

MICHIGAN FARMER

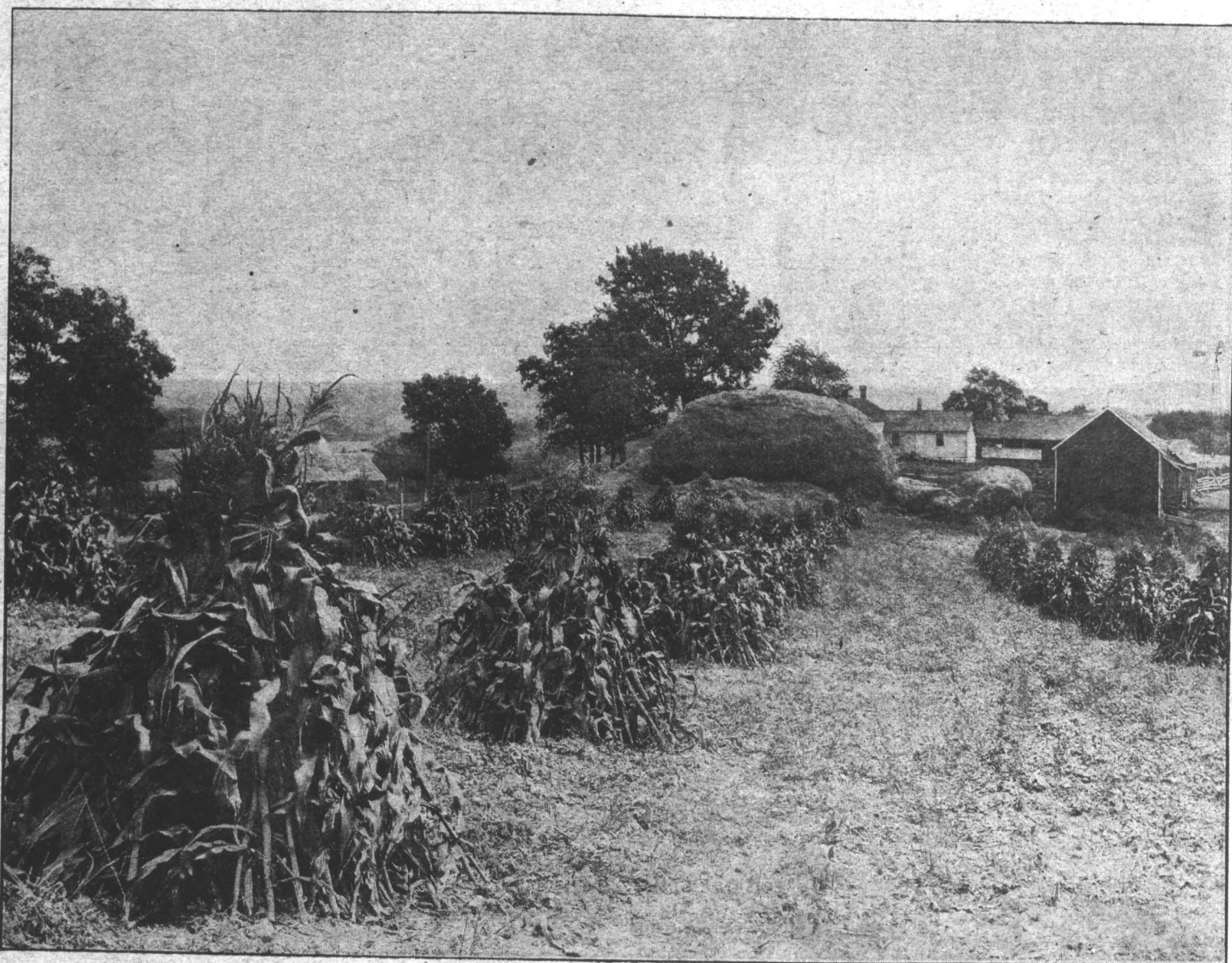
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IT IS NOT a good spiritual policy for us who are now living to thank God only for the material progress of our times; because these material things will soon give place to something better, and then our prayers and hymns will seem lost, and we who lived for them will seem to perish with them. But if we bless God for the sun that has held us in its arms, and for the autumns that have painted the fields and have set in mezzotint the sky and sea and land, then we have a worship which the future cannot take away from our souls or memories. Man's world changes, but human life may easily find an unchanging greatness. As

the goodness of old Governor Bradford shines out through his irregular verse and distorted syntax, thus the merit of our race often is mingled with little defects, but still it may possess a beautiful and everlasting part. As the game and fruits on the table in 1621 would be good for our table today, so their happiness would be all we could wish this week in our reunions at home, because man's happiness comes chiefly from the fact of a heart at peace with the universe. Man must, for the most part, give thanks for his life rather than for the field through which that life continues to flow.

—David Swing

The Michigan Farmer

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DETROIT, NOVEMBER 20, 1920

CURRENT COMMENT

Immigration and Agriculture

THAT a large number of immigrants from the war stricken countries of Europe will seek entrance into the United States is already being demonstrated. The attitude which this country should take in the matter is certain to become a mooted question in the future. Quite naturally every class of citizens will look at the matter from their class standpoint, rather than from the broader American standpoint. Industry will welcome the arrival of potential laborers, as a possible means of increasing or cheapening production. Organized labor will quite naturally charge that immigration is being promoted and used to cheapen wages and lower the standard of living of the American workman. Many thoughtful citizens will fear the growth of radicalism as the result of the admission of a horde of immigrants from southern Europe. Thus the class viewpoint will affect individual opinion on this many-sided question.

From the agricultural viewpoint it would appear that this natural increase in immigration would be beneficial rather than detrimental. European industry is badly shattered as a result of the war. Most European countries are unable to provide employment for all their people at a wage which will support them at all, let alone comfortably. Nor are these countries able to buy foodstuffs in our market for their adequate relief, due to the depreciated state of their money. Almost without exception, the countries of the world which are now on a sound financial basis are the great agricultural countries, and there are notable exceptions in this class. This fact greatly restricts the foreign market for food products, and makes the foreign outlet for our surplus foodstuffs an uncertain proposition in immediately succeeding years. On the other hand, our possible market for manufactures will be much broader, as it includes countries which do not need our food products. Thus an increase in our manufactures and commerce are essential to an increased home consumption of food products to balance a lessened foreign demand for those products.

The essential question is whether the American viewpoint on this question is in line with the agricultural viewpoint as above set forth. From the standpoint of national prosperity this would appear to be the case. An increase of industrial exports sent to other prosperous agricultural countries will serve to maintain that favorable balance of trade, which is essential to national prosperity, and which an im-

poverished Europe can not now provide for us. True, "the melting pot" must be worked overtime to Americanize this fresh horde of foreign blood or the alarmists' apprehensions may be, to some degree at least, realized. But American institutions and American communities are equal to this task if they set themselves to it in earnest. And if it can be made to spell continued prosperity for our nation, at the same time aiding in the immediate relief of Europe it is a task well worth while, and one in which all classes can well join from the American viewpoint.

Farm For Sale

WHAT do you consider the greatest obstacle to agricultural progress? Science has discovered a great many leaks in farm management, and chemistry has followed up this good work by telling us what our soils, plants and animals need to make them productive and fat. But, after all, the microscope of the scientist and the retort of the chemist seem to have left this vital problem still unsolved. The question—what do you consider the greatest obstacle to

he certainly will not plant with a view for the future. Before our agriculture can make the maximum of progress we must have more men who have the desire to carefully settle themselves to a life work in some particular branch of farming and plan accordingly, not impatient for immediate profits, but with a view for the future, and who are willing to stay on their farms until they have put them on a money-making basis.

Next in rank to the "Farm for Sale" sign, is the absentee landlord who cares little for the permanency and value of his farm, even though his personal profit would be conserved if he treated his farm more in the nature of a permanent investment. In many instances such farms have been inherited by men who have made a fortune in other business or professional lines, and who look upon the ownership of land as a liability rather than an asset. There are farms throughout the state that are not paying an income sufficient to keep up the taxes and maintain the premises in good condition. It isn't because they couldn't be made to support a family and pay some profit, but is due to a general lack of interest and enthusiasm in farming. Very few

ed to be prosperous and the two families were happy and contented. The land was naturally no better than that of the other two farms described, but the farm was well-stocked and well-equipped and kept up in first-class condition. This farm was not for sale. Did not these three farms, all within a square mile, prove that there was something in the county agent's argument that the "Farm for Sale" sign was the greatest obstacle to agricultural progress in his county?

Young men who have an ambition to establish a home for their families should look upon the "Farm for Sale" sign as a beacon light calling them back to the land. Never were conditions quite so favorable for judicious investments in farm land right here in Michigan. Those who have the capital necessary to make a reasonable first payment need not hesitate about buying a good farm in a community where they are well-known and have established a satisfactory line of credit. The time is coming when the ownership of land is going to mean far more than it does today. A balance in agriculture will soon be struck where not one but every possibility will be brought to its maximum effort, and then the man who knows how to apply his labor and knowledge to a good farm and good live stock—not to land exhausted during the great soil-mining period and to mongrel live stock—will begin to take stock in his surroundings and thank God that he followed the beacon light which showed the way to the farm, with its home, its work and its surroundings.

"The Voice of the Pack"

Our New Serial by Edison Marshall,
Starts Next Week

HERE is a thrilling tale of how Dan Failing, a modern man, and Snowbird, a frontierswoman, arrayed themselves against the forces of age-old savagery. It is a love story, adventure story and nature story combined.

There are glowing descriptions of the Oregon woods, thrilling recitals of encounters between its wild denizens, an account of a mountain lion's stalk that makes one personally thankful at the great beast's death, and a remarkable picture of a wolf pack's hunt.

No one, it is said, however safe and protected, can hear unmoved the cry of the wolf pack, whether it be the strong triumphant cry of early fall, the sad mournful howl of midwinter, or the exultant chorus of the hunting cry, it stirs the deep-hidden instincts and unconscious memories of primitive man which civilization has never entirely destroyed.

It is the symbol of the wild, or so it seemed to Dan Failing, come back to the homeland of his frontiersman grandfather to spend the last four months of life which the lung specialists had given him. Back in the Oregon forests, however, Dan experiences a curious throwback to his famous ancestor. Outside of his bodily weakness, he seems almost a reincarnation. He is a woodsman by intuition, a dead shot at sight, and his knowledge of the wild creatures springs up practically full-fledged, a strange instinct. Then his joy and love of the life, and also his love for his mountaineer host's daughter, Snowbird, awaken his ambition to live. Eventually he proves himself at all points a man, a worthy descendant of old Dan Failing, the finest frontiersman of his day. This wholesome serial will start in next week's issue.

agricultural progress?—yet remains without a conclusive answer.

Recently the writer asked this question of one of the shrewdest and most successful county agents in Michigan—and to get him to express his opinion added:

"Is it the scarcity of farm laborers? Is it the lack of marketing and transportation facilities? Is it the land-owner and tenant problem? Is it due to the oppressive middlemen? Or, as many claim, is it due to the lack of adequate capital to develop the business?"

"No," he answered, after a thoughtful pause; "it isn't anything that can be found with a microscope or by chemical analysis. The greatest obstacle to agricultural progress in this county today is the sign, 'Farm for Sale.'"

The widespread unrest and general desire to sell the farm and go into some other line of business has been the bane of Michigan agriculture for a course at M. A. C. and returned to the farm and entered into a partnership with his father. Everything seem-

farmers plan to make their farm a permanent home, consequently they take little interest in keeping things up, the soil is losing its fertility, the buildings are running down and there is nobody on the place who takes an interest in keeping things up—perhaps some neighbor, who is a practical farmer, is renting the pasture or cutting what little grass grows on the farm and feeding it out on his own premises. This would sound rather discouraging and sensational were it not for the fact that right in the different neighborhoods where these farms are situated other farmers are going ahead and making fair profits from their business.

In a ride over the county with this county agent we visited two farms where families had moved to the city and left things in the hands of lazy, dishonest tenants. Right between these two farms was one owned by a prosperous farmer. His son had completed a course at M. A. C. and returned to the farm and entered into a partnership with his father. Everything seem-

News of the Week

Wednesday, November 10.

IT is announced that Italian delegates at Santa Margherita have presented an ultimatum to the Jugo-Slav delegation concerning the frontier line and the independence of Fiume.—Bulgaria makes application for admission to the League of Nations.—A movement is started in Michigan to secure legislation compelling attendance of children in schools until they reach the age of eighteen years.

Thursday, November 11.

FRANCE becomes alarmed over the entry of fifty thousand German troops into Lithuania from East Prussia.—The Jugo-Slav delegates have accepted all the Italian claims at the conferences over the Adriatic question.—Forty-eight persons are believed to have perished when a small steamer was struck by a typhoon among the south Philippine Islands.—Kansas bankers decide to assist the wheat growers of that state in holding grain for better prices.—Russian soviet troops have crossed into the Crimean peninsula.

Friday, November 12.

THE assembly of the League of Nations is sharply divided over the question of admitting to the league former enemy states.—It is now expected that judges of the new international court will be elected this coming spring.—Chicago banks announce that there will be plenty of money for building purposes as soon as prices for materials are reduced to a reasonable level.—The British House of Commons passes the Irish Home Rule bill on its third reading and the measure now goes to the house of lords.

Saturday, November 13.

THE Russian bolshevik armies enter Crimea and violently attack General Wrangel's last line of defense.—Diplomats of both Italy and Jugo-Slavia express their satisfaction over the agreement on the Adriatic question which has just been signed.—The Philippines announce their intention to continue their drive for complete independence.—The Atlantic and Pacific fleets of the United States will make a joint cruise to the west coast of South America next February.

Sunday, November 14.

GABRIEL D'ANNUNZIO, dissatisfied with the Italian Jugo-Slav agreement, has occupied the islands in the gulf of Quarnero at the entrance of the Fiume harbor.—Irish volunteers are warned by the military to cease their activities.—The wholesale price of gasoline is reduced one cent per (Continued on page 650).

Who Shall Make Agricultural Prices?

Shall Prices for Farm Products be Made Within the Great Industry of Agriculture or Without? This is the Momentous Question Toward Which We are Moving

By James N. McBride

THE orthodox agricultural economist approaches this subject in a mathematical way and has an equation that reads: "Demand divided into supply equals price." This, like the law of the Medes and Persians, is unalterable and irrevocable and when applied to the farmer's product, unescapable. Supply and demand are, however, only two views of the same object, and in the end the obtaining of this object is a question of knowledge, skill, and largely the mechanism of power.

The startling level of grain prices is an important point. The professional buyer of actual grain, like any contractor, takes into consideration all the hazards and desires a low level. He pays for the best knowledge of demand and supply and shrewdly conceals the elements that would depreciate the margin which he would have for profit. It is this wide margin of profit hoped for that is in reality an element charged out against grain handling that reduces the price to the grower. It is for this margin there is paid a high price for the seats in the grain exchanges. All the claims of an open market—supply and demand—does not alter this fact.

Whether the trader is a bull or a bear, this hoped for margin is a toll on the business that has its defense largely in the ability of millers to "hedge" and deliver flour from wheat on a safe profit based on wheat they have or may have. The very protection the millers have is the one thing sought by the growers of wheat.

COOPERATIVE elevators are denied seats on grain exchanges, because it would be to their interests to decrease this cost or margin of profit. These elevators are denied seats because they distribute earnings or profits back to the producers of grains, and technically, exchanges call them rebates, which is against a rule established by the exchanges. In this circle of operations cooperative elevators to be immune from prosecution under the anti-trust laws when participating in collective selling must restore profits on basis of commodities. This compulsory legal restoration prevents these elevators from selling or participating in what the grain exchanges are pleased to term an "open" market. To be sure, the cooperatives can sell through houses having seats on the exchanges, but this does not allow them to participate in price making, for they are handlers of grain and cannot speculate as can the private elevator owner.

To state it another way, the grain exchanges cooperate in establishing a price level with opportunity for wide margins, and compete above this line. Their defense is that it is a competitive market where the best talent measures supply and demand and in this way true values are arrived at, and that anyone can buy and sell through them. If there was a semblance of fact in this, the countryman or man of the street would be able to buy and sell just as well as if he had a place on the exchanges, but if he attempts this, he is a lamb to be shorn.

THE established grain trade rather welcomes the cooperative elevator as long as it is kept in its place to sell through their organization, but bitterly opposes any attempt at selling directly to the trade. The miller must stabilize his ownership of grain during the

process of manufacture and sale of flour, so he finds a safe insurance in "hedging" against his cash purchases by buying futures. There is in reality a double buying with double commissions for execution of orders. The farmer only can sell his wheat once. The exchange sells twice at least, once on the actual wheat and again on a similar amount to replace the grain sold to the miller.

The federal trade commission have denied manufacturers the right to guarantee prices until a resale is made, but the system of "hedging" accomplishes this same purpose and end. There is no inherent objection to this guarantee if it were made or attempted to be made to apply to the producer as well. The suggestion of this is described as fundamentally an error and an economic impossibility. Wheat

occur automatically. The gentlemen's agreements, submission of prices or the recognition of strong leadership as in the case of iron and steel, woolen goods, oils, etc., establishes these bulk prices, leaving a margin of profit.

These established prices in the products outside of agriculture are the interpretation of supply and demand by men whose interests are within the industries. Agricultural prices are the interpretations of supply and demand by men outside of the industry and who do not go into that industry because it is more profitable to remain outside, some human fingers must write down the prices of products. Supply and demand does not as an automatic oracle, write these decrees of agricultural prices.

TO the average person "price fixing" does not impress favorably. The term carries with it an assumption of arbitrary power which may be used oppressively. This conception has had its legal survey by the United States Supreme Court and the popular misconception was not upheld. Power, size or degree of control are not illegal; it is the use or intent of the power; the rule of reason promulgated by the court is certainly most reasonable.

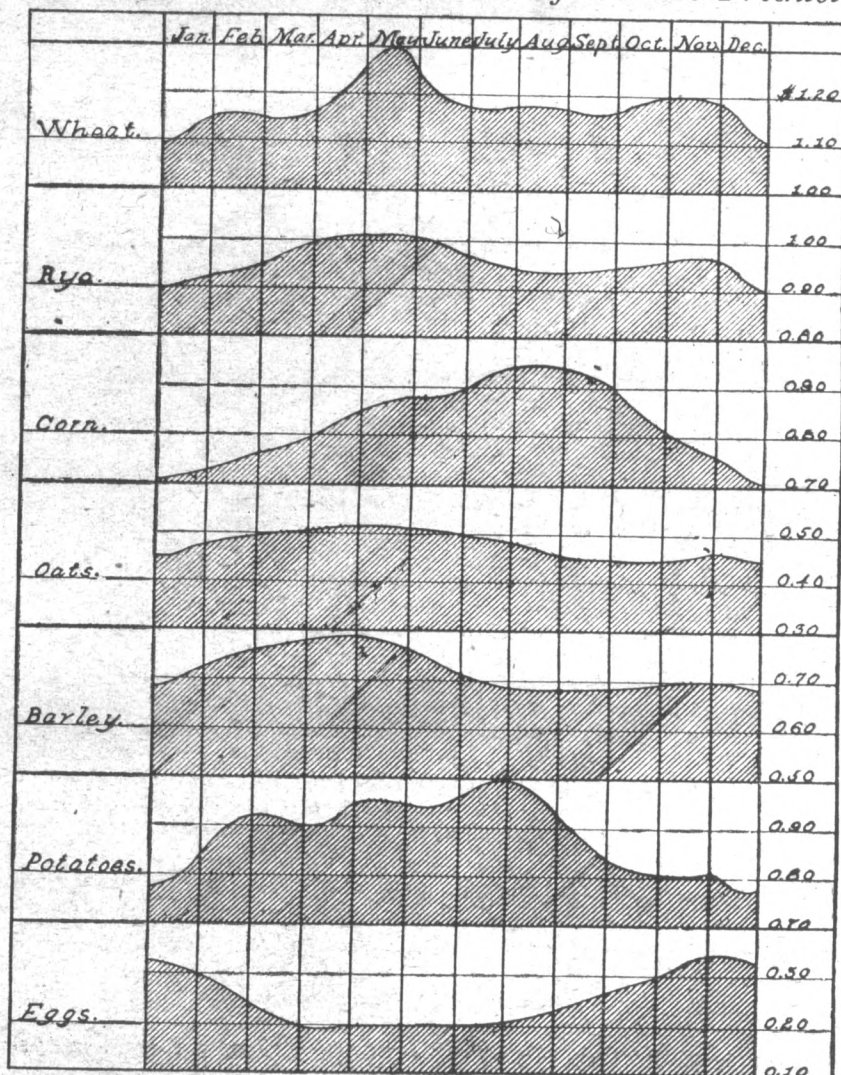
Many agricultural writers assume a superior air and say that the lodgment of the power of interpretation of supply and demand with agriculture would be in disregard to the rights of the consumer. All normal persons are producers and primarily have their paramount interest in their products. The lack of logic is the transferral of the equity among producers to a comparison between producer and consumer. The socialist is guilty of this same loose thinking when he views the world from the consumer's standpoint, and awakes to find that the stern duty of life is production, and unless this is done, there is no food supply. To paraphrase the famous observation of President Lincoln, "The industrial world cannot continue to survive where the prices of agricultural products are determined without and apart from that industry, and the prices which this industry must pay for the products of other industries is determined by those within."

IN the final analysis, it is not a question of price fixing, but a question of who does it. Agriculture is from time to time asserting this power, and the proposition must be met instead of evaded. Economic industrial liberty is quite as much a right as civil or religious liberty. A pound of grain or meat has its nutritive ratio constant as is the tensile strength of a bar of iron. Their exchange relation is a varying one, and the self-determination of the relation of producers of each is economic liberty.

The timidity of agricultural leadership in this regard has neither economic nor legal foundation. The necessity of the Volstead bill is not apparent. The Clayton amendment to the Sherman law is conclusive in connection with the supreme court decisions in the tobacco cases as previously noted. The attempt to make agricultural collectivity any different than manufacturing collectivity is of doubtful legal possibility. The classification of corporations are for profit through stock ownership and the other for profit in the ratio of commodities handled

(Continued on page 626).

Average Prices Paid Producers for These Products



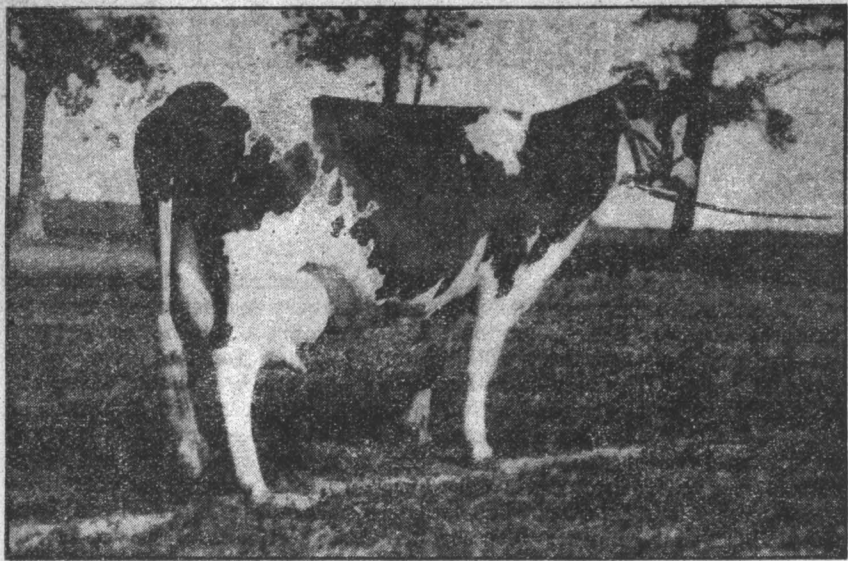
Carefully observe the wide fluctuations during the course of the year in the prices of each of these seven important products of the farm and then study with even greater care the position taken in the accompanying article by Farmer McBride, of Shiawassee county, who incidentally, is a member of the economic committee of the American Farm Bureau Federation.

in process of production and in the hands of the grower is a world-wide commodity and its price is beyond control. Supply and demand, relentless as the tides, must forever make the grower the victim of his own industry if a large crop is grown. In the hands of the exchanges, with the price level low enough to allow profits and the possibilities of numerous commissions on many times the sale of the same

grain, profits must be assured and the greater the volume traded in, the more profit, while the increased volume grown and handled by the grower tends to reduce his profits below cost. To get into the same class with the dealer and miller away from a price

ty per cent is the extremes of the most favored and least unfavorable, all of whose products once on the market have to be reckoned with.

