheat receipts last season were 163,503,780 bushels and the balance of the grain receipts was divided as follows; corn, 32,784,316 bushels; oats, 26,258,077 bushels; barley, 8,788,248 bushels and rye, 28,024,330 bushels.

More than 50,000,000 bushels of grain were stored in elevators and the holds of lake grain carriers anchored inside the breakwall early this month. This is regarded as the largest amount of grain ever stored here at this time of the year. W. D. Sanderson, traffic manager of the Washburn-Crosby Company, says that grain men are not alarmed over the large storage. In freighters, 28,500,000 bushels are stored. In elevators, which are filled to capacity, there are about 20,000,000 bushels, of which 16,000,000 bushels is for foreign consumption and 3,385,000 bushels for domestic use. Lack of proper rail facilities is largely responsible for the piling up of grain in Buffalo and as fast as cars can be secured much of the export grain will be rushed to the Atlantic Seaboard. The grain congestion has been more or less acute in Buffalo since the early part of September when the rush of grain started from the upper lake ports.

Edwin T. Douglas of the Douglas Agency Corporation, grain handlers, says that during the past season more than 24,000,000 bushels of grain have been shipped to Montreal from Buffalo via the Welland Canal and the New York State Barge Canal took 18,-

000,000 bushels of grain to New York from Buffalo. The shipment of grain from Buffalo to Montreal reached a high peak during the season and it is believed that the inauguration of new grain carrying service by boat between Buffalo and Montreal next season will have a stimulating effect upon this trade.

There were 133 boats carrying winter storage cargoes of grain lined up at the breakwater and at berths in the inner harbor early this month. Owing to the congested condition of the terminal elevators, lake grain carriers will be slow in having their cargoes unloaded this winter. All that is needed, however, is sufficient cars to keep the grain moving between Buffalo and the Atlantic Seaboard.

All of the assets of the General Flour & Feed Company, of Buffalo, including the mill, warehouses and real estate, were sold at auction in United States Bankruptcy court. The trustees were W. T. Conkling, F. B. Hodges and David F. Costello. The mill adjoins the New York Central Railroad.

Despite unfavorable weather conditions during the closing days of December, official figures show that grain handling at Fort William and Port Arthur during the fall exceeded the best previous season by more than 21,000,000 bushels. Outgoing ships from September 1 to the close of navigation carried almost 150,000,000 pounds of mixed grains and 78,402 tons of screenings. Grain of standard grades to the total of 188,510,061 bushels, of which more than 166,000,000 bushels were wheat, was handled during this period, against a total of 166,992,234 for the corresponding period of 1915, which was the best previous year. The record-making crop of the past season was carried from the twin ports at the Canadian Head of the Lakes by 821 cargoes and the average cargo was 239,608 bushels of mixed grains. There was consigned to Canadian ports a total of more than 72,000,000 bushels while American ports took more than 115,000,000 bushels.

The wheel house of the Cataract City Milling Company of Niagara Falls was damaged by fire to the extent of \$40,000. The milling plant was forced into idleness for a period of two weeks because of the blaze. Overheated bearings are believed to have been the cause of the fire.

Michael B. Scanlon of Buffalo, trading as the Erie Flour Company, 172 Norwalk avenue, filed a voluntary petition in bankruptcy in United States District Court in which he schedules liabilities of \$14,723 of which unsecured claims are \$6,492. Assets are \$25,079 of which debts due on book accounts are listed at \$18,972, a large part of which are uncollectable. Mr. Scanlon was engaged in the flour and feed business in Buffalo for many years. A sale of the assets will be held late in January.

Callanan Bros., Inc., grain merchants in the Chamber of Commerce, has filed a certificate of incorporation. The capitalization is \$2,000 and the directors are Neil D., William J., and Agnes M. Callanan.

Long standing grain records of the port of Erie, Pa., have been broken. Figures announced by the Chamber of Commerce show that a total of 20,376,834 bushels of grain entered the terminal elevators at the port during the 1922 season. The greatest total heretofore for any single season was 17,500,000 bushels. There are 28 ships at anchor in the Erie Harbor with winter storage cargoes totaling 885,000 bushels. Early in January terminal elevators were holding almost 8,000,000 bushels of grain.

There is no such thing as a spontaneous dust explosion in a grain elevator or mill, according to David J. Price, engineer in charge of development work of the United States Department of Agriculture, who was the speaker at the December safety meeting under the auspices of the Buffalo Chamber of Commerce. In 13 recent dust explosions, Mr. Price said 155 lives have been lost and property worth upwards of \$16,250,000 has been lost. Mr. Price emphasized the necessity for adopting safety devices in all grain elevators and flour and feed mills and said that one of the most essential factors is co-operation of workmen with officials of the company in applying safety methods and refraining from dangerous practices such as smoking and using open lights.

Grain shipments over the New York State Barge Canal between Buffalo and New York during the season were 570,171 bushels as compared with 354,977 bushels for the corresponding period of 1921. Of the grain shipped last season, wheat was 323,801 bushels; corn, 70,181 bushels; oats, 15,146 bushels; rye, 75,482 bushels; barley, 51,990 bushels; flax, 33,560 bushels.

New York state may go into the shipbuilding business in order to increase the grain movement over the state waterway between terminal elevators at Buffalo and tidewater points, especially New York and Jersey City. The new state Superintendent of Public Works is expected to urge the appropriation of \$5,000,000 to be spent for barges to be used for transportation over the state waterway. It is be-

lieved that the new administration will lend a sympathetic ear to such a proposal inasmuch as Governor Smith always has taken an interest in the canal and its development. It has not been decided whether the state would operate the barges or lease them to private shipping interests.

Henry P. Werner, president of the H-O Company of Buffalo, has been elected president of the Buffalo Club.

G. W. Arthurs & Co., is a new firm to engage in the feed business in the Buffalo market. The company has offices in the Peoples' Bank Building with G. W. Arthurs as proprietor. Mr. Arthurs is well known in the Buffalo market having been manager of the Young Commission Company, Buffalo, for several years. The new company will handle feeds, vegetable oils, animal fats and feed manufacturing materials.

The Globe Elevator which was formerly occupied by the Quaker Oats Company, of Buffalo, has been taken over by the Quisenberry Feed Manufacturing Company with T. E. Quisenberry as president. Harlo Fiske, who for years has been engaged in the feeding of cattle, has prepared a special feed which the new company is placing on the market.

"There is hardly enough flax on hand to run the mills," explained L. R. Beath, manager of the Archer-Daniels Linseed Company. "There will be no new crop until next spring. The Northwestern crop is not as good as some think it is and present high freight rates do not permit rail shipments from Minneapolis. The Argentine crop, which will be close to 60,000,000 bushels, will not be available until March."

Dudley M. Irwin of New York, who for many years was engaged in the grain brokerage business in the Buffalo market, must appear for an examination in Bankruptcy Court before Referee James W. Persons later this month, according to the trustee who is liquidating the estate of Mr. Irwin. Efforts now are being made to determine the value of certain properties in California and northern Ontario. The liabilities exceed \$423,000 of which \$135,680 is owing to the Marine Trust Company, Buffalo; \$15,000 to Nisbet Grammer of the Eastern Grain, Mill & Elevator Corporation; \$30,000 to Edward H. Butler.

The Sunset Feed & Grain Company, Inc., of Buffalo has opened a branch office at 120 Mayo Building, Utica, with E. W. Niles as manager. Mr. Niles for many years was associated with the American Milling Company of Peoria, Ill., and is well known among the feed dealers of New York State. He also has been associated with the Kasco Mills of Waverly, N. Y., and the American Linseed Company, of Minneapolis as manager of their New York state office in Syracuse, N. Y. M. F. Cohn, president-treasurer of the Sunset Feed & Grain Company reports a rapidly growing demand for the products of the company in Central New York so that it has become necessary to open an office in that district to give better service to customers.

GRAIN NEWS FROM BOSTON

BY L. C. BREED

Warren G. Torrey, northeastern representative Star & Crescent Milling Company of Chicago, again heads the Grain Board of the Chamber of Commerce. Herbert L. Hammond of Charles M. Cox Company, Boston, grain and feed dealers, was re-elected vice-chairman. The following members were elected to serve two years on the Executive Committee: Charles S. Clapham, Horace Cook, Harry Hamilton, Daniel G. Joy, William S. Leavitt and Harry J. Wood.

A referendum on the question of annual dues recently was called for. The members of the Chamber were asked to vote on whether or not the dues should be advanced from \$25 to \$50. The count showed that a majority of the members were opposed to an advance being made at present.

During the year, two well-known members of the Chamber have passed away. A. S. Maynard of Boston, died in the summer and Albert C. Brown, also of Boston, who died in the fall. The former was for many years the representative of Chicago grain houses, and the latter was a member of the firm of Brown, De Loria Company, Boston.

The many friends in Boston of Henry B. Moore were pained to learn of his death which took place on December 29, in Minneapolis, where his home has been in recent years. He was 70 years of age. For many years he was a member of the firm of J. E. Soper & Co., Boston, grain and feed dealers, which concern is still engaged in this line with offices in the Chamber of Commerce Building. Mr. Soper died several years ago.

Of late there has been a heavy movement of grain from Boston to foreign ports, some weeks totaling over a million bushels. Shipments have been destined to the following ports: Genoa, Christiania, Barry (Wales), Manchester (England), Liverpool, Antwerp

and Rotterdam. All of the elevators are well filled with grains and hundreds of cars are enroute to Boston for shipment to Europe. Shipments that are being made are mostly wheat.

During December, the following western men were among the visitors admitted to the trading floor of the Chamber: W. E. Ashe, Charles B. Lee, W. J. Callanan, Buffalo; M. D. King, St. Louis; H. F. McCarthy, Minneapolis; W. E. Savage, Toledo; H. M. Stratton, Milwaukee; C. S. Woolman, Chicago.

NEWS FROM NORTHERN OHIO

BY T. J. CUNNINGHAM

The Jewell Grain Company, Jewell, Ohio, has let the contract for a 13,000-bushel elevator to the Ballinger Construction Company. The building will be frame, and will be on the same site as the elevator of the company which burned last summer.

Toledo is harboring a large fleet of vessels with storage grain this winter. Some 20 vessels, with cargoes aggregating 5,000,000 bushels will winter there.

The Farmers' Elevator at Williamstown was totally destroyed by fire with 6,000 bushels of wheat and a quantity of other grain. The loss is partly covered by insurance. Two years ago the company bought the elevator at Moffitts, moved it to Williamstown and rebuilt it.

L. E. Thatcher, agronomist at Ohio Experimental Station, is advising farmers to re-sort seed corn in order to discard ears which, since drying out, show chaffiness, lack of luster, or shrunken kernels. Even after this roguing, he says the average lot of seed corn will present a number of distinct types which may be subject to further selection.

W. W. Betts, coal dealer of Bettsville, was arrested December 12, charged with selling Hocking coal for Jackson. When arraigned before Mayor Unger of Tiffin, Betts pleaded not guilty.

W. W. Somers of the Ohio Farm Bureau spoke at Luckey, Ohio, at a joint meeting of Luckey, Pemberville and Stony Ridge locals of the Northwestern Co-operative Sales Company.

A. E. Anderson, Columbus, grain marketing specialist of the Ohio Farm Bureau Federation, addressed a large gathering of farmers at Marion, December 21.

John Rothenbuhler fell down a stairway in the Farmers' Exchange Elevator at Luckey, Ohio, and was injured about the head, arms and legs.

William R. Gilmore of Croton, Licking County, Ohio, probably has won a world's record by raising 1,342.31 bushels of corn on his 10-acre plot this year.

This average of 134.1 bushels to the acre is a measure of air-dried corn.

R. G. Shannon of Tiffin and H. W. Tomb of Bloomville attended the annual meeting of the American Bureau Federation at Chicago, at which O. E. Bradfute of Xenia, Ohio, was elected president. A strong forward-looking program of co-operative marketing throughout the United States was a feature of the meeting.

After a special inquiry, Ohio State University economists announced that Ohio wheat did not repay for care last year. Only farmers who saved by sowing wheat after corn without plowing, made anything on their wheat. The average cost of raising a bushel of wheat in Green County was \$1.17. The average selling price, \$1.15.

A co-operative seed warehouse is now planned for Toledo, from which farmers' co-operative organizations of Ohio and southern Michigan may buy selected Clover, Timothy and Alfalfa seed. The Ohio Farm Bureau Federation would advance money on warehouse receipts, it is said. Individual purchases would be permitted as well as co-operative deals.

Chas. V. Truax, of Sycamore, Ohio, will be secretary of agriculture in Governor-elect Donahye's cabinet.

The Farmers' Elevator at McClure, Ohio, was broken into, December 31, by a band of thieves. They were discovered by William Harner, groceryman, who aroused the citizens and the thieves fled in a touring car.

Many barberry bushes were found on 46 Seneca County farms, according to C. F. Shackson, state farm bureau representative, who has been making a survey here.

Crop statistics for 1922, just completed by C. J. West, Federal-state agricultural statistician at Columbus, show Wood County's corn acreage this year was greater than that of any other northwestern Ohio county—89,800 acres, with an average production of 41 bushels on each acre. The total county

production of corn was 3,681,800 bushels, of average value of 58 cents a bushel and total value \$2,135,444 for this crop.

Fifty representatives of the farmers' co-operative elevators in Monroeville, Collins, North Fairfield, Boughtonville, Greenwich, Willard and Norwalk, at a meeting at Norwalk, Ohio, decided to affiliate with the state co-operative grain elevator organization. This organization is known as the Central Sales Agency.

George H. Beatty, Bloomingville, Ohio, elevator man and farmer, was elected secretary of the Erie County Fair Board.

A corn show will be held in connection with the Leipsic farmers' institute, January 12 and 13.

Financed by the Commercial Savings Bank and Trust Company, Toledo, five or six carloads of seeds will be shipped in from the Michigan State Farm Bureau for distribution in Ohio. Sales are desired only through co-operative elevators or townships where orders have been pooled.

This whole territory is covered with a blanket of snow, which fell to a depth of 5 inches. This has been reduced by thawing, and is now about 3 inches deep. Several

days of cold weather preceded the snow, so that the ground was moderately frozen when it fell. Think, however, that the ground was able to absorb the water from the thawed snow, so that there is no immediate danger to wheat from ice forming. Shortly before the snow came, quite a number of farmers were observed plowing. Wheat is not coming to market very fast, nor are the farmers selling their stored wheat just now. The recent big drop in prices has put them on "Uncertain Street" again.

While there was a good crop of corn in this immediate territory, very little is coming to the elevators. Farmers are either feeding it or selling to each other. More shredding was done this year, in this locality, than ever before, and hand-husked corn is therefore hard to obtain.

Clover and Timothy seed continues to come in in straggling lots, but there is no great amount of either left in this territory.

E. T. Drake has been appointed superintendent of the Mennel Milling Company, Fostoria, to fill the vacancy caused by the death of P. J. Flynn. Drake was formerly head miller at the plant.

R. D. Sneath, vice-president of The Sneath-Cunningham Company, Tiffin, will start on his winter vacation at Miami, Fla., about January 12. Mr. Sneath is a golf enthusiast, and can't keep away from the links during the winter months.

TRANSPORTATION

AGRICULTURAL CAR SERVICE OFFICIAL

Announcement was made last month by the car service division of the American Railway Association that it had decided to appoint an agricultural representative on its staff and that Elmer Knutson of St. Cloud, Minn., had been selected to fill the place. The avowed purpose in appointing him was to enable the car service division, which supervises the distribution of cars among the sections of the country, to keep more intimately advised as to the transportation requirements of farming sections of the country.

REDUCTION IN RATES ANNOUNCED

The Union Pacific recently announced reduction on west-bound products from Missouri River points to Pacific Coast effective within 30 days. Included in the general reduction in rates were wheat, corn and cornmeal. Wheat reductions amount to 4 cents. Corn rates were reduced from 71 cents to 68 cents and cornmeal from 64½ cents to 63 cents. These reductions apply to carlot shipments only. The new rates will work to the advantage of the grain trade, particularly in the case of corn. A large amount of corn is brought yearly from middle western points, this year the movement being the heaviest from Iowa.

FREIGHT REDUCTION ON WHEAT DENIED

Application of the Portland Flour Mills for equalization of freight rates on wheat to Portland and to Puget Sound from Harrington, Wash., on the Great Northern Railway, about 51 miles west of Spokane, has been disapproved in a report by C. I. Keppart, examiner for the Interstate Commerce Commission. The rate on wheat from Harrington is 24 cents to Puget Sound and 27½ cents to Portland. Puget Sound millers contend that equalization of the rates would violate the principle of the settlement of a controversy known as the Columbia Basin case in which a differential of 10 cents in favor of Portland from territory south of the Snake River was established on grain.

CAR CONDITIONS

Freight cars awaiting repairs on Class 1 railroads on December 15 totaled 213,837, or 9.4 per cent of the cars on line, according to the American Railway Association. This is a reduction of 12,451 cars compared with the number in need of repair on December 1, at which time there were 226,288, or 9.9 per cent.

The number awaiting repairs on December 15 was the smallest since February 15, 1921. On December 15 last year, 318,556, or 13.5 per cent, were in need of repairs. Cars in need of light repairs on December 15 this year totaled 44,567, a reduction of 5,715 since the first of the month, while those in need of heavy repair totaled 169,270, or a reduction of 6,736 within approximately two weeks.

FREIGHT LOADINGS

Although revenue freight loading showed a decline in the week ended December 23, as compared with the preceding week, the loading was still considerably ahead of that for the corresponding weeks of 1921 and 1920, according to the weekly

report of the car service division of the American Railway Association.

The total for the week ended December 23 was 834,591 cars as compared with 888,082 cars in the preceding week, and as compared with 666,605 and 648,406 in the corresponding weeks of 1921 and 1920, respectively.