THIS principle applies to manufactured goods as well. The absolute cost of sugar in different mills is a varying one, also of nails. The master minds directing the sale of these products bulks the prices to afford a fair profit to eighty per cent. The least favored drop out and the more favored increase their output so there is constant elimination of the inefficient, and the standard needs are thus maintained. The records of business failures are largely these eliminations which



Grand Champion Female at Lenawee Fair. Owned by Mr. Rhead.

HILLSDALE is chiefly a rural county. The tendency of the farmers is to diversify their crops and feed live stock, rather than take long chances on specialties. Her many acres of rolling lands and different soil types on the same farms are largely responsible for this; the tendency to play safe and return as much manure and organic matter as possible to the land is another contributing factor. There is a degree of sameness about the farms that makes it difficult for one to describe the farming practices of certain farmers in a way that does not approximate the general tendencies of others. And yet individual examples of well-balanced farming operations are by no means hard to find.

The county's greatest need is better methods of soil management and the growing of more proteinaceous forage crops. This fact is recognized by the management of the County Farm Bureau and soil improvement is one of the lines of work that is to be given due attention during the next three years. The farmers of the county have long desired such information as may be gathered from field experiments and are cooperating with County Agent Sims and the extension men from M. A. C. in conducting such experiments on their farms. Some of the field plots visited have been laid out in such a manner that results can be noticed by people driving by the fields and the work is so complete that the results can hardly fail to prove of great benefit to the farmers of the county.

Hillsdale county is well organized for business. With a County Farm Bureau membership of two thousand one hundred, and a progressive executive board the organization of cooperative associations has been rapidly pushed until practically every farmer in the county will soon find it easy to secure farm bureau service within easy distance of his farm. County Agent Sims, who assumed charge of the work the first of last July, has continued the work so well started by Dr. Nichols that it is only a question of a few months before the new associations throughout the county will be ready for business. The quick work of the State Farm Bureau in securing shipments of fertilizer and coal for the farmers in several communities has convinced some of the managers of the independent organizations that they cannot afford to go it alone.

AMONG the different cooperative organizations in the county The Tri-State Cooperative Association at Montgomery is the leader. O. K. Coolman is manager and Ray Throop assistant manager. The directors are: John Pridgeon, Henry Haynes, Fred Wigent, John Moshier, David McEllaine, John Knitigh and Henry Bradley. There are four departments: Creamery, elevator, live stock and general produce. This association has been in business six years and has made a success of hand-

ling the various small products of the farms in that territory and putting them on the market in shape to command fair prices. The elevator department has joined the Michigan State Farm Bureau Exchange and will do business that way. The creamery and general produce departments have been big factors in developing the dairy, poultry and general produce business in that section. The association now has six hundred members and did a business of more than \$900,000 the past year. They own a complete creamery and cold storage plant and when the new buildings are completed will be in a position to handle the business to better advantage than ever before.

At Reading the Cooperative Commerce Company does a general business in grain and farm supplies and ships live stock. The officers and directors are: George Card, president; I. Howe, Charles Bower, W. T. Phelps, W. K. Smith, A. J. Denton, Floyd Galoway, directors. A. E. Hakes is manager. Last year the volume of business amounted to more than \$500,000. Here is a splendid example of an efficient cooperative organization handling more than two-thirds of the business of a prosperous farming community instead of the farmers supporting five or six dealers and middlemen. The organization has been in business several years and each year's business has shown a gain over that of the previous year.

The Hillsdale Cooperative Association at Hillsdale has been in operation about five years and does a general business in shipping farm produce and handling farm supplies. Last year's business amounted to more than \$200,000. E. S. Lamb is president and Bert Payne, manager.

Among the cooperative creameries in the county the Litchfield creamery has a reputation second to none in the country. Last year's sales totaled nearly \$500,000. This creamery has been in operation nine years and has more than six hundred stockholders. The officers and directors are: L. R. Lindsey, president; A. F. Anderson, J. D. Hawkes, H. W. Denham, Milan Wade, J. Herring and F. N. Sherk, directors. C. A. Bater is manager.

At Litchfield the Shippers' Association did a business of \$125,000 last year and plans are being perfected to enlarge the business and take on new lines. Mr. LeFleur is manager.

At Allen the Live Stock Shipping Association did a business of \$100,000 last year. Tom Wells is manager and Alton Pomeroy, president.

The North Adams Cooperative Association has recently been organized and will conduct a general elevator business and ship live stock. Herbert Wells is president; Lyman Stevens, manager; Harley Roberts, John Quar-ton and James Post, directors.

The Prattville Cooperative Association was organized last June and a warehouse has been purchased. The

Our Farm Bureaus

The Circuit Rider Finds that Hillsdale Higher Type of Agriculture Under the

members are a good live group of farmers who mean business. H. E. Tuttle is president.

The Jonesville Live Stock Shippers' Association have made plans to handle coal, fertilizer and supplies. William Glasgow is president and Claud Beau, secretary. It is reported that last year's business amounted to more than \$100,000, but the officers were not at home when the writer was at Jonesville.

The Osseo Cooperative Association was organized in June and has been handling fertilizer, seed and live stock. E. D. Cheney is manager and W. G. Mosher, president.

The Somerset Cooperative Association was organized in June and conduct a general elevator and farm supply business. It has about one hundred members at present. Mr. Weatherwax is manager.

The Mosherville Cooperative Association is a brand new one and will do a general shipping and farm supply business. J. D. Angell is president and W. A. Gillispie, manager.

The Pittsford Cooperative Association was organized in June and has purchased a complete plant for handling a shipping and farm supply business. It has a bunch of live members and is expected to do a big business. William Harmon is manager and N. J. Likely, president.

The Moscow Live Stock Shipping As-



Hog House of H. M. Abbaduska.

sociation has been in business some time. H. J. Gockhanour is secretary.

JOHAN W. SIMS, county agent of Hillsdale county, was born in Indiana and lived in Mason county, Michigan before attending M. A. C., from which he graduated in 1918. After graduating from East Lansing he taught agriculture at the Hillsdale High School. In July, 1920, he took charge of the Hillsdale County Farm Bureau. During the time he was teaching at Hillsdale he formed many acquaintances over the country through his poultry culling work. In his college work he specialized on soils and live stock husbandry, two branches of agriculture which need special attention in Hillsdale county. Sims is a good practical man whose knowledge of farming has been gained in some measure from the good old school of experience and hard knocks. He has gotten his work well under way throughout the county and seems to have the confidence and respect of the farmers. His main projects are marketing, soil improvement and community live stock improvement.

Dr. A. Z. Nichols, of Hillsdale, president of the Hillsdale County Farm Bureau, has been a practicing veterinarian and farmer in the county for twenty-six years. He owns and operates a good one hundred and eighty-acre farm where he breeds Holstein cattle and Duroc Jersey swine. Dr. Nichols had charge of the membership drive in the county and acted as farm bureau manager until the first of July.

He had the organization work well under way and left things in good shape for Mr. Sims to take hold of when he assumed charge of the work. Mr. Nichols was thoroughly familiar with the peculiar conditions in the county and succeeded where many others would have failed in putting over the farm bureau program. Few men have a better and more sympathetic understanding of the farmer and his problems than Mr. Nichols, and to meet him face to face and discuss the work he has in mind cannot fail to impress one that he is the type of man that will work for the best welfare of his county from an agricultural point of view.

Andy Adams, of Litchfield, vice-president of the County Farm Bureau, owns and operates a splendid two hundred and ten acre farm where he breeds Shorthorn cattle, Percheron horses and Chester White swine. In addition to breeding pure-bred stock, Mr. Adams grows quite an acreage of potatoes. At the head of his Shorthorn herd is Denmark Chief, a bull from Butterfly lines of blood and a really good individual. At present he has about thirty Scotch and Scotch-topped females in the herd. The seven Percheron horses are headed by a good stallion purchased from the M. A. C. Mr. Adams has about seventy-five head of Chester White hogs, among which are winners at Columbus, Detroit and other big fairs. Mr. Adams has recently completed one of the best stock barns in the county. It is 136x36 feet and modern in every respect. For several years Colonel Andy Adams has been a prominent figure at Shorthorn sales in all parts of Michigan. Always interested in agricultural improvement, better live stock and cooperative work he is sure to put life into the County Farm Bureau work.

I. K. Maystead, of Osseo, member of the executive board, is one of the best farmers in Hillsdale county. Mr. Maystead graduated from M. A. C. in 1915, and is deeply interested in pure-bred live stock and crop improvement work. On his one hundred and sixty acre farm he grows pedigreed grain crops and breeds Poland China hogs. His new hog house is one of the best in Michigan and few men are so well equipped for breeding and handling a pure-bred herd.

For a herd sire he has Orange Price 2. Among the sows is Lady Giantess, a wonderfully good individual bred by W. B. Ramsdell. The young animals are well grown and show up well for their ages. Maystead is keeping a flock of five hundred White Leghorn hens. With good crops of grain and alfalfa and good hogs and poultry he has a combination that is hard to beat from the standpoint of profit and pleasure.

Glenn Gordon, of Addison, member of the executive board, owns and operates a fine two hundred acre farm and practices general farming and cattle feeding. He is also a veterinarian and has a wide acquaintance among the farmers of the county. He is rec-



One of Mr. Espie's Hampshires.

and Their Work

County is Hopefully Moving Toward a Leadership of County Agent J. W. Sims

ognized as a hustler and a man thoroughly fitted for the place.

J. W. Luma, of Hudson, member of the executive board, is a practical dairy farmer and breeder of Holstein cattle. He has a splendid farm and outfit for conducting the dairy business. He stands well in his community and can be depended upon to support measures that will benefit the farmers of the county.

William Glasgow, of Jonesville, member of the executive board, owns a fine three hundred and twenty-five acre farm and conducts a general farming and sheep feeding business. At present he is feeding about four hundred lambs and seventy hogs. Mr. Glasgow is a good farmer and experienced business man. He is generally recognized as a clear thinker and progressive citizen.

A. E. Hakes, of Reading, member of the executive board, owns a good one hundred and twenty acre farm and practices general farming. For five years he has managed the Reading Cooperative Company, one of the livestock organizations in the county. Mr. Hakes has always been a leader in all kinds of cooperative work and is sure to prove a strong man for the place.

George Tanner, of Camden, member of the executive board, operates a splendid farm devoted to general farming and stock raising. Mr. Tanner was not at home when we visited his farm. He is a good citizen and a man the farmers can depend on at all times.

E. G. Shaneour, member of the executive board, owns and operates a fine one hundred and twenty acre farm near Pittsford. Mr. Shaneour practices dairying and general farming. His farm is one of the neatest and best equipped in the county. He has been an active worker in putting across the farm bureau in his part of the county and is generally recognized as a progressive farmer who will keep the farm bureau work alive in his community.

Fred Shepard, member of the executive board, in partnership with his father, owns and operates two farms of three hundred acres near Allen. General farming with fruit growing for a leader is practiced. Mr. Shepard operates a tractor and motor truck and uses every possible labor-saving device to solve the help problem. He is a good farmer and business man.

Ray Baker, member of the executive board, from Camden, has sold his farm and at present is not engaged in business. Mr. Baker is an active worker for better agriculture and a square deal for the man on the farm. He will quite likely be back in the farming game before another year.

A. D. Dimmers, member of the executive board, of Osseo, has sold his farm and gone to New Mexico for the winter. He expects to return in the spring and purchase another farm. Mr. Dimmers is a live wire and the farmers of his community hope he will re-

turn and represent them on the board.

ONE of the most interesting farms visited in Hillsdale county was Kneedmore Farms near Pittsford. The farms consist of one hundred and sixty acres and are owned and operated by Mr. and Mrs. Kurt W. Rhead, whose specialty is pure-bred Holstein-Friesian cattle. Mrs. Rhead takes an active interest in the business and is one of the best judges of dairy cattle and pedigrees in Michigan. At the head of the herd is Lothian Pietertje Korndyke Lad, whose sire, Lothian Maggie De Kol Son, is a son of that great producing cow, Lothian Maggie De Kol, who made a record of 1238.5 pounds of butter and 27,967 pounds of milk in one year and 2,258 pounds of butter and 52,058 pounds of milk in two years, the latter being a world's record at the time.

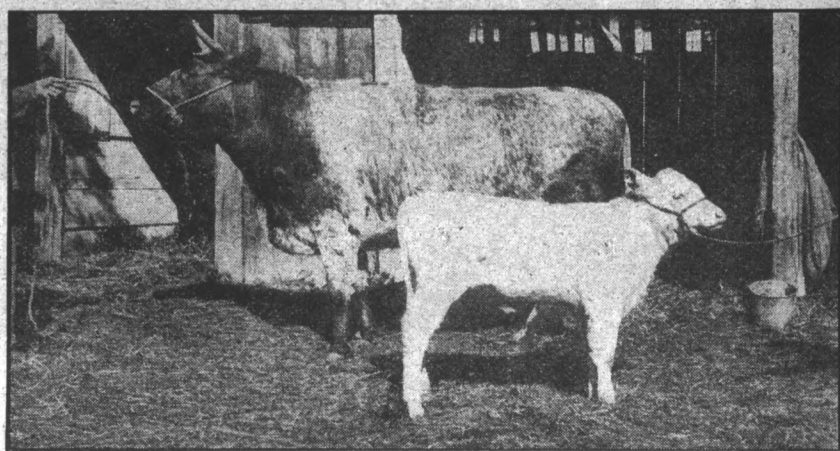
The sire of Lothian Maggie De Kol is Pietertje Sir Korndyke, making him a full brother to Lothian King De Kol Korndyke, better known as "Alex," the bull that upset the "dope." Pietertje Hengerveld Sir Korndyke has nine year record daughters, seven of which made their records as two and three-year-olds, with the nine averaging over 19,000 pounds of milk in a year. He was the first sire to have five two-year-old daughters with records above 18,000 pounds of milk in a year. The dam of Lothian Pietertje Korndyke Lad is Lothian Ruth Pietertje Korndyke, with a record as a senior year



One of Mr. Nye's Good Rams.

ling of 688.07 pounds of butter and 15,288 pounds of milk in a year. Her sire is a son of Pietertje Hengerveld Sir Korndyke. Lothian Pietertje Korndyke Lad is an excellent individual and both his sire and grandsire were show animals of note, while his dam shows the real dairy conformation. Among the cows and heifers in the herd there are about fourteen head bred along King Segis and Pontiac Korndyke lines. Several of these cows are being fitted and will soon be started on yearly work. Mr. and Mrs. Rhead have laid a splendid foundation and if hard work and enthusiasm, coupled with a knowledge of type and pedigree are the keys to success in breeding they are sure to be heard from as successful breeders of black-and-white cattle.

At Alta Loma Farm, one mile east of Jonesville, we visited Donald C. Espie, all-around-good-farmer and breeder of pure-bred Hampshire swine. Mr. Espie has for a herd sire Advance Perfection, a grandson of Essig's Perfection, one of the good sires of the breed. Messenger blood predominates in the brood sows. Mr. Espie is a young, energetic man and is making good with Hampshires. He says, "They are good hogs, excellent rustlers and grazers, feed out well and make champion carcasses; have big litters and furnish them with plenty of nourishment; and



Prize-winners from the Herd of J. M. Southworth.

the demand for breeding stock is strong. A Hampshire hog is heavier than he looks and one rarely finds them lacking in stamina and strong bone."

Mr. Espie's herd numbers about thirty head and no effort has been spared to secure the best lines of blood and produce strong, vigorous pigs. His big talking point is the records made by the breed in the championship carloads at the Chicago International where the two carloads of Hampshires dressed an average of 81.65 per cent, which was nearly one per cent higher than the champion single carcass of the show. That is a mighty strong point.

ANOTHER interesting visit was at the farm of F. E. Haynes, near Osseo. Mr. Haynes has some of the best Big Type Poland China hogs in Michigan and is doing more to build up the breed in his own county than any other man. His herd sire, Senator F., is a son of Art Senator, and grandson of Rachael, grand champion sow at this year's Michigan State Fair. The brood sows are descendants of Nemo Orange 3, one of the best foundation dams of the breed. In 1919 she won first in her class at Detroit. Nemo Orange 3 and her daughters form as good lines of breeding as could be desired. These sows are being mated with Senator F. and Lord Clansman.

The spring gilts and boars are a fine lot and show remarkable uniformity of type, fine heads, strong arched-backs and good bone. Two of the gilts look very much alike, have abundant bone, plenty of stretch, good backs and attractive heads; they will make a pair of great sows before the next year's fairs. Mr. Haynes has about forty head on his farm at present. Besides Poland and China hogs he has Jersey cattle and Rhode Island Red chickens. He is always active in any movement to boost the cause of pure-bred live stock in his county, and is one of the men who can see beyond the narrow limits of his own breed. To meet Mr. Haynes and discuss better live stock is sure to result in becoming converted to the idea of keeping pure-breds.

The success of Charles Bowditch & Son, of Osseo, as breeders of Shorthorn cattle, and feeders of beef cattle and sheep, begins with a good father. Mr. Bowditch has about three hundred and twenty acres in his farms and has made his son a partner in the business. The day before we visited the farm young Bowditch had returned from Kansas City with thirty-two head of as good feeder cattle as have come into Michigan this year. They were a fine bunch of nine-hundred-pound feeders and showed excellent Shorthorn breeding. They are also feeding three hundred and twenty lambs and about sixty hogs.

IN addition to their general farming and feeding business, Bowditch & Son have a fine herd of Shorthorn cattle and a few Hampshire hogs. At the head of the Shorthorn herd is Village

Baron, a son of Silver Knight. This bull is an excellent individual and some of his calves are coming along nicely. Among the cows are several pure Scotch and some good Scotch-topped individuals. A few Duchess cows and young things are worthy of a place in almost any herd in the country.

About three miles north of Waldron we visited the farm of H. M. Abbaduska and looked over some of his Duroc Jersey swine. Mr. Abbaduska has had some successful bred sow sales and is recognized as one of the best breeders in the state. For a herd sire he has King Burketta, a large boar that stands exceptionally well on his toes and has a good open eye. His pigs all show good color and conformation. His pedigree is one of the best and he has demonstrated his ability to produce good even litters of the right type to please the most critical judges of the breed. The sows are all bred along Joe Orion lines and show remarkably good development. The farm is well equipped for handling the herd and all of the young stuff is well grown. At present the herd numbers less than fifty head and no sale will be held this fall.

And now we come to E. E. Nye. One cannot fail admiring Nye, for his enthusiasm for his Merinos and Delaines is so infectious. His farm of one hundred and eighty acres near Jonesville is well adapted for sheep husbandry. He has only been in the business six years, but from his winnings at the recent state fair it is agreed that he is a comer. At this year's Michigan State Fair he won first and champion on yearling B type Merino ram, first and champion on yearling B type ewe and first and champion on Delaine aged ewe.

His flock numbers about one hundred and sixty head and sufficient rams are held over to supply his constantly growing home trade; the bulk of the young rams being conditioned and sold to buyers from Texas and foreign countries. According to Mr. Nye the fine wool sheep is rapidly coming into its own in popularity and prices are reaching a level that makes the business more attractive to men who understand the fine points of the breeding business.

One of the problems confronting the breeders of Merinos and Delaine sheep is that of encouraging other men in their communities to go into the business to the end that they can furnish carloads of rams for shipment to the range country. There are a lot of ranchmen in Texas who are taking an interest in improved Merino and Delaine blood. In fact, Texas is in a position to take all the good rams that the Merino and Delaine breeders in all the United States can supply.

Mr. Nye is breeding all three types in his flock, but is avoiding the extremes, simply depending upon rams from the more heavily wrinkled types to maintain the density and weight of their fleeces. Most of his breeding stock came from Staley's and Cleaver's (Continued on page 646).



The Pride of Andy Adams.

News of the Agricultural World

WHAT THE STATE FARM BUREAU IS DOING.

ORGANIZATION of the elevator exchange department of the State Farm Bureau proceeds rapidly. It is now composed of thirty-one cooperative associations and elevators. The last three to join are the Port Hope Cooperative Association, the Farmers' Cooperative Association of Harbor Beach, and the Elkton Farmers' Elevator Company. In the three weeks that the elevator exchange has been organized it has handled twenty-nine cars of hay, four cars of bran, fourteen cars of wheat, six cars of rye, two cars of oats, seven cars of beans, one car of feed and five cars of corn.

The seed department has also reached the figure thirty-one in the number of County Farm Bureau seed departments which have made an agreement with the state department to do all of their business through the one channel. The department did a relatively large amount of business this last week in clover seed.

C. D. Potter, well known for fifteen years for his successful work in purchasing in Michigan has become assistant in the purchasing department. The traffic department is flooded with requests for refrigerator cars. It reports that there are very few available refrigerators in the country but that the State Farm Bureau is getting its share. It is going to be necessary that a number of shippers use box cars.

Seed and purchasing departments did \$100,000 worth of business last week. Half of which was in a sale of clover seed by the seed department; the other half was made up of purchases of bran, middlings, coal, and flour by the purchasing department.

Upper peninsula membership campaigns are concluding with 6,462 members to date and a possibility of 7,500 when completed entirely. Ontonagon county has asked for a membership campaign next summer. The percentage of farmers joining as compared with the number visited is higher in the upper peninsula than in the lower part of the state.

OWNERSHIP OF STOCK YARDS.

THE presidents and secretaries of middle west State Farm Bureau Federations, meeting at Columbus, Ohio, November 9-10, asked the Washington office of the American Farm Bureau Federation to convey the message to the department of justice not to accept any proposal of the present owners of the stock yards in regard to change of ownership of the yards until the farmers' live stock committee of fifteen has had a chance to study the situation and state intelligently the position of producers. Live stock producers have not been consulted by the department of justice. When present negotiations are effected, the ownership will probably remain the same for many years. The middle west farm bureaus feel that it is a question in which producers are vitally concerned, and for this reason it appears to them that organized agriculture should be given a chance to express itself.

The form of organization and how the State Farm Bureau Federations should work was a subject of discussion at the meeting of the presidents and secretaries of middle west State Farm Bureaus. It was brought out that the membership of the farm bureaus is made up of all classes of farmers, including members of most all other farm organizations. There was a trend toward the idea that the farm bureau should be a promotion and ser-

vice organization, ready to assist in the working out of problems of any particular group of farmers. Most state organizations are working along this line. Few organizations are in actual business for themselves. In discussing publicity problems, it was brought out that an important part of the work is to inform and educate the membership and public with regard to the work of the organization.

Secretary Murray D. Lincoln, of the Ohio Farm Bureau Federation, discussed uniformity of organization among the State Farm Bureaus. He pointed out the smoothly working relations of the federation and the Grange in Ohio and presented a scheme by which all farmers' organizations could function so as to maintain their individuality and special utility and at the same time enjoy the support of the pooled power of all farmers' organizations. The paid men who are maintained in practically every county will be able to assist in the proper development of these other organizations and each will thus be benefited by the farm bureau. The scheme that he presented advocated the business organizations of the grain, fruit, vegetable, dairy, live stock and wool interests, but each special organization would still operate in the interest of its special line. The State Farm Bureau Federation would maintain legal, statistical, publicity and legislative departments which would serve all individual as well as organization members.

Inasmuch as a great many farm organizations in the past have been wrecked on the rocks of commercial operations he advised not to expect too much of the cooperative buying department. In fact, it developed that with the exception of Michigan none of the states are attempting to do extensive buying of many items through the state organization. The most effective way to handle the purchasing operations is through the local units, although these may deal in turn through the state agency.

It was agreed that all of the states could not operate on the same basis on account of varying conditions.

There was an extended discussion of the advisability of publishing an official paper or magazine by the state and national organization. The dangers and objections to maintaining an organization publication were so numerous and so logical that it would not be wise to attempt it. In some of the states a small folder is sent out to the members each month but even that involves quite a heavy expense. Even the state publication that carries advertising loses money to the farm bureau federation and the publicity that it carries is no more effective than if it cultivated the support of the regular farm press. It was generally agreed that it was far better to secure proper publicity through the regularly established farm papers, even though these papers might assume a critical attitude from time to time. The farm press is favorable to the farm bureau and whatever is said for or against its activities is usually said with good intent.

Informal discussion of dairymen's and milk producers' problems took most of the second day's program. J. W. Coverdale, Chicago, secretary of the American Farm Bureau Federation, said a conference of dairy and milk men shortly would be called by the federation to work out a suitable program. It was indicated that the question might be taken up by constituent states and by the milk conference.

Mr. Coverdale also said President Howard would announce the personnel

of the live stock marketing "Committee of Fifteen" early next week.

The conference voted to recommend to the states the organization of live stock shipping associations on the county basis. Delegates visited Ohio State University at the lunch hour. Dean Alfred Vivian declared the university was giving the strongest possible endorsement to the Ohio and American Farm Bureau Federations.

MICHIGAN PRODUCTS AT INTERNATIONAL.

CAN the farmers of Michigan surpass their feat of last year when exhibiting Red Rock wheat and Rosen rye they captured the lion's share of prizes at the International Hay and Grain Show held in Chicago?

At any rate they are going to try. Well over one hundred entries for this year's show, to be held from November 27 to December 4, already have been received by the farm crops department at M. A. C., and more are arriving daily. The quality of the exhibits is unusually high, according to experts at the college, and therefore an even better showing is looked for this fall.

The hay and grain show, inaugurated last year, is held in connection with the famous International Live Stock Exposition and attracts entries from the entire United States and Canada.

To advertise Michigan crops to leading farmers of other sections an extensive display exhibit is being prepared for the show by M. A. C., with the cooperation of the seed department of the Michigan Farm Bureau and the Michigan Crop Improvement Association.

STATE FARM BUREAU EXECUTIVE COMMITTEE MEETS.

THE executive committee of the State Farm Bureau, in session November 8-9, began preparations for the annual meeting of county delegates in February by the appointment of A. M. Berridge, of Greenville, and Secretary Bingham, as a committee to prepare a program. The executive committee voted a formal invitation to Secretary Meredith, of the United States Department of Agriculture, to be present and speak at that meeting, and instructed the committee to send that formal invitation to Secretary Meredith.

A committee of dairymen from Allegan county, who a month ago had addressed a letter to the executive committee asking that the State Farm Bureau officially help the dairymen in their problems, appeared before this last meeting upon invitation. Fred Hilbert, their leader, presented the position of the dairymen of Allegan county. The executive committee referred the tentative plan of the Allegan county dairymen to a committee consisting of R. G. Potts, vice-president of the State Farm Bureau and a dairyman himself, and Secretary Bingham, with the view of calling together farm bureau members interested in the production of dairy products, looking toward the establishment of a dairy department.

The Michigan State Farm Bureau will be represented at the annual convention of the American Farm Bureau Federation at Indianapolis, December 6-7-8, by the following members of the executive committee: Roland Morrill, president; R. G. Potts, vice-president; James Nicol, A. M. Berridge and A. J. Rogers, Jr.

During the session a telegram was received from Columbus, Ohio, where delegates from the middle western

group of farm bureaus were holding a conference, stating the Michigan State Farm Bureaus' apportionment in the expenses of the farmers' national grain marketing "Committee of Seventeen." The executive committee allowed the apportionment and wired back its answer within fifteen minutes. Though Michigan is not one of the big grain producing states it stands solidly behind the national program for bettering grain marketing conditions.

WHO SHALL CONTROL PRICES?

(Continued from page 623).

is fundamental. The latter form is now immune in the practice of collective action, and carries its own cure from oppressiveness by increased products.

Agriculture asks no special favors to do what other industries cannot do, and should assert the same powers as others in the right of interpretation and regulation of supply and demand. Agriculture should also resist being longer subjective and devise a method of being self-serviceable without oppression. This would allow the elimination of the unfavorable and inefficient and prevent the exploitation of the farmer's family and his unpaid for overtime in competition with this class which now exists and persists. This can be done at even a price advantage to other industries when measured over a period of years. When farm products are scarce the extreme high prices do not measure the cost for that year alone, but include the wastage and loss of the machinery of operations when prices were below the cost of production.

When an economic and legal right exists as is the case now, the planning of the machinery for agriculture's participation in interpretation of supply and demand and establishing its equality of plane with other industries is not difficult. Economics is simply a matter of correct relations between industries. These relations are not now economical as to agriculture, hence the general inadequacy of much of the instruction of agricultural courses in economics.

FRUIT GROWERS HOLD ANNUAL MEETING.

An unusually good program is being prepared for the fiftieth annual meeting of the Michigan State Horticultural Society to be held at the Pantlind Hotel, Grand Rapids, November 30 to December 2. Program and further details will be published later.

CATTLE DECLINE ON LIGHT RUNS.

NOTWITHSTANDING the light receipts and a firm and higher dressed beef market, prices on beef steers were slumpy and show losses compared with a week ago. Supplies were very light at first, due probably to the election, and a sharp advance occurred, but with heavier runs later this bloom speedily faded. The top still hovers around the \$18 mark. Bulls and calves advanced, both of them feeling less pressure from western competition.

Chicago receipts of cattle during October show a sharp reduction compared with a year ago. The western run at Chicago for the season is under 200,000, compared with 350,000 head in 1919 and 325,000 in 1918. Other large markets show similar curtailment.

Kansas City's October run being 50 the best for the month in twenty-three years. These figures suggest that supplies outside the corn belt have been fairly well cleaned up.

Establishing Prices on Farm Products

The Part Taken by Pacific Coast Farmers in This Important Matter

By Herman Steen

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CALIFORNIA farmers themselves largely determine the prices at which their products sell upon the markets of the world, instead of letting somebody else do that job for them. This is one of the most conspicuous features of cooperation in California, and is the obvious result of the organization of cooperative associations large enough to dominate the industries whose products they handle.

The reader will understand that individual farmers do not control the prices of their own products, but that the farmers in each farm industry join together and act as a unit in this matter. The individual grower, as a matter of fact, has very little to say about the price for his products; he does have a voice in selecting the board of directors of his cooperative marketing association, and this board of directors acts for all the producers who are members of the organization.

Two Plans of Determining Prices.

Two general methods of arriving at prices are followed by the Pacific Coast cooperative organizations. The first is that used by the prune and apricot, almond, raisin and other associations, and is nothing more or less than naming a schedule of prices for the products controlled by the association. This scale of prices usually prevails for an entire season or year, but may be changed at any time by the responsible heads of the organization.

The other method of determining prices is that used by the citrus and egg associations. It depends primarily upon wide and efficient distribution of products, and upon their distribution as evenly as possible throughout the entire marketing season. These organizations do not fix a schedule of prices, but accept those prevailing when their products reach the market. Their control over prices is exercised by even, efficient distribution and by withholding shipments in extreme cases, rather than by fixing prices.

Two Roads to the Same Place.

Cooperative leaders on the Pacific Coast are divided into two camps over the relative merits of these two methods of determining prices. Advocates of the first plan assert that every producer has the right to name the price which he will take for his product, and that the plan of price-fixing by the association is the most feasible and practical method of achieving that result. Advocates of the second plan say with more or less firmness that they do not believe in price-fixing, and that prices on all products should be "determined by supply and demand."

It seems to me, however, that the difference between the two methods of determining prices is mostly on the surface, and that the two methods achieve the same general result. It is a case of two roads of equal length that reach the same town. This opinion is shared by the members of the committee from the mid-west farm bureau federations which visited the California organization in August. The important thing to remember is that California farmers largely determine the prices of their products, regardless of which system of arriving at prices is followed. The producers' association dominates the market in either case, while speculators are relegated to the background.

When Farmers Fix Prices.

The officers of the prune and apricot, almond and raisin associations make no pretence of concealing the fact that

their organizations fix a scale of prices for the products of their members. On the contrary, the board of directors, of each of these three organizations, have one meeting each year which it designates as "price-fixing day," and any member may attend the meeting. Wide publicity is given to the meeting, both before and after, and the associations publish the schedule of prices fixed by the directors. I mention these facts to point out that the California cooperatives do not follow any dark lantern practices.

"Certainly we fix prices," said Wylie Giffin, president of the California Associated Raisin Company, in reply to a direct question. "Why the deuce shouldn't we? We produce the crop and make it ready for market, and I'd like to know one good reason why we shouldn't name the price we receive for it. But remember this—we don't try to force anybody to buy our raisins. We simply say, 'Here are our raisins, our price is such-and-such, take 'em or leave 'em.'"

Obeying the Law of Supply and Demand.

H. G. Coykendall, general manager of the California Prune and Apricot Growers, Inc., made substantially the same answer to the same question as did Giffin, and added, "Now don't ever get the idea that we fix an arbitrary scale of prices on prunes and apricots. We get all the information we can about the size of the crop, the probable domestic demand, probable foreign

demand, probable competition from other nations, probable competition from other fruits, and review general business conditions.

"We then fix a scale of prices for prunes and apricots which is our interpretation of what we think the world will pay for them. That price must not be too low, or the speculators will grab up the supply; it must not be too high, or consumers will refuse to buy. We would be poor business men if our prices were made too low, and would hurt ourselves more than anybody else if we set our prices too high. The law of supply and demand operates freely in the prune and apricot market today. It was usually manipulated beyond all recognition before our organization became the dominant force in that market."

The method followed by the prune and apricot growers in fixing prices is practically the same as that used by raisin and almond associations. Various departments of the organization gather different kinds of information that is deemed necessary. One department keeps in touch with the growers, and is able to estimate in advance within one or two per cent of the total volume of fruit produced by members of the associations. It is also able to tell, though with somewhat less accuracy, how much fruit will be produced by non-members. By keeping in touch with the Oregon and Washington associations, the amount of fruit to be marketed from those states can

be estimated in advance. Special representatives are maintained in the principal prune and apricot growing districts in the foreign countries which produce those fruits to report on the size of the crop there. When the board of directors of the organization meets to fix prices, it has before it accurate figures and information regarding production in every prune and apricot country in the world.

Naming the Price.

Manager Coykendall also brings in all of the contracts he has made in advance for selling prunes. Last year he had contracts for 110,000,000 pounds or half of the crop, made before the price was fixed. These contracts were good at the opening price fixed by the board of directors. This helps to determine the probable demand for prunes. The sales manager also brings in a hundred and one bits of information gathered from the wholesale and retail trade. A detailed report is also brought in to show how much increase in consumption of prunes can be brought about, by advertising. Other facts are brought before the board with regard to general business conditions, transportation conditions, and every other thing that affects the price of prunes.

The board of directors considers all of these things and then decides upon a scale of prices which is their judgment of what the prune crop is worth. The price is not a guess, but a conclusion reached after careful, business-like study of the situation.

Another Method of Stabilizing.

The citrus growers, on the other hand, fix no scale of prices. They depend upon other means of stabilizing prices. First, they avoid any glut in the market by marketing their oranges and lemons evenly throughout the year—as nearly as possible, one-fifty-second of the crop every week. An even flow of product is thus maintained, which varies only slightly from day to day. The individual growers are not under contract to distribute their marketing, but have learned to do so from force of habit and the habit has been urged by the association for twenty years. The pooling plan, described in a recent issue, is of very direct aid in this matter, because it guarantees each grower the average price received for his crop—no less and no more—and there is no inducement for a man to try to hit the high market.

The citrus organization has its own representatives in every large city in the United States, and every bit of information they gather about markets for oranges and lemons is sent back to the central office in Los Angeles. Close touch is kept on the volume of oranges and lemons in every market, and shipments are diverted accordingly so that no city is glutted and no city is ever swept bare of citrus fruit. Some of the fruit is sold at auction, and some in carload lots to buyers. The sum and substance of all this is that the orange growers thoroughly dominate the orange market. If prices fall too low, shipments are stopped, so the growers' control over the market is practically as complete as is the prune and raisin growers' control over their markets, through out-and-out price fixing.

The egg associations of San Francisco and Los Angeles operate on a slightly different basis. They sell eggs to wholesalers and retailers as long as the price remains high enough to suit

Community Market Grows



THE Community Market at Adrian was established in April, 1918. It now has a paid-in capital stock of ten thousand dollars. During the last year it has purchased the present occupied market building, and also the adjoining cold storage building, which has been put into use, especially now for the storage of potatoes, apples and other perishable products.

The accompanying cut shows the market, with the new manager, L. H. Remus, in the foreground. Mr. Remus took charge of the market in April, 1920. The following report will give the reader an idea of the amount of business done at the market for a single month.

The market has done as much as \$23,000 worth of business in one month, eggs being the largest purchase, namely, 34,617 dozen, costing \$14,791.48.

The community market buys everything and anything raised on the farm, and at any time it is brought into the market. The following table shows this

and also the value of each of the various lines purchased.

Products Bought During October, 1920.

Products.	Value.
Apples, 1,575 bushels.....	\$1,223.41
Beans, 63 pounds.....	5.00
Butter-fat, 906.1 pounds.....	473.59
Eggs, 4,530 dozen.....	2,778.82
Grapes, 974 pounds.....	40.12
Hides.....	76.26
Honey, 840 pounds.....	142.80
Onions, 6,030 pounds.....	132.54
Packing stock, 8½ pounds....	2.38
Peaches, 60 bushels.....	83.57
Poultry, 14,372 pounds.....	3,267.91
Pop corn, 273 pounds.....	5.50
Potatoes, 36,480 pounds.....	510.62
Pears, 339 pounds.....	233.62
Plums, half-bushel.....	.65
Quinces, half-bushel.....	.75
Sorghum, 4½ gallons.....	6.50
Tallow, 87 pounds.....	1.74
Veal, two.....	47.20
Vegetables.....	53.84
Vinegar, 50 gallons.....	11.70
Total.....	\$9,098.52

These products are all bought direct from the farmer, for which he received spot cash when the products were delivered at the market.

the growers; when prices are too low, suggest that price-fixing after all, is the association packs the eggs for sale at a later time or ships them to New York for immediate sale at a probable higher price.

Both Methods Are Effective.

A careful analysis of the two methods of determining prices shows that both are very effective in stabilizing prices. There is so little fluctuation in prices that it is hardly noticeable.

In either case, the growers thoroughly dominate the market though the fact that they operate as a unit, and because a large majority of them are organized to act together. In either case the law of supply and demand operates freely and fully. In one case the price-fixing is direct, in the other it is indirect. I therefore venture to

in saying that it should stay there. Wylie Giffin's philosophy on this question represents the viewpoint of the cooperative leaders. "We used to talk about securing the cost of production for raisins," he said. "We found that one year our cost of production would be two cents per pound and the next year four cents per pound. It was quite possible that when we could produce raisins for two cents, we could sell them for four cents, and the reverse would be true the next year. The fellow who buys raisins doesn't care what it costs to produce them; some years he will pay two or three times the cost of production and holler for more, and at another time won't pay more than half the cost of production. We quickly discarded the cost

Cost Plus Idea Discarded.

In connection with price fixing or price determination, or whatever you want to call it, it is highly interesting to note that no cooperative organization in California bases its prices on the cost of production. It is true that most of them figure out occasionally the cost of production of the crop they handle, but that is as far as they ever let it go. Ten years or so ago it was the style in farmers' meetings on the Pacific Coast to argue for cost of production plus a fair profit for farm products, but that idea has long since gone to the junk heap. Every leader of cooperative organizations there is agreed

plus idea and fell back to the law of supply and demand, which we found was not so bad when the speculators were prevented from manipulating it. We fix prices, but the prices we fix are determined by the law of supply and demand."

Summing up the methods of determining prices followed by California cooperatives it is well to remember that the law of supply and demand prevails, no matter whether prices are fixed directly or fixed indirectly. Price fixing, then, becomes a relative term. Someone has to fix a price, and farmers are entitled to a voice in deciding it. Remember also, that the cost of production as the basis of prices, has been discarded because it has proved impractical.

Congressional Committees Are Busy

Several Important Agricultural Measures Will be Given Early Consideration

ALTHOUGH congress will not convene for its winter session until early in December, the various executive departments are busily at work preparing estimates for appropriations for the next fiscal year, and the house appropriations committee will begin the hearings by the middle of this month.

Formerly the agricultural committee had charge of the appropriations for agriculture, the military committee for the army appropriations, and so on; but a change was made in the rules last spring requiring that all appropriations measures be considered by the house appropriations committee.

Large increases will be demanded by several departments, but it is probable that only on account of absolute necessity will increased appropriations be granted for any object. Treasury reports show that government revenues from customs are increasing, but the latest figures indicate this year's government revenues are falling below last year's receipts. In line with the necessity for economy, it is inevitable that the house appropriations committee will cut down estimates and it will be the work of the farm organization representatives to prevent if possible, the crippling of any department activity that may be needed for the protection of agriculture, and also to protest against needless expenditures for non-essentials.

The wheat and cotton growers, despairing of getting financial relief from the secretary of the treasury or federal reserve board, will turn their attention to congress for relief. The farmer representatives will hold a series of conferences for the purpose of developing a definite legislative program. They will ask for amendments to the federal reserve act, providing for extension of credits, and it is expected that long drawn out hearings will be held before the agricultural and banking committees on the proposed amendments.

It is confidently expected that the party soon coming into power will be very considerate of the farmer's needs and demands. "The crux of the present agricultural condition lies in prices, labor and credit," says the republican platform. This is interpreted as signifying that the party leaders in congress will be favorable to measures which will give farmers better credit facilities. In its platform the dominant party says it "believes in the authorization of associations for the extension of personal credits," is taken to mean that some kind of rural personal credit legislation will be enacted as soon as congress can get down to business. The platform statement that "the federal farm loan act should be so administered as to facilitate the acquisition of farm land by those desiring to become owners, and

thus minimize the evils of farm tenantry, and to furnish long-time credits as farmers may need to finance adequately their larger and long-time production operations," also stimulates confidence that the farm loan system will be made more effective in aiding the farmers.

Tariff revision legislation will be taken up early in the coming session. The committee on ways and means, of which Representative Joseph W. Fordney, of Michigan, is chairman, has been doing considerable work on the tariff during the summer vacation. A large volume has been prepared and just received from the printer, giving a comprehensive summary of tariff information, including the acts of 1909 and 1913.

IT is evident that an attempt will be made when congress meets to either do away with the federal farm loan system or secure the enactment of amendments which will make its operation ineffective in meeting the long-term credit needs of the farmers. The farm mortgage bankers, it is said, are backing this fight against the farm loan act. Their representatives are already in Washington preparing for the campaign. The first move will be made against the joint stock land banks. If successful in destroying this feature of the farm loan system the federal farm loan association will be proceeded against.

At a conference of farmer organization representatives, a few days ago, Judge Charles E. Lobdell, a member of the federal farm loan board, was quoted as being opposed to the farm loan act. Dr. W. J. Spillman, formerly chief

of the bureau of farm management, stated that "Commissioner Lobdell told me he was not in favor of national farm loan associations." It was also charged that the board favored the Smoot bill to eliminate joint stock land banks. The farm loan board, it was asserted, would continue the twelve land banks, having them make loans direct through agents of their own choosing.

The farmer representatives are not all agreed as to the best method of helping the farm loan system, but all are united in the belief that it will be necessary for the farmers to put up a strong fight if the federal farm loan act is to be retained and made effective. Promoters of the movement to organize the four thousand farm loan associations into a national union reported some progress. Senator Arthur Capper, of Kansas, has written a letter in which he says: "I am in hearty sympathy with this movement. I believe that it is time that the various farm loan associations should organize for self-protection." United States Senator Robert L. Owen, of Oklahoma, who was chairman of the senate committee on banking and commerce which framed the farm loan act, has agreed to accept the chairmanship of an advisory committee to assist in the organizing of the National Union of Farm Loan Associations.

PRESIDENT J. R. HOWARD, American Farm Bureau Federation, while at the Washington headquarters, a few days ago, said the big thing in the middle west just now is the development of cooperative organizations. The American Farm Bureau Federa-

tion will soon appoint at the head of its department of cooperation a secretary of marketing, who will make a study of all the various phases of cooperative marketing and give his assistance to all marketing projects. The wool pools are now acting independently. There is no medium of cooperative unity between them. It will be the purpose of the new department to correlate these cooperative marketing movements and see that they are properly advised. It is probable that one man will give his entire attention to wool, another to dairy products, and so on.

THE committee of seventeen is functioning finely, as representatives of different farm organizations with diverse ideas then have gotten together on common ground, with great confidence that something of real worth will be accomplished in the development of a satisfactory marketing plan. There is no thought of impossibilities in their task, no manifestation of selfishness on the part of any one. The committee has adjourned to meet on December 13. It has been voted to raise a fund of \$50,000 for investigation in marketing and research work.

According to Mr. Howard, North Dakota is pushing to the front as a farm bureau state. Enough farm bureaus have been organized to start a state federation, and a drive was put on this week, which promises to put North Dakota nearer one hundred per cent farm bureau membership than any other state. In Nebraska the Farm Bureau Federation and Farmers' Unions are making drives for membership, working harmoniously in the same counties, and their greatest gains are in sections where the non-partisan league is strongest. Reports indicate that ninety per cent of the farmers in Nebraska are joining the farm bureaus.

Professor Graves, of the Dairy Division of the United States Department of Agriculture, who is in charge of the breeding experiments at Beltsville, Maryland, states that in the development of the breeding work at Beltsville they have a number of surplus bulls in addition to those taken by experiment stations, which will be loaned to good reliable dairymen on condition that all their daughters be tested.

Many bird lovers from all parts of the country were in attendance at the thirty-eighth annual convention of the American Ornithologists' Union, in Washington, November 9-11. An interesting feature of the meeting was a special exhibit in the library of congress of a large collection of zoological illustrations, showing their development as applied to birds, and original drawings and photographs of birds by American artists and photographers.