Total loadings for the week ending December 23 and the corresponding week in 1921, all roads: Grain and grain products, 50,802 and 37,113; live stock, 30,934 and 23,093; coal, 181,325 and 136,089; coke, 13,243 and 7,200; forest products, 58,696 and 45,077; ore, 8,941 and 5,593; merchandise, L. C. L., 217,256 and 211,161; miscellaneous, 273,394 and 201,279; total, 1922, 834,591; 1921, 666,605; 1920, 648,406.

CAR SHORTAGE AND SURPLUS

The average daily shortage of freight cars dropped from 105,018 in the period December 8-15 to 99,908 in the period December 15-23, according to the car service division of the American Railway Association. The average daily surplus increased from 7,677 to 9,563 cars.

The shortage was made up as follows: Box, 41,985; ventilated box, 17; auto and furniture, 1,695; total box, 43,697; flat, 4,967; gondola, 21,935; hopper, 21,729; all coal, 43,664; coke, 461; S. D. stock, 1,973; D. D. stock, 242; refrigerator, 4,677; miscellaneous, 227; total, 99,908.

The surplus was made up as follows: Box, 1,534; ventilated box, 214; auto and furniture, 3; total box, 1,751; flat, 838; gondola, 724; hopper, 1,808; all coal, 2,532; coke, 40; S. D. stock, 1,350; D. D. stock, 14; refrigerator, 535; tank, 81; miscellaneous, 2,422; total, 9,563.

CANADIAN RAILROADS DO RECORD BUSINESS

The Canadian National Railways carried the largest volume of freight in October last that has ever moved over this system. The large grain crop, with the long haul from the Western provinces to the elevators, was the chief factor in the heavy tonnage carried, but heavy movements of coal, lumber and other materials also helped to increase the traffic on all Canadian roads. Revenue ton miles during October last on the Canadian National Railways aggregated 1,500,701,023, which was an increase of 28.9 per cent over October, 1921, and 50 per cent over October, 1920.

The figures compiled by the bureau show that the Grand Trunk Railways also increased revenues during October last, over October 1921 by \$425,052, but operating expenses increased \$559,757 or nine per cent, reducing the operating revenue by \$134,704 and increasing the operating ratio from 87.08 per cent in October, 1921, to 89.59 per cent. Both freight and passenger traffic showed increases.

The large increase in operating expenses was in maintenance of equipment, which increased \$581,615 or 38.7 per cent over the figures of October, 1921.

The Canadian Pacific Railway also made a record in revenue ton miles during October and showed the lowest operating ratio in the last three years. Revenue ton miles aggregated 2,126,879,127 an in-

THE AMERICAN ELEVATOR AND GRAIN TRADE

crease of 33.6 per cent over October, 1921. Freight revenue increased \$729,273 or 3.3 per cent over those of October, 1921.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for December and the year 1922:

BALTIMORE—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce: Receipts and Shipments table for Baltimore.

BALTIMORE—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce: Receipts and Shipments table for Baltimore (second instance).

CHICAGO—Reported by John R. Mauff, secretary of the Board of Trade: Receipts and Shipments table for Chicago.

CHICAGO—Reported by John R. Mauff, secretary of the Board of Trade: Receipts and Shipments table for Chicago (second instance).

CINCINNATI—Reported by D. J. Schuh, executive-secretary of the Grain & Hay Exchange: Receipts and Shipments table for Cincinnati.

CINCINNATI—Reported by D. J. Schuh, executive-secretary of the Cincinnati Grain & Hay Exchange (year): Receipts and Shipments table for Cincinnati.

CLEVELAND—Reported by F. H. Baer, traffic commissioner of the Chamber of Commerce: Receipts and Shipments table for Cleveland.

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade: Receipts and Shipments table for Duluth.

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade (year):

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade: Receipts and Shipments table for Duluth.

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners: Receipts and Shipments table for Fort William, Ont.

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners (year):

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners: Receipts and Shipments table for Fort William, Ont. (second instance).

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade: Receipts and Shipments table for Indianapolis.

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade (year):

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade: Receipts and Shipments table for Indianapolis (second instance).

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade:

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade: Receipts and Shipments table for Kansas City.

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade (year):

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade: Receipts and Shipments table for Kansas City (second instance).

LOS ANGELES—Reported by M. D. Thiebaud, secretary of the Los Angeles Grain Exchange:

LOS ANGELES—Reported by M. D. Thiebaud, secretary of the Los Angeles Grain Exchange: Receipts and Shipments table for Los Angeles.

LOS ANGELES—Reported by M. D. Thiebaud, secretary of the Los Angeles Grain Exchange (year):

LOS ANGELES—Reported by M. D. Thiebaud, secretary of the Los Angeles Grain Exchange: Receipts and Shipments table for Los Angeles (second instance).

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce: Receipts and Shipments table for Milwaukee.

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce (year):

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce: Receipts and Shipments table for Milwaukee (second instance).

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce: Receipts and Shipments table for Minneapolis.

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce (year):

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce: Receipts and Shipments table for Minneapolis (second instance).

NEW YORK—Reported by H. Heinzer, statistician of the Produce Exchange:

NEW YORK—Reported by H. Heinzer, statistician of the Produce Exchange: Receipts and Shipments table for New York.

NEW ORLEANS—Reported by G. S. Colby, Chief grain inspector and weighmaster of the Board of Trade, Ltd.

NEW ORLEANS—Reported by G. S. Colby, Chief grain inspector and weighmaster of the Board of Trade, Ltd.: Receipts and Shipments table for New Orleans.

NEW ORLEANS—Reported by G. S. Colby, Chief grain inspector and weighmaster of the Board of Trade, Ltd. (year):

NEW ORLEANS—Reported by G. S. Colby, Chief grain inspector and weighmaster of the Board of Trade, Ltd.: Receipts and Shipments table for New Orleans (second instance).

OMAHA—Reported by F. P. Manchester, secretary of the Omaha Grain Exchange:

OMAHA—Reported by F. P. Manchester, secretary of the Omaha Grain Exchange: Receipts and Shipments table for Omaha.

OMAHA—Reported by F. P. Manchester, secretary of the Omaha Grain Exchange (year):

OMAHA—Reported by F. P. Manchester, secretary of the Omaha Grain Exchange: Receipts and Shipments table for Omaha (second instance).

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade:

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade: Receipts and Shipments table for Peoria.

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade (year):

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade: Receipts and Shipments table for Peoria (second instance).

PHILADELPHIA—Reported by S. S. Daniels, statistician of the Commercial Exchange:

PHILADELPHIA—Reported by S. S. Daniels, statistician of the Commercial Exchange: Receipts and Shipments table for Philadelphia.

PHILADELPHIA—Reported by S. S. Daniels, statistician of the Commercial Exchange (year):

PHILADELPHIA—Reported by S. S. Daniels, statistician of the Commercial Exchange: Receipts and Shipments table for Philadelphia (second instance).

PHILADELPHIA—Reported by S. S. Daniels, statistician of the Commercial Exchange (year):

PHILADELPHIA—Reported by S. S. Daniels, statistician of the Commercial Exchange: Receipts and Shipments table for Philadelphia (third instance).

PORTLAND, ME.—Reported by Howard H. Waldron, traffic manager of the Chamber of Commerce:

PORTLAND, ME.—Reported by Howard H. Waldron, traffic manager of the Chamber of Commerce: Receipts and Shipments table for Portland, Me.

PORTLAND, ME.—Reported by Howard H. Waldron, traffic manager of the Chamber of Commerce (year):

PORTLAND, ME.—Reported by Howard H. Waldron, traffic manager of the Chamber of Commerce: Receipts and Shipments table for Portland, Me. (second instance).

SAN FRANCISCO—Reported by H. C. Bunker, chief inspector of the Chamber of Commerce:

SAN FRANCISCO—Reported by H. C. Bunker, chief inspector of the Chamber of Commerce: Receipts and Shipments table for San Francisco.

SAN FRANCISCO—Reported by H. C. Bunker, chief inspector of the Chamber of Commerce (year):

SAN FRANCISCO—Reported by H. C. Bunker, chief inspector of the Chamber of Commerce: Receipts and Shipments table for San Francisco (second instance).

ST. LOUIS—Reported by Eugene Smith, secretary of the Merchants' Exchange:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	3,173,147	2,071,625	2,351,290	1,392,315
Corn, bus...	2,332,200	3,786,822	1,204,110	2,306,180
Oats, bus...	2,640,000	1,790,000	1,655,330	1,042,350
Barley, bus...	100,800	96,000	32,710	10,710
Rye, bus...	9,900	34,273	9,400	37,720
Kaffir Corn, bus.	50,050	67,200	10,690	30,170
Hay, tons...	12,789	10,669	4,950	2,710
Flour, bbls...	3,628,870	382,020	468,710	381,395

ST. LOUIS—Reported by Eugene Smith, secretary of the Merchants' Exchange (year):

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	39,457,251	48,716,393	32,246,230	36,246,540
Corn, bus...	33,376,434	29,515,548	24,131,470	21,424,045
Oats, bus...	29,336,425	26,940,085	22,545,170	19,891,990
Barley, bus...	836,800	829,627	285,400	254,440
Rye, bus...	552,589	391,593	288,175	147,880
Kaffir, bus...	477,250	1,135,070	181,775	532,635
Hay, tons...	125,195	135,344	48,385	47,705
Flour, bbls...	4,476,310	5,266,070	6,080,410	6,013,955

SUPERIOR, WIS.—Reported by E. W. Fiedler, chairman of Grain and Warehouse Commission (year):

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	30,445,465	28,277,319	25,750,159	24,928,523
Corn, bus...	5,131,856	693,581	4,992,586	526,325
Oats, bus...	3,250,698	4,501,044	6,709,661	1,761,999
Barley, bus...	3,871,193	3,457,460	3,800,373	3,643,818
Rye, bus...	24,849,611	9,942,234	22,273,129	9,360,156
Flax, bus...	2,134,608	2,286,430	1,655,521	1,913,520
Bonded Wheat, bus.	1,961,472	878,221	1,806,404	794,698
Bonded Oats, bus.	28,794	37,049	.....	1,674
Bonded Rye, bus.	97,676	.....	40,500	.....
Bonded Barley, bus...	145,766	63,801	82,503	53,969
Bonded Flax, bus.	5,228	9,193	.....	.....

TOLEDO—Reported by Archibald Gassaway, secretary of the Produce Exchange:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	2,426,400	462,500	831,470	478,965
Corn, bus...	373,750	466,250	137,965	156,680
Oats, bus...	745,900	147,600	22,460	119,545
Barley, bus...	.....	1,200	.....	.....
Rye, bus...	25,200	19,000	281,845	9,870
Timothy Seed, bags	891	6,463	922	505
Clover Seed, bags	4,917	3,685	2,304	2,585
Alsike Seed, bags	418	538	537	431

TOLEDO—Reported by Archibald Gassaway, secretary of the Produce Exchange (year):

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	9,679,510	7,189,075	4,007,360	2,488,915
Corn, bus...	4,092,700	3,302,500	1,825,060	2,477,791
Oats, bus...	3,766,878	5,784,800	1,656,715	3,718,253
Barley, bus...	28,600	41,400	.....	3,625
Rye, bus...	846,800	777,600	627,920	636,990
Timothy Seed, bags	19,620	24,936	25,725	47,826
Clover Seed, bags	43,527	55,062	47,987	50,590
Alsike Seed, bags	8,265	12,462	8,640	8,930

NEW YORK FEED DEALERS TO MEET

The annual January meeting of the Mutual Millers and Feed Dealers Association will be held in the Statler Hotel, Buffalo, N. Y., on January 19, opening the morning session at 10:00 o'clock and the afternoon session at 1:30. The speakers will be H. C. Elwood of the Colonial Salt Company; L. F. Brown, secretary of the American Feed Manufacturers Association; and F. C. Jones, secretary of the Eastern Federation. A question box will be a feature of the meeting, also an open discussion of topics interesting to the retail trade.

ANNUAL MEETING OF INDIANA DEALERS

The Indiana Grain Dealers Association will hold its annual meeting at the Indianapolis Board of Trade on January 16 and 17 beginning at 1:30 p. m. of the first day. This will enable dealers to arrive from all points in the state in time for the opening session, and as the meeting will probably be concluded by noon the following day, the return home can be made conveniently with only two days spent away from business.

This time will be well spent. The grain trade is beginning a new era, following the real hardships of the past two years. New policies will have to be considered, and the meeting promises to develop much of importance to every dealer in the state.

NATIONAL ASSOCIATION CHOSSES DES MOINES

The Board of Directors of the Grain Dealers National Association has voted to hold the next annual meeting at Des Moines, Iowa, on Monday, Tuesday and Wednesday, October 1, 2 and 3. This will be the twenty-seventh annual convention. The headquarters for the meeting will be at the Hotel Fort Des Moines.

The Association has met twice before in the Hawkeye city. On June 29 and 30, 1897, the first annual meeting of the organization was held there, and on October 2, 3 and 4, 1901, the fifth annual convention met in Des Moines.

Owing to the unsurpassed location of the convention city a great attendance is assured. Des Moines is in the heart of the grain producing section of the country and within a night's ride of half a dozen of the country's largest terminal markets. A big registration of both country shippers and terminal dealers is expected.

NEW FUEL ADMINISTRATOR

F. R. Wadleigh has been appointed Federal Fuel Administrator by President Harding succeeding Conrad E. Spens whose resignation became effective December 30. That the office of Federal fuel administrator will be kept open for at least a month and possibly for two months is the opinion of those in close touch with the coal business.

Mr. Spens in the report submitted upon his retirement stated the bituminous situation is in good shape but that there is urgent need for improvement in the anthracite.

INCREASE IN COAL EXPORTS

Bituminous coal exports in November increased approximately 600,000 tons over the same month a year ago, according to Department of Commerce. November exports totaled 1,618,037 tons, valued at \$10,467,872, as compared with 1,078,806 tons, valued at \$5,514,522 in 1921.

Shipments of coke amounted to 38,397 tons, valued at \$492,495, as compared with 30,347 tons, valued at \$254,484, in November, 1921.

For the 11 months ended with November, bituminous exports aggregated 9,614,195 tons, valued at \$56,453,975, as compared with 19,822,735 tons, valued at \$118,765,103 in the same period in 1921. For the 11 months ended with November exports of anthracite totaled 1,983,429 tons, valued at \$21,130,086, as compared with 3,869,944 tons, valued at \$42,185,014 during the same period of 1921.

For the 11 months ended with November, coke exports were 333,291 tons, valued at \$3,469,559, as compared with 250,854 tons, valued at \$2,563,239 during the same period of 1921.

COAL DEMAND IN KANSAS DIMINISHES

Coal substitutes are being used in greater quantities than ever before in Kansas, the people there being driven to their use because of the coal strikes and consequent irregular production and uncertain supply of coal. Ira Clemens, president of the Clemens Coal Company, in commenting on the coal situation in that state continued:

"The wildcat strikes in this district during the last five years, together with the rapidly increasing cost of production as compared with other fields, and our inability to fill contracts when made because of the failure of the miners' union to live up to their agreement with the operator, have been gradually forcing consumers of coal, which include all kinds from the residences to the largest railroads, to look for other fuel. This is exceptionally true of the year 1921, and another fact which the Southwest will have to reckon with is the excessive amount of strip mines opened by farmers all over the country."

LITTLE CHANGE IN COAL SITUATION

The *Black Diamond* in its report for the week ending January 6, says the following of the coal situation:

Despite the lack of any material increase in the demand for coal, the market today is decidedly a seller's market, due to the fact that as small as the demand is, the supply is no more than enough to fill it. This condition, being entirely a result of the unimproved transportation situation, prevents anything in the nature of the storing of coal on a large scale for future emergencies. The foregoing remark concerning lack of increased demand relates, of course, entirely to the bituminous situation. The demand for anthracite is far greater than at any time heretofore but, as in the case of bituminous, railway conditions are such that only a small portion of the country's requirements can be supplied and absolutely nothing can be done towards enabling the public or dealers to lay in reserves.

Prices throughout the country have shown but little change during the week, although the tendency here and there has been towards a stiffening movement. In most cases, however, prices remain firm, with the public, because of fairly mild weather doing most of its buying on a hand-to-mouth basis. The railroad situation, instead of showing the hoped for improvement has been worse during the last week than ever, this being especially true in the northeastern part of the country and in the Kentucky regions. The prime factor in retarding transportation appears to be not so much a lack of cars as a further crippling of motive power.

The export trade has undergone a further decline and remains negligible. On the other hand, the importations of British coal have shown a large increase, fully 200,000 tons have been contracted for in the last two weeks for New York, Philadelphia and New England points. The buying of ad-

ditional British coal is due to the fact that prices in West Virginia and Pennsylvania are still being maintained at a high level and that for this reason quotations on the British product are considerably under those of American coals.

BETTER DISTRIBUTION OF FUEL

The American Wholesale Coal Association, through its executive committee and senior council, has submitted to the United States Coal Commission its views as to the remedy for existing conditions in the coal industry. It said that car shortage or transportation disability was one of the three principal causes for irregular production; that waste of coal was caused by improperly loaded cars, use of defective and unfit equipment; loss in transit by pilferage, losses by rough handling of trains, loss by degradation, and theoretical losses by inaccurate weighing.

In answering the request for suggestions as to remedies, the association said:

Continued education of the consumer that he may know the coal most suited to his needs, having due regard to transportation conditions and freight rates. We suggest that transportation losses can be reduced by:

(a) Proper loading of railroad cars, (b) Policing in transit, (c) Improved care in train operation, (d) Proper preparation of coal at the mines, (e) Frequent scale inspection and adjustment, (f) Uniform and prompt disposition of claims arising against the carriers.

The present situation is, in our judgment, due to the unnatural conditions that prevailed during and since the great war; inadequate transportation, strikes, and government regulations. The remedy is:

(a) A return to conditions prevailing for many years prior to the war and, (b) Free operation of the law of supply and demand, (c) The financing of railroads to enable them to properly equip themselves, (d) The doing away with preferential distribution and movement of private and assigned cars, (e) Stabilization of mine labor and readjustments of labor costs, (f) Restoration of fluidity of car movement by removal of unnecessary reconsignment restrictions and permitting one free reconsignment to any destination as formally allowed, (g) Encouragement of storage by consumers, and (h) The elimination of discriminatory freight rates where they exist.

We believe that under these conditions competition would restore normal supply and prices.

WILL THERE BE A STRIKE THIS YEAR?

Perhaps the matter of greatest concern to the people of the United States, as 1923 opens, is the question whether there will be a strike of soft coal miners on April 1 next. No one knows; no one can foretell, says C. E. Leshner, editor of the *Coal Age*. A turn of the cards may be all that is necessary to settle this question. The miners' union has repeated its demands of 1922. It stands for a renewal of the present wage contract, the six-hour day and the five-day week, and a two-year contract.

The operators have no unified idea now of what their attitude will be towards these demands. Individually they oppose the demands. Collectively they are at odds with each other. So far, after a series of conferences extending over several months, the operators have been unable to agree among themselves on any basis for negotiation save that each group goes its own way. This is the equivalent of agreeing to disagree on combined group action.

The legal complications of continued interstate conferences among operators are conceivably great. There is little recognized mutuality of action. The one set-up, which the united mine workers refuse steadfastly to recognize, is fewer district settlements, and this is all the operators have offered so far.

I do not believe the union wants a strike, but I do not believe that it will hesitate to call one if it should consider that the best course to gain its ends. Many competent observers say that if the union can get a two-year contract at the present wage scale it will forego all other demands and sign up without a struggle.

I do not believe the operators want a strike, and very many of them will go far to avoid it. Some will argue it is preferable to keep the mines going at a wage scale that is high and cannot be reduced to meet non-union wage reductions that may be made if the market demand falls off.

The retail coal business of W. L. Palmer at Medway, Mass., has been purchased by the Hinman Coal & Grain Company.

The retail coal and grain business of M. D. Leonard & Co., at Watertown, Conn., has been taken over by the Farmers Co-operative Association.

Capitalized at \$20,000, the Farmers Elevator Company has been incorporated at Badger, Iowa. The company handles coal in addition to grain.

T. B. Krug, J. J. Breen, and P. M. Krug have incorporated at Mineola, N. Y., as the Mineola Coal Company. The firm is capitalized at \$40,000.



ELEVATOR AND GRAIN NEWS

CANADA.

The Horn Elevator at Port Arthur, Ont., is being operated by the Gillespie Grain Company as a storage annex.

A new elevator of 50,000 bushels' capacity is to be erected next spring at Cardston, Alta., for the Alberta Pacific Grain Company.

The elevator and flour mill of the Taylor-Osborne Company at Essex, Ont., have been taken over by the Gordon & McDonald Milling Company.

A branch office has been established at Vancouver, B. C., by Strauss & Co., grain dealers of London, England. A. W. Whitmore will be in charge.

The Western Terminal Elevator Company's house at Fort William, Ont., is to build an addition to its present 1,000,000-bushel elevator, doubling the present capacity.

R. M. Mahoney is manager of all of the houses of the Home Grain Company, Ltd. He was formerly manager of the Alberta houses of the firm. His headquarters in the future will be at Winnipeg.

Fifteen No. 11 Monitor Style "B" Receiving Separators and two No. 9 Monitor Style "A" Screenings Separators have been purchased from the Huntley Manufacturing Company, Ltd., Tillsonburg, Ont., by the Saskatchewan Co-operative Elevator Company, Ltd.

The terminal house of the Brooks Elevator Company at the Head of the Lakes has been purchased by R. B. McClean. The Brooks elevator was extensively remodeled this year and has a capacity now of about 30 cars daily. Possession was given the new owner on January 2.

THE DAKOTAS

The Farmers Elevator at Erwin, S. D., is being conducted by Roy Kneisel.

Farmers around Alexander, S. D., are planning the erection of a grain elevator there.

H. Irwin succeeds Herman Holtz as manager of the Imperial Elevator at Dunseith, N. D.

A new addition is to be built to the elevator of the Rosebud Grain Company at Winner, S. D.

The Independent Elevator Company has repaired and repainted its elevator at Cartwright, N. D.

The building of the King Elevator Company located at Burbank, S. D., is being remodeled by that firm.

The elevator of the Farmers Elevator Company, Garrison, N. D., has been equipped with an automatic scale.

Grain elevators are to be built at Freeman and Marion, S. D., by J. J. Miller and Louis and Albert Waltner.

The Western Terminal Elevator Company of Burbank, S. D., is building an annex of 10,000 bushels capacity.

Several farmers around Stanley, N. D., are interested in the formation of a co-operative grain company at that place.

The elevator which Nils R. Tacklind operated at Drayton, N. D., has been purchased by the Farmers Interstate Elevator Company.

Overhauling has been done to the elevator of the Winter-Truesdell-Ames Company at Medina, N. D., and new machinery has been installed.

James Foster, W. S. Ross and Marcus Solomonson have incorporated at Estelline, N. D., as the Farmers Co-operative Company. Its capital stock is \$25,000.

William Landrigan is no longer manager of the Woodworth Elevator at Glenburn, N. D., and has moved to Portland, Ore., where he will make his home.

E. N. Morgan is now manager of the Aus Elevator at Junius, S. D. He recently resigned from his position as manager of the elevator at Canover, S. D.

The Farmers Elevator Company of Madison, S. D., has purchased the plant of the Merchants Elevator Company and will open it at once under the name of the Dakota Grain Company. J. A. Johnson is president and F. H. McGowan, manager of the purchasing company.

Articles of incorporation have been filed by Christ Wolff, Ed. Knudson and Anton F. Hettrich as the Havelock Grain Company. The company has pur-

chased the plant of the defunct Farmers Elevator Company at New England, N. D., and has opened it for business with Mr. Hettrich as manager.

Operations have been commenced in the new Farmers Elevator at Sherman, S. D. It is of fireproof construction and has a capacity of 30,000 bushels.

The new 30,000-bushel elevator of W. G. Lee & Co., at Morrystown, S. D., has been completed. It is equipped with a 10-horsepower engine, Fairbanks 10-ton Scale and a single leg.

Charles Van De Water is now manager of the Farmers Elevator at Parker, S. D., succeeding James Elder who resigned. Mr. Van De Water was formerly with the Farmers State Bank there.

INDIANA

The Morocco Farmers Grain Company is to be incorporated at Morocco, Ind.

The elevator at Ora, Ind., has been taken over by Ira E. Rinehart and will be enlarged in capacity.

The elevator at Gwynneville, Ind., of the Hungate Wholesale Company has been taken over by W. H. Springer.

E. A. Benedict is succeeded as manager of the Farmers Co-operative Company at Chase (p.o. Boswell), Ind., by C. F. Hail.

U. V. Faris is succeeded as manager of the Tunnelton Milling Company which operates a grain elevator at Tunnelton, Ind., by Charles E. Allin.

The name of the Shadeland Co-operative Elevator Company at Lafayette, Ind., has been changed to that of the Lafayette Co-operative Elevator Company.

Property on the Big Four Railroad has been purchased by the National Elevator Company of Indianapolis, Ind., which will erect there a grain elevator to cost \$75,000.

John Sellers is now with the McMillan Grain Company of Fort Wayne, Ind. He was formerly with the Farmers Exchange at Fredericktown, Ohio, in charge of the house there.

The postoffice at at Jolietville, Ind., has been discontinued. The address of the Goodrich Bros. Hay & Grain Company's branch at that place is now R. F. D. 4, Sheridan, Ind.

Improvements have been made by Anderson & Morgan to the elevator at Dunkirk, Ind., which they purchased from the Shirley Bros. New machinery has been installed and new corn cribs erected and the office remodeled.

A new 11,000-bushel elevator, 30x44 feet, has been completed at Hanna, Ind., for the Andreas Lumber Company. It has been equipped with two legs, corn sheller, and double corn and grain cleaner, feed grinder and seed cleaner. The company plans to increase its capital stock to \$30,000.

ILLINOIS

The Beggs Elevator at Redmon, Ill., which burned, is being rebuilt.

The E. K. Thayer Elevator at Chrisman, Ill., has been purchased by Foster Stanfield of Paris.

The Elliott Elevator Company of Elliott, Ill., has replaced its gasoline engine with a 15-horsepower motor.

A new warehouse is to be erected at Culver (mail to Sweetwater), Ill., for the Culver Farmers Elevator Company.

A 33,000-bushel addition is being erected to the elevator of the Farmers Elevator Company of El Paso, at Panola, Ill.

The Farmers Elevator Company of St. Francisville, Ill., has erected a feed room of frame construction, 18x36 feet.

W. H. Graham has resigned as manager of the Farmers Elevator Company at Sheffield, Ill. He will locate in Oklahoma.

Anthony Walters is no longer manager of the Farmers Elevator Company at Risk (Forrest p.o.), Ill., having resigned as such, but is now located at Strawn.

The Shultz Seed Company of Olney, Ill., is building a new mixing plant and grain elevator on the B. & O. at that place which will be operated as the Shultz Milling Company. The capacity for mixed feeds will be three cars a day. The building will be 80x120; the grain elevator will be 32x36 with capacity of 10,000 bushels ear corn, besides the

grain bin. The plant will be complete with mixing and grinding machinery and with side track capacity holding about 20 cars.

A store building is to be erected at Arnold, Ill., for the Arnold Co-operative Company adjoining its elevator. It is 16x40 feet.

A new 15-horsepower motor has been installed in the elevator of the Elliott Elevator Company of Elliott, Ill., replacing the gasoline engine.

The Kankakee Farmers Grain Company is building an addition to its office and wareroom at Kankakee, Ill. A truck dump scale and attrition mill are being installed.

The Boecker Coal & Grain Company is erecting a new cement elevator and mill at Aurora, Ill. This will replace the elevator which burned last summer and will cost \$40,000.

Capitalized at \$50,000, the Evans Elevator Company has been incorporated at Decatur, Ill. R. R. Carroll, Frank L. Evans, R. C. Roberts and H. L. Legrand are interested.

Townsend B. Smith, elevator builder of Decatur, Ill., has just finished a modern, concrete, 40,000-bushel grain elevator at Dwight, Ill., for the Farmers Elevator Company. A separate motor is provided for each leg. Western machinery, supplied by the Union Iron Works, is used throughout.

OHIO AND MICHIGAN

The Hemans Co-operative Elevator Company of Hemans, Mich., has discontinued business.

A grain elevator is to be erected at Detroit, Mich., for the Munders Products Company.

The elevator of the Fostoria Milling Company at Fostoria, Ohio, has been purchased by J. E. Babbett of Cleveland.

The capital stock of the Rockafellow Grain Company of Carson City, Mich., has been increased from \$40,000 to \$160,000.

The buildings of the Bad Axe Elevator Company at St. Louis, Mich., have been leased by McFarland & Ryan of Merrill.

Jesse A. Stemen is succeeded as manager of the Middle Point Equity Exchange Company, Middle Point, Ohio, by Lucy Hennon.

The capital stock of the Marine City Farmers Co-operative Elevator Company of Marine City, Mich., has been increased from \$10,000 to \$20,000.

The capital stock of the Grafton Flour Milling & Grain Elevator Company of Grafton, Ohio, has been increased to \$250,000 preferred and 1,000 shares common, no par.

The Sneath-Cunningham Company's elevator at Iler, Ohio, known as the Ash & Ash Elevator, has been equipped with a new metal boot; other minor repairs have been made.

The elevator and mill of the Granville Flouring Mill, at Granville, Ohio, formerly owned by H. D. Ashbrook are now the property of E. J. Wright. D. F. Robinson is superintendent.

A grain, hay and feed business is to be conducted at Ashland, Ohio, by Judson Wise and Cliff S. Martin as Judson Wise & Co. Mr. Wise was formerly with the A. G. Smith Milling Company and Mr. Martin was with the company for four years as manager of the hay department.

E. R. Gebby has bought out John Kinnan and D. C. Keller's interest in the grain and coal business of Keller, Gebby & Kinnan at Bellefontaine, Ohio. Mr. Keller will take over a third interest in the Belle Center Hay & Grain Company at Belle Center which is now managed by his son, C. E. Keller.

MINNESOTA AND WISCONSIN

Operations in the Equity Elevator at Cokato, Minn., have been discontinued for the season.

A new Fairbanks Electric Motor has been installed in the Farmers Elevator at Clinton, Minn.

Charles Swenberg has resigned as manager of the Farmers Elevator located at Maiden Rock, Wis.

The Otto F. Nelson Company recently incorporated at Deer Creek, Minn., has purchased the elevator of the K. B. Wilson Elevator Company of which Mr. Nelson was manager for some time.

One of the storage elevators of the Fleischman Malting Company of Jackson, Minn., has been moved up to the receiving elevator and a leg has

been installed so that the grain can be loaded independently out of the receiving elevator. Both sheller and cleaner, is also being installed.

Louis Graupman is succeeded as manager of the Farmers Elevator at Biscay, Minn., by F. A. Bandas.

The Security Elevator Company at Marietta, Minn., has been purchased by N. D. and Karl Kjelmeyer.

Clifford Lybeck of Kensington, Minn., is now manager of the Osborne-McMillan Elevator located at Belgrade, Minn.

The capital stock of the Brooks Elevator Company at Minneapolis, Minn., has been increased from \$100,000 to \$750,000.

The Big Diamond Mills Company, Morristown, Minn., has covered its elevator with galvanized corrugated iron and has also repaired it.

The Russell-Miller Milling Company of Minneapolis, Minn., has purchased a site at Duluth, Minn., on which it will erect an elevator to cost \$1,000,000.

The Murphy Elevator at Bear Creek, Wis., has been repaired and overhauled by George Williams & Son. Feed grinding will be started as soon as the work has been completed.

Articles of incorporation were recently filed for the Gray Milling Company of St. Paul, Minn., to conduct a grain, hay and cereal business. Clarence Gray and Plato & Starkey are interested.

The Equity Elevator at Montevideo, Minn., is to be operated under the management of A. O. Hilden, formerly of Watson. He succeeds A. E. Swenson who was recently elected to public office in that town.

Several side lines are now to be carried by the Farmers Elevator Company of Sleepy Eye, Minn., including feeds, tankage and oil meal. The firm has been handling for some time such side lines as coal, flour, salt and twine.

WESTERN

A warehouse at Paul, Idaho, has been leased by the Globe Grain Milling Company of Ogden, Utah.

The Bell & Reinbold Company has purchased the T. W. Bolithe Warehouse located at Hamilton, Mont.

The new 17,000-bushel addition of the Big Flat Elevator Company at Harlem, Mont., has been completed.

A 5,000-bushel warehouse at Driggs, Idaho, has been rented by the Alfred Beckett Company of Salt Lake City.

A 30,000-bushel addition was recently completed at the house of the Missoula Mercantile Company of Missoula, Mont.

The Flaxville Farmers Co-operative Company of Flaxville, Mont., recently awarded the contract for a new annex.

The Inland Grain Company of Ogden, Utah, has opened a branch office at Arco, Idaho. G. A. Browning, Jr., is in charge.

A warehouse was recently opened at Riverside, Calif., by C. C. Stafford, prominent grain and hay merchant of El Monte.

A branch office has been opened at Montpelier, Idaho, by the Idaho Grain Company of Soda Springs. O. H. Brown is in charge.

F. L. Brault, H. Lindstedt and G. D. Whitney have leased the property of the Miles City Mill & Elevator Company at Miles City, Mont.

D. G. Williams is now grain inspector of the Rocky Mountain Elevator Company at Great Falls, Mont. He was formerly grain buyer for the firm.

The Farmers Produce Company's elevator at Big Sandy, Mont., is being operated by the Greely Company of Great Falls. W. F. Schurmann is manager.

A branch office has been established at Lewistown, Idaho, by the Gray-Rosenbaum Grain Company of Seattle and Portland. J. L. Rogers is in charge.

The capital stock of the C. A. Babcock Company, operating a grain, hay and feed business at Portland, Ore., has been increased from \$25,000 to \$40,000.

A wholesale and retail grain, feed, hay and coal business is to be conducted at Petersburg (P. O. Littleton), Colo., by E. W. Hepler who has leased the mill there.

Work has practically been completed on the new elevator of the Model Mills Company of Greeley, Colo. The mill will not be ready for operation before February 1.

The Colorado Mill & Elevator Company's elevator at Haxtum, Colo., which it operates as the Haxtum Mill & Elevator Company is to be conducted by R. R. Archer.

The North Elevator and the Persson Elevator at Powell, Wyo., and an elevator at Garland, Wyo., have been purchased by the newly organized Powell Elevator Company. The three houses will be conducted under the management of A. W.

Finch. R. L. Gillison will conduct that at Garland and Mr. Finch will operate the Powell Houses with the assistance of Harry Tinleff.

A grain elevator and feed mill are being put into operation at Erie, Colo., by William Grimson as the Erie Grain & Feed Mill Company. Its capacity is 10,000 bushels.

The Western Grain & Brokerage Company has been incorporated to operate at Pocatello, Idaho. Its capital stock is \$10,000. A. Y. Satterfield, Herman Kline and C. Stephenson are interested.

R. J. Leo, Ralph H. King, H. Borden Wood have incorporated at Portland, Ore., as the Pacific Elevator Company. The company will conduct a grain elevator, warehouse, commission and merchandizing business.

The Farmers Warehouse Company has been incorporated at Enterprise, Ore., by L. W. and C. A. Riley and W. E. Daggett and will handle grain, hay, feed, fuel and livestock. C. A. Riley is secretary of the firm.

The elevator and mill of the farmers company at Fort Lupton, Colo., has been purchased by J. C. Otteson of Platteville. New equipment is being installed. Mr. Otteson has turned the management of the house over to his son Frank Otteson.