E. E. REYNOLDS.

Flint's Municipal Market

AMUNICIPAL market has been started at Flint, Michigan, through the cooperation of the city council, the chamber of commerce, and the Genesee County Farm Bureau. This is the first of many other city markets which are expected to follow, where the farmer and the city resident can work together to their mutual advantage.

L. C. Carey, formerly of the Michigan Fruit Growers' Exchange at Benton Harbor, has been selected as market director. He plans to render the double service of offering a cheaper produce market for the hundred thousand inhabitants of Flint and at the same time raise and stabilize the prices which the farmers are receiving for their produce in that vicinity. The city council of Flint voted \$40,000 two years ago to this project. That was during the war. A great many persons were in favor of bringing the producer and the consumer as close to-

gether as possible, but in addition to some opposition there was a general lack of knowledge of just how to bring about a successful market.

After the County Farm Bureau had become thoroughly established it took an interest in the proposal to establish a produce market because market prices were in an unstable condition and in many instances lower than they were in surrounding cities. The farm bureau took the attitude that a market without a supervisor was worse than no market at all. The chamber of commerce has assisted materially in publicity and preparation of public opinion. The market is expected to bring about greater stability in the local markets, not only of vegetables, but of hay, straw and grain. The first day of the market brought forth only a few rigs, but fifteen hundred citizens assembled and all produce moved readily except apples and potatoes.

STORING APPLES.

I have several hundred bushels of choice winter apples that I would like to put into storage until I can find time to haul them to the city or ship them from our station. Would you advise me to put them in cold storage at our local shipping station or send them to some storage house in one of the larger cities?

Oakland Co.

H. F. D.

It is rather difficult to advise you which would prove the better method of handling your apples. A good plan would be to make a careful study of your local storage plant before deciding whether to use it or send the fruit to the city. One of the points to consider is the temperature of the storage house and the condition of the fruit when it gets there.

A report of extensive apple storage investigations made at the Iowa Agricultural Experiment Station shows that temperature is a very important factor in the control of apple scale and other more common diseases of apples in storage. A constant storage temperature of not more than thirty-two degrees F. has given the best control of these diseases, according to a bulletin issued by the agricultural college at Ames. It is concluded, however, says the author of the bulletin, that the losses in storage from apple rots may be practically eliminated by proper spraying, harvesting, handling, grading and packing of the fruit, keeping it at a constant low temperature and removing it from storage before the storage season for the particular variety in question closes. No correlation was found between the size of the apples and the amount of scald developing on them in storage, but the largest apples were generally attacked more quickly by rots in storage than smaller apples of the same variety, other things being equal. Apple scald makes fruit more susceptible to the entrance of rot fungi. Alternario rot, which is a black fungus growth, develops readily on the badly scalded portions of the fruit and hastens decay. The author has had under observation an unidentified dry brown rot, which appeared on both Jonathan and Northwestern Greening apples, developing sunken areas in which the skin becomes a clear brown color, varying from a medium to a rather light tone and remains unbroken. The flesh beneath becomes dry and brown, or brownish, to a depth of 0.125 to 0.25 inch. All attempts to isolate a causal parasitic or saprophytic organism from the affected tissues have thus far failed.

Effect of Humidity.

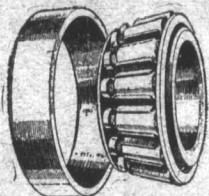
Humidity was found to bear some relation to the development of apple scald, but was less important than temperature. Less scald developed in a relative humidity of from sixty to seventy per cent than in one of from eighty to ninety per cent. Wrapping apples in paper delayed the appearance of scald during storage. Paraffin paper retarded scald more than ordinary wrapping paper, but the difference was too slight to be of commercial importance. Immature fruit scalded readily in storage. Whatever the variety of apples under consideration it is in the best condition for cold storage when it is well colored and hard ripe. If the fruit must be picked early to avoid freezes it may be held at ordinary temperatures until it more nearly reaches the best degree of maturity for cold storing. Apples in prime maturity for cold storing will scald more quickly in common than in cold storage.

Advantage of Wrapping.

Observations on temperature changes in cold storage showed that it requires thirty to sixty hours to reduce the temperature of fruit in the center of a box or barrel from a temperature around seventy degrees down to thirty-

(Continued on page 633).

Do You Know—



STANDARD PRACTICE

The use of Timken Tapered Roller Bearings at points of hard service in the great majority of leading tractors—and in power-driven farm machinery—is proof of leadership established on the tapered principle of design, quality of manufacture, performance, and service to the automotive industry.

that most of the tractors now on the market have been tested for seasons before they were offered to the farm public?

that in the course of these tests the machine has been called upon to prove itself time and again under every conceivable condition of service?

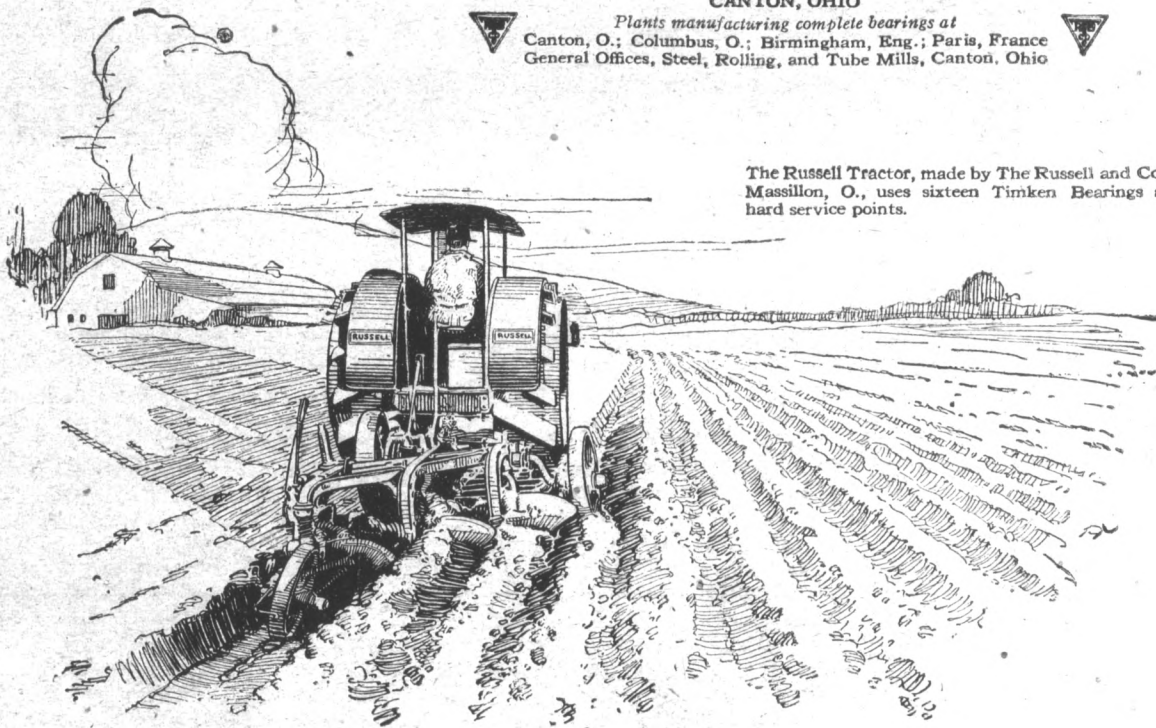
that one of the things that gets very careful attention during these tests is the performance of the bearings?

that the result of tests of this kind is the rapidly increasing use of Timken Tapered Roller Bearings by the tractor-making industry?

THE TIMKEN ROLLER BEARING COMPANY

CANTON, OHIO

Plants manufacturing complete bearings at
Canton, O.; Columbus, O.; Birmingham, Eng.; Paris, France
General Offices, Steel, Rolling, and Tube Mills, Canton, Ohio



The Russell Tractor, made by The Russell and Co., Massillon, O., uses sixteen Timken Bearings at hard service points.

TIMKEN
TAPERED ROLLER BEARINGSHeat the Water They Drink With
the Cobs They Leave

No bother or fire danger with a Nelson Tank Heater. Just put a few cobs into the fuel box when you do your chores and have drinking water at 70° for your stock all winter. No ice to chop. No chilled stomachs. Stock gain faster—keep healthier. Cows average 15 quarts a month more milk. Heater soon pays for itself.

NELSON TANK HEATER
(Made by Hudson)

Heats water twice as fast as any other heater and with less fuel. Made of 20 gauge galvanized metal with cast flanged joints bolted and packed with one piece asbestos. No welded seams to leak or rust. End of tank and pipe cast in one piece to above water line. Won't rust out. More than one inch of clearance for water to circulate under heater. Asbestos easily removed. Burns straw, cobs, wood or coal. Lasts for years. Get one for your stock NOW. WRITE FOR FREE CIRCULAR.

Hudson Mfg. Co., Dept. 52 Minneapolis, Minn.



DO DITCHING THIS FALL

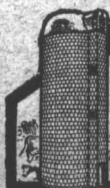
Prevent winter rains smothering the soil. Put land in shape for early spring work. Get your ditching and terracing done now with the **Marlin Farm Ditcher**. Works in any soil. Makes "V" shaped ditch or cleans ditches down 4 ft. deep. All steel. Reversible. Adjustable. Write for Free Book. **OWENSBORO DITCHER & GRADER CO., Inc.** Box 318, Owensboro, Ky.



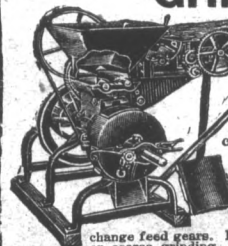
10 Days Free Trial

Dickey Glazed Tile Silos

Best of materials, six different diameters, everlasting hollow tile roof, easiest to build—such features as these have made the Dickey pre-eminent among silos. **The Fruit Jar of the Field**. Send for catalog No. 9. **W. S. Dickey Clay Mfg. Co.** Macomb, Ill. Kansas City, Mo. Chattanooga, Tenn.



BUY FENCE POSTS direct from factory. Prices delivered your station. M. M. care of Michigan Farmer

KELLY-DUPLEX COMBINATION
CUTTER and
Grinding Mill

Grinds alfalfa, corn fodder, clover hay, peas, vetch, sheep oats, kaffir corn and milo maize in the head, either separately or mixed in varied proportions with corn on the cob, with or without shucks, oats, rye, barley, corn and all other grains.

FULLY GUARANTEED Four plates—a double set, grinding at the same time accounts for its large capacity. This machine has three sets of perfect regulation, fine, medium and coarse grinding. For capacity, easy running and uniform grinding, the Kelly-Duplex can't be beat. Especially adapted for Gasoline Engines. Write for free catalog. **DUPLEX MILL & MFG. CO., Box 308, Springfield, Ohio**

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DOG DISEASES
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Pioneer
Dog Medicines

Trained American Fox Hounds Rabbit and Skunk dogs all ages. Send stamp. **W. E. LECKY, Holmesville, Ohio**

Mention The Michigan Farmer When Writing Advertisers

Agricultural Activities in Cloverland

By L. A. Chase

COOPERATION among the farmers of the upper peninsula is pretty common. It comes quite easy to the Finns and other recent European stocks—more easily than to the native Americans. An investigation recently carried on by J. W. Weston, assistant state leader of county agents in the upper peninsula, brings out the fact that there are thirty-eight cooperative stores in the northern peninsula, of which twenty-six were visited for the purpose of this investigation. These stores were found to be operating under various state laws applicable in such cases. The average number of members of these stores was found to be two hundred and forty-five. The total capitalization of \$559,500—an average of \$20,000 per store. The total paid-in capital was ascertained to be \$212,418—an average of \$8,850 per store. Total sales amounted to \$3,821,158 for twenty-four stores. The average yearly business amounted to \$125,881. The turnover of sales was 14.2 per cent of the paid in capital per year. The average sales per store on the basis of the total number of these stores in the upper peninsula was computed to be \$4,782,478. The overhead expenses average 10.01 per cent, varying from five per cent to fifteen per cent. Only one cooperative store was found to have failed—that at Iron River, which had been burned and appeared not to have been sufficiently covered by insurance, it is stated. Four stores were listed as cooperative stock company stores where the shares were not limited to members and the vote was based on the number of shares held and not on membership. The remainder allowed one vote per member regardless of the number of shares owned. There was a nominal rate of interest on stock, usually five or six per cent. Profits are divided on the basis of purchases by members. Some stores are reported as giving one-half as great dividends to non-members as to members. Some stores give employees the same dividend on salary as patrons obtain on purchases. This is said to make employees more careful and conscientious.

Farm Bureau Membership Grows.

A recent compilation of the number of members of the State Farm Bureau in upper peninsula counties shows the

following results: Chippewa, 1250; Menominee, 1,150; Delta, 1,002; Marquette, 505; Luce, 288; Schoolcraft, 264; but this list is incomplete as several other upper peninsula counties have finished their membership campaigns. In Gogebic county one solicitor reported three hundred and ten signed up out of three hundred and forty-nine solicited, reports the State Farm Bureau, while Iron county's membership will exceed four hundred. In two townships, it is reported, every farmer solicited joined the bureau. Alger county is now being canvassed.

County Agent Irving Kirshman, of Menominee county, announces a shipment of a carload of twenty-nine head of cattle to Chicago, the estimated saving being \$220 over local prices. This shipment is also said to have stimulated local prices, thus benefiting other farmers not directly concerned with this transaction. Several other township locals have ordered feed in carload lots, which will be sidetracked at Stephenson on the C. & N. W. R. R. Two townships are buying a car of rock phosphate. Menominee county farmers are said to be greatly dissatisfied with the potato market, with sales made locally at sixty to seventy cents. Farmers, of course, should not expect the farm bureau to perform miracles. It is a business proposition and people who go into business must be prepared to take losses as well as gains. Menominee county was one of the counties represented at the recent conference of sugar beet growers held at Lansing. Menominee and Delta counties are the only ones raising sugar beets in the upper peninsula.

Menominee county, with a total area of 670,279 acres, has approximately 220,000 acres of farm land, according

to the county agricultural agent. The number of improved acres is put at 84,000, and the number of farmers at eighteen hundred. The estimated value of farms is \$10,000,000. Mr. Kirshman reports that ninety-five per cent of the farmers in Menominee county own their own farms and that tenantry is not increasing. Mike Gardner, of Stephenson, expects this season to net \$2,500 from an eighth of an acre of golden seal which he planted. It is grown from seed and takes four years to mature. It is a medicinal plant.

Although the upper peninsula has plenty of snow in the winter season, the road commissioners know how to handle it. The Keweenaw county road commission is reported already to have got its equipment ready for the work that is ahead. All trunk-lines and mail routes in the county are to be kept open by using a plow and roller drawn by a caterpillar tractor, which proved very successful last season. The work of widening the Copper Harbor road—one of the most scenic highways in the state, is now under way.

Will Introduce Mixed Farming.

There has been a tendency for Chippewa county to be a one-crop (hay) county. The Sault Ste. Marie Civic and Commercial Association has been taking stock of the situation and is strongly advocating that intensive farming, in the form of truck-gardening, be more generally adopted in the county. It points out that figures furnished by the South Shore Railroad show that there were received during the year August 1, 1919, to August 1, 1920, forty-two carloads of fresh vegetables, one hundred and fifty-three cars of fresh milk, twelve cars of eggs, and one hundred and sixty-seven cars of fresh meat, and reminds the county

that much of this could well be grown at home. The Commercial Association proposes the establishment of a farmers' market at the Soo.

That the upper peninsula is well supplied with game is indicated by the report of the county clerk of Marquette county in relation to bounties paid by his office during the past year. These amounted to \$6,825 for the year ending September 30. These were paid on woodchucks, weasels, rats, crows, owls and hawks, and \$3,156 on big game—wolves, wildcats, lynxes, and foxes. Seven thousand eight hundred and fifty-five rats were brought in, with woodchucks second on the list (7,516); 2,829 weasels suffered the same fate; eighty-four wolves cost the county \$2,940 in bounties.

Fifty marketable potatoes and fifteen smaller ones were produced in one hill from one seed potato on the farm of Robert Blemhuber, near Marquette this season. The total weight of these potatoes was thirty-two pounds and the top weighed six pounds. The potato was a "volunteer," having been overlooked in the fall digging a year ago. These statements have been verified by County Agricultural Agent, L. R. Walker. Mr. Blemhuber is upper peninsula director of the Michigan State Farm Bureau. His phenomenal hill of potatoes will be sent to the Michigan Agricultural College. Who can beat it? A portion of Mr. Blemhuber's crop is running at over six hundred bushels per acre.

The Calumet News announces the launching of a new industry in that place, which will manufacture an all-service motor truck body. Its feature is said to be the Crandall hinge which makes it possible for either side of the truck to be placed at an angle. The truck is designed especially for farm use. It is said that eighty-five per cent of the material necessary to make the truck, and labor, are at hand in the copper country.

The four-mile stretch of federal aided road on the state trunk-line between L'Anse and Baraga has been completed by the contractors, announces the L'Anse Sentinel. This is a very important road for it gives access to the copper country from outside points. The remaining sections of this highway are already opened.



Should Get More Service From Wire Fencing

Advises That We Standardize the Galvanizing of All Woven Wire Fencing Sold in Michigan

THE days of wood fences are now recorded as history. Hedges as yet are not practical, and an era of woven wire fencing is now inaugurated. To show the great importance in farm economics of fencing we have but to note the geographical position of our state in the midst of what we may term the mixed farming section of our country.

Mixed farming with live stock calls for comparatively small fields with lanes and considerable small inclosures. In fact, fencing now constitutes one of the largest items of expense in farm up-keep. It is therefore of much concern to the farmer as to minimum cost and maintenance. As it is, woven wire fencing falls far short of reasonable expectancy in endurance. Its average life is but about ten to twelve years or about one-half the endurance of a good wooden post.

When the farmer invests in labor and fencing (not including the posts) a dollar per rod and must repeat the process every ten years, it makes him begin to investigate as to cause and a possible remedy. Regarding the cause, it is plain that poor galvanizing is at

the bottom of it all, and regarding the remedy, insistence upon adequate galvanizing is our plea.

Scientific investigation and practical observation shows that adequate galvanizing is both possible and practical. One of the simplest and plainest of proofs may be seen in many lines of fencing where one or two bright smooth wires may be traced for a long distance along in the mesh of the wire, while the main body of the fence is rusted out and in a badly broken up condition. The bright smooth wires carry a sufficient coating of galvanizing to protect them, and if all of the wires had been equally well protected, the whole of the fence would be in good condition and in form to save both labor and money cost for many years to come.

The conclusion is that the galvanizing of woven wire fencing should be standardized and the sale of it regulated by law the same as fertilizers, food-stuffs and some other articles of use. Experience shows that this is the only way to relieve farmers of the great and extortionate cost of poor galvanizing and shortlived fencing. Is it

worth while, you ask? Here are some figures:

One section of land one mile square contains eight parcels of eighty acres each. On each eighty acres there is an average of 800 rods of fencing, plus the extra on account of highways, making 7,400 rods of fencing for each section of land.

In the township there are thirty-six sections and 253,440 rods of fencing. There are 672 townships in the southern peninsula below a line across even with southern Midland county, and approximately 170,311,680 rods of fencing. Then add the territory above Midland up to the south side of Antrim at one-half the above basis, and we have 37,550,400 rods of fencing to add, and which equals in all 207,862,080 rods.

This computation is fair, but to allow for cities, lakes and open lands we will throw in for good measure all the territory above Antrim and all of the upper peninsula. Thus we will say there is a total of 207,862,080 rods of fencing in Michigan. This at a nominal cost of one dollar per rod exclu-

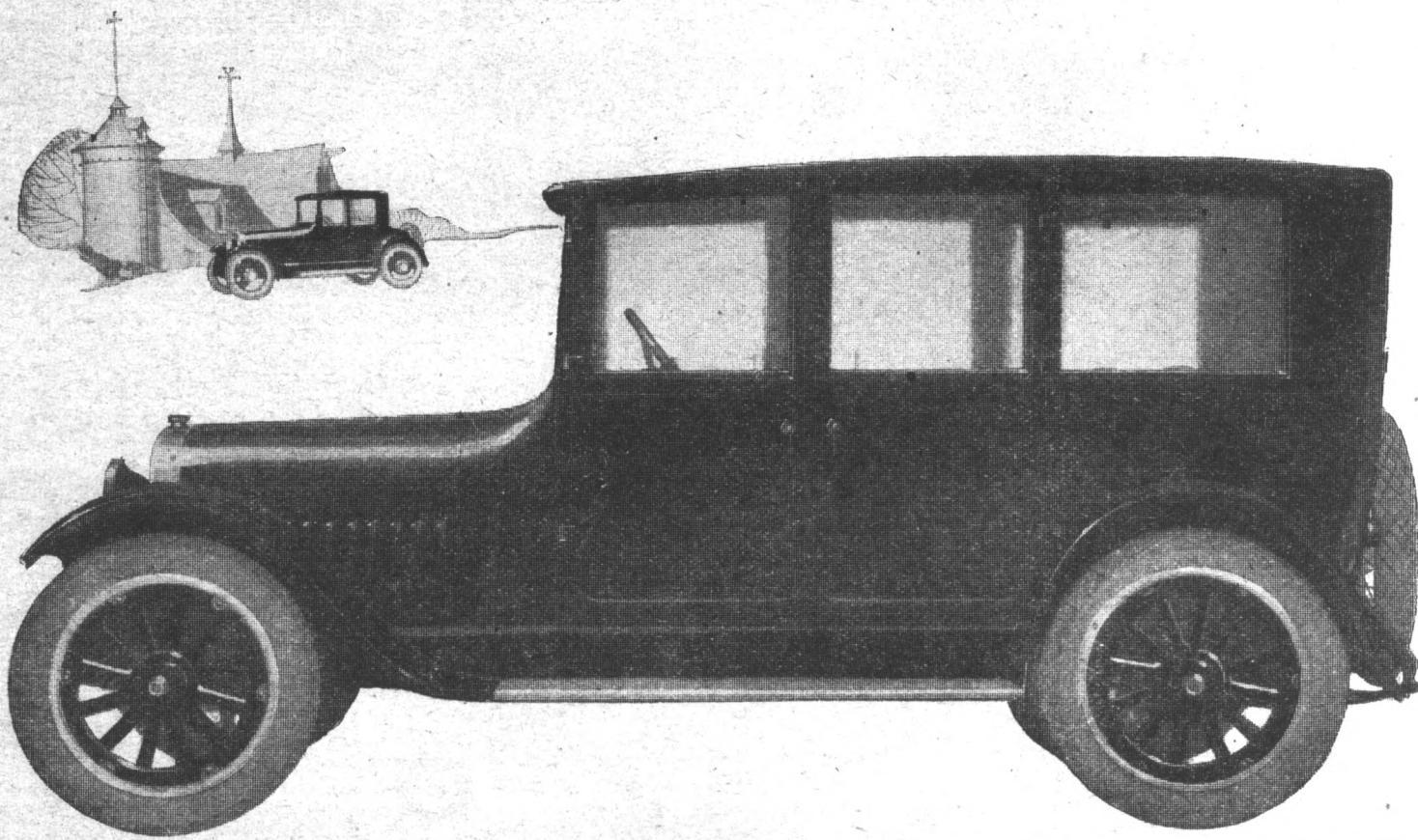
sive of cost of posts equals \$207,862,080.

If by proper galvanizing the life of a fence can be twenty years instead of ten, it would be as money at ten per cent doubling every ten years. Observation, however, and expert testimony proves that thirty to fifty years for the life of a well galvanized wire fence is easily within the range of reasonable expectancy. From this an immense saving in farm up-keep becomes apparent.