EASTERN

F. S. Grant has retired from the grain business at Pittsburgh, Pa., having purchased a coal mine.

The Stephentown Grain Corporation was recently incorporated at Stephentown, N. Y., capitalized at \$10,000.

The capital stock of the Eastern Grain, Mill & Elevator Corporation of Buffalo, N. Y., has been increased from \$3,000,000 to \$5,000,000.

The Spencer Construction Company of Baltimore, Md., has completed a 17,000-bushel cribbed, iron-clad elevator at Newville, Pa., for the Newville Warehouse Company.

The new mill of the Wilkins-Rogers Milling Company at Washington, D. C., will have a capacity for 25,000 bushels grain in addition to the 60,000-bushel elevator which withstood the fire.

An interest in the Sandwich Grain & Coal Company of Wareham, Mass., has been purchased by E. P. Harvey. He will be in active control conducting a general grain and coal business.

To conduct a grain business and flour mill, the Homestead Milling Company has been incorporated at Niagara Falls, N. Y., capitalized at \$200,000. F. P. Tower, A. E. Holmes and M. B. Porter are interested.

IOWA

A grain and feed business has been opened at Imogene, Iowa, by C. J. Addy.

A grain elevator is being erected at Barney, Iowa, for the A. B. Wilson Grain Company.

The Farmers Elevator Company of Woden, Iowa, has covered its house with corrugated iron.

The Farmers Co-operative Company has repaired and improved its elevator at Whitten, Iowa.

Electricity has been installed in the house of the Atkins Grain Company of Atkins, Iowa.

The Farmers Elevator Company of Malcom, Iowa, is intending to install some new machinery.

The Downey Elevator Company of Downey, Iowa, has installed a new loading device in its elevator.

A 20,000-bushel elevator is to be erected at Alden, Iowa, for the Farmers Elevator Company next spring.

The Clark-Brown Grain Company's elevator at Baxter, Iowa, is being equipped with an electric motor.

Art Fleming has purchased the elevator of W. G. Goy at Tabor, Iowa. Mr. Goy is now in the radio business.

E. Harris is succeeded as manager of the Farmers Elevator Company at Batavia, Iowa, by Harley Johnston.

Remodeling has been done to O. E. Kaeberle's elevator at Van Horn, Iowa, and a new leg has been installed.

A feed and flour house, 30x80 feet, is to be erected at Ringsted, Iowa, for the Farmers Elevator Company.

The Essex Mill & Elevator Company filed articles of incorporation recently at Essex, Iowa. R. A. Sanderson is president.

The branch house of the Wilkin Grain Company at Melrose, Iowa, has been sold by the Albia company to James Cummins.

Capitalized at \$3,500, the Dunbar Elevator Company has been incorporated at Dunbar, Iowa, to conduct a grain, livestock, poultry, lumber, and dairy products business. Conrad and Carl Roseland and Alfred Barker are the incorporators.

The elevator of the Dixon Co-operative Elevator Company at Dixon, Iowa, is being equipped with a

new corn crib, sheller, and cleaner addition. An ear corn sheller, equipped with a Barnard & Leas sheller and cleaner, is also being installed.

E. E. Thompson is no longer manager of the Farmers Elevator Company at Aredale, Iowa, but is succeeded by B. G. Sniffins.

Remodeling has been done and new equipment installed in the house of the Farmers Elevator Company at Greenfield, Iowa.

The King-Wilder Company has purchased the line elevators at Maxwell, Collins and Elwell, Iowa, from the Armour Grain Company.

Improvements have been started at the office building of the Farmers Elevator at Massena, Iowa. A large addition is being erected.

The Blirstown Grain Company of Blirstown, Iowa, has equipped its elevator there with a seed cleaning outfit and a sacking device.

Glenn Jackman is manager of the Farmers Co-operative Elevator at Clear Lake, Iowa. He formerly managed the Holland house.

John Plagman will in the future conduct the house of the Farmers Elevator Company at Corley, Iowa. He succeeds Pearl Manuel.

E. P. Meyer succeeds E. G. Mellen as manager of the Goodell Co-operative Grain Company at Goodell, Iowa. He was formerly at Reading, Minn.

The new elevator which Frank Pierson is building at Villisca, Iowa, replacing the one which burned last spring, is practically completed.

George French has purchased an elevator at Fairfield, Iowa. Mr. French was formerly with the Gardiner B. VanNess Company in its Cherokee office.

A new elevator costing \$15,000 is to be erected at Randolph, Iowa, for the Farmers Elevator Company, replacing the one destroyed by fire a short time ago.

Carson Williams and Lee Lightner have purchased the elevator located at Diagonal, Iowa, from G. E. Prentis. The new owners have taken possession.

The Farmers Elevator Company of Wayland and Coppock, Iowa, has let the contract for the razing of its present elevator and the erection of a new 20,000-bushel house.

A new direct spout distributor has been installed for the Farmers Elevator Company of Arcadia, Iowa, of which L. C. Harris is manager. Other repairs are also being made.

A deal was recently consummated transferring the elevator at Templeton, Iowa, to Henry Stevens for \$10,900. The elevator is being completely overhauled and cleaned up.

An addition of 25,000 bushels' capacity is to be erected at the Scranton Farmers Elevator Company's house at Scranton, Iowa, which will practically double the present capacity.

Glen Hall is succeeded as manager of the Farmers Elevator Company at Marcus, Iowa, by C. W. Brower. He had been manager of the Farmers Elevator Company at Meriden, Iowa, for four years.

The Farmers Co-operative Exchange has been incorporated at Shenandoah, Iowa, capitalized at \$10,000. D. E. Butte is president; W. R. Martin, vice-president; A. D. Latimer, secretary, and Theo Nordstrom, treasurer.

SOUTHERN AND SOUTHWESTERN

A grain, feed and hay business has been established at El Reno, Okla., by the El Reno Feed Company.

The Collin County Mill & Elevator Company of McKinney, Texas, has increased its capital stock from \$200,000 to \$420,000.

The Woody Grain & Elevator Company of Madill, Okla., has been dissolved. The company sold its business several months ago.

The Stokes Bros. & Co. of Lampass, Texas, has enlarged its warehouse. The capacity has been increased to 50,000 bushels sacked grain.

E. J. Martin is manager of the J. Rosenbaum Grain Company's terminal elevator at Norfolk, Va., He has been located at Omaha for a year and a half.

A grain and feed business has been started at Rockmart, Ga., by Beasley & Gresham, the personnel of which is R. R. Beasley and Charles Gresham.

A grain elevator and warehouse costing \$40,000 are to be erected at Memphis, Tenn., by the Sessums Grain Company, replacing the one destroyed by fire.

J. C. Terry, Hugh Tilloson and W. G. Williams have filed articles of incorporation at Plainview, Texas, as the Farmers Elevator Company. Its capital stock is \$15,400.

F. N. Hartwell and W. L. Verhoeff on January 1 retired from the firm of H. Verhoeff, receivers and shippers of grain at Louisville, Ky. The business will be continued under the firm name of H. Verhoeff & Co., by the remaining partner,

R. M. Hartwell, who has associated with him John S. Green and W. C. Hartwell, both of whom have been connected with the business for a number of years.

O. Shotwell, H. Schnack, Elmer McLaury and J. C. Freud have incorporated at Cushing, Okla., as the Farmers Union Co-operative Exchange. Its capital stock is \$10,000.

The grain elevator of the Hayes Grain & Commission Company of Little Rock, Ark., which burned last July is being rebuilt. It will cost \$100,000. The concern is an extensive distributor of feeds.

Two concrete elevators, each 20 feet in diameter and 60 feet high, and weighing more than 100,000 pounds are being moved for the Pioneer Flour Mills of San Antonio, Texas, for a distance of 250 feet.

The W. H. Balentine Packing Company purchased the building at Greenville, S. C., owned by the Smith Grain Company and has made plans for converting it into an addition for the packing plant.

I. M. Pearlstine & Sons of Charleston, S. C., has made arrangements for opening a branch warehouse at Walterboro, S. C., to be conducted by C. C. Anderson. Grain, hay and groceries will be handled.

Callahan & Sons, Louisville, Ky., have filed articles of incorporation capitalized at \$100,000. R. Lee, J. E. and W. C. Callahan are interested. The company has been operating a grain elevator there for years.

A new and modern plant is to be erected at Greenville, Texas, for the Greenville Mill & Elevator Company. Mr. Richter is general manager of the company. The firm recently increased its capital stock to \$200,000.

W. J. Haydon & Son have taken over the business of J. R. Shaw & Co., at Jett, Ky. Shaw & Co. have been in the grain and coal business there for 35 years. The new firm will conduct a grain, seed, and coal business.

The Afton Mill & Elevator Company has been incorporated at Afton, Okla., capitalized at \$8,000. C. W. Livingston, M. T. Cox, and T. J. Brackeen are interested. The company has a grain elevator and flour mill under construction at Afton.

The capacity of the corn elevator of the White Commission Company at Pine Bluff, Ark., has been increased from 2,000 to 4,000 bushels and that of the oats elevator from 5,000 to 8,000 bushels. The company is also installing a mill for manufacturing chicken feed.

The Fort Worth Elevator Company of Fort Worth, Texas, has awarded the contract for the erection of a new storage warehouse at its plant there. It will have a capacity of 1,500,000 bushels. The company has also had plans prepared for a new elevator which it will build in South Fort Worth. Jule G. Smith is president of the company.

The Paul T. Jackson, Inc., succeeded the Jackson-Friss Grain Company at Oklahoma City, Okla., recently. Mr. Jackson has been in the grain business in Oklahoma for three years. For two years he was with the W. L. Perkins Grain Company and later with the Marshall Grain Company, resigning from the latter to organize the Jackson-Friss Grain Company which began business last April. Mr. Friss retired on November 15 and sold his interest in the firm to Mr. Jackson.

MISSOURI, KANSAS AND NEBRASKA

A new elevator is being erected at Kearney, Neb., by Paul Burgner.

A new elevator is being built at Clearwater, Kan., for the Larabee Flour Mills Corporation.

The elevator and lot at St. James, Mo., of J. M. Gray have been purchased by William Beckham.

A grain office has been opened at McCook, Neb., by E. J. Price who will handle all kinds of grain.

G. Walker succeeds W. E. Caldwell as manager of the Farmers Elevator Company at Amoret, Mo.

A new elevator is being erected at Yoder, Kan., for the Red Star Milling Company of Wichita, Kan.

M. W. Henry has resigned as manager of the Farmers Co-operative Elevator Company at Elsberry, Mo.

A 2,000,000-bushel elevator is to be erected at St. Louis, Mo., for the Missouri Pacific Railroad at a cost of \$2,000,000.

Capitalized at \$10,000, the Cedar Point Farmers Co-operative Union, Cedar Point, Kan., has been incorporated.

The Weber Elevator at Solomon, Kan., is to be conducted by Dan Berrigan following the resignation of U. G. Smith.

The business of the L. E. Timmons Grain Company, Centralia, Kan., has been purchased by C. E. Drum of Bigelow, Kan.

R. O. Andrews has resigned as manager of the Farmers Elevator at Filley, Neb., and is succeeded in that position by C. J. Saum who has been in

the employ of the company for some time. Mr. Andrews is now employed as manager in a Stromsburg elevator.

A 5,000-bushel annex is to be built by L. L. Beachler, at Reynolds, Neb., on each side of his 14,000-bushel house.

Harrison Brown in the future will be in charge of the elevator of the Stevens-Scott Company located at Seward, Kan.

A grain elevator is being erected at Gering, Neb., by F. M. Sands, feed dealer, and is being equipped with milling machinery.

A new elevator of 50,000 bushels' capacity is to be erected this spring at Garden City, Kan., for the Farmers Elevator Company.

The Farmers Union Co-operative Association of Valentine, Neb., has completed its new elevator. D. Kellogg will be in charge.

A concrete elevator of from 150,000 to 200,000 bushels, capacity is to be erected at Carthage, Mo., for the Cowgill & Hill Milling Company.

The elevator of the Farmers Grain & Lumber Company located at Kennard, Neb., has been equipped with a new electric motor.

The contract has been let by Walter Petty for rebuilding his elevator at Windsor, Mo., which burned. It will be of fireproof construction.

The elevator located at Leahey, Neb., has been purchased by F. A. Engler of Deward, Neb., who will conduct a general grain business there.

Stephen Swigle is president and A. E. Hockman, manager, of the Farmers Grain & Supply Company of Hastings, Neb. Its capital stock is \$50,000.

A new engine room is being built to A. L. Huffman's elevator at Satanta, Kan., replacing the one which was destroyed by fire not very long ago.

The elevator at Lathrop, Mo., is now the property of S. W. Shoemaker of Brownington, Mo., who traded in a farm near Brownington for the house.

The elevator and equipment of the Phillips Grain Company at Phillips, Neb., have been purchased by the recently organized Farmers Grain Company.

The name of the Farmers Grain, Livestock & Supply Company at Stratton, Neb., has been changed to that of the Farmers Co-operative Company.

Capitalized at \$25,000, the Interstate Hay & Grain Company has been incorporated at Scotts Bluff, Neb., to conduct a grain, hay, seed and feed business.

J. F. English recently resigned as manager of the Farmers Co-operative Grain & Lumber Company at Humphrey, Neb., and is succeeded there by D. Roufs.

A new elevator is to be erected at Ulysses (New Ulysses p. o.), Kan., for A. Campbell of Macksville and A. L. McClure who will operate as the McClure Grain Company.

A partnership has been formed at Hopkins, Mo., by Fred Wooldridge and Cecil Appleton under the name of Wooldridge & Appleton who will buy corn, oats, wheat and grain.

Frank Moser has resigned as secretary and manager of the Hiawatha (Kan.) Co-operative Grain Association and is succeeded there by D. A. Knepper of Hobart, Okla.

The Manhattan, Kan., office of the Fuller Grain Company has been closed and the equipment moved to Atchison. The company will reopen the Manhattan office in the spring.

The Farmers Union Co-operative Association of Maple Hill, Kan., of which T. C. Cook is manager, has equipped its elevator with a 30-horsepower motor, and is doing some repairing.

Cecil Wayland has resigned as manager of the Farmers Grain & Supply Company of Carrollton, Mo., a position which he has held since its organization. William Moore of Orrick succeeds him.

Frank O. Everts is president of the Dixie Grain & Mill Feed Company which was incorporated recently at Kansas City, Mo. The company will deal largely in millfeed. D. H. Kresky is sales manager.

The interest of T. E. Collins in the Belleville Mill & Elevator Company at Belleville, Kan., has been purchased by G. A. Chapin, a retired merchant. He will conduct the plant, associated with S. D. Smith, general manager.

A general grain business is to be conducted at Wilcox, Mo., by the Wilcox Co-operative Association on a co-operative plan. W. J. Fox, B. C. Shell, R. L. McGinness, F. Winnell, E. L. Shelton, L. Thompson and A. J. Jones are interested.

The business and plant of the Moran Grain Company located at Moran, Kan., have been purchased by Willis Pereau. Mr. Pereau on December 18 assumed charge of it and is now operating as the Pereau Grain Company. A general merchandising business of grain and grain products is to be conducted.

The Farmers Elevator Company of Salisbury, Mo., has contracted with Townsend B. Smith of Decatur, Ill., for a new concrete grain elevator, warehouse

and office. The elevator has a capacity of 18,000 bushels and the warehouse five carloads of feed. The machinery equipment includes a Western Sheller and Western Cleaner and an attrition mill.

The Kansas City Southern Elevator at Kansas City, Mo., has been enlarged by the erection of new tanks with capacity of 500,000 bushels. The former house had capacity of 80,000. The Moore-Seavers Grain Company operates the elevator.

The old Farmers Elevator at Gibbon, Neb., has been purchased by the Gibbons Elevator whose house at Kearney burned not long ago. The old elevator has been repaired and an addition has been built to it. The company will handle small grain.

The J. W. Boyd Grain & Commission Company and the Hanna-Pate Grain Company have consolidated and will operate at Joplin, Mo., as the Boyd-Pate Grain & Milling Company. P. C. Pate is president and J. W. Boyd, vice-president. It is capitalized at \$100,000.

The Farmers Elevator Company of Louisburg, Kan., has let the contract for a new elevator which will be equipped with sheller, one leg, Western Gyrating Cleaner, No. 7 Bowsher Feed Mill. It will also be equipped with a 20-horsepower Type "Z" Fairbanks Morse Engine.

THE LAST WORD IN MECHANICAL HANDLING

The growth of the grain trade in international commerce has paralleled the improvements in mechanical handling. Today the trade is absolutely dependent on the short cuts in time and labor which the applied principles of mechanics afford. This applies also to every other industry, for world trade today is measured in volume undreamed of 100 years ago, and as the refinements of civilization penetrate farther into the world's hinterlands this volume will be augmented.

The time, then, is most opportune for a critical survey of handling equipment, upon which our prosperity depends. This has been done in a comprehensive way by George Frederick Zimmer, A. M. Inst. C. E., in the volume before us, entitled "The Mechanical Handling and Storing of Material." This is the third edition of the work which has been brought up-to-date in every line. About 800 pages of large quarto size and over 1,100 illustrations give an idea of the scope and comprehensiveness of the work. The publishers, D. Van Nostrand Company, 8 Warren Street, New York, have done their work well, for the paper, the illustration, the typography and the printing are all that the most discriminating critic could desire.

In his "Foreword" in the book, John Purser Griffith, past president of the Institute of Civil Engineers, says: "At no period of our history was the need so great for cheap food and clothing. The recent rapid advances in the rates of wages have not been accompanied by corresponding comfort in living. Instead of production increasing with the increase in wages, the result has been reduced output with increased prices and increased cost of living. A vicious circle has been formed, and no real permanent improvement has been made in the condition of our workpeople.

"No remedy can be found for this state of things unless the output of each individual worker is increased. No means of doing this exists except by the introduction of 'time-saving' and 'labor-aiding appliances,' by which man is enabled to supplement his manual by his mental powers.