I want to submit to the farmers of the state this proposition: Is it not worth while to demand of the next legislature a law standardizing the galvanizing of wire fencing sold within the state? In the enactment of such a law we must expect strong opposition from the combined fence manufacturers of the country, but being backed by reason and justice, the combined farmers of the state can afford to go into the contest. A formal call is in process for a meeting of representatives for the farmers' organizations of the state to give form and impetus to the campaign.—G. B. H.



OAKLAND OWNERS REPORT RETURNS OF FROM
18 TO 25 MILES PER GALLON OF GASOLINE
AND FROM 8,000 TO 12,000 MILES ON TIRES



THIS NEW OAKLAND SENSIBLE SIX FOUR DOOR SEDAN IS POWERED WITH THE FAMOUS 44-HORSEPOWER, OVERHEAD-VALVE OAKLAND ENGINE

LET your new car be an Oakland Sensible Six Sedan. For the farmer, as for every other class of citizen, this is the thoroughly practical automobile. It is the most useful car, providing homelike comfort and security in any weather. It is the most sensible car, linking its many advantages to the minimum of operating

cost. The present Oakland Sensible Six Sedan retains the proved high-power and light-weight principle of construction in an even stronger chassis of longer wheelbase. However you judge it, whether by performance, reliability or economy, it affords a value not to be duplicated in any other type of automobile.

OPEN CAR, \$1395; ROADSTER, \$1395; FOUR DOOR SEDAN, \$2065; COUPE, \$2065
F. O. B. PONTIAC, MICHIGAN. ADDITIONAL FOR WIRE WHEEL EQUIPMENT, \$85

OAKLAND MOTOR CAR COMPANY, *Pontiac, Michigan*

OAKLAND
SENSIBLE SIX



GRAND RAPIDS, MICHIGAN

This Trademark is
Your Protection

Are You Protected?

Scarcely a day goes by that we do not hear of some disastrous farm fire. Disastrous through lack of foresight. Strange to say the lack of foresight is always due to lack of proper insurance protection, when one of the very first thoughts of every farm owner should be about his insurance. Of course, you are covered by some insurance, but are you fully covered the way you can be? Have you Peninsular Protection?

Peninsular Protection

The Peninsular Fire Insurance Company—Michigan's Big Fire Underwriters—will save you from discouraging fire loss by giving you full protection. The Peninsular Policy protects your farm property on the same basis that it protects city property, by recognizing all protective improvements and rating buildings according to their location.

If you are not fully protected—write our large farm department for complete details, and prove to your own satisfaction that it is impossible to buy better protection. It will not obligate you in any way and you will also get valuable information for the protection of your growing crops.

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Beautiful Silk Shade Lamp FREE



One minute to
change from
Silk to either
Plain or De-
corated Shade

Radiolite

Inter-Changeable Shades

Rivals
the
Light
of Day

This handsome lamp given FREE to persons to whom customers can be referred. Send no money—just ask how you can take advantage of this remarkable offer. Enjoy the most ideal, yet most economical light known. Burns 97% air and only 3% gasoline. One gallon lasts 60 hours. No wicks to trim, no smoke, no odor. Fully guaranteed 5 years.

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Fills room with a cheerful, glowing light—powerful, yet restful to the eyes. Offer is limited, so act now. Simply write for Catalog, Free Lamp Offer and 10 Day Trial Plan. Agents make big money. No selling experience necessary, no capital required. Exclusive territory for both Lamps and Lantern, free.

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So tough that they roll through mud, ice and snow in preference to a decent road. They're rebuilt—double tread—double chain stitched—and glutons for hard work!

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Yet we guarantee them—even at these little prices:

Size Non-Skid	Price	Size Non-Skid	Price
30x3	\$6.50	34x4	\$10.50
30x3 1-2	7.50	34x4 1-2	12.00
32x3 1-2	8.00	35x4 1-2	12.00
33x4	10.50	36x4 1-2	13.50

2 percent off for cash with order.
10 percent deposit required with all C. O. D. orders.

R. K. Tire Company

837 No. Broad St., Dept. C, Phila., Pa.

Send for descriptive booklet and price list.
Good Territory Open for Live Agents.

Are YOU The MAN?

A large Company with 20 years of successful business needs a few more men to handle the output of another new factory. We want good and reliable men. If you can qualify in this class you can earn big money selling our highly advertised and well-known household necessity. No toilet goods or patented medicines. All men who qualify are given personal training. Common school education required. In replying please tell us if you have a car or rig, your age and present occupation. Remember, it costs nothing to investigate. Address 1615 Ford Bldg., Detroit, Mich.

FARM HELP

Position Wanted as manager of modern farm, married, lifetime experience in farming, stock raising, fruit growing, soil improvement, machinery, six winters at Agricultural Colleges. Best references. Box G 1120 care of Mich. Farmer, Detroit.

GENUINE ASPIRIN



Name "Bayer" identifies genuine Aspirin introduced to physicians in 1900. Insist on unbroken packages of

BAYER-TABLETS
of **ASPIRIN**

Aspirin is the trade mark of Bayer Manufacture of Monoaceticacidester of Salicylicacid

Our Service Department

STARTING WITH STRAWBERRIES.

I intend putting out an acre of strawberries. How many will it take for the acre? What are the best varieties, and when is the best time to set them out, spring or fall? Where can I get the plants, the nearest home, and about what will they cost per hundred?

Wexford Co.

I. S.

You can set strawberry plants either in the fall or spring. Ordinarily spring setting is preferable. However, if you are anxious to get the bed started you can set them this fall, preferably as early as the soil conditions are favorable.

Strawberry plants will not do well unless the soil is moist at the time of setting. Fall-set plants will bear a light crop the season following. Spring-set plants will give a good crop the next year. One of the precautions to take in connection with the setting of strawberries in the spring is to have them in early.

During the last year or two it has been difficult to get strawberry plants from different nurserymen at the proper time for setting. This has been owing to a lack of labor in the nurseries and to the poor transportation. Would advise you, therefore, to try and get your plants of someone as near your place as possible. Perhaps your county agent can locate a grower in your county who could furnish you with these plants. If not, send to the nearest nursery which can furnish them.

Strawberries set three feet eight inches by one and a half feet, which is a common distance of spacing will require 7,920 plants per acre. The price of strawberries varies somewhat with different varieties, running from \$6.00 to \$9.00 per thousand.

One of the most commonly planted commercial sorts is Senator Dunlap. This variety needs no other varieties planted with it as it is what is known as a perfect flowering variety. Another newer variety which is very similar to the Senator Dunlap in that the fruit is dark in color and the plants prolific, is Dr. Burrill. A good late sort is an old variety called Gandy. Another variety which is taking its place in some cases is Steven's Lake. All of the varieties named are perfect flowering varieties, thus need no other variety planted with them.

C. W. WAID.

BEANS FOR HOGS.

Is it safe to feed ground beans to hogs? If so, state amount which may be fed daily. Also, is it better to give the beans mixed with ground oats or rye?

S. G.

Ground beans are a splendid food for hogs, but they should be cooked. You can get along without grinding the beans by cooking them whole. The hogs will eat the beans better and make better growth if you cook them.

It is always better to mix beans with some grain. Corn meal or ground barley are splendid to mix with beans. Cook the beans thoroughly. You can mix it half-and-half with ground barley or corn meal and feed all the hogs will eat up clean and you will get splendid results.

C. C. L.

RIGHTS OF RENTER.

I rented a farm on halves for four years. This farm was sold last fall. I put in about fourteen acres of wheat last fall. I wish to know whether or not I am entitled to half the straw from this field, if the owner of the land does not reserve it. I would want to draw my share of the straw away, if I am entitled to it.—R. M.

The rights of the tenant are entirely determined by his lease. His rights

against the buyer of the farm are no greater nor less than against the prior owner. An agreement that the tenant should have half of the crops would give him right to half of the straw if no special provision were made forbidding removal of it.—J. R. R.

FARM BUREAU PAINT.

Has the Michigan State Farm Bureau put men in the field to sell paint? We have been solicited by a party who declares he is acting as agent for the state organization.

J. Q.

This person is a faker. The State Farm Bureau has no men out soliciting orders for paint. The organization warns farmers not to be imposed upon by parties who announce that they are farm bureau representatives. Report such men to your county agent.

SUGAR BEET PROGRAM.

Could you give me an idea as to the nature of the sugar beet program being worked out?

Gratiot Co.

F. W.

The following general statement will indicate the line along which the committee of five is working:

Plans for the formation of a sugar beet department of the Michigan State Farm Bureau which will represent the interests of the twelve thousand sugar beet growers of the state, most of whom are members of the farm bureau, are being perfected by a committee of five appointed by representatives of twenty-four counties. At a recent meeting of this committee, December 15 was set as the time for submitting of its report to the representatives of the sugar beet counties, when a plan of organizing the interests of the growers is expected to be adopted.

SOWING FERTILIZER BROADCAST.

This year I sowed my fertilizer broadcast and worked it in with a disc about a week before sowing wheat. Now I have been told that I would not get much benefit from the fertilizer sown this way, and that it should be sowed with the wheat.

J. B. S.

You probably used the best method possible in sowing your fertilizer and harrowing it in before you sowed the wheat. One of the prime requisites in getting good results with fertilizer is proper distribution. It ought to be mixed thoroughly and evenly in the soil. The argument in favor of sowing fertilizer with combination fertilizer drill at time of sowing wheat is the cost of distribution. Of course, you do it at the same time you sow wheat, with very little expense, but that is the only argument that can be given in favor of it. It is not the best method to put this fertilizer right in the drill with wheat and having it come in, actual contact with the kernels under certain conditions. It will often injure the germinating power of the seed, but usually it is used in such small quantities that no harm results. But when you sow the fertilizer while you are preparing the land and then work it into the soil you ought to get the best results. Possibly one thing, however, against this method is that it is more difficult to check up results since the fertilizer is evenly distributed all over.

When you apply it with a drill you can shut the drill off, using no fertilizer for a short space, and then usually there is marked results shown between the fertilized and unfertilized land. That is the only reason why some people think you do not get good results by your method of applying. The threshing test, however, tells a different story.

C. C. L.

FARM BUREAU ACTIVITIES.

THE seed department of the Michigan State Farm Bureau is notifying the County Farm Bureaus that alfalfa did not set a good crop of seed in Montana and the Dakotas this year on account of excessive rains. This is the territory that grows what is called northwestern grown common. The State Farm Bureau has received orders from county seed departments for many bushels of this, but it may find it necessary to cut down some if the personal representative is not able to fill all the orders. The seed department will also handle some native Kansas seed, purchased under the personal supervision of the representative of that department who will see that only the best type of Kansas seed is secured. Price of all such seed is only approximately known. Clover seed is arriving at the Lansing warehouse in carload lots assigned by members for sale. So far it is mostly alsike, mammoth and sweet clover.

Two more cooperative associations have joined the elevator exchange. One is the Farmers' Elevator & Produce Company of Bad Axe, and the other is the Atwater Grain Company of Atwater. It seems probable that within the next few weeks the number of elevators in the exchange will be almost doubled. Some of the elevators are waiting for the perfection of the purchasing department of the State Farm Bureau, the full services of which each elevator in the exchange will receive. The purchasing department is already organized and is collecting orders for coal, tile, flour and feed. Due to light receipts and the presidential election the business of the exchange, like the business of most other grain companies, has been comparatively light for the last two weeks. The exchange is keeping its member associations informed daily as to market conditions by mailing a report which is prepared at the Lansing office immediately after the close of the board of control.

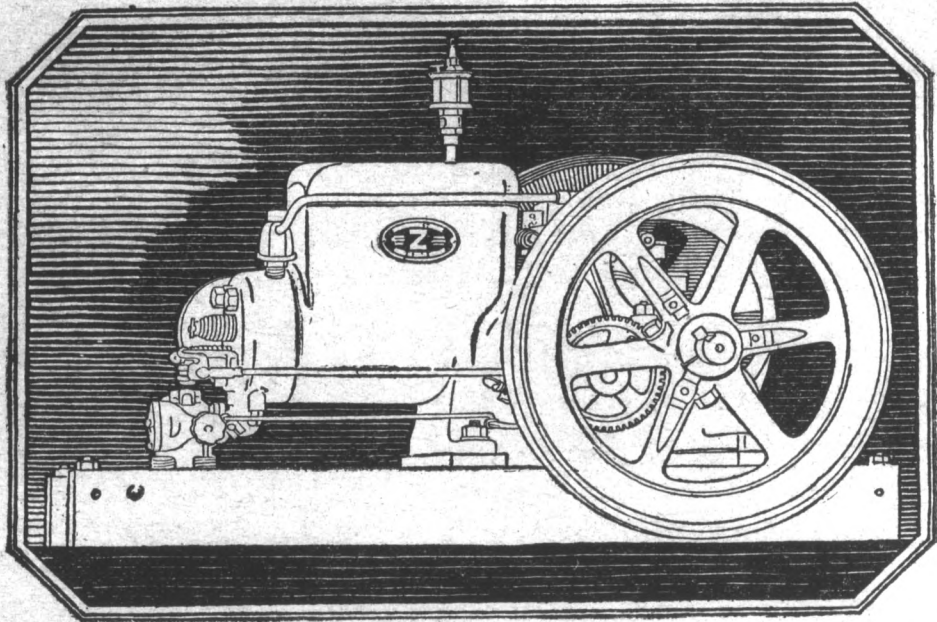
MICHIGAN SOIL SURVEYS.

IN recognition of the distinctive survey methods developed by the M. A. C. Department of Soils, Prof. M. M. McCool has been invited to address the next meeting of the recently organized National Association of Soil Workers, to be held in Chicago November 19-20. Michigan soils experts have led the entire country in certain fields of research in recent years, with investigations of soil temperature and moisture and the effect of different fertilizers on different types of soil in particular. The newly formed body is intended to promote an exchange of views by men of different sections and experts from every part of the United States will be present at the Chicago meeting.

STORING APPLES.

(Continued from page 629).
five degrees, the temperature of apples in boxes being reduced sooner than that of apples in barrels. Unwrapped apples packed in boxes were more quickly affected by changes in storage temperatures than similar wrapped apples. Small changes in room temperatures do not materially change the temperature of fruit in the package, particularly of wrapped fruit. The author points out the importance of not exposing picked apples to the sun either in the orchard or in the packing-shed, as they absorb considerable heat, and when first placed in cold storage, apples which have absorbed heat during the day do not cool off readily at night, even though the nights are comparatively cool. When the fruit is ready for storage it should be cooled to thirty-two degrees as quickly as possible.—C. B. F.

FAIRBANKS-MORSE "Z" FARM ENGINES



As Clean Cut as a Thoroughbred

The clean-cut business-like design of the "Z" Engine was not just accident. A farm engine, to be efficient, *must* be properly designed. The "Z" has graceful, natural lines—free from geegaws.

The parts are strong—weight where weight is needed. Strains foreseen—contact parts case hardened—all parts carefully, precisely made by accurate machine work.

Looks like a thoroughbred—is one. Delivers a steady flow of power—runs smoothly—operates economically. Correct design and precision methods give the "Z" its built-in quality. It is a mighty pleasing engine to look at.

Other "Z" features are: Runs on kerosene, as well as gasoline; Bosch magneto; more than rated power; parts interchangeable; long life.

Let your nearby dealer show you why you should have a "Z."



PRICES:

1 1/2 H. P.	\$ 85.00
3 H. P.	135.00
6 H. P.	220.00

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MANUFACTURERS - CHICAGO

NOW READY TO SHIP

DRIED BEET PULP

Palatable succulent vegetable feed for
dairy cows, beef cattle, sheep and hogs

We can take care of orders from any
part of the country

The Larrowe Milling Company
Detroit, Mich. Los Angeles, Calif.

MOLINE

has no rival in economy and long life. Burns kerosene, cheapest fuel, 36 hours one filling; handy valve controls heat for small tanks or mild weather; flame can't blow out; no ashes, smoke, sparks; heavy rust proof boiler iron insures steady heat; no rivets under water; dependable; lasts years; fits any tank; pays for itself quickly.

Moline Hog Waterers
Guaranteed heavy galvanized steel; non-freezing; sanitary; cool in summer; long burning lamp; three styles. Write for prices.



Farmers who owned ordinary tank heaters are the men who buy and stick by the "MOLINE". Costs no more than the inefficient kind. Get literature, Price Today! Immediate shipment. direct from factory. Write.

Moline Tank Heater Co.
126 Oak Street, MOLINE, ILL.



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1917-1920

Direct from Factory to You

Full crown type. Enameled—not painted. Guaranteed to fit old irons and side shields perfectly. All holes properly drilled—making them simple and easy to attach.

Your Money Back If Not
Entirely Satisfied

Complete set of four fenders for either Ford Touring Car or Roadster body—Only \$16.70 packed and crated, f. o. b. Factory. Write us.

Saginaw Sheet Metal Works
Saginaw, Mich.

Tire Agent

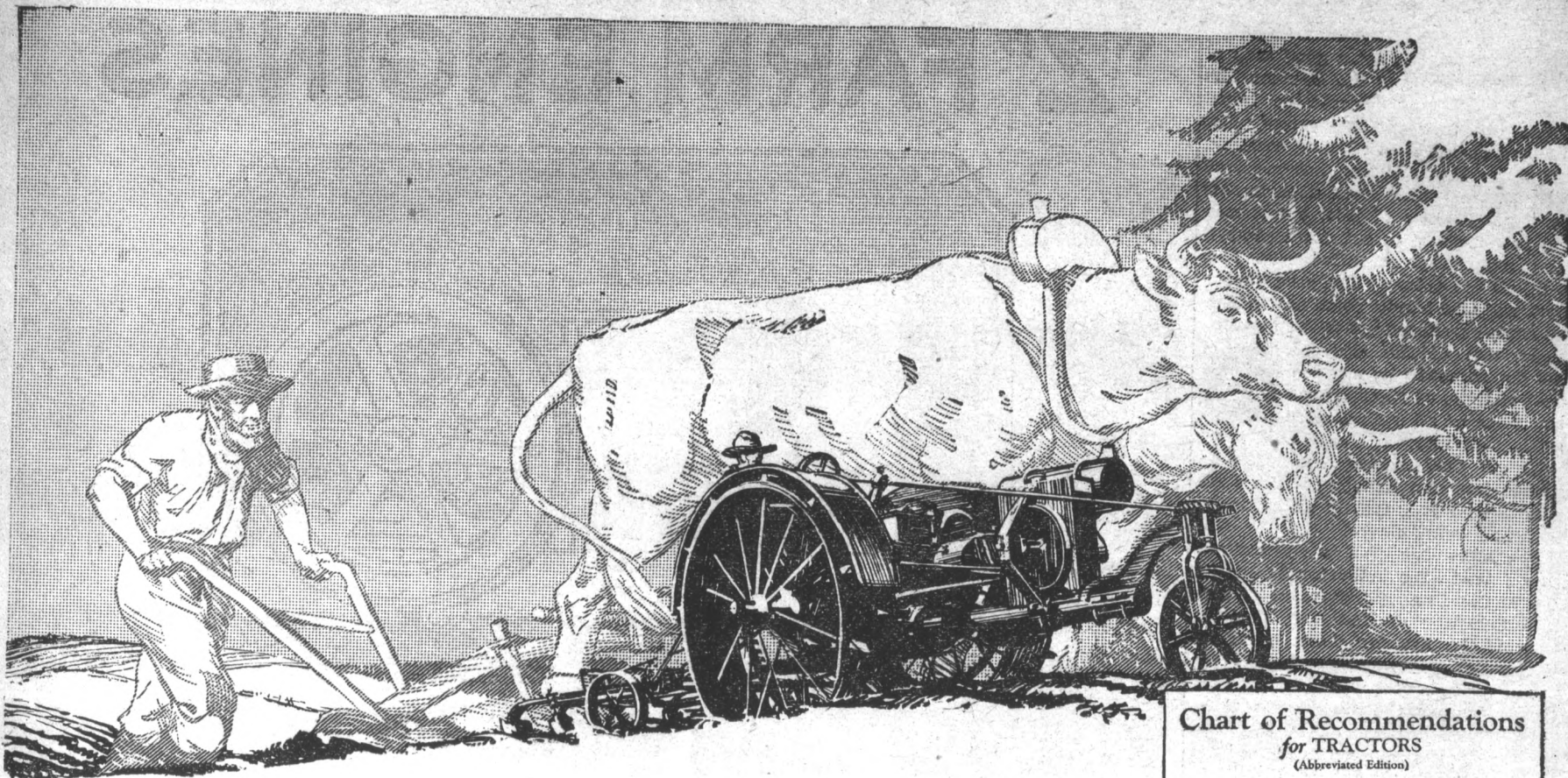
We want one exclusive representative in each locality to use and sell the new Mellinger Extra-Fly hand made tires. Guarantee Bond for 8000 Miles. (No seconds). Shipped prepaid on approval. Sample sections furnished. Don't buy until you get our Special Direct Prices. Write MELLINGER TIRE & RUBBER CO., Kansas City, Mo.

Dept. 967

Free Catalog in colors explains how you can save money on Farm Truck or Road Wagons, also steel or wood wheels to fit any running gear. Send for it today.

Electric Wheel Co.
35 Elm St., Quincy, Ill.

Mention The Michigan Farmer, When Writing Advertisers



The Farmer's Yearly Balance Sheet

National Interest demands that it show profits

IN 1830 ten hours of labor produced three bushels of grain. Today the same labor produces 60 bushels. The modern farmer more successfully combats insect blights, live stock diseases, soil conditions and in many cases even the elements.

This advance has been made at tremendous cost through research by the Department of Agriculture, Universities and other agencies supported by public funds because successful agriculture is vital to National prosperity. Only success can keep the best manhood on the farms.

In spite of improved methods, however, many farmers make only a "living" from their work. *In many cases criminal waste is the cause.* This waste is glaring in the case of farm machinery. Millions of dollars are lost yearly by farmers because machinery is not protected from the elements, and more important still, because it is inefficiently operated.

Prominent engineers agree that over 50% of all engine troubles on tractors, trucks and automobiles are due to incorrect lubrication. Incorrect lubrication not only means repair expense, but excessive oil and fuel consumption,

frequent shutdowns and quick depreciation.

The Vacuum Oil Company has for years been recognized the world over as an authority on scientific lubrication. Gargoyle Mobiloils when used as specified in our Chart of Recommendation, have in hundreds of public and private tests shown a saving of oil from 50 to 70% and a fuel economy from 17 to 25%. Besides lower operating costs Gargoyle Mobiloils enable you to get engine results, which means more power, less trouble, less depreciation.

Farmers fully alive to this situation have increased their profits to an appreciable extent by the economies effected with scientific lubrication.

The Chart of Recommendations (shown in part on this page) specify exactly what grade of Gargoyle Mobiloids will give you best engine results from your auto, truck and tractor.

* * *

Gargoyle Mobiloils are put up in 1- and 5-gallon sealed cans, in 15-, 30- and 55-gallon steel drums, and in wood half-barrels and barrels.

Write for "Correct Lubrication," a booklet containing complete automobile and tractor charts and other valuable data.



Mobil oils

A grade for each type of motor

In buying Gargoyle Mobiloils from your dealer, it is safest to purchase in original packages. Look for the red Gargoyle on the container.

VACUUM OIL COMPANY, New York, U. S. A.

Specialists in the manufacture of high-grade lubricants for every class of machinery. Obtainable everywhere in the world.