"Mr. Zimmer deserves well, not only of his professional brethren, but of all classes of the community, for having devoted so much of his time and thought to preparing this valuable monograph on 'The Mechanical Handling and Storing of Material.' He has not only drawn from his own wide experience, but has placed before his readers selections from the best world-wide authorities, who have dealt with these cosmopolitan problems."

To briefly summarize the subject matter as treated in the various chapters, we find: Elevators; worm or screw conveyors; push-through conveyors; band conveyors; steel plate conveyors; vibrating or reciprocating trough conveyors; gravity-bucket conveyors; driving power, speed, and wear and tear of elevating and conveying machinery; the handling of hot coke in gas works; coal face conveyors; tightening and equalizing gears for elevators and conveyors; conveying by gravity; handling by pneumatic and by hydraulic means; endless rope and chain haulage; vessel loading and unloading in all its phases; coal handling machinery; the warehousing of grain; automatic weighing of material.

The chapter on "Warehousing of Grain" comprises 37 pages illustrated by elevators of various types and a full discussion of the grain handling methods in use. It is a full and rich survey of present handling equipment in some of the largest plants in England, Germany and other European ports.

Mr. Zimmer and his publishers are to be congratulated on this contribution to our knowledge of one of the most important adjuncts of modern trade. The price of \$15 is small enough considering the scope and thoroughness of the work.

FIRES—CASUALTIES

New Leipzig, N. D.—Fire destroyed the Farmers Elevator office not long ago.

California, Mo.—The feed establishment of John Herfurth was destroyed by fire.

Winthrop, Minn.—Fire destroyed with a loss of \$3,000, the De Wolf Feed Mill here.

Santa Fe, N. M.—Fire destroyed the Hale Mill & Elevator with a loss to owners of \$7,000.

Collyer, Kan.—Fire damaged to a considerable extent the Farmers Union Elevator here.

Lewistown, Mont.—The elevator of the Montana Elevator Company burned recently with a loss of \$5,000.

Hillsview, S. D.—The Hillsview Elevator Company's plant was destroyed by fire with a loss of \$22,000.

Williamstown, Ohio.—Fire totally destroyed on December 10, the elevator of the Williamstown Elevator Company.

Sand Point, N. B.—The concrete elevator here of the Canadian Pacific Railway was damaged by a dust explosion.

Ferguson, Iowa.—With a loss of \$6,000, the Ferguson Farmers Co-operative Elevator Company's elevator burned.

Norwalk, Conn.—The Maiorana Feed Store was damaged by fire to the extent of \$3,000. The cause of the fire is unknown.

Walton, Ill.—The Walton Co-operative Elevator here was completely destroyed by fire which started from an overheated bearing.

South Bend, Ind.—Fire destroyed, with a loss amounting to \$25,000, the J. S. Barrett Hay and Feed House located at this place.

Emmet, Neb.—Fire on December 26 destroyed the office and contents of the Emmet Hay Company. The origin of the fire is unknown.

Honey Grove, Texas.—Fire destroyed with a loss of \$5,000 three abandoned buildings owned by the Fannin Mill & Elevator Company.

Brookville, Ohio.—The Brookville Farmers Grain Company sustained a small damage loss by fire recently. The cause was not reported.

Tamworth, Ont.—On December 4, fire destroyed the feed mill and electric light plant here. The loss amounted to \$12,000; insurance, \$5,000.

New Lothrop, Mich.—On December 22 the elevator of M. C. Mountain & Son was partially damaged by fire, the origin of which was not reported.

Linwood, Kan.—Fire destroyed the Linwood Elevator owned by Frank Hayward. The wheat and building were both covered with insurance.

Bottineau, N. D.—The International Elevator Company's plant here was slightly damaged by fire, which started when the stove became overheated.

Sheridan, Wyo.—The T. J. Settle Feed Store was damaged seriously by fire on December 8. The building will probably be torn down and rebuilt.

Elbert, Colo.—The Elbert Lumber Company sustained a small damage loss on December 8 from fire which was caused by the backfire of an engine.

Bainbridge, Ohio.—The granary of the Worley Milling Company was destroyed on December 13 with a loss of \$75,000. The origin of the fire is unknown.

Gate, Okla.—Small damage was done on December 26 to one of the elevators of the Oklahoma City Mill & Elevator Company. The cause of the fire is unknown.

McLouth, Kan.—Fire damaged to a small extent the engine room of the Casebier Elevator. The fire departments' quick work saved the house from destruction.

Roundup, Mont.—The Montana Elevator Company experienced a severe loss by fire on December 12. The damage was due to defective electrical equipment.

Bison, Kan.—During the latter part of December the Bison District Farmers Union Co-operative Association sustained a small damage loss to their warehouse by fire.

Mayville, Wis.—Fire on January 3 destroyed the grain elevator and warehouse of the Buerger Grain & Malting Company. The loss amounted to between \$150,000 and \$200,000.

Elmhurst, Ill.—The grain elevator, warehouse and lumber yard of Hammerschmidt & Franzen Company here on December 27 was damaged by fire with a loss of \$200,000.

Davis, Sask.—With a loss of from \$13,000 to \$15,000, the elevator, engine room, dwelling house and flour warehouse of the Searle Elevator Com-

pany was destroyed. There were about 4,000 bushels of wheat in elevator at the time. The loss is partly covered by insurance.

Roland, Iowa.—The two-story building of the Scromme Feed Company was destroyed by fire on December 20 with a loss of about \$5,000. The origin of the fire is unknown.

Baltimore, Md.—A loss of \$25,000 was suffered by P. Frederick Obrecht & Son, grain, feed and flour dealers, when their warehouse was burned. The loss was covered by insurance.

Connersville, Ind.—On December 20, fire destroyed the Uhl-Snyder Flour Mill & Elevator. The fire was of unknown origin and did damage of \$15,000. The loss is partly covered by insurance.

St. John, N. B.—A dust explosion occurred on December 20, in the elevator of the Canadian Pacific Railroad almost wrecking the plant. It shattered the entire upper portion of the concrete structure, which is of metal. No workman was seriously injured. The bin floor was buried under pieces of

concrete and sheets of metal. The elevator is 228 feet high; was built in 1913 and has a capacity of 1,000,000 bushels. Repairs were started immediately.

Dublin, Pa.—Fire on December 20 destroyed the Co-operative Feed Mill, owned by the farmers around there. The fire is believed to have been of incendiary origin. The loss was \$12,000.

Chelsea, S. D.—The C. F. Durr Elevator was damaged to the extent of \$18,000. In addition to the elevator about 12,600 bushels of grain were destroyed. The loss is covered by insurance.

Anthony, N. M.—Fire destroyed Carl Price's hay warehouse which contained at the time a large quantity of Alfalfa. The loss amounts to \$30,000, half of which is covered by insurance.

Labolt, S. D.—A hot box is believed to have started the fire which on January 5 destroyed the Farmers Elevator Company's elevator here. The loss is \$24,000, covered practically entirely by insurance.

St. Louis, Mo.—Serious damage was done to the plant of the H. W. Beck & Sons Feed Company by fire of unknown origin. The loss on building was \$4,000; that on stock, \$6,000. All was covered by insurance.

Fort William, Ont.—Fire which started in the millwright's shop at the Canadian Pacific Elevator, leased by the Gillespie Grain Company, destroyed the wooden conveyor tunnel between elevators "A" and "C."

OBITUARY

ADAIR.—Ben G. Adair was killed in an automobile accident on January 1. He was salesman for the W. M. Cosby Flour & Grain Company of Birmingham, Ala.

ALEXANDER.—Jefferson M. Alexander died recently at Petersburg, Ind., aged 60 years. He was until a few years ago, with E. J. Whitelock in the grain and milling business at Petersburg. His widow and four children survive him.

BARTLETT.—V. R. Bartlett died aged 91 years. He was for more than 40 years a prominent grain buyer at Winfield, Kan.

BAUMANN.—Henry J. Baumann died aged 68 years. He was formerly prominent in Milwaukee grain and commission circles and at one time operated several grain elevators in Iowa. His widow and five children survive him.

BROWN.—Albert C. Brown died aged 80 years on December 17 at Malden, Mass. He was founder of Brown, De Loria & Co. of Boston, Mass.

CARLSON.—Victor Carlson was killed while working around the elevator of the Cargill Elevator Company at Superior, Wis. He was caught in the belt of the machinery.

CHISHOLM.—Thomas W. Chisholm died on December 15 of heart disease. He was traveling salesman for the Braslan Seed Growers Company, Inc., of San Jose, Calif. He was 44 years old.

COSTELLO.—On December 8, John A. Costello died at his home in Chicago. He had been in the grain business for years as state grain inspector and in 1895 established a grain sampling business. Before the war he was associated with William J. Farrell in Costello & Farrell.

DESMOND.—On December 17, Thomas Desmond died at Pinkerton, Ont., after a long illness. He was a well known grain operator having owned a large grain elevator there and having been a grain shipper there for years. He was 60 years old. His widow, six sons and two daughters survive him.

DILKS.—George L. Dilks aged 83 years died at Wenonah, N. J. He was engaged in the grain business there. His widow survives him.

DOON.—Fred J. Doon died on December 3, aged 60 years. He was a grain dealer with J. W. Doon & Co. of Worcester, Mass. He was formerly in the feed business.

DOW.—John F. Dow died recently at Davenport, Iowa, aged 66 years. He was president of the Davenport Elevator Company.

DUFF.—John Duff died recently at Toronto, Ont., aged 77 years. He was well known in the Ontario grain trade inasmuch as he had conducted a grain business at Peterboro, for years. He went to Toronto 14 years ago.

FOSS.—H. A. Foss, weighmaster of the Chicago Board of Trade, died suddenly at his home in Chicago on December 20. Complete details concerning Mr. Foss' activities in the business are to be found elsewhere in this issue.

GREEN.—William L. Green died on January 1 at

Pasadena, Calif., where he was residing. Mr. Green was at one time a well known grain dealer at St. Louis, Mo., but retired and went to California about 10 years ago.

HARDIN.—Samuel Hardin died recently at Kansas City, Mo. He was a former member of the Kansas City Board of Trade and for a time was also in the grain business at Wichita, Kan.

HUNTER.—Thos. B. Hunter was killed when struck by an automobile. Mr. Hunter resided in Evanston, Ill., and for nearly 20 years had been a member of the Chicago Board of Trade.

JENSON.—After a lingering illness, Rudolph Jenson aged 36 years, died at Thief River Falls, Minn. He had been manager of an elevator at Tolna, N. D., for several years.

KERCHNER.—On January 4, aged 68 years, Oscar L. Kerchner died at Breinigsville, Pa. He was a retired feed and flour merchant.

LINTON.—J. Robert Linton died on January 6 at a Philadelphia hospital. He was for years in charge of the accounts of the Philadelphia Grain Elevator Company which operates the Pt. Richmond and the Twentieth Street Elevators. His widow survives him.

MOORE.—Henry B. Moore died on December 29 at Minneapolis. Mr. Moore was 70 years old. Many years ago he was a member of the Boston grain and feed firm of J. E. Soper & Co.

MUMFORD.—Aged 82 years, William R. Mumford died at his home in Evanston, Ill., on December 30. He had been a member of the Chicago Board of Trade for 47 years, and had been in the grain business in Chicago for over 50.

OWEN.—E. N. Owen died aged 80 years. He was a member of the State Board of Grain Appeal and resided at Duluth, Minn. Two daughters survive him.

PHINNEY.—John F. Phinney died on December 10 at his home in Lincoln, Neb. He had for years been manager of the Norfolk (Neb.), Farmers Elevator, but retired because of poor health about five years ago.

PIOTROWSKI.—On December 8, Hipolite Piotrowski died suddenly aged 74 years. He was a feed and flour dealer at Milwaukee, Wis.

POLLOCK.—On December 14, L. C. Pollock died aged 75 years at New Orleans, La. He had been for years identified with the cowpea trade as a broker.

ROBERTS.—Harry E. Roberts died recently at Washington, D. C. He was a former grain and lumber dealer at Rippey, Iowa.

ROSS.—William Ross died of heart trouble on December 11 in California. He was the founder of the Ross Seed Company of Louisville, Ky., and retired in 1916 from active business.

STEPHENS.—F. E. Stephens died recently at Minneapolis, Minn. He was wheat buyer for the Pillsbury Flour Mills Company.

VERHOEFF.—W. L. Verhoeff aged 60 years died at Louisville, Ky., on January 9. He had just retired from H. Verhoeff & Co., in which he had

been interested for many years, although not actively of late. Bronchial pneumonia was the immediate cause of his decease.

TRUSCOTT.—Frederick Truscott died suddenly aged 69 years. He was connected with the grain trade a few years ago being in business as Truscott & Heathfield, at Buffalo, N. Y.

WALCUTT.—H. C. Walcutt died recently at On-

tario, Calif. He was a prominent member of the Winnipeg Grain Exchange and was sales manager of the International Elevator Company, Ltd.

WEAVER.—John Nelson Weaver died from pneumonia recently aged 78 years. He was senior member of Weaver & Watkins, grain and produce jobbers, and was prominent in the Michigan Jobbers Association at one time. He lived at Milford, Mich.

about as apathetic as formerly. Because of this numerous holders became tired and discouraged, and consequently showed more anxiety to sell, and particularly common or inferior grades in small bales. As a result the weaker tone continued, although no important reduction in prices was noticeable. On the whole, it has been a decidedly slow and unsatisfactory month.

United States grades of No. 1 Timothy in large bales sold at the outset as high as \$27, but subsequently were held mainly at \$26, with some buyers unwilling to pay over \$25. No. 2 Timothy and 1 Light Clover Mixed in large bales sold temporarily as high as \$25, but afterwards were selling at \$24. Late in December straw held about steady, as receipts continued small, but afterwards there was a slightly weaker tendency as nearly all buyers were showing indifference, and hence there was a downward trend, but more especially on ordinary or poor grades.

Few strictly important changes occurred in the market for horse feeds during the past month. Handlers of Alfalfa meal and molasses feeds assert that there is a firm undertone with indications of continued firmness in the future. In the main they attributed the firm undertone to good shipments to southwestern points owing to poor pasturage. Demand was fair for local consumption in this territory with the supply ample as a rule.

ST. LOUIS HAY REVIEW

BY S. F. LARRIMORE

While the volume of hay handled in the St. Louis market during the past year has shown a loss in tonnage, the business has been steady, and a fair amount handled. The St. Louis market has shown a less relative loss in comparison with other terminal markets. The decrease in receipts is largely due to excessively high freight rates from the producing localities, together with high freight rates to consumptive territories, which prevented a free movement of any quantity of hay. The financial condition of the South, where a large quantity of hay is sold under normal conditions, contributed largely to the decrease in volume. Due to the increase of motive power in the cities, straight Timothy, which is generally used as a horse feed has ruled quiet, and the demand only fair. On the contrary, there has been excellent demand for Pure Clover, Heavy Clover Mixed and Alfalfa, which is principally used for dairy and cattle feed.

The St. Louis market is a large user of dairy and cattle hay and there is an excellent demand throughout the year. The St. Louis market is famed for its stability, and fluctuations have been very light, in contrast with some of our nearby markets, which advance sharply on light receipts, only to decline heavily on anything like liberal receipts. Many Illinois shippers have made heavy losses shipping on these inflated markets, only to find that when their shipments arrive the market has declined \$3 to \$4 per ton.

The stability of the St. Louis market guarantees to the shipper an equitable value. Steady and consistent shippers to St. Louis have done a profitable business during the past year. It is advisable to patronize a market that is stable, and where the shipper can know about what his hay will bring. The personnel of the St. Louis hay receivers are above reproach, and they stand high in this community as men of integrity and financial worth. All of the St. Louis hay receivers are members of the St. Louis Merchants' Exchange, an organization that guarantees to the shipper a fair, square deal, and no hesitation should be felt in shipping hay to any member of the St. Louis Merchants' Exchange.

Receipts of hay in St. Louis during 1922 were 125,195 tons as compared with 135,344 tons in 1921. Shipments were 48,385 tons in 1922 as compared with 47,705 tons in 1921.

The Timothy hay market is steady under moderate receipts and fair local demand for the better grades. There is also a good shipping inquiry for medium grades. The situation promises steady prices, and liberal shipments may be made to this market with certainty of securing fair prices. Light Clover Mixed hay is in moderate receipt, with an excellent local demand for high grade Light Clover Mixed, the medium grades are strong with an active demand. Heavy Clover Mixed is steady with only moderate receipts and a good demand prevailing.

Pure Clover hay is steady, with fairly liberal receipts. The demand is very good for the better grades suitable for dairy trade. The Prairie hay market is quiet but steady, with moderate receipts and a good demand for the No. 2 grades. Hay that is suitable for the dairy trade is selling at the outside figures. The medium and lower grades are quiet and dull.

The shipment of Alfalfa hay to the St. Louis market during the past two months has been very unsatisfactory, due to the fact that shippers do not seem to realize the kind of hay that is wanted here and the kind of hay that sells best. We have a large crop of hay in our immediate vicinity and

HAY, STRAW AND FEED

NEW HAY OFFICERS

The Kansas City Hay Dealers Association at its recent annual meeting elected the following officers to serve during the coming year: President, N. C. Campbell (re-elected); vice-president, Victor Faris; added to Board of Directors, J. M. Hall, C. M. Funk and W. H. North. B. F. Tyler, J. D. Cole and E. A. Fitzgerald were named as members of the Board of Arbitration.

HEARINGS ON HAY MINIMUM WEIGHTS

The question of raising minimum weight on hay carloads from 20,000 pounds per standard car to 22,000 pounds per standard car is to be considered on January 16 by the Consolidated Classification Committee. The hearings are to be heard in Room 408, 143 Liberty street, New York City, and appointments to this should be made through F. W. Smith, chairman, Official Classification Committee, 143 Liberty St., New York City.

CHICAGO NEEDS YOUR HAY

Under date of January 12, Albert Miller & Co., of Chicago, Ill., say: We are getting our shippers some mighty satisfactory prices and we can do the same for you. Consignments will pay you if you ship to right party. We are handling about half the hay coming on the Chicago market at present time. Pretty good proof that consigning pays, because every car is a consigned car. Trade here coming to us and you bet we are making them pay the price.

NEW LEGUME UNDER TEST

A quick growing legume known as the *Crotalaria Juncea*, or sun-hemp, which has been successfully introduced into Porto Rico by the Federal Experiment Station at Mayaguez, has been sent by the Porto Rico station to stations south of the Ohio River and along the Pacific Coast for testing as to whether or not it will be available as a cover crop. The sun-hemp makes quick growth, flowering the second month and ripening the third. Very favorable reports have been received concerning it from a number of experiment stations by the United States Department of Agriculture.

IMMATURE CORN FEEDING WASTEFUL

In recent tests made by the Ohio Experiment Station it has been proved that the feeding of immature corn is a wasteful practice and that the loss from gathering or feeding new corn, yielding 60 bushels per acre at maturity, is \$19 at four weeks before maturity, \$9 at three weeks; \$5 at two weeks and \$2 at one week.

Calculated on a moisture basis of 15.5 per cent, corn harvested when in the dough stage yielded 42 bushels; when fairly hard and ready for the silo, 68 bushels; when ready to shock, 75 bushels, and when thoroughly mature, 78 bushels per acre.

Instead of using new corn at these stages, the feeder could afford to buy old corn at \$1.29 rather than feed new corn 4 weeks before maturity; 88 cents at 3 weeks; 80 cents at 2 weeks, and 73 cents at one week before maturity, if the new crop is priced at 70 cents a bushel when ripe.

GRASS IN ORCHARDS

Ten years ago the Iowa Agricultural Experiment Station commenced a series of experiments and tests to determine which grass, Clover or Bluegrass, would bring best results in orchards. After making intensive investigations, it has come to the conclusion that Clovers are most satisfactory. Bluegrass did not give the right kinds of growth.

Where Clover was used in an orchard of northwestern greenings an average yield of 473.4 pounds of fruit was secured from 55 trees per acre. Where the Clover was cropped the trees yielded only 456.4 pounds. Where clean cultivation was tried only a yield of 425.3 pounds resulted, while with Bluegrass 298.5 pounds was obtained.

Records in this orchard show that the Clover planted orchard produced over three bushels per tree more per year than the Bluegrass covered orchard.

Careful observations of the trees show that where

Bluegrass was used the trees produced terminal growth which lacked vigor to form the lateral fruit buds necessary for fruit production in succeeding years. Under Bluegrass culture it was found that the trees produced fruit buds during a year that the tree did not bear.

Other methods of culture showed that the trees each year produced fruit buds that were strong enough to bear fruit each season.

Where fertilizer was applied to sod of Bluegrass the buds were made strong enough to bear fruit each year. Experiments with these trees are still under way and over 50,000 fruit bud observations have been made under different cultural conditions.

HAY MARKET STEADY

The Graham & Martin Grain Company of St. Louis, Mo., in letter of January 12, said: The Timothy hay market rules steady under moderate receipts with an excellent demand for the No. 2 grades of Timothy. Also a fair demand for medium grades. The situation promises steady values and we do not hesitate to advise liberal shipments. The market is cleaned up of all desirable grades day by day and the movement from the country is light.

Light Clover Mixed hay firm under moderate receipts with an excellent local inquiry for good No. 1 Light Clover Mixed, also a fair feeding and shipping demand for No. 2 hay.

HAY DULL IN NEW YORK

BY C. K. TRAFTON

It would be an exceedingly difficult task to recall a month during which the hay market was so narrow, sluggish and featureless as it was during the one under review. Of course, dullness never creates surprise during the last half of December as every member of the trade is well aware that buyers generally keep out of the market as much as possible toward the end of the year. Probably this has always been so in the memory of the oldest inhabitant and as every old-timer well remembers it has been the habit to ascribe this falling-off in demand to the so-called annual stock-taking. Be that as it may, buyers rarely ever take any noteworthy lots just before the end of the year, and consequently there is never any justification for expecting noteworthy price changes.

Also at this season receipts are invariably insignificant, and consequently there is no necessity for pressing supplies on the market, and therefore the variations were in the main trivial. It was generally asserted that the limited arrivals were due to the fact that farmers and country shippers were displaying no inclination to make noteworthy sales, and furthermore, the weather was said to be unfavorable for hauling, while the supply of box cars was light.

Notwithstanding the facts described, there were indications of a weak undertone. This trend was more especially noticeable among the buying element, and consequently the breach between buyer and seller became wider which, as suggested, was chiefly due to the refusal of numerous buyers to make reasonable bids. It seemed evident that small local dealers were comparatively idle and they declared that they had been making few sales to horse owners, indicating that consumption had been down to the minimum. In some quarters it was believed that the weak undertone was due to the unexpectedly favorable final report anent the crops of 1922 by the Department of Agriculture, which placed the total yield of all hay at 112,791,000 tons, against 108,730,000 in the preliminary report and 97,770,000 tons a year ago.

Furthermore, the action of the market after the turn of the year was a source of surprise and disappointment to almost everyone concerned, but especially the receiver, who had as a rule fully counted on at least some improvement in the demand. This seemed entirely natural as nearly always buyers begin to display renewed interest during early January, which usually seems entirely proper inasmuch as stocks had been allowed to run down to a low plane during December. But in this instance buyers in general failed to manifest a revival of interest, but on the contrary continued

Clover hay is selling here for from \$17 to \$19 and is taking the place of Alfalfa hay for ordinary feeding purposes.

On the contrary, there has been a good demand for high grade soft leafy hay, suitable for the dairy trade and a fair milling demand. Milling hay must be sound, dry and free of fox-tail and foreign grasses. There has been a large amount of hay received in St. Louis that is heavily mixed with fox-tail and other grasses which has been refused. A great deal of this hay arrived here damp and out of condition, showing mold and heating, undoubtedly having been baled too damp and heated in transit.

The rejections of Alfalfa hay have filled up the market with an unusually large amount of this poor stuff which has depressed the market on the fair grades of Alfalfa. There still continues an excellent unsupplied demand for high grade Soft Leafy Alfalfa, which is wanted by the dairy trade, and high prices are being paid for it.

NEW FEED BRANDS

"MASCOT" stock feed, more specifically wheat feed. Modern Flour Mills, Macon, Ga. Filed April 11, 1922. Serial No. 162,128. Published December 12, 1922.

"MERCHANT'S CHIEF" feed for chickens. Merchants Supply Company, Beatrice, Neb. Filed June 6, 1922. Serial No. 165,088. Published December 19, 1922.

"BRAMILO" mixed feed manufactured from Kafir corn, milo maize and wheat bran. Great West Mill & Elevator Company, Amarillo, Texas. Filed June 19, 1922. Serial No. 165,680. Published December 12, 1922.

"RAPID-FIRE" scratch feed. Lawrenceburg Roller Mills Company, Lawrenceburg, Ind. Filed April 17, 1922. Serial No. 162,423. Published December 12, 1922.

"CORNSOLVO" dairy and stock feed. Commercial Solvents Corporation, New York, N. Y. Filed May



20, 1922. Serial No. 164,156. Published December 19, 1922.

"QUISENBERRY QUALITY" poultry feed. Quisenberry Feed Manufacturing Company, Kansas City, Mo. Filed January 19, 1922. Serial No. 158,143. Published December 26, 1922.

"INSURANCE" stock feed, poultry feed, and chick feed. Ballard & Ballard Company, Louisville, Ky. Filed November 30, 1921. Serial No. 156,074. Published December 26, 1922.

"A" scratch feed, calf feed, dairy feed, horse feed and hog feed. R. E. Jones Company, Wabasha, Minn. Filed July 14, 1921. Serial No. 150,361. Published December 26, 1922.

"QUISENBERRY QUALITY" poultry feed, buttermilk laying mash. Quisenberry Feed Manufacturing Company, Kansas City, Mo. Filed January 19, 1922. Serial No. 158,145. Published January 2, 1922.

Trademark Registrations Renewed

21,632. Prepared food for animals. Registered August 16, 1892. Pratt Food Company, Philadelphia, Pa. Renewed August 16, 1922.

21,634. Prepared poultry food. Registered August 16, 1892. Pratt Food Company, Philadelphia, Pa. Renewed August 16, 1922.

Trademarks Registered

162,811. Chicken feed. Milton Liggett, Seymour, Iowa. Filed September 9, 1921. Serial No. 152,762. Published August 22, 1922. Registered December 26, 1922.

J. Pasch has purchased the feed business of A. J. Fisher at Waldron, Mich.

Roy Rawlings Company, Inc., of Providence, R. I., has enlarged its feed and flour warehouse.

A feed and produce business is to be conducted at Chesaning, Mich., for the Lepard Company.

Mr. Roggs of Palmyra has purchased the feed business of J. B. Sutherland at Elmwood, Neb.

A feed store is to be operated at Neodesha, Kan., by Charles and John Wright and Fred Powell.

A feed and flour store has been opened at Tonganoxie, Kan., by Dale Rawlings.

An interest in the feed and poultry company known as the Dorsh & Greenfield Company at Butte, Mont., has been purchased by Alfred Kain of Helena. Mr. Kain will go to Butte on February 1.

The Clark & Brown Hay Company is succeeded in business at New York City, by Colin A. Brown.

A warehouse 40x150 feet is being built by the Carrollton Feed Company of New Orleans, La.

The Mo-Alfa Milling Company is adding a four-story poultry feed mill to its plant at Omaha, Neb.

Capitalized at \$25,000, the Adams Flour & Feed Company, Inc., of Clifton, N. Y., was incorporated.

The feed mill at Evansville, Wis., owned by George Fischer has been purchased by W. M. Berwick.

A feed store has been opened at Antlers, Okla., by J. H. Wonsch in connection with his coal business.

The feed and flour business of Floyd I. Whitmore at New Berlin, N. Y., has been purchased by J. S. Etling.

A feed mill has been added to the house of the Piper Grain & Manufacturing Company of Sioux City, Iowa.

Equipment for grinding and handling feed is to be installed at Clinton, Iowa, for Joe G. Sikkema of Fulton, Ill.

The feed business of Russell Edson at Bethany, Mo., has been purchased by W. H. Shumard and Dick Endsley.

Thomas A. Dollard of Oklahoma has purchased the Greenfield, Mass., feed store formerly owned by W. A. Barber.

A feed and produce business has been opened at Stillwater, Okla., by The Williams & White Commission Company.

A feed store has been installed at Clarendon, Ark., by J. L. Green. He has erected a new building for that purpose.

The principal place of business of the Interstate Feed Company is now at Fort Worth. It was formerly at Dallas, Texas.

A feed business is to be conducted at San Gabriel, Calif., for the Great Western Milling Company of Los Angeles, Calif.

The capital stock of the Perry Feed & Commission Company of Hazard, Ky., has been increased from \$15,000 to \$25,000.

The Schroeder's Mill at Two Rivers, Wis., has been equipped with an electric feed grinder with capacity of 250 bushels.

A building at Pine Bluff, Ark., is being improved by the Brown Pearson Company in which it will conduct a cash feed store.

An Alfalfa meal mill near Jerome, Idaho, originally built by P. O. Bethune has been purchased by the Crane Creek Sheep Company.

A feed business is to be conducted at Binghamton, N. Y., as the Southern Tier Feed & Grain Company by Seward M. Clark.

A two-story feed grinding mill has been erected at Beaver, Wis., by Fred Bird. He will carry a complete line of feed and flour.

The feed mill of Robert Watson at Charlo, Mont., has been purchased by F. L. Irvin. Mr. Irvin will move the mill to a new location.

The business of W. A. Atkins at Republic, Wash., including feed and flour, has been sold by him to J. F. Jarvis and F. S. Vau of Valley.

A hay, straw, potato, produce, and poultry business is to be conducted at Bancroft, Mich., by T. R. Cudney who succeeds John Neal.

A feed business has been started at St. James, Mo., by Louis Morrison. He will handle a full line of chicken, hog, cattle and horse feed.

A feed store has been opened at Burlington, N. J., as the Serve You Grain & Feed Store by Harry F. Roberts, formerly with B. F. Ashby.

To conduct a general feed and fuel business, the Star Hay Company has been incorporated at Los Angeles, Calif. Its capital stock is \$100,000.

Improvements were recently completed to the building of the Anderson Feed, Seed & Ice Company of Lawrenceburg, Anderson County, Ky.

Plans are being made by the Elston Warehouse of Chehalis, Wash., for enlarging its plant in the spring. The company handles feed and grass seed.

A feed, flour and machinery business is to be conducted at Manitowoc, Wis., by George and Louis Kellner who have leased a building for that purpose.

Karl Sherrill, F. A. Sherrill and Green Castevens have incorporated at Gastonia, N. C., as the Standard Flour & Feed Company. Its capital stock is \$200,000.

The plant of the Proto Feed & Guano Company at Chicago, has been taken over by the Western By-Products Company which has improved the plant. The lease covers a period of 10 years. A wholesale seed and feed business is to be conducted by the company whose officers are: M. L. Kenney, chair-

man of the Board; A. W. Schisler, president; H. M. Schisler, vice-president; V. J. Flannagan, secretary and treasurer.

A feed grinding business has been started at Oswego, Kan. T. J. Sharp and his son, H. M. Sharp, are interested. They will operate a small feed mill.

Capitalized at \$25,000, the Adams Flour & Feed Company was incorporated at Clifton, Staten Island, N. Y. J. Pinnola and M. and F. Fenighetti are interested.

The Schreiber Feed Manufacturing & Cereal Company has been incorporated at Kansas City, Mo., where it has been operating for years. Its capital stock is \$200,000.

A plant for manufacturing pyphene feed for cattle and livestock has been established on the Avoca Island, near Morgan City, La., with Charles Gott of Morgan City manager.

The interests of Richner & Morgan in the Morgan Feed Company at Elk River, Minn., have been sold to W. H. Graves, who in turn sold a half interest in the firm to S. A. Bailey.

The Montgomery Company has been incorporated at Houston, Texas, to deal in feed, capitalized at \$50,000. Shelley Montgomery, B. C. Dissen and H. O. Schendler are interested.

Capitalized at \$30,000, the Farmers & Merchants Feed & Cottonseed Oil Mill Company has been formed at Tipton, Okla. C. H. Little, W. T. Hasley and L. A. Storms are interested.

A new building at La Grange, Mo., is being occupied by A. Brinkman who conducts a feed business there. It has tile walls and cement floors and has a driveway through the building.

The Emmet Hawks' flour and feed business at Abbotsford, Wis., has been purchased by E. J. Crane. Mr. Crane now has three flour and feed elevators, at Chippewa Falls, Owen and Abbotsford.

The Lake Charles Company, Inc., has been organized at Lake Charles, La., to conduct a feed business, with capital stock of \$80,000. R. G. Lamkin, A. A. Patrick and F. J. Vincent are interested.

A three unit feed mill and other equipment for a stock and poultry food plant is to be erected at Little Rock, Ark., for the Hayes Grain & Commission Company. Sprout, Waldron & Co., have the contract.

To conduct a general wholesale feed and grocery business, the Louisburg Grocery Company has been incorporated at Louisburg, N. C., capitalized at \$25,000. M. M. Ferguson, W. W. Ferguson and M. C. Phillips are interested.

The feed store of E. L. Hill located at New Cumberland, W. Va., has been sold by him to the Faulk Bros. Company of Chester, W. Va. The Faulk company operates feed stores in Chester, East Liverpool and Wellsville, Ohio.

The Produce Company's warehouse at Kennewick, Wash., has been purchased by the Boyd Conlee Company of Spokane, Wash., which will operate as the Barton Grain & Feed Company with James R. Barton in charge as manager.

The feed grinding business at Sharon, Wis., which has been conducted for the past 10 months by McCarthy & Rokenbrodt, has been purchased by A. M. Rokenbrodt. Mr. McCarthy is now with the Armour Grain Company at Oconomowoc, Wis.

The California Alfalfa Products Company of Pasadena, Calif., is to conduct a national advertising campaign in magazines and newspapers and has placed its contract for this work with The Read-Miller Company, a Los Angeles advertising agency.

The Taylor Brokerage Company of Atlanta, Ga., and the A. A. Pearson Company have merged and will operate their business under the name of the Taylor-Pearson Company. It will specialize as did the old companies in cottonseed meal, and hulls and fertilizer materials.

Offices at 331 Chamber of Commerce Building, Buffalo, N. Y., have been opened by the Quisenberry Feed Manufacturing Company of Kansas City. The company will manufacture feeds in Buffalo, located in the plant of the Globe Elevator Company. H. J. Fiske is manager of the Buffalo branch.

O. L. Newton and C. A. Harding of Corona, Calif., have purchased the business of the Alhambra Feed & Fuel Company at Alhambra, Calif. The former owners are retaining the transfer and storage business which they will conduct as the Alhambra Transfer & Storage Company.

The retail feed business of the J. E. Bartlett Company at Jackson, Mich., has been sold to the Mutual Grain & Feed Company. The Bartlett company is located at 303 Carter Building where it continues in the feed brokerage and jobbing business. E. J. Fogell is manager of the Mutual Company.

Judson Wise & Co., have been organized to handle hay and straw at Ashland, Ohio. The members of the firm are Judson Wise of Ashland, who for four years was buyer of hay for the A. G. Smith Milling Company of Wooster, Ohio, and Cliff S. Martin of West Salem, Ohio, for four years manager of the hay department of the Smith Milling Company.

FIELD SEEDS

INCREASE IN RED CLOVER YIELD

The December crop report on Red Clover shows a slight increase in estimated 1922 yield. Figures are 1,875,000 bushels against 1,865,000 last month and 1,538,000 revised final year ago. The acreage is 1,126,000. Indicated yield per acre is 1.7 bushels. Ohio and Wisconsin showed big losses compared with last month; Minnesota a big increase; Indiana and Iowa gained slightly.