Chart of Recommendations for TRACTORS (Abbreviated Edition)

How to Read the Chart

THE correct grades of Gargoyle Mobiloils for tractor engine lubrication are specified in the Chart below.

A means Gargoyle Mobiloil "A"

• B means Gargoyle Mobiloil "B"

BB means Gargoyle Mobiloil "BB"

AB means Gargoyle Arctic
Arc means Gargoyle Mobiloil Arctic

These recommendations cover all models of tractors unless otherwise specified.

Where different grades of Gargoyle Mobiloils are recommended for summer and winter use, the winter recommendations should be followed during the entire period when freezing temperatures may be experienced.

This Chart is compiled by the Vacuum Oil Company's Board of Automotive Engineers, and constitutes a scientific guide to Correct Tractor Lubrication.

If your tractor is not listed in this partial chart, consult the Chart of Recommendations at your dealer's, or send, for booklet, "Correct Lubrication for Tractors," which lists the Correct Grades for *all* Tractors.

Winter, 1939		1920	1919	1918	1917	1916
NAMES OF TRACTORS		Summer	Winter	Summer	Winter	Summer
Allen-Chalmers General Purpose	" All Other Models	B	A	A	B	A
All Work	" All Other Models	B	A	B	B	A
Appleton	" (18-35)	B	B	B	B	A
"	" (22-45)	B	B	B	B	A
"	" (15-30) (Waukegan Eng.)	B	B	B	B	A
"	" All Other Models	B	B	B	B	A
Avery	(5-10)	B	B	A	A	A
"	Motor Cultivator & Planter	A	A	A	A	A
"	" All Other Models	A	A	A	A	A
Bates Steel Mule	"	B	B	B	B	A
Bean-Track Pull	"	B	B	B	B	A
Big Pull	"	B	B	B	B	A
Buckeye (Findlay, Ohio)	"	B	B	B	B	A
Case	(9-18)	B	B	A	A	A
"	" (10-15)	B	B	A	A	A
"	" (10-20)	B	B	A	A	A
"	" (12-25 & 20-40)	B	B	A	B	A
"	" (12-25)	B	B	A	B	A
"	" All Other Models	B	A	B	A	A
Case	"	B	B	A	B	A
Cleveland	"	B	B	A	B	A
Cotman	"	B	B	A	B	A
Cotton	"	B	B	A	B	A
C. O. D.	"	B	B	A	B	A
Craig	"	B	B	A	B	A
Crescent Corp.	"	B	B	A	B	A
E. B.	(7-16)	B	B	A	B	A
"	" (Reeves)	B	A	A	B	A
"	" All Other Models	B	A	A	B	A
Flour City (20-35)	"	B	A	A	B	A
"	" All Other Models	B	A	A	B	A
Fordson	"	B	B	A	B	A
Gas Pull	"	B	B	A	B	A
Gran Belt	"	B	B	A	B	A
Happy Farmer	"	B	B	A	B	A
Hart Parr	"	B	B	A	B	A
Heider	"	B	B	A	B	A
Holman	"	B	B	A	B	A
Holls	"	B	B	A	B	A
Hot Caterpillar (Model 18)	"	B	B	A	B	A
"	" All Other Models	B	B	A	B	A
Huber	"	B	B	A	B	A
Indiana	"	B	B	A	B	A
K. C. Prairie Dog	"	B	B	A	B	A
Liberty	"	B	B	A	B	A
Lightfoot	"	B	B	A	B	A
Moline	"	B	B	A	B	A
Mogul	(8-16)	B	B	A	B	A
"	" All Other Models	B	B	A	B	A
Monarch	"	B	B	A	B	A
National	"	B	B	A	B	A
Newberry (20-12)	"	B	B	A	B	A
"	" All Other Models	B	B	A	B	A
New Age	"	B	B	A	B	A
Nilton	"	B	B	A	B	A
Oil Pull	(14-25, 10-30)	B	B	A	B	A
"	" (20-40)	B	B	A	B	A
"	" All Other Models	B	B	A	B	A
Parrett	"	B	B	A	B	A
Pioneer	"	B	B	A	B	A
Rumely	(8-16)	B	B	A	B	A
"	" (12-24)	B	B	A	B	A
"	" All Other Models	B	B	A	B	A
Russell (Grand)	"	B	B	A	B	A
"	" All Other Models	B	B	A	B	A
Sandusky	"	B	B	A	B	A
Square Turn	(15-40)	B	B	A	B	A
Turn	(20-18-35)	B	B	A	B	A
Townsend	"	B	B	A	B	A
Treadnar	"	B	B	A	B	A
Tractor Simplicity	"	B	B	A	B	A
Twinn City (Model 15)	"	B	B	A	B	A
"	" (Model 16)	B	B	A	B	A
"	" (Model 20-30)	B	B	A	B	A
"	" (Model 20-35)	B	B	A	B	A
"	" All Other Models	B	B	A	B	A
Valle	"	B	B	A	B	A
Wallis	"	B	B	A	B	A
"	Cub (Junior)	B	B	A	B	A
Waterloo Boy	"	B	B	A	B	A
Wheat	"	B	B	A	B	A
Whitney	"	B	B	A	B	A
Wisconsin	"	B	B	A	B	A

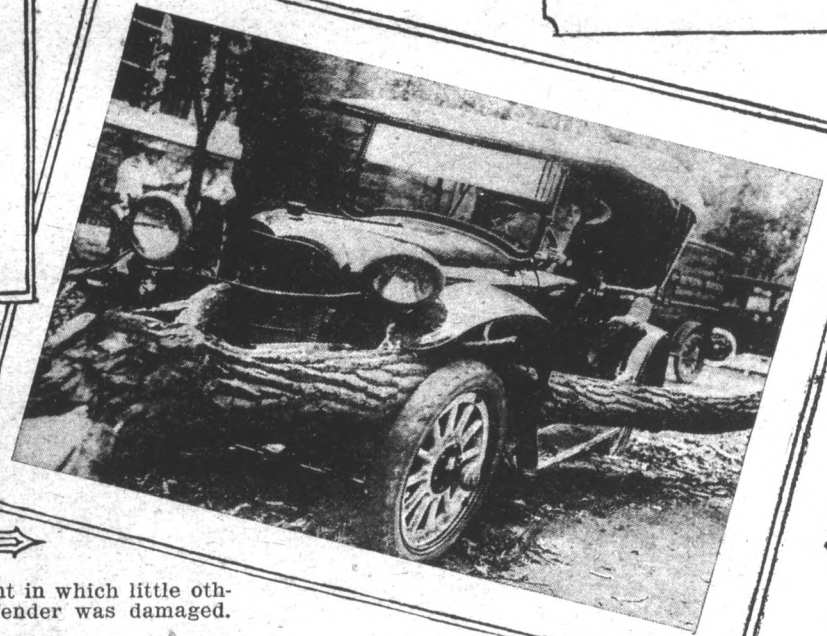
WORLD EVENTS IN PICTURES



Due to the new women voters at the recent election it was necessary to increase the capacity of ballot boxes. In Jersey City ballot barrels were substituted.



Mrs. Theodore Roosevelt aids in dedication of Roosevelt Highway on birthday of great American.



A peculiar accident in which little other than the car fender was damaged.



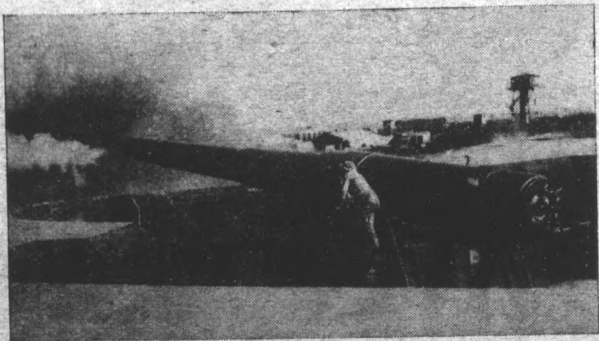
Married sixty-seven years. Still happy.



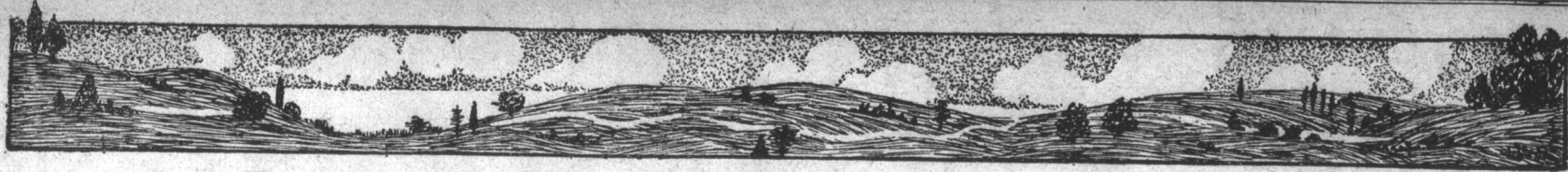
Eight-year-old chess marvel who plays a number of games simultaneously.



Richard Washburn Child, lawyer and writer, who may be named secretary to President-elect Harding.



Firing a twelve-inch gun at Fort Hancock.



A Little Surprise for Mabel

By Charles H. Smith

IF you should ask anyone in Veronica who owned the best farm in that vicinity they would undoubtedly answer, "John Brown." And if you cared to listen they would tell you all about his one hundred and sixty acres of gently-rolling fertile soil equipped with fine buildings, good silos, new fences and the latest labor-saving devices known to modern agriculture. All of which would be true.

Ever since he had married five years ago and moved on his own farm John Brown had striven to make it one of the best farms in Veronica county. Unhampered by the traditions of early farming he had been quick to grasp each new idea as soon as its worth had been proved and so it was that his neighbors judged his farm to be one of the best-equipped farms in that section of the country. John Brown was a leader. If he installed a new device of any kind it must be right, declared his neighbors, for John knew what he was doing.

But there was one place on his farm that was not up to date. And alas! that was his own home. Just before he had been married he had collected a rather nondescript assortment of furniture—most of it old and second-hand—and Mabel had loyally said that she would make it do until they got a start. But now they had a start—a fine prospect ahead of them—and the old furniture still remained in the house with no new additions. Progressive as he was in getting the latest machinery and conveniences around the barns, John hardly gave his own living quarters a serious thought. He was comfortable, and that was sufficient. His home produced no revenue and his thoughts were concentrated entirely upon the revenue end of the farm. After everything was perfected around the buildings, and all debts were paid, then he might give his attention to his home and furnish it with the same thoroughness he had his barns. Probably he would have done this, too—in time.

Since the first year of their marriage his pretty little wife, Mabel, had confided to him her longing for pretty furniture—and a piano. But never insistently. It was: "John, dear, wouldn't this bed-room look lovely with an ivory dresser, bed and dressing-table—and a green velvet rug? I just wish we could afford to have it!" Or, "John, don't you wish we could furnish our living-room in mahogany? And if we could only have a piano, too! I'd just like it so much! Oh, I'm afraid I'll forget how to play before we can afford to have one."

And John would patiently explain

how necessary it was that he should get this or that for the barn or that he had some bills almost due, telling her how he'd like to get all of these things for her if only he could afford to buy them. But some day, some day she should have all the pretty things that she wanted. Mabel would sigh a little, re-arrange the old furniture as prettily as she could and try to content herself with promises of the future. But at times her longing would get the better of her and then she would bury her face on John's big shoulder and say, "Dear, don't you think you can afford to get our pretty furniture soon now?" And John would always answer, "Yes, Mabel Girl—pretty soon."

But five years had slipped by and no new furniture had been bought. Then one afternoon the little wife had gently asked that same question. And John as always, had answered, "Yes, Mabel—soon now," and had explained how he must have a new gasoline engine so that he could have more power to run his machinery, which would take about all of his cash. Seeing how disappointed she was he had tried to cheer her up by telling her that the new furniture would be there much sooner than she expected. And then he had driven to the city for the new gasoline engine.

The next afternoon a big van drove up laden with furniture. When Mrs. Mabel Brown saw it turn in the yard her heart beat fast with anticipation. The driver descended from his seat and knocked at the door. She flew to it and jerked it open.

"Is this where Mr. John Brown lives?" asked the driver.

"Yes."

"Well, I've brought the load of furniture he ordered yesterday," replied the man. "Where do you want it unloaded?"

So John—Dear Old John, had surprised her by saying nothing about getting the furniture but going to town and having it sent out! Now she knew what he meant when he had said that it would be there sooner than she expected! It was so good of him! She would show him how happy it made her when he came in that night.

"Oh! Unload it on the front porch!" she finally exclaimed after partially recovering from her surprise.

Then she went to a point of vantage on the lawn and seating herself watched the burly driver and his assistant unload the big van. John certainly knew just what she wanted—the old

series of delighted little exclamations of admiration from her as the men unloaded each piece. And when they began carrying the different pieces which went to make up the beautiful mahogany living-room suite she could scarcely contain herself. And there were other pieces of furniture that she hadn't even mentioned to John—but they were just what she liked! Another bed-room suite in walnut! Some pretty wicker porch furniture—a settee and three rockers! Suddenly a brilliant thought came to her. Why not move in all the furniture and have it all arranged in the different rooms when John came in to supper? To be sure, it was rather heavy work for such a little woman but then, she could get the furniture men to place the heavier pieces. And wouldn't John be pleased. Jumping up she ran up to the men.

"Would you men please help me to place this furniture in the house? I'll be glad to pay you for it if you will," she said appealingly.

For a second the men hesitated. This wasn't part of their job. Then one of them spoke up: "Sure, Miss, we'll be glad to help you."

When John Brown stepped on his back porch that evening a vision in white flew to him, two small white arms wound themselves tightly around his neck and a dozen kisses were rained upon his tanned face in quick succession. The attack almost took his breath away.

"John! You Old Dear! Why didn't you tell me you were going to do it? I just love you, Sweetheart!"

And then another hug that threatened John's vertebrae and some more quick kisses and taking him by the arm she quickly pulled him into the house.

"Isn't it lovely, John dear?" she asked when she had piloted him through the kitchen into the living-room with the new mahogany furniture all tastefully arranged. "When the delivery man drove in the yard and asked if Mr. John Brown lived here I knew right away what you'd done. But when he unloaded all these lovely things—just exactly what I wanted—well, I was the happiest girl in all the world, Dearest. And I just got the men to help me settle the house and surprise you, John dear. Now come and see our other rooms. Oh! It's all so pretty! You're so good to me."

She gave him a quick little kiss and then slipping her small arm around him led him to see the ivory bed-room

suite, which had particularly delighted her.

If Mabel had not been so supremely happy she might have noticed the look of surprise on her husband's face when she bustled him in and showed him the new furniture. But happily she didn't and so her happiness was unalloyed. For the fact is that John Brown had not bought a penny's worth of furniture and had never even seen this particular assortment before. While his little brown-eyed wife was so happily displaying the new things, he was trying to solve the enigma. Suddenly he remembered of hearing about a young fellow named John Brown who had just been married and was moving on the Wentworth Farm a mile south. That was it! The young bridegroom had ordered the furniture sent out to the Wentworth Farm from Minyon City and the driver had made a mistake due to the likeness in names and had delivered it to the wrong house. And the furniture was all arranged in his house. He wanted Mabel to have it. He hadn't realized before how much it meant to her.

"John, why don't you say something? Don't you like the way I have everything arranged?" asked Mabel noticing his silence.

"It's—it's fine, Mabel Girl. You've done just fine. Everything looks great," he replied trying to appear enthusiastic.

"I'm so glad you like it. You do, don't you?" she asked again, wishing to be reassured once more.

"You bet I like it. It's all right," answered John as he racked his brain to figure out how he could make it "all right."

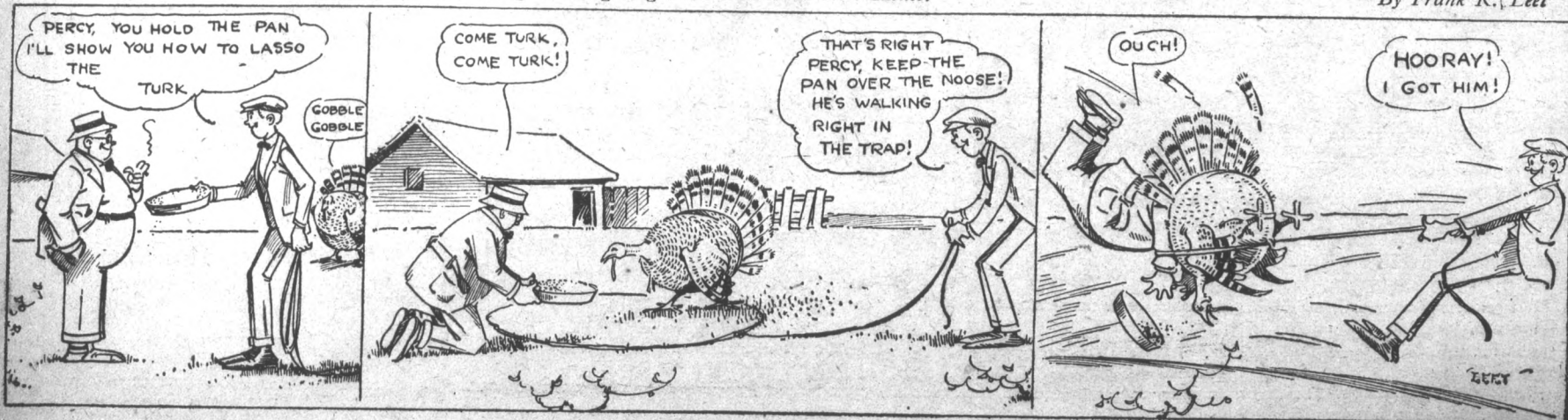
The next morning he drove over to Minyon City and hunted up the firm that had delivered the furniture to his home by mistake and after some explanation and a little diplomacy he persuaded the dealer to allow him to keep the entire order and send the other John Brown a duplicate order. After paying the bill, he drove to another store and after careful consideration made one purchase, stipulating delivery that afternoon. Then he drove home. When he turned into the yard Mabel was on the front porch sitting in one of the new wicker rockers reading a book.

"John dear," she called to him, "You didn't tell me that you were going away."

"Well, Mabel, I just had to go to the city and give that man a calling down for not delivering your new piano with the rest of the things. But it's all right. It will be here this afternoon," replied John laughingly.

AL ACRES—Unusual Excitement Occurs During Thanksgiving Preliminaries at Al's House.

—By Frank R. Leet



How to Skin Fur-bearing Animals

By S. Thomas

NO fur-bearers should be trapped before they are prime. Most states have trapping laws, and it will pay the trapper to obey the law. If the trapper lives in a state where there are no laws regulating the trapping of fur-bearing animals, trapping should not be started before November 1 to 15, depending upon weather conditions. Naturally, furs become prime earlier in the northern states than in the south, due to climatic conditions, and the northern trapper can commence trapping sooner than his southern brother.

Skunk and raccoon are the first animals to become prime, usually around the middle of November. Then follow mink, red fox, white weasel and other land animals. Muskrat and beaver are at their best in the spring. However, a great many muskrats are taken in the fall and winter and command fairly good prices. Fall-caught muskrats are used largely for coat linings. A skin that is fully primed is always full-furred and the pelt side shows white or a light pink. Any skin that is blue on the pelt side, or streaked with blue is unprime and will be classed as a No. 2 or No. 3. A skin that is entirely black or real dark brown on the pelt side will be classed as a No. 4 or a trash.

It is just as important to know how to skin and handle the fur-bearers as to know when and how to trap them. The trapper who takes pains in skinning, stretching and handling his furs will be well rewarded for the extra time and effort spent, as he will enhance the value of his collections considerably. The better the condition the skin is in when received by the fur buyer, the less labor he has to put into it, therefore, he can well afford to pay a higher price for the properly skinned and well handled furs.

There are two ways of skinning fur-bearing animals—"cased" and "open." Skunk, mink, muskrat, coyote, otter, marten, fisher, white weasel, red fox and wild cat are skinned "cased."

The "cased" method of removing the pelts is as follows: Cut the skin down the under side of the hind legs and straight across to the root of the tail. Split the tail part way. Then remove the tail bone by slipping a split stick over the tail, grasping the stick with the right hand and holding the animal's body with the left—a quick pull and the bone slips out. Then pull the skin over the body to the front legs, keeping as clean of flesh and fat as possible. Work the front legs out. Pull the skin some more—use the knife around the ears and eyes—and take off at the end of the nose. To make the work of skinning easier, a strong cord may be looped around the hind legs and the animal suspended from the limb of a tree or some other projecting object.

Muskrat tails are worthless and should be cut off. Otter tails should be split open on the under side the entire length, spread out flat and the edges fastened to the board with tacks.

Raccoon, beaver, badger, timber wolf and mole should be skinned "open." The "open" method of skinning is cutting the skin down the belly from the chin to the root of the tail, then peeling it from the body, using the knife whenever necessary. The fur should be tacked on to a wide, flat board to dry. Beaver should be stretched as round as possible. Procure a hoop and fasten the skin at four points in the hoop. Then gradually stretch between these fastenings, using a large bag needle, passing the string through the skin and around the hoop.

After the skin is taken from the carcass, it should be fleshed, that is, all

(Continued on page 639).

Make Note of this big Exposition

Here is something that no progressive farmer can possibly afford to miss. It marks the greatest forward stride in educational exhibits ever undertaken.



Your best chance to inspect and judge all types of power farming machinery.

MAKE no mistake. This Sixth Annual National Tractor Show is not just a tractor demonstration. It is a gathering of the leading men in agriculture and *all* men interested in mechanical power as applied to farming. They will get together at Columbus, Ohio this February, for the exchange of new and profitable ideas.

A wonderful program has been arranged. Eight huge buildings will be devoted to power farming equipment, demonstrations, lectures, meetings and entertainments that are free to all who come.

Tractors of every size and type, together with tractor drawn and operated tools of many kinds, will be combined in an exhibit of enormous instructive value. New and highly interesting machines and methods without number will be shown. Successfully tried out ideas, startling in the results they obtain, will be demonstrated for the first time. Valuable knowledge will be gained by every farmer—practical facts that can at once be turned into real profit.

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You can take it for granted that you will have a good time. There will be plenty of fun. But, far more important is the big list of famous men and practical successful farmers who will be here to go into the problems and possibilities that confront you in your work.

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Hundreds of different tractors, tractor-drawn and power operated tools, farm-lighting plants, etc., will form the most tremendous display ever witnessed.

Of course you want to come! Of course it will pay! Use the coupon now to obtain more complete information and insure free admittance.

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Arrange your plans now to come and bring your wife and family. Ample accommodations are assured for one hundred thousand farmers who will attend. Columbus, the country's most central city, bids you welcome.

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Gentlemen:

Please send me your booklet regarding The Sixth Annual National Tractor Show. Also enclose free tickets for myself and _____ others of my family.

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Find out how these graphite lubricated bearings end windmill annoyance and save you dollars.

Get the facts now about pumping costs on the farm and you will see that you can get all the water you want with a new model Perkins Windmill cheaper than you can get it with gas engine or by any other method.

Don't judge by any windmill you have ever seen or used. This new model has many improvements. Gravity regulator; ball bearing turn table; automobile-type crank shaft; everything to make it the most efficient pumping power in the world. Many Perkins mills in use 50 years.