MANY SEED TESTS IN ILLINOIS

According to Albert C. Wilson, state chief seed analyst of Illinois, there has been a great increase in the number of samples sent in to the laboratory for testing. This is undoubtedly due to the large production of Clover and Timothy seed in Illinois this year.

The analysis of seed is free on five samples each year and this usually covers all samples submitted by any farmer. A fee of 50 cents is charged for samples in excess of five, except in the case of the chaffy grasses, like Redtop and Kentucky Bluegrass the charge is one dollar.

29,671 SAMPLES OF SEEDS TESTED

The Federal seed testing laboratories, conducted by the Bureau of Plant Industry, United States Department of Agriculture, have received and tested during the fiscal year 1922, a total of 29,671 samples of seeds. Of these 17,100 came to the Washington laboratory, and 12,571 to the five branch seed testing laboratories maintained in co-operation with the state institutions.

The samples represented both vegetable and field seeds from farmers, seed dealers, and investigators, to whom reports were sent, showing the presence of weed seeds, and worthless material, or the germination, or both, as requested.

A total of 5,962 samples of vegetable seeds was purchased and tested for germination and the results of these will soon be published. Sweet corn samples are being grown for field stands and observation as to the presence of disease.

CAREFUL SELECTION OF SEED CORN NECESSARY

The careful selection of seed corn in Ohio is particularly necessary this year, says A. D. Selby, botanist of the Ohio Agricultural Experiment Station, because the dry weather which has prevailed in Ohio during the late summer favored the infection of seed corn by organisms causing root rot and corn ear rot.

Seed should be gathered from the standing stalks or husked very promptly from the shocks after cutting. Corn which has been standing in shock for some time, especially if the weather has been wet, or which has been left in piles on the ground for some days is nearly always unfit for seed since the root rot fungi rapidly spread through the shocks or enter the husked corn from the soil.

Farmers are advised to preserve enough seed for two years inasmuch as this year seed is plentiful and two year old corn if carefully kept will grow nearly as well as seed saved the previous season and is certainly to be preferred to disease infected seed.

NEW SEED MARKETING SCHEME

The Provincial Department of Agriculture of Canada has a scheme under way for the marketing of seed grain which will, it is hoped, encourage the production of pure seed in Alberta. Official approval of the plan has been given by George Hoadley, Minister of Agriculture of Canada.

The plan as it now stands involves the establishment of a cleaning and grading house at Edmonton, already under way, and a complete system of distribution of pure seed. It also provides for the advancement to farmers of 65 per cent of the commercial elevator price, with a certificate covering the remainder. The Government will market the seed to the best advantage and the remainder will be turned over to the grower after expenses have been deducted. In marketing the seed, the Government will first supply the Alberta market after which outside markets will be sought.

It is believed that 100,000 bushels of seed grain of all varieties will be handled under the plan before the end of the year. The grading and marketing will be under the supervision of the fields crops branch of the Provincial Department of Agriculture, over which W. J. Stephen, crops commissioner, presides.

In the future representatives of the fields crops branch will inspect the growing grain produced from the registered seed distributed. Any farmer whose grain passes this inspection and whose seed

is of sufficiently high quality to be registered will have the privilege of marketing his own grain if he does not wish to take advantage of the Government's new marketing machinery.

NEW SEED TRADEMARK

The following new seed trade mark was published under date of December 26 in the *Official Gazette* of the U. S. Patent Office: "Pure Quill" grass or

PURE QUILL

field seeds and seed grains. Horace E. Conklin, doing business as E. W. Conklin & Son, Binghamton, N. Y. Filed July 1, 1922. Serial No. 166,345.

RE-SORTING SEED CORN

Ears of corn which after drying out show chaffiness, lack of luster or shrunken kernels should be discarded and, in order to insure this separation, re-sorting of seed corn is recommended by L. E. Thatcher, associate agronomist at the Ohio Experiment Station. The average lot of seed corn even after this resorting will show a number of distinct types, which, however, are not objectionable inasmuch as a mixture of types tends to give a larger yield.

The Ohio Station has for about 10 years been investigating the relation of types to yield and has found that smooth seed ears of Clarage corn have yielded an average of 2½ per cent more shelled corn than rough ears, and have out-yielded the rough type 10 years out of 14. Tapering ears of Leaming have yielded 3 per cent, and of Darke County Mammoth 3½ per cent more shelled corn than the cylindrical ears of these varieties.

IMPORTS OF FORAGE SEEDS

The following imports of forage plant seeds, permitted entry under the Seed Transportation Act, are announced by Washington, for the periods noted below:

Kind of Seed	Dec. 1-15, 1922		July 1, 1921- Dec. 15, 1922	
	Pounds	Pounds	Pounds	Pounds
Alfalfa	263,700	5,754,000		
Canada bluegrass	122,500	170,300		
Alsike clover	130,300	3,583,900		
Crimson clover		1,002,500		
Red clover		226,600		
White clover	10,900	267,200		
Alsike clover and timothy mixtures		6,600		
White and alsike clover mixtures		7,700		
Grass mixtures		100		
Mixed agrostis		2,600		
Broom-corn millet		908,200		
Orchard grass	69,700	587,300		
Rape	706,200	1,678,700		
Redtop		7,600		
English rye grass	108,000	874,100		
Italian rye grass	102,400	428,400		
Hairy vetch	198,100	489,100		
Spring vetch	88,000	611,600		

ORIGIN OF RED CLOVER

Efforts are being made by the Research Committee of the Official Seed Analysts Association of North America to determine the origin of Red Clover seed by means of the impurities found therein, and much interest is being manifested in the proposal for a uniform examination and description of Red Clover seed of different origin. Seedsmen are asked to co-operate in obtaining this information by locating or furnishing samples of Red Clover seed of known origin. Charts obtained from results secured in the various countries and states in Europe mark out the northern limits of Clover dodder and reflect with reasonable accuracy the area from which a Clover seed sample was originated.

In speaking about the work of the committee, of which he is chairman, M. T. Munn of Geneva, N. Y., said: "The original method of charting the results secured by the examinations came from a committee representing the International Seed Testing Congress, whose desire it was that following the successful work done in Europe, that the seed production in each state and province in North America be charted by taking seed that has been cleaned for commerce and indicating from a large number of samples of each kind of seed the species and number per given weight of each kind of impurity contained in the seed.

"Previous to our last association meeting copies of the outline or chart suggested for use in making this study were sent to each official analyst for guidance and to many seedsmen who were interested. These outlines called for the examination of large samples of Red Clover seed obtained direct from reliable farmers and cleaned like commercial seed. The following information was called

for: (1) number and species of weed seeds; (2) the per cent by weight and the character of inorganic matter such as pieces of earth and small stones, and organic matter such as animal residues, shells, bits of stalk, leaves, etc.; (3) the predominant color of the seed, and (4) the weight of a thousand grains or individual seeds."

SEEDS FIRM IN NEW YORK

BY C. K. TRAFTON

Business in field seeds during the month under review was of about normal volume for this season of the year and a firm tone has prevailed throughout the list. Many varieties are quoted on practically the same basis as ruling a month ago and several show advances of from ¼ cent to two cents.

Red Clover has again gained about one cent, partly because of the strength in interior markets where prices rose to the season's top levels. According to Government reports fully two-thirds of the crop had been sold early in December and it was stated that the balance was being strongly held as it was believed that it would all be absorbed by the spring demand, sending prices to still higher levels. As a consequence country offerings remained extremely light. Moreover, the import situation continued decidedly strong, business being impossible because of the strong views of European shippers. Another month has passed without a single bag being imported. At the same time exports showed further enlargement, the total for the period being about 1,380 bags, compared with about 980 for the previous month.

Alsike, although not quotably changed, has been decidedly firm owing to a marked revival of export interest and reports that growers and interior dealers were holding on to the small remainder of the crop tenaciously in anticipation of the early spring demand. According to Government reports only about one-quarter of the crop remained unsold on the farms early in December. About 2,780 bags were exported during the month, all to Denmark, against nil during the preceding month.

Crimson Clover has advanced about one cent owing to small arrivals and the appearance of demand from the South. Imports for the month were about 630 bags, compared with 1,370 during November. On the other hand, France has been offering some choice seed at 13½ c.i.f., New York, compared with 14 cents a month ago and 14½ cents early in November.

White Clover is about two cents higher owing to the continued strong import situation with arrivals of only about 60 bags, against 210 in December.

Alfalfa quotations show no change, but the tone has been firm owing to a considerable demand from the West. As a consequence the substantially larger arrivals, about 7,690 bags, compared with 2,055 during the preceding month, had practically no effect. In fact, it was stated that a good part of the arrivals were shipped to the West immediately on old orders. Moreover, additional claims were heard of the exhaustion of the Argentine crop, and also reports that the new crop is not very promising. Hence shippers continue to ask 13½ c.i.f., New York. The arrivals included 2,784 bags from London, probably transhipped from Argentina.

Timothy has remained more or less in a rut in spite of a further material increase in the exports, the total being 8,085 bags, compared with 5,325 during the preceding month. The larger total included about 3,230 bags to Denmark, 2,530 bags to the United Kingdom, and 2,000 bags to Germany. On the other hand, an easier tone was reported at interior markets as the slow cash demand served to offset the small country offerings.

Rye grass has been quiet and virtually unchanged in spite of larger imports, the month's total being about 1,660 bags, against 550 during November. European seeds is now quoted at 8½ cents in bond New York. Redtop has been firm, some dealers quoting ½ cent advance, in spite of smaller exports, the total being 2,230 bags, against 3,455 during November. Kentucky and Canadian Bluegrass are practically unchanged. The month's exports were about 800 bags, against 1,685 during the previous month.

Orchard Grass was firm, but not quotably changed. The import situation has remained steady, only 590 bags being received from Denmark, as against 2,950 during November. Rapeseed has been firm owing to a good demand and a striking decrease in the arrivals, the total being only 1,900 bags, compared with 10,780 in the preceding month, the latter including the record-breaking cargo of 9,285 bags from Japan. Hence prices are just about where they were a month ago in spite of cheaper offerings from Europe. France is offering at 5½ cents c.i.f. New York and Holland at 6½ cents, whereas both quoted 7 cents a month ago. Japan is offering at 5.25 against 5.30 cents a month ago. Vetch has been firm, supplies being inadequate to the demand in spite of larger arrivals, 2,010 bags, compared with 1,025 bags in November. No offerings are reported from Europe.

Sunflower seed has been quiet but firm, reflecting the strong importing situation. In short, additional supplies of importance cannot be expected from Argentina until March or April as practically all of

January 15, 1923

the old crop has been sold. The month's arrivals included about 730 bags from that country and 800 bags from Holland, the latter, it was said, being of less desirable quality. Imports for the preceding month were 545 bags.

Canary seed has been in active enough demand to keep the market firm in spite of a further material enlargement in the arrivals. The total for the month was 10,250 bags, compared with 6,445 bags for the month previous, but it was quite evident that the bulk of the seed arriving had been previously sold and hence did not come on the market. Moreover, although Argentina contributed about 9,750 bags, the situation there continues to grow stronger owing to the virtual exhaustion of the old crop. The latest offerings for shipment were at 3.90 cents c.i.f. New York, compared with about 3.50 cents a month ago, and 3 to 3½ cents early in November. Sweet Clover has advanced about 1½ cents during the month.

The month's exports included 1,740 bags of Meadow Fescue, compared with 1,440 during November. Only 30 bags were received from New Zealand. Another arrival was 210 bags of Manchurian Hemp. That market is firm at 2.75 cents c.i.f. New York. Two hundred bags of German millet were received, against about 520 in November.

SEED SITUATION AT MILWAUKEE

BY C. O. SKINROOD

The most striking point in the monthly report on seed receipts and shipments, as compiled by the Chamber of Commerce of Milwaukee from the railroad companies, shows small receipts of Clovers, and quite exceptionally large receipts of Timothys.

The receipts of Clover seed for the past month were 245,106 pounds as compared with receipts for the corresponding month a year ago of 656,811 pounds. The shipments of Clover seed from Milwaukee for the past month were 915,289 pounds, as compared with shipments for the corresponding month a year ago of 1,207,004 pounds. Thus while the shipments of Clover seed were about one third less than for the same time a year ago, they were still of large volume, being close to the 1,000,000 pound mark. Comparing receipts and shipments of Clover seed for the past month, the report shows receipts of 245,000 pounds in round numbers and shipments of 915,000 pounds, approximately. The receipts were therefore only about one fourth as large as the shipments.

Receipts of Timothy seed for the past month were 728,482 pounds as compared with receipts for the corresponding month a year ago of 377,560 pounds. The shipments of Timothy seed for the past month were 401,622 pounds as compared with shipments for the corresponding month a year ago of 170,105 pounds. Comparing receipts and shipments of Timothy seed for the past month

the receipts were 728,000 pounds in round numbers and the shipments were 401,000 pounds approximately. The receipts were therefore almost twice as large as the shipments.

While these figures are compiled from the railroad statements, the reports will hereafter be compiled by direct statement of the seed houses on receipts and shipments. These reports will be made confidentially to the Chamber of Commerce and the totals only will be available for publication.

The Central Wisconsin Seed Company will open in a few days at Waupaca, Wis., with A. J. Pinkerton as manager. Mr. Pinkerton will make a specialty of pure bred, home grown seeds and the company will be equipped with improved machinery for cleaning of seeds of all kinds.

Very little poor seed is being sold to the farmers of the state as a result of the official seed inspection which is supplied by Wisconsin, according to the Commissioner of Agriculture C. P. Norgord. He pointed out that of the 28,766 samples tested in the last eight years, only 793 were condemned by the Department. Elimination of weed seeds and the tests of germinating ability are the principal factors to be sought after, Mr. Norgord explained.

Prof. E. J. Belwiche of the University of Wisconsin College of Agriculture is out with a campaign in northern Wisconsin urging the extensive raising of the soy bean. He says it is not only one of the best soil builders, but it is one of the best protein producers for livestock. Another use for the soy bean is for soy bean oil, Prof. Delwiche pointed out. He suggested that soy bean mills will be the next step after the soy bean acreage is increased and that this would produce a very valuable oil cake, fully equal to linseed oil meal and this would be a by-product besides the principal results—soy bean oil.

The Marinette Seed Company, which has been in business for many years will wind up its affairs as soon as possible. It is expected that the creditors and the preferred stockholders, largely residents of Marinette, Wis., will be paid in full. W. I. Brockson, who has been manager of the seed company, will go to Chicago where he will take a position with the Illinois Seed Company, and C. Gardner, his assistant, has gone to Des Moines to accept a position with an Iowa seed concern. The general slump in farming is given as the main reason why the company will no longer continue in business. The company passed a resolution that inasmuch as business had been conducted at a loss and that further continuance of it would mean more losses for stock holders and creditors, the best interests of all concerned would be met by closing out the business. This will be done.

At the grain show held at Sturgeon Bay, Wis.,

some excellent displays of Scotch peas were reported. Years ago this county was strong in pea production, but various difficulties arose and pea production was dropped for a time. Now the College of Agriculture has developed a disease resisting strain of peas and they are coming back into vogue in that county. The show was sponsored by the Door County Pure Bred Seed Growers' Association.

Estimates are made that the Clover seed crop of Wisconsin was worth more than \$6,000,000, it being certain that most of the farmers have sold their seeds before this time at prices ranging from 14 to 18 cents a pound. Reports from various counties of the state are that various Wisconsin growers are planning to keep enough seeds of the present crop to last them for two years. The vitality of the seed is said to be high for three years, so that this policy can be followed by those who expect reduced yields next season.

The official report of the Chamber of Commerce on the seed market for the month just passed shows that the seed market was firm, Red Clover rising considerably, while other kinds of seeds were firm. The receipts of Clover and Timothy seed were fair and both largely exceeded the receipts for the corresponding time a year ago. The demand for Red Clover was reported as fairly active with prices ranging from \$15 to \$21. Alsike was quoted at that time from \$10 to \$15. White Clover was selling at \$37 to \$47, poor to good Timothy ranged from \$5.25 to \$6.25 and the choice to fancy at \$6.50 to \$6.85.

Practically all the seed dealers of Milwaukee expect a very active season for the coming spring. In general the offerings are light and the demand is rather active for this time of the year.

The North American Seed Company reports an excellent demand for seeds in practically all lines. Receipts are not burdensome in any of the varieties, the company adds, and the good general demand is sufficient to take up everything that is offered readily. A strong and active market in seeds is predicted for the spring season and advances in prices are considered not at all unlikely, especially in such lines as Alsike, Alfalfa and Red Clover, as the buying is expected to be of large volume. The North American gives the following scale of prices for the present market: a range of \$20 to \$22.50 for Red Clover, Alsike varying from \$14 to \$18, Alfalfa ranging from \$20 to \$23, White Blossom Sweet Clover being quoted at \$10 to \$12, White Clover from \$40 to \$55 and Timothy ranging generally from \$6.50 to \$7.25.

The Courteen Seed Company reports that the seed market is a little quiet at this time of the year as a regular thing, but business is by no means less than usual for early January. The receipts of seeds are said to be light in practically all lines and the demand is sufficient to take up everything that is offered readily. Most of the surplus supply of seeds is said to be shipped now and this accounts for the relatively light offerings. The market is considered as steady to firm by the

The Mangelsdorf Seed Co.

Sweet Clover, Alfalfa,
Soudan Grass, Millet, Rape.

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Wholesale Grass and Field Seeds

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We buy and
sell all varieties
of grass and
field seeds

The Albert Dickinson Co.
MINNEAPOLIS CHICAGO

Courteen Seed Company. There has been little change in prices for the last two or three weeks. The Courteen company quotes \$21 to \$23 for Red Clover, Alsike rules generally from \$12 to \$18, the Alfalfa market is quoted from \$18 to \$21, White Clover ranges usually from \$45 to \$53 and Timothy seed is quoted from \$6.85 to \$7.15. The White Blossom Sweet Clover market is somewhat firmer and the market rules from 9 to 12.