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The Thanksgiving Habit

Our Weekly Sermon—By N. A. McCune

THE original Thanksgiving Day will always have a deep interest for Americans. The little company that had come over in the Mayflower was having a hard time of it. The first winter nearly half of their number died, with the exposure, improper food and want of medical care. The remainder lived on scant fare. But the first summer they reaped a good harvest, and in gratitude to the good God whom they served so courageously, they appointed a day of Thanksgiving, November, 1621.

Thanksgiving was not at first an annual festival, but was observed from time to time as special occasions arose. In 1789, after the state had ratified the constitution, congress appointed a day of thanksgiving, and at the close of the War of 1812, President Madison issued a proclamation calling for a day of thanksgiving and prayer. But probably the greatest thanksgiving day after colonial days was that of 1863. The battle of Gettysburg had been fought, which had turned the tide of the Civil War. It was the greatest battle ever fought on the western continent. Up to that time, victory had perched on the banners of the south more frequently than on those of the north. But when the smoke cleared away after three terrible days of cannonading, Lee turned back toward the south, never again to attempt an invasion of the north. A few months later the battlefield was dedicated as a national cemetery, and Lincoln gave his undying Gettysburg address, which every American child should be taught to memorize. Lincoln's heart was full. He told General Sickles that he had prayed for victory at Gettysburg, as he had prayed before no other battle. A Thanksgiving Day proclamation was issued, and the custom has been observed by every president since then. It has become one of our national days. Like the Fourth of July, it is distinctly an American holiday.

IN the Old Testament a corresponding festival was held. In fact, it is more than likely that the Pilgrims got the idea from the Bible. In the Hebrew festival, a sheaf of grain was waved by the priest, before Jehovah, at the beginning of harvest as a token of the fact that He is the giver of the crop. After fifty days, two loaves made from the new grain, were waved before the Lord, to show that the people recognized the Creator with the first and best of their increase.

The New Testament does not hold to set feasts and times of thanksgiving so much as it teaches the attitude of thanksgiving as a habitual state of mind. "In everything give thanks." "Giving thanks always for all things." This is the mental state that brings the greatest returns. The whining, grumbling person shuts the windows of the soul against all that is finest in life, while the thankful heart is open to every life-bringing influence. Whittier says:

"The west winds blow, and singing low,
I hear the glad streams run;
And all the windows of my soul
I open to the sun."

The King of England one day heard a miller singing at his work, and asked him how he could be so happy, while he, the monarch, found life gloomy. The miller's reply was:

"I earn my bread," said he,
"I love my wife, I love my friend,
I love my children three.
I owe no man I cannot pay,
I thank the river Dee,
That turns the mill, that grinds the corn,
To feed my babes and me."

NO nation has cause for gratitude more than the United States, in this year of our Lord, 1920. We have

the forests, we have the mines, we have the agricultural lands, we have the waterways, the fisheries, the sea coast, and the people to make us the most powerful nation in the world. The Mississippi Valley alone could nourish the entire population, and have a surplus to export. The Pacific seaboard holds the key to the Orient. And as for population, the very heterogeneousness of it is a source of strength. We have not one type of human, but several, and the blending of them means virility. When one considers the population in such countries as France or England, it is evident that the United States is still in the beginning stages. And yet this wealth of resources, this variety in population are but the groundwork of national strength. A people's greatness lies in its strength of purpose, its religious faith. And if increased wealth means the decay of soul, it is but a synonym for death. "The tumult and the shouting dies, the captains and the kings depart. Still stands thine ancient sacrifice, an humble and a contrite heart." That was the sentiment expressed at one of England's great anniversaries, and it needs echoing now. When the Serbians were on their terrible retreat before the Austrians, American Red Cross workers remarked the fortitude of those humble folk. No words of hate were heard. There was no despair, and no immorality. Whatever form of Christianity they believed, it was a reality to them, when they needed it most. Much yet may be expected of such a people. Much may be expected of a nation that nourishes a real and quiet faith in the Lord of Hosts. Thanksgiving ought to remind us of the need of such faith.

NATIVE PLANTS OF MICHIGAN.

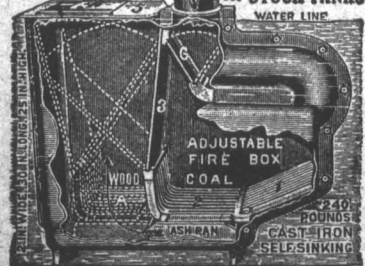
WITH a view to the publication of a volume giving a complete description of the plant genera and species of Michigan, Dr. E. A. Bessey, professor of botany at M. A. C., is seeking the cooperation of the people of the state in compiling the necessary information. Those who have collections would be putting them to the fullest use if they found it convenient to comply with the doctor's suggestion.

"Many persons possess collections of plants made at various times and in various places in Michigan," says Dr. Bessey, "which in many cases are no longer of interest or are no longer being increased. Could the owners be persuaded to deposit them in the herbarium at M. A. C. they would be very gladly received and cared for and the work of preparing the printed flora would be materially assisted.

"Furthermore, there are many people who pick up rare or interesting plants here and there and do not know what they are. If these should be sent to us they would be named, in this way benefiting the sender and at the same time aiding the whole project, for frequently such plants prove to be of the greatest interest."

One valuable collection made in Oakland, Wayne and Monroe counties by the late Benjamin F. Chandler, of Detroit, has just been received from the executor, C. Billington, himself an enthusiast in the subject. Because much of the original flora of the state is being destroyed, Dr. Bessey desires to complete his information as soon as possible. The volume when issued will be the culmination of eighty years of work begun by such pioneers as Coolidge in Macomb county and Whitney, of the state geological survey, and carried on by Dr. William J. Beal, now of Amherst, Mass., for many years head of the botany department at M. A. C.

COW BOY SURE HEATER for STOCK TANKS



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"Purchased 8 of your Tank Heaters last Winter, worked very satisfactorily and are well worth their cost. Every stockman should use one." W. H. FEW, Prof. of Animal Husbandry, Iowa State College, Ames, Ia.

THE MUNDIE MANUFACTURING COMPANY
519 Brunner Street, Peru, Illinois

Mention The Michigan Farmer When Writing to Advertisers.

FUR-BEARING ANIMALS.

(Continued from page 637).

superfluous fat and flesh should be removed. A dull knife may be used to good advantage for this work. If all fat and flesh is not taken off, the skin is liable to become tainted or hairslip, or grease-burnt. A tainted or hairslip skin is one from which the hair comes out in large bunches, and such skins are practically worthless. Grease-burnt skins crack when bent, and are of but little value. Always skin the animal as soon as possible after killing.

"Cased" skins should be put on boards, flesh out, belly on one side and back on the other, and fastened with half a dozen tacks. Skunk, muskrat, mink, white weasel and wild cat may be shipped flesh out; skins of other fur-bearers should be turned when dry and shipped fur out.

Never dry furs near the heat of a fire or in the sun, but put them in a cool, dry place. Do not use salt or alum on your furs, as it is injurious to the skins and lessens their value.

Be careful not to over-stretch the skins. Don't try to make a large out of a medium. You can't fool the buyer and you will be the loser, as the fur is spread over too large a surface, thereby becoming thin, and such skins will not be graded as No. 1.

There are several kinds of steel fur stretchers on the market, which are very good for that purpose, and particularly useful to the beginner. However, a supply of stretching boards can be made from shingles and other soft wood. Average size mink boards should be about thirty-two inches long, four and a half inches wide at base and four inches at the shoulder, then taper to a blunt point at the nose. The skunk board ought to be about twenty-eight to thirty inches long, five to seven inches wide at base and four to six inches at the shoulder, from there coming to nearly a point, about an inch wide at the end. The muskrat board should be about twenty-two inches long, about six inches wide at base and about five and a half at shoulder, then taper to a point.

When the skins are thoroughly dry, they are ready for shipping. Pack them flat, one skin on another. Never put one skin inside another. Tie them together securely and wrap in burlap. Most fur houses furnish identification cards, which are sent free to the shipper. The contents of your shipment should be listed on one of these, your name and address plainly written on it and the card placed inside the bag or bundle. Also be sure your name and address are plainly written on the outside tag and that it is securely fastened to the bundle.

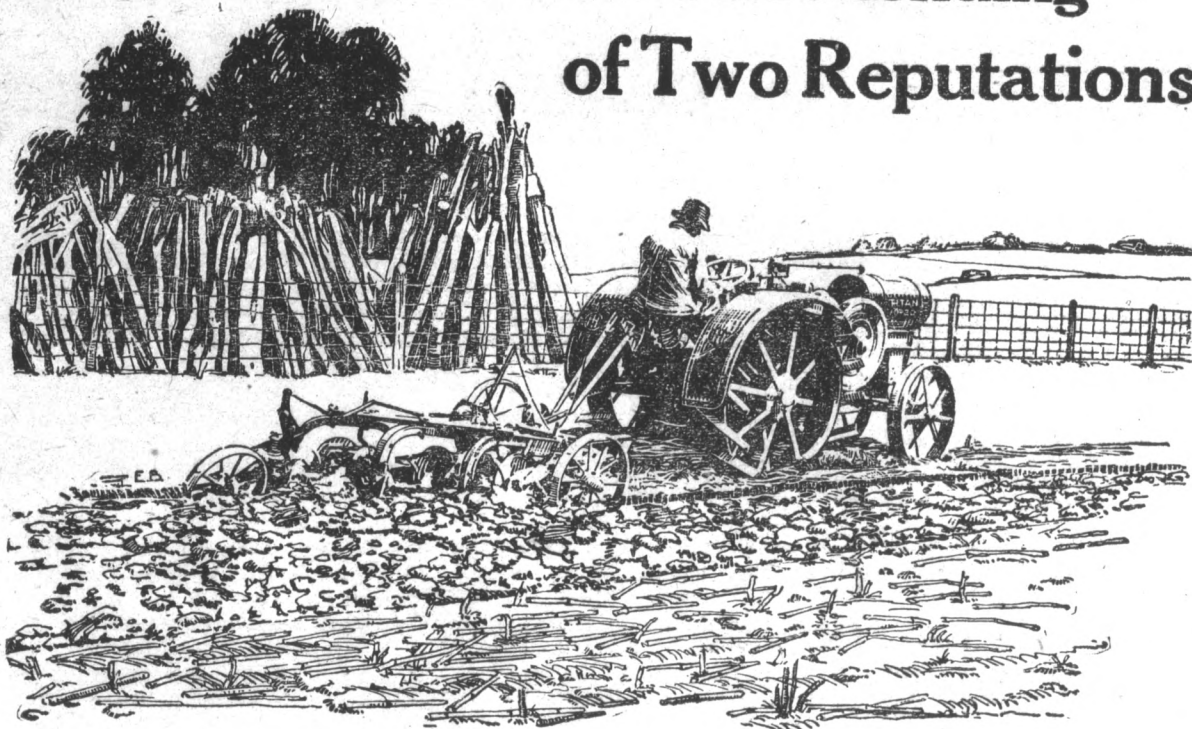
Small packages may be shipped by parcel post. Larger bundles should go by express. Never ship by freight, as the delivery is too slow and your furs might spoil while in transit.

An important thing to the trapper is to ship his furs to a reliable house. Of course, it is hard to tell which is which unless you have done business with them before. There are many reliable fur houses who will treat the shipper "square" and most of these will hold furs separate on approval and submit a valuation. If you have any doubt in your mind regarding the house to whom you are making your shipment, it would be well to request the shipment held separate. Then if the offer is not satisfactory you can have the furs returned.

Skin, stretch and handle your furs with care, use judgment in shipping and trapping will pay you big.



The Blending of Two Reputations



AWAY back in the beginning of modern American farming the pioneer builders of farm machines began their work. For more than three generations the genius and skill of good plow makers at Canton, Illinois, ran parallel with the skill and genius of good farm machine builders now united under the name of the International Harvester Company.

From the pioneer days down to date these industries were intent on providing the farms with quality machines. They were ever on the alert for improvement and progress.

When, fifteen years ago, this Company began putting practical tractors on the farms, the Parlin & Orendorff plow makers began the development of a superior line of tractor plows. As the International Tractors developed into popularity, so did the

sterling worth in **P&O Little Genius** win its way into leadership.

It was fitting, therefore, that eventually the International Harvester Company should join together the extraordinary success of **P&O Plows** and **International Titan Tractors**. For a long period now these reputations have been blending. **P&O Plows** are a part of the International line. International Harvester Tractors and **P&O Plows** have long been working together efficiently.

Many thousands of new owners of these long-famous plows and tractors, who are turning soils with them in every corner of the land, know that this close and necessary association of power and plow is making for better plowing and more completely successful tractor farming. **P&O Plows** and **Titan** and **International Tractors** recommend themselves.

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160 to 900 lbs. capacity. Backed with a guarantee of separator perfection. Easiest turning—closest skimming—most sanitary. Ask your dealer for trial or write to us.

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13-4 to 12 H. P. Engines for every farm purpose—200,000 satisfied users. Highest quality—most economical power. Has no duplicate in value. Learn the features—get the facts.



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Self-sharpening automatic-aligning, oscillating burrs. Grinds all grains. Pulls easy—durable—great capacity. 6-8 and 10-inch sizes. With or without elevators. See your dealer or write to us.

See The United Dealer—If a dealer near you cannot show you the United line, write to us. The high standard of United quality and low prices make the United America's Greatest Value. Get all the facts.

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one ton truck with five by eight stake body which cost us \$850. Will sell for \$500 cash. Suitable for hauling produce.

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Inner Armor for auto tires. Prevent blowouts and punctures. Double tire mileage. Easily applied to any tire between casing and tube. Details free. Agents wanted. Liberal profits. Amer. Accessories Co., Dept. T-1291, Cincinnati, O.



This Grain Disinfectant Officially Endorsed

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Our Boys' and Girls' Department

Michigan Boys at the International

A WEEK of "good time" and something interesting each day has been arranged for that part of the program known as the Junior Club Tour, which is for the benefit of the prize-winning club members who will attend the International Live Stock Exposition at Chicago, November 29 to December 3. The twelve boys selected at the district fairs in Michigan will be there to enjoy the week and see those things most interesting to club members.

Ever since club folks began talking about fairs and stock-judging last summer the various local leaders and county club agents were anxious to know what boys would go to the International. State Club Leaders R. A. Turner and his assistant, W. A. Anderson, have worked steadily and patiently through the hot summer days and many evenings coaching the county teams.

Mr. Anderson has now completed arrangements with the different fair associations and the three high-scoring boys in each judging contest will have their expenses paid to Chicago. Following are the names of the club boys who will make the trip, and the fair associations that send them:

Michigan State Fair:—Carl Johnson



Carl Johnson.

Ironwood; Walter Ball, Charlotte; Rex Stowe, Wolverine.

Jackson County Fair:—Don Shepard, Charlotte; Ward Parker, Charlotte; Merritt Young, Northville.

Grand Rapids West Michigan Fair:—Ralph Johnson, Charlotte; Verne Riggis, Vicksburg; Carl Bloom, Grand Rapids.

Saginaw County Fair:—Verne Diehl, Davidson; Edward Wendling, Saginaw; Tom Bannon, Saginaw.

The first day, Monday, November 29, is registration and live stock exposition day. All club members will register on that day and an opportunity will be given to all to see the animals exhibited at the world's greatest live stock show.

Tuesday, November 30, will be known as Armour Day. A complete trip will be made through the huge packing plant with ample opportunity to see the slaughtering, beef coolers, curing of meat and the manufacture of soap, glue, curled hair and other by-products. At noon a luncheon will be given club members in the Armour restaurant, and an entertainment will be held in the evening.

Loop Day comes on Wednesday, December 1. Entertainment on this day will include visits to the Continental and Commercial Na-



Rex Stowe.



Walter Ball.

tional Bank, Marshall Field's establishment, the art institute and other points of interest in Chicago's big downtown business district. Lincoln Park with its zoo will also be a feature when the club members will see bears, lions, tigers, monkeys, camels, birds, sea-lions, and animals from all parts of the world.

Thursday, December 2, is Manufacturers' Day. A trip will be made through the plant of the International Harvester Company to see the manufacture of binders, rakes, wagons, tractors and other farm machinery on a large scale. The plant of the Corn Products Company will be inspected, starch, gluten, syrup and forty other products are made from corn.

Good-bye day comes on Friday, December 3. A chance will be given to say farewell to all club friends, old and new, and to pledge another year of club work that will win another trip to Chicago.

A movie will be taken of every club activity during the week, in which officials of the United States Department of Agriculture, farmers' organizations and the International Live Stock Exposition will take a part. Three hundred and twenty-five club champions from all parts of the United States are making plans to attend the exposition. G. O. S.

How I Got Started—By Clifford Gettings, Hillsdale

I BECAME a member of the Poultry Club three years ago, as I have always taken a great interest in "Fancy Poultry." It is a pleasure, also a profit, and also a great deal of work to raise poultry. I raise Silver Wyandottes, because we have always had this kind and also because of their eggs, and also of their show quality, that is, at poultry shows, fairs, etc.

It takes some time to get started in well marked birds, we have been raising the Silvers for eight years and are beginning to get some good ones now after years of culling out and mating the best marked birds. The birds I had this year were some fine show birds, well marked, and they matured well. I won three firsts and four seconds, also second best parti-colored birds at the local fair this fall.

I was a member of the demonstrating team from Hillsdale this year. The counties of Michigan were divided into districts of which Hillsdale was in the fifth district. The local teams would compete and winners go on till the winners were from the five different districts.

Our team was lucky to be the winner of the fifth district, which means that we got a chance to go to the State Fair at Detroit. Hillsdale won the state poultry judging contest of Michigan for all boys' and girls' clubs. In this demonstration we had

that raised poultry had me come over and sort his chickens, for he wanted to sell some because they were not laying enough eggs for the amount of chickens he had. He said there were too many loafers in the flock. I went over and sorted out the flock of eighty hens, so he had about thirty-five left. On the day he had all of them he got twenty-eight eggs and the next day after he sold those that I thought were not laying, he got twenty-seven eggs, so you see there were some loafers in the flock that were not bringing in any profit and they took as much feed as the others.

So you see what the poultry club has done for me and I wouldn't have known nearly as much about poultry if it hadn't been for this. The club work also teaches one to keep reports for feeds, labor, etc.

PIG CLUB MEMBER WINS FIRST PRIZE AT GOGEBIC COUNTY FAIR.

HELMI NEVALA, daughter of Mr. and Mrs. Walter Nevala, Ironwood township, was the lucky winner of a registered Duroc-Jersey sow, given by the Michigan Duroc-Jersey Association.

Helmi has been an active club member for many years, engaging in garden club work, garment-making club work, and lastly, as a pig club member. Helmi is the youngest member of any of the live stock clubs in the county. Plans are under way for drawing more girl members into these clubs in the coming year. An interesting fact in connection with the story of the pig club member is that Helmi secured the money for the purchase of this pig



Four Years of Club Work Has Developed Clifford Into a Poultry Breeder.

from "The Farm Boys' and Girls' Leader." Helmi is mighty proud of this purchase.

Why Pure-bred Stock

By Carl Johnson of Ironwood, Who Won a Trip to the International

EVERY farm boy, as well as his father, hopes some day to have a fine herd of pure-bred cattle. The question I want to ask is, why not start at the beginning with pure-breds, instead of grades? Some will say that it costs a pile of money to start with pure-breds. It is very true that it costs more to buy a pure-bred animal than to buy a grade, but where is there a better investment than one that will assure you of success? And if you are looking for success the best way to find it is to invest in pure-bred cattle.

If you start in with one pure-bred heifer you can have her bred to a pure-bred bull if there is one near you, and in a few months you will have a pure-bred calf. Now, this calf at the age of six weeks will be worth more than a grade calf at the age of six months. If it is a heifer calf you can keep it to increase your herd, and if it is a bull calf you can always find a good market at high prices for pure-bred bull calves are always in demand if they come from a good producing herd. This is one point in favor of the pure-breds and that is, you can always sell a pure-bred calf for a good price that is far above its value as beef on account of the future value of the calf as a producer or breeder. All you can get for a grade calf is what it is worth as beef, because no real farmer wants a grade bull to head his herd and nobody cares to buy a grade heifer calf and keep her until she starts milking.

Of course if there is no good pure-bred bull in your neighborhood you will have to buy one. A good way to get a start is to buy a purebred bull calf and a pure-bred heifer. It will cost a little more than to start with grades but it will pay you in the end.

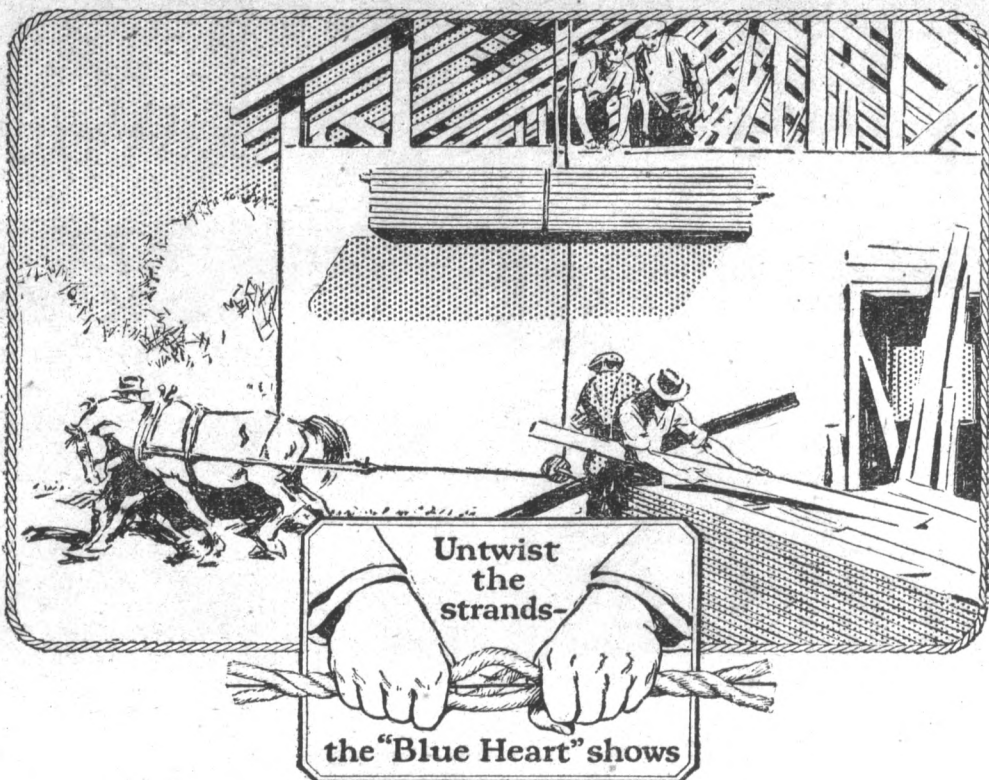
When you are buying a pure-bred animal make sure that you buy one whose ancestors have good records of production and you are bound to win.

Remember boys, you are going to have pure-bred cattle sooner or later, and if you start from the beginning with pure-breds, your success is assured. Why put off for a few years what you can have right now?

AN UNPLEASANT VISITOR.

RECENTLY while after the cows, the dogs and I ran onto an early hunter, out after his breakfast.