The Kellogg Seed Company reports trade active despite the fact that January is a month usually of dull trading. The Kellogg company quotes Red Clover at \$17 to \$21, Alsike is said to range from \$8 to \$15, Alfalfa is scarce with no supplies on hand, Timothy is quoted from \$5.90 to \$6.75, White Clover sells from \$40 to \$55 and no quotation is offered by the company on White Blossom Sweet Clover. The future trend of prices is dependent very largely on the weather, the company reports. If weather is normal in spring, a strong active market is expected. If spring is delayed and seeding is backward, a break in prices might be expected.

The Teweles Seed Company says this is the month of little trade in the seed business, most of the supplies having come in in readiness to go out again later. A big business is looked for by the company when the spring buying movement gets under way in the latter part of January and in subsequent months. At the present time the market is quoted steady to firm with the same prices as prevailed and were quoted a month ago.

A seed and feed establishment is to be opened at Eagle Grove, Iowa, by Ed. Davis.

A retail seed store has been opened at Oakland, Calif., by A. Lombardo and Henry Huber.

An addition is being built to the warehouse of the Spokane Seed Company of Spokane, Wash.

W. C. Cullen has purchased G. K. Butts' seed and grocery business located at Milton Junction, Wis.

To conduct a seed, poultry feed, etc., business, the A. J. Kaufman Company was organized at Moneta, Calif.

The Elston Warehouse of Chehalis, Wash., which handles feed and grass seed is planning to enlarge its plant in the spring.

The Galletin Valley Seed Company has purchased the business and stock of the W. A. Davis Seed Company at Bozeman, Mont.

The seed business of C. B. Powers at Battle Creek, Mich., has been sold by him to E. R. Thomas, who was formerly in his employ.

The interest of E. E. Meyer in the M. & M. Seed Company of Chicago, Ill., has been sold by him. He is in business with A. Molenhouse.

C. E. Dunn has bought a partnership in the Clarinda Seed & Feed Company at Clarinda, Iowa, purchasing a half interest from Frank Sinn.

A new seed department has been installed by Clapp & Treat, Inc., of Hartford, Conn., in connection with their retail hardware store.

M. C. Snow and O. M. Morris of the Morris & Snow Seed Company, Los Angeles, Calif., have sold their interest in the company to D. F. Reichert.

The Marinette Seed Company of Marinette, Wis., has discontinued business. W. I. Brockton, former manager, is now with an Illinois seed company.

A two-story building, 60x120 feet, has been built at Spencerport, N. Y., by the Crescent Seed Farm which will use it for cold storage and drying house.

A store has been opened at Fort Collins, Colo., by the Fort Collins Seed Company. G. S. Smelser, formerly of Julesburg, Colo., is manager of the firm. It will deal in seeds, feed and poultry and dairy supplies.

Harry Young and Walter D. Coles are contemplating reorganizing the C. Young & Son Seed & Plant Company, Olivette (Clayton p.o.), Mo., which

went into bankruptcy last year. Mr. Coles was referee in bankruptcy and Mr. Young is an uncle of the men operating the company.

A five-story building at St. Louis, Mo., has been leased by the Agricultural Seed Company. It will conduct its wholesale seed and feed business from there.

A retail seed and feed store has been opened at Cincinnati, Ohio, by the recently incorporated

(Continued on next page)

For Sale

ELEVATORS AND MILLS

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Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

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Good location for factory between B. & O. and Big 4 R. R. Co. tracks at Pana, Ill. EDWARD McKEE, Box 196, Pana, Ill.

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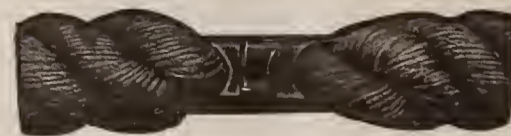
Drawing Account and good commission paid salesmen acquainted with farmers' buying organizations such as exchanges, equity and grain elevators to sell quality line of oils, greases and paints direct to users through organizations. Get full particulars from MANUFACTURERS OIL & GREASE CO., Dept. 3, Cleveland, Ohio.

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F. L. Erricson & Son Company. It is capitalized at \$10,000. F. L. Erricson, Guy Erricson, P. Trent, L. J. Miller and W. F. Hopkins are interested.

J. F. Blatt, Jr., J. O. Markle, Chester D. Ladd and H. L. Kuhn have incorporated at Utica, N. Y., as the Utica Seed Company. Its capital stock is \$20,000.

Alfred L. Rosenberg is conducting a new business in Milwaukee, Wis., as the Cream City Seed Company. He was formerly with the Milwaukee Seed Company.

W. E. Haile is president and W. R. Neal, secretary and treasurer of the Haile & Co., of Monticello, Fla., which will handle seeds. Its capital stock is \$30,000.

P. M. Latourette of Jonesboro, Ark., is now associated with the Latourette Grain Company which does a seed business. He has been in the seed business for years.

A new company to be known as the A. J. Kaufman Company has been incorporated at Moneta, Calif. The firm will carry seeds, poultry and other feeds, implements, etc.

Hovey & Co., interests at Boston, Mass., have been purchased from Carter Tested Seeds, Inc., by D. G. Reid and Norman Howden. They will operate under the old firm name.

Walter Land and J. B. Kettmacher have purchased the property of the Hoffman Seed & Feed Company of Newport, Ky. Henry Hoffman was formerly proprietor of the company.

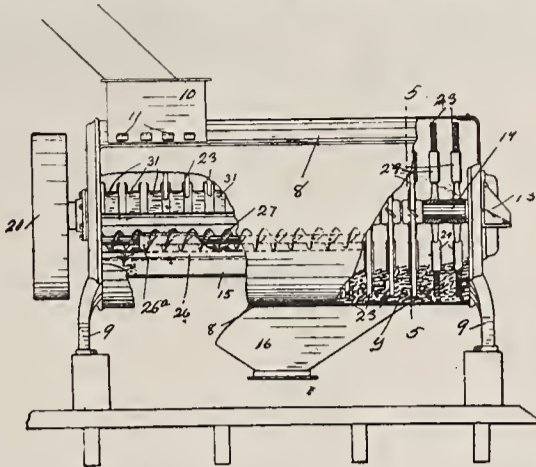
The cleaning facilities of the Kellogg Seed Company, Milwaukee, Wis., have been increased and the establishment completely remodeled. New machinery, including cleaners, has been installed.

Several large motors, elevator legs, and corn cleaner and sheller have been installed by the Bruns Seed Company of Sigourney, Iowa. Other changes are being made and electrical equipment is being installed.

A new store has been opened by the Superior Poultry Feed & Seed Store at Galveston, Texas, of which W. Collier is proprietor, and in which a complete line of field, flower and grain seeds will be carried.

ing Company, Minneapolis, Minn., a corporation of Minnesota. Filed March 30, 1921. No. 1,437,042. See cut.

Claim: The combination with a container for material to be separated, of a plurality of disks rotatable within said container, said disks having feed passages therein permitting the material to be fed therethrough and, out-



ward thereof, having separating surfaces, and oblique propeller blades forming disk-supporting arms located within the feed passages thereof.

Bearing date of November 14, 1922

Force feeding attachment for corn shellers.—John D. Peters, Westfield Township, Plymouth County, Iowa. Filed February 25, 1922. No. 1,435,419.

Percentage feeder.—Emial R. Draver, Richmond, Ind. Filed May 18, 1918. No. 1,435,822.

Bearing date of December 5, 1922

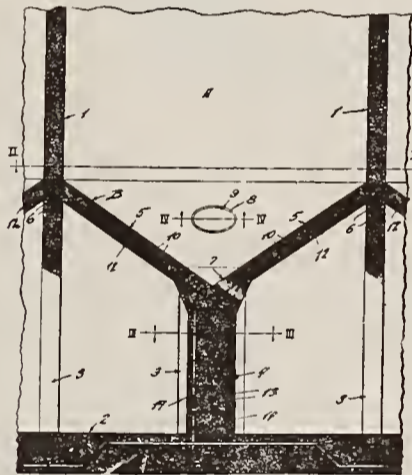
Machine for closing and tying sacks.—Frank O. Lindgren, Minneapolis, Minn. Filed December 3, 1921. No. 1,437,598.

Grain chute.—James Westfall, Poplar, Mont. Filed June 14, 1921. No. 1,437,459.

Bearing date of December 12, 1922

Grain bin.—Richard C. Stone, St. Louis, Mo. Filed June 9, 1920. No. 1,438,275. See cut.

Claim: A grain bin comprising a base, vertical side walls supported by said base, a single vertical column supported by said base, and a hopper bottom having



flat triangular wall elements inclined upwardly from the top of said single column to said vertical side walls, said hopper bottom being made of reinforced concrete supported mainly by said single vertical

column and partly by said side walls, and said side walls being recessed to receive the upper margins of said triangular wall elements.

Bearing date of December 19, 1922

Dust collector.—George Halliday, Tacoma, Wash., assignor of one-half to Joseph E. Case, Seattle, Wash. Filed April 19, 1919. No. 1,439,412.

Grinding mill.—James Bernard Sedberry, Texarkana, Ark. Filed December 8, 1920. No. 1,439,581.

Bearing date of December 26, 1922

Grain car door.—Benjamin W. Heitz, Brainerd, Minn. Filed May 31, 1922. No. 1,440,007.

Hammer rod for crushers.—William M. Davidson, St. Louis, Mo., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo., a corporation of Missouri. Filed July 28, 1922. No. 1,439,800.

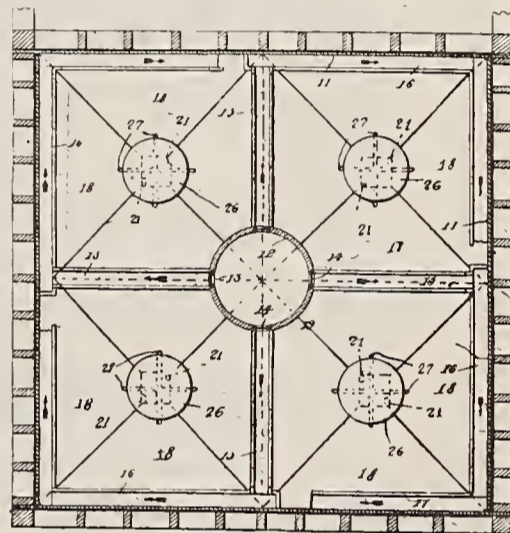
Cage partition plate for crushers.—William M. Davidson, St. Louis, Mo., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo., a corporation of Missouri. Filed September 11, 1922. No. 1,439,872.

Crusher and pulverizer.—Harold M. Plaisted, St. Louis, Mo., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo., a corporation of Missouri. Filed August 8, 1921. No. 1,439,754.

Crusher.—Milton F. Williams, St. Louis, Mo., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo., a corporation of Missouri. Filed July 1, 1922. No. 1,439,781.

Blending, grading, and bagging bin.—Nicholas M. Miller, Aurora, Ill. Filed March 1, 1920. No. 1,440,165. See cut.

Claim: A device of the class described comprising a rectangular bin, a hopper centrally mounted therein having a plurality of outlets, and discharge



troughs for said outlets leading outwardly from said hopper to the sides of the bin and thence downwardly and around said sides and discharging adjacent the bottom of the bin, said bin having outlet openings in its bottom.

A feed business has been opened at Dewitt, Ark., by J. L. Green.

The feed store of W. A. Keptel at Duluth, Minn., is to be rebuilt.

A feed store has been opened at Vandalia, Ill., by Charles Schilling.

The Puyallup Feed & Supply Company of Puyallup, Wash., has changed its name to the Hugh B. Clark Feed Company. There has been no change in ownership or policy.

GRAIN TRADE PATENTS

Bearing date of November 7, 1922

Grain car.—John W. Wingert, Wichita, Kan. Filed January 25, 1922. No. 1,434,517. See accompanying cut.

Claim: In a grain car of the class described including a bottom having a trough therein, a guide provided with a plurality of openings, said guide constructed so as to



have raised portions adjacent each opening splinting there-towards, a slide associated with said guide and provided with a plurality of openings and means for moving said slide in the manner and for the purpose specified.

Grain separator.—Clarence W. Carter, Minneapolis, Minn., assignor to Carter-Mayhew Manufactur-

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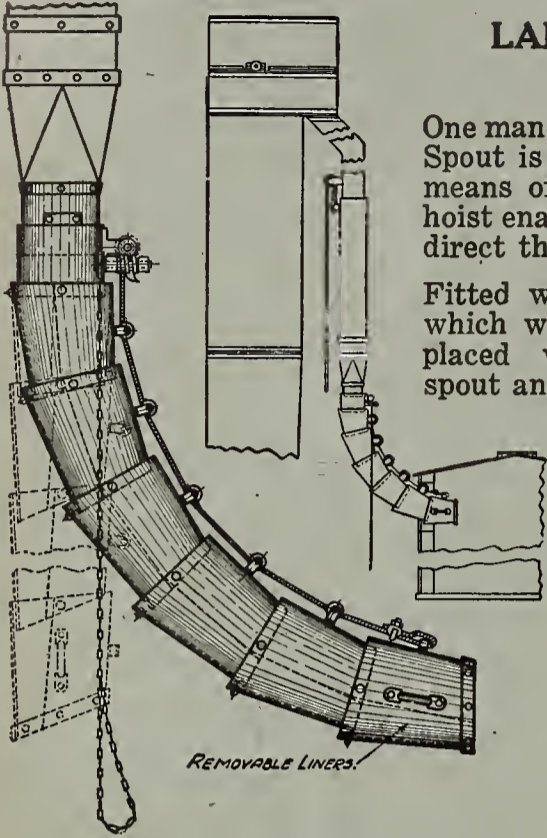
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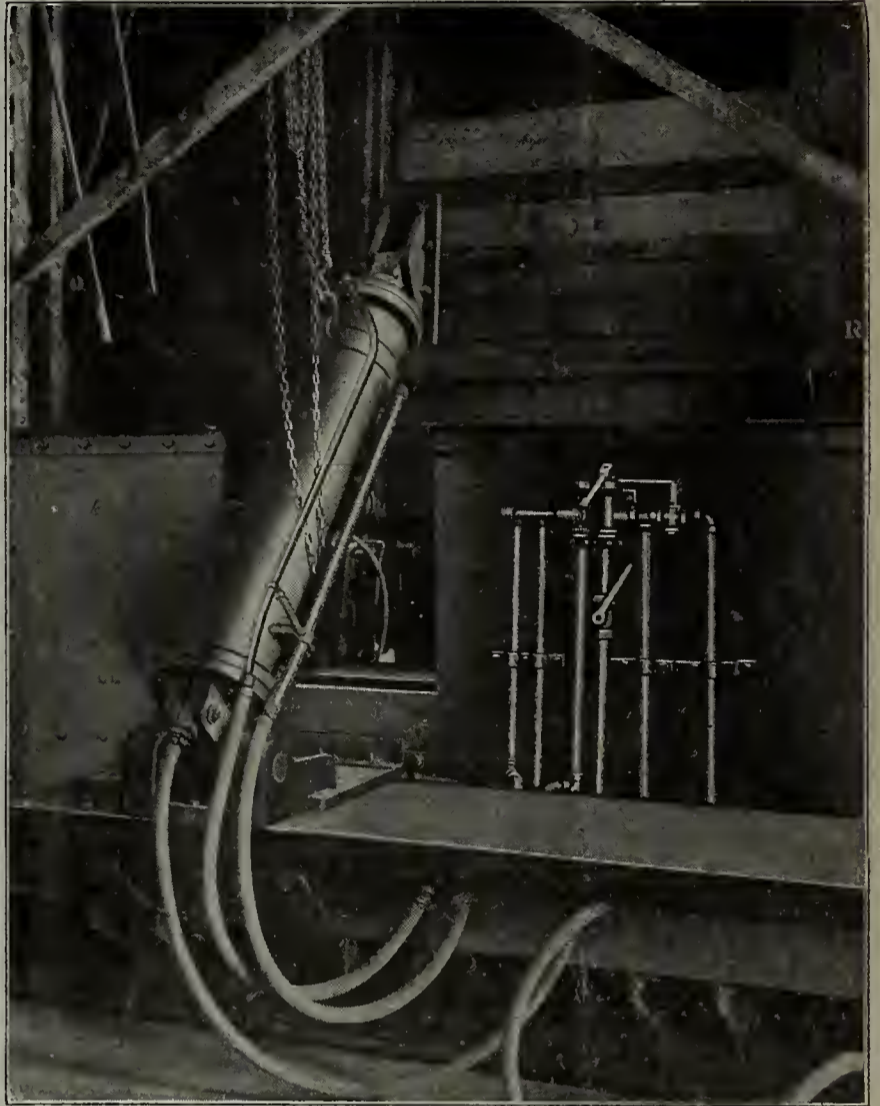
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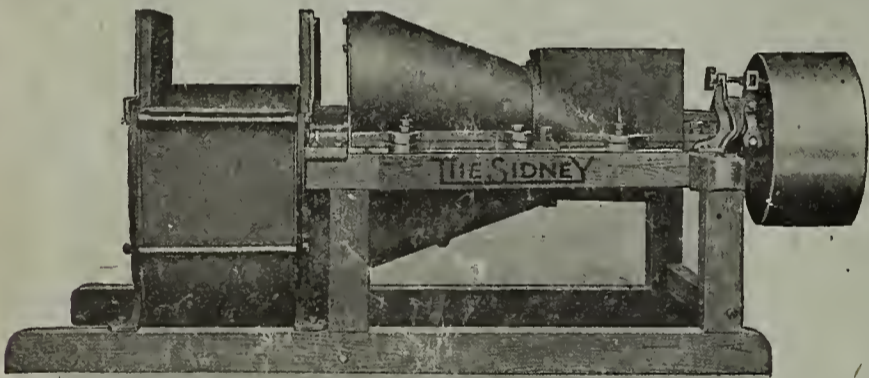
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