Ted discovered the hunter and immediately started after him. But I soon noticed that he did not want to get very close to the creature that was bobbing along before him, and I mistrusted that there was trouble, and perhaps something more, for it was not long before I could scarcely breathe for the smell that arose from the trail of the trio. Ted kept just about so far behind the skunk, barking at the top of his voice, while Flicker took after them both, yelping in his shrill notes. Across the pasture they went pell mell, and down into the meadow. Once the skunk whirled on Ted. Much to my surprise Ted having a wholesome regard for the animal backed off hurriedly. A moment more and the skunk had dashed into a wood-chuck hole and was safe. Ted seemed glad to get out of a bad job that way and went home through the twilight, blowing his nose and acting as if he expected to be banished for a week or so from the presence of those he loved, which turned out to be the case. I have not laughed in many a day as I did to see those three natural enemies race about, each afraid of the other and not caring for any nearer approach myself.



Doing the job that would break ordinary rope

H. & A. "Blue Heart" Manila Rope takes the stress of tremendous pulls

Rubbing, grinding over pulleys, hoisting heavy loads of lumber into place—this is work which no ordinary rope can long stand without fraying and snapping to pieces.

In building a barn, in painting the house, and in a dozen other ways, you often trust your life to a rope. You want no ordinary rope then. You need a rope of known strength—of excess strength.

And this is what you have in H. & A. "Blue Heart" Manila Rope. Spun from the toughest of manila fibre, it is built to stand the stress of tremendous pulls.

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A rope whose strength is insured. There are many fibres used in rope making, of varying strength and durability. Manila, the strongest, the toughest, has numerous substitutes which closely resemble it.

The public, confused by this similarity in appearance, has had to buy in the dark and trust to the honesty of the maker for good rope.

The eye cannot detect adulterations. What looks like excellent rope will often fray to pieces when comparatively new.

How, then, can you tell? There's an easy way. Pick up any piece of rope in your hands, untwist the strands, and—

If you find a thread of blue running through the center, a Blue Heart, then you will know that you have found a good rope, a rope built to deliver more strength than you require.

Then you will know that you have found genuine H. & A. "Blue Heart" Manila Rope.

Let H. & A. "Blue Heart" Manila Rope do your heavy work

A halter made of H. & A. "Blue Heart" Manila Rope has three times the strength of a leather halter. A piece of H. & A. "Blue Heart" Manila Rope the size of your little finger will carry the weight of fifteen or twenty men.

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H. & A. "Blue Heart" Manila Rope is elimi-



H&A "Blue Heart" Manila Rope

nating the guess from rope buying. It is a rope that will answer your every requirement—a rope built to meet your severest rope test.

Insure yourself against rope breakage, against delay in your work—with H. & A. "Blue Heart" Manila Rope.

Leading merchants throughout the United States are selling H. & A. "Blue Heart" Manila Rope. If yours cannot supply you, write us.

The Hooven & Allison Company

"Spinners of Fine Cordage since 1869"
Xenia, Ohio

For purposes where the great strength and long-wearing qualities of H. & A. "Blue Heart" Manila Rope are not required, use H. & A. rope made from one of these less expensive fibres:

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with this wonderful new Libbey Automatic Water Bowl. Animal moves lever, opening water valve, when it starts to drink. Lever swings back, closing valve, when animal stops drinking.

15% More Milk

Milk is 87% water, and cows cannot give their greatest yield unless they have plenty of water constantly within reach. Farmers who use Libbey Bowls report an increase of 15% to 20%, which soon pays for the bowls.

Libbey Automatic Water Bowls

are the most sanitary and successful ever invented. Each bowl controls its own water supply, operated entirely by cow, and may be put at different heights, or in any stall or pen. No float tank required. Cannot overflow; cannot get out of order. Almost no water left in bowl to become stagnant. They save labor and feed and increase milk. Prevent spread of contagious diseases, as each cow has her own bowl and no water can pass from one to another, as with old-style bowls. Very simple and easy to install. Write for circular and prices, also FREE DAILY MILK AND FEED RECORD.

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It's Hard to Keep Cows Clean

when they are stabled, but clipping makes it easy. Takes only five minutes a month to clip flanks and udder of each cow, then wiping with a damp cloth quickly cleans before milking. Keeps dirt and filth out of the pail. Clipped cows give better and cleaner milk. The Stewart No. 1 Machine is best. Clips horses also. Only \$14 complete at your dealer's, or send \$2 and pay balance on arrival.

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Second: It has more than the ordinary leavening strength, therefore, you use less.

Third: There are no failures—it always makes the sweetest, most palatable of foods.

Fourth: It is used by millions of housewives—leading domestic science teachers and cooking experts.



YOU SAVE
WHEN YOU BUY IT—WHEN YOU USE IT



CALUMET BAKING POWDER

Fifth: It is the best Baking Powder that can be produced. Was given highest awards at World's Pure Food Exposition, Chicago; Paris Exposition, Paris, France.

Sixth: It contains only such ingredients as have been officially approved by the United States Food Authorities.

The finest quality Baking Powder—at the most economical cost. "The Biggest Bargain That Goes into the Kitchen Today."

Pound can of Calumet contains full 16 oz. Some baking powders come in 12 oz. instead of 16 oz. cans. Be sure you get a pound when you want it.

**Calumet
Nut Cookie
Recipe**

— $\frac{1}{2}$ cup butter,
 $\frac{1}{2}$ cup sugar, 2
eggs, $\frac{1}{2}$ cup
flour, 1 level tea-
spoon Calumet
Baking Powder,
 $\frac{3}{4}$ cup chopped
nuts, 1 teaspoon
lemon juice.
Then mix in the
regular way.

Woman's Interests

The Real Trouble With the School

WHAT is the matter with the schools? How many people have grumblingly asked you that in the past few years?

Certainly something is wrong somewhere when boys and girls are allowed to blunder through the grades and high school, even into college, unable to spell the commonest words, and seemingly, entirely ignorant of the simplest rules of grammar; when they looked dazed over a problem in compound interest; when they tell you Prussia is a county somewhere in Asia, and are not just clear as to whether it was Burgoyne or Barleycorn who surrendered to General Gates.

It is quite the fashion to rail at the teachers and superintendents and school boards. But, really, are they wholly to blame? I wondered as the Michigan State Teachers' Association convened in Grand Rapids in October, if we hadn't been a little rough on teacher especially. Can we expect her to do more in her six hours with our young hopefuls than we are able to accomplish in the other eighteen?

After all, the teachers do about as well as can be expected with the material they have to work on, and the subjects they are expected to cram in. We start the children off in the morning with minds filled up on movies or cheap stories, and stomach filled with griddle cakes and coffee, and then expect the teacher to do what we could not do, get ideas into a befuddled brain. What child could remember whether "i" or "e" comes first, if

he is wondering just what happened to the hero after the villain bound him hand and foot in the deserted mine and started the fuse? How can he remember nominative forms when his brain is fed by blood poisoned from faulty feeding?

Then the amount of work we expect teachers to do in a day. In country schools, one teacher for eight grades. In city schools, time wasted on fads, a dab of music, a smatter of drawing, an hour or two of manual training, a quarter of an hour off to listen to some uplifter expound on his original idea for elevating the human race, periods of making dolls for French children and giving playlets to raise money for Armenian children. True, we want the children to help the suffering. But do we want them to do their charitable work in the time allotted to learn their mother tongue and the multiplication tables?

The trouble with the schools harks back to the parents. Teachers and school boards do exactly as we let them. After all, school officials are elective and teachers are public servants, paid out of our pockets. When parents get ready to stop carping and unite to insist that the schools teach essentials, a change will come. Whether the child belongs to the home or the state doesn't make any difference in this case, because we are the state. We can say what our children shall be taught if we get together.

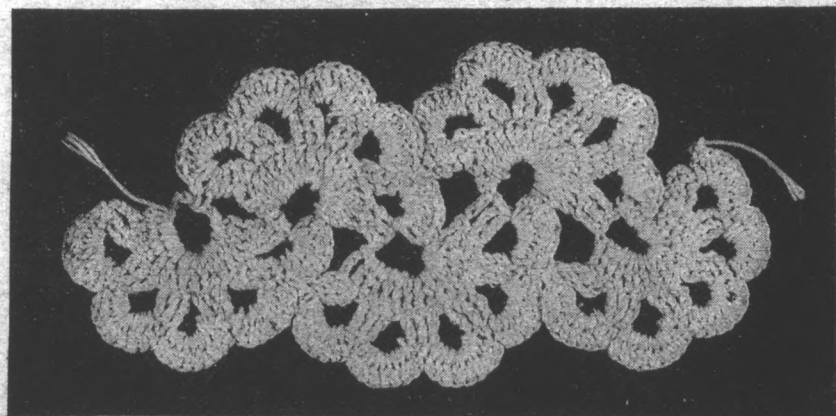
The great cry is that the modern child doesn't want to work. In that he

Double Scallop Crochet

THE scallop-like trimming illustrated can be used as an insertion or an edging, and is suitable for bedroom linens, curtains, and lingerie, according to the materials used. In the sample, which is more than two inches wide, ordinary carpet warp is the medium, finer threads decreasing the size proportionately. The work is especially effective in a medium fine thread, of a close, firm twist. Since each scallop-like portion of the design is com-

pleted before proceeding to the next turn. Dc 9 into ch of 5. Sc 1 into center of next group of tc, and dc 9 into next ch of 5, and so on around the scallop. After the 9 dc into last ch of 5 begin a new scallop by ch 8 and join to last group of tc with slip stitch (sl st.)

Continue new scallop by ch of 4 to turn, and 17 tc. Ch 4 to turn, 2 tc, ch 5, 3 tc, ch 5, 3 tc, ch 5, 3 tc, ch 5, 3 tc. Sc 1 into center of first scallop to connect the two and



pleted before proceeding to the next turn. Dc 9 into ch of 5. Sc 1 into it is possible to make the work of any desired length without difficulty. The work goes very rapidly when once the pattern is learned.

Begin with a chain (ch) of 16, and unite to form a circle. Ch 4 to turn, and triple crochet (tc) 17 over a little more than half the circle. Ch 4 to turn, tc 2, ch 5, tc 3, ch 5, tc 3, ch 5, tc 3, ch 5, tc 3. Turn, making 1 single crochet (sc) into center of last group of tc. Double crochet (dc) 9 into ch of 5. Sc 1 into center of next group of tc, and dc 9 into next ch of 5, and so on around scallop. Each successive scallop is made in this manner, but in connecting them to the preceding scallop instead of single crocheting into the central ring, just after completing the row of alternate triple crochets and chains a single crochet is made between the first and second groups of 9 double crochets in the preceding scallop.—M. MAHAFFY.

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No more of the dangers and discomforts of the out-of-date outdoor toilet. Dr. Murphy's Sanitary Indoor Toilet can be installed by anyone in 15 minutes, in any desirable room. No plumbing sewerage or water. Endorsed by Health Officers everywhere. Sold on 60-day, money-back, no risk guarantee. Order yours today and write for our special agents proposition.
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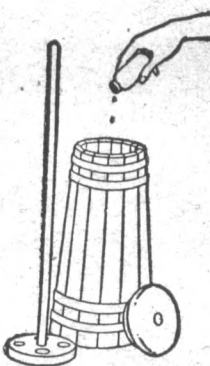
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Buy your Coffee at wholesale prices direct from us parcel post paid. We offer our Old Colony Blend freshly roasted, at these low prices, which will prove the value of buying by mail.

3 lbs. for \$1.00
10 lb. for \$3.20
30 lbs. for \$9.30
60 lbs. for \$18.00

Order today, cup test it and if not pleased return it and we will refund your money. Send check or money order. State if you want it ground.

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Established 1879

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YOUR COFFEE IN 5 LB. LOTS
from JEVNE'S and SAVE 10c per pound
We Pay Parcel Post. We sell only High Grade Coffee and Tea
Send for our Money Saving Price List, or better still
Send \$1.75 for 5 lbs. JEVNE'S EXCELLO COFFEE
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JEVNE COFFEE CO., (Est. 1881) Coffee Specialists
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VIRGIN WOOL YARN
FOR HAND KNITTING. SOLD ONLY
DIRECT FROM THE MILL TO YOU!
50c a skein—4 skeins, approx. 1 lb., \$2.00.
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SEND TO-DAY FOR FREE SAMPLES
HOME WOOLEN MILLS
204 MAIN ST., EATON RAPIDS, MICH.
ESTABLISHED 44 YEARS

is not one whit different from his forbears. No one wants to work. The difference lies here, his forbears were made to work.

Life has been made too easy for the child of today. No drudgery is to be allowed in the modern school. Learning is to be made easy, and pleasant. It can't be done. It may be made pleasant by a real teacher, but, to the average child learning can never be made easy. It must be drill, drill, drill. A certain amount of drudgery is necessary not alone to drive the facts home, but to develop his character, give him "spine."

Parents and teachers are both at fault here. The average parent is too spineless himself to make a child do unpleasant tasks. It is so much easier to do it oneself than to insist that the child do it. And teachers have hard work to counteract home training.

The schools need a stirring up. The place to begin is with the parents, and not with the teachers. DEBORAH.

JELLY AND BUTTER FROM SAME APPLES.

BY HARRIET HENDERSON.

QUARTER apples without peeling or removing the core. Cover with cold water and boil slowly. I find they boil down much easier without burning than if peeled, and the peel gives color to the jelly. When they are thoroughly soft pour off some of the juice for jelly.

Put the rest through a coarse colander, season to taste with cinnamon and sweeten. From a gallon of quartered apples cooked, I get about three cups of juice and have three pints of apple butter. I use three-quarters of a cup of sugar to one of juice and boil five minutes. The juice can be poured off carefully through a sieve before stirring the apples and it will need no straining.

For the apple butter I use about one and one-quarter cups of sugar and one teaspoon of cinnamon to the amount of pulp. You will find that it is better to cover the apples with cold water and not cut in smaller pieces than quarters, as this allows the juice to be extracted without the apples being broken up so soon and they do not burn so easily.

HOME QUERIES.

Subscriber, Milan.—I have no recipes for using sorghum. Here are two recipes for taffy, however, one using syrup and one using molasses.

Taffy with Syrup.—Boil one quart of syrup until brittle when dropped into cold water, stirring frequently to prevent burning. Add one-half teaspoon of soda, and stir well. Then pour on greased pans until cool enough to handle.

Taffy with Molasses.—Two cups of molasses, one cup of sugar, one tablespoon of glycerine. Boil until it forms a hard ball, remove from fire and add half a teaspoon of soda and three tablespoons of butter. Pour into buttered tins until cool enough to handle.

If you will write to the department of agriculture, Washington, D. C., you can undoubtedly get a bulletin giving recipes for sorghum.

Mrs. S. B. E.—Coat the bottom of your rug with a weak solution of glue. It would be better to send it to the rug cleaners and have them clean and "size" it. They know exactly how to do it right. You could remove the wall paper by using simply water, applied with a brush. This is what the paper hangers do. Oiled paper, such as is used in kitchens and bathrooms, is removed by applying strong suds.



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Even as the Puritans offered thanks for bountiful crops and prosperity so should we be thankful for wheat—the soil's greatest gift to mankind. And so should we be thankful for

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because LILY WHITE is scientifically milled from the finest hard and soft wheats grown in America. Every process that enters into the manufacture of LILY WHITE is the result of years of experience, extraordinary skill and unflagging desire to produce the best.

LILY WHITE is milled to a state of uniform granulation that is perfection. Only the nutritious wheat kernels are used. It is positively supreme in color, texture, volume and wholesomeness, and is guaranteed to be the best flour you ever used.

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Bread, biscuits and rolls made from LILY WHITE are light and tender; blessed with remarkable flavor, enticingly appetizing and wholly digestible. Don't forget bread at the Thanksgiving Dinner. It is the one great item of food for which all should ever be thankful.

Good baking results are assured with LILY WHITE. It has been a favorite for three generations with women who take pride in their baking. One sack of LILY WHITE will convince you of its many superior qualities, and you will be surprised at the ease with which you can produce really wonderful baking results.

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Michigan Farmer Pattern Service

Send 15c in silver or stamps for our up to date fall and winter 1920-1921 catalog, containing over 500 designs of ladies', misses' and children's patterns, a concise and comprehensive article on dressmaking, also some points for the needle (illustrating thirty of the various simple stitches) all valuable to the home dressmaker.

No. 3346.—Child's Coat. Cut in five sizes, 4, 6, 8, 10 and 12 years. A six-year size will require three yards of 44-inch material. Price 12c.



3346

No. 3356.—A Dainty Dress. Cut in four sizes, 4, 6, 8 and 10 years. A six-year size will require 2½ yards of 36-inch material. Price 12c.



3356



3365

No. 3365.—Boy's Suit. Cut in four sizes, 3, 4, 5 and 6 years. A four-year size will require 1½ yards of 27-inch material for the blouse, and 1½ yards for the trousers. Price 12c.



3367

No. 3361.—A Popular "Cover All" Apron. Cut in four sizes: Small 32-34; medium 36-38; large 40-42; extra large 44-46 inches bust measure. A medium size will require 6¾ yards of 27-inch material. Price 12c.

No. 3169.—Ladies' Dress. Cut in six sizes, 34, 36, 38, 40, 42 and 44 inches bust measure. A medium size will require 6¾ yards of 40-inch material. Width of skirt at lower edge, is 1¾ yards. Price 12c.



3345



3361

No. 3367.—Child's Dress. Cut in four sizes, 4, 6, 8 and 10 years. A six-year size will require 2¾ yards of 27-inch material. Price 12c.

No. 3344.—Dress for Work or Porch Wear. Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires six yards of 36-inch material. The skirt with plaits extended measures about 1¾ yards. Price 12c.



3169



3353

3345

es waist measure. It will require 2¾ yards of 38-inch material for the skirt and 2¾ yards of 36-inch material for the waist for a medium size. The width of the skirt at its lower edge is 1¾ yard. Two separate patterns 12c for each pattern.

No. 3327.—Boy's Overcoat. Cut in five sizes, 6, 8, 10, 12 and 14 years. A 12-year size will require 1¾ yards of 40-inch material. Price 12c.



3327



3371

No. 3353-3345.—A Costume for Business Wear. Waist 3353 cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 3345 cut in seven sizes, 24, 26, 28, 30, 32, 34 and 36 inches.

No. 3371.—Child's Dress. Cut in four sizes, 4, 6, 8 and 10 years. A six-year size will require 3¾ yards of 27-inch material. Price 12c.

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Newly Invented
Clutch Starts
and Stops Saw
Engine
Runs
and
Stops



Used by the
U. S. Navy
and in
Government
Schools



Plenty of Fuel for
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Sell at High Prices!

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Pulls Over 4 H. P. Makes 810 saw cuts a minute. Direct gear drives saw—no chains to tighten; no keys; no set screws. 4-cycle Frost Proof Engine with counter balanced crank shaft. Oscillating Magneto Ignition, no batteries ever needed, and Automatic Governor with Speed Regulator. Uses little fuel. Easy to operate. As easily moved by one man as wheelbarrow. When not sawing, engine runs pumps, feed grinders, etc.

30 Days Trial. Every Ottawa shipped on 30 days trial. Must fulfill 10-year Ottawa Guarantee. For nearly 20 years we have been selling direct from factory to users, saving them thousands of dollars. Now over 10,000 satisfied users all over the world.

Cash or Easy Terms. Get our payment plans of purchase and find out how easy it is to own an OTTAWA Log Saw. It will soon pay for itself. Any man with logs to cut can not afford to be without this Log Saw, and he can soon own it under our wonderful selling plan.

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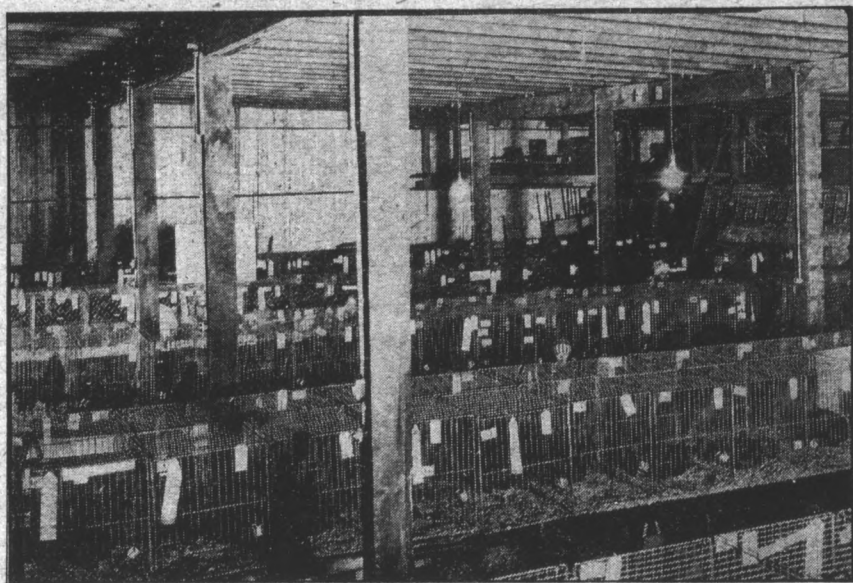
Exhibit Birds at Their Best

By R. G. Kirby

CONSIDERABLE can be gained by properly preparing birds for exhibition. Often two birds will be nearly equal in points and then the bird that is clean and well groomed will look just enough better than its rival to take the prize.

The beginner should study the standard of perfection for each breed that he expects to exhibit and then select the birds that most nearly conform to its requirements. It is a waste of time to show birds that are seriously deficient but at the same time nearly perfect birds are scarce and the breed-

known as lighter breeds like Leghorns. The dark breeds, like the Barred Rocks, do not require much washing before being exhibited and sometimes not any. Birds that are unclean, and white birds, do need a bath. Fill two tubs with warm soft water. Lather the bird with soap in the first tub until the feathers are thoroughly cleaned. Then rub off as much of the soap as possible and thoroughly rinse in the second tub. Be sure and remove all of the soap in the feathers or it will dry and stick the feathers together and the appearance of the bird will be unsatis-



Give Your Birds Every Possible Advantage when Exhibited.

er cannot expect to find birds that exactly conform to the standard and should not be discouraged because of that fact.

Pullets look the best just before laying their first egg and so the time of hatching exhibition stock should bear some relation to the shows where the birds will be entered. Time enough should be allowed to give the birds their opportunity for natural development. The cockerels that are forced to bring them into exhibition shape seem to stand the strain better than pullets but it is better to develop them steadily in their normal time. This will be about eight months for the American and Asiatic breeds and about six months for the class of chickens of infection.

factory. After a white bird is carefully rinsed it may be plunged into a tub of cold water containing about as much bluing as is used in washing clothes.

In mating up breeding pens for exhibition it pays to select the birds so that they will appear as uniform as possible in size, shape and color. Never exhibit birds that are lacking in vigor or as they may become sick in the show room and give the observer a very poor opinion of the stock from such a farm. By all means never show a bird that has a cold or other ailment. It is not only bad business but it is unfair to the other exhibitors to make them submit their stock to the dangers of infection.

Treatment for Colds

TIMELY advice to poultrymen on methods of combatting incipient colds among the flock and of fattening lean fowls for the holiday markets have been given by Prof. C. H. Burgess, head of the poultry department at M. A. C.

Symptoms shown by ailing fowls, according to Prof. Burgess, are running at the nose, clogging of the nasal cavities, swelling of the side of the head and pus forming over one eye. As a remedy he suggests a mixture of four pounds of epsom salts, six ounces of magnesium carbonate, twelve ounces of copperas, sixteen ounces of sulphur, and twelve ounces of ground ginger, to be mixed thoroughly with mash that has been moistened. One tablespoonful should be allowed for each fifteen hens and they should not be fed until ten or eleven o'clock. The remedy may be given three mornings in succession, then after skipping a like number, repeated for another three mornings if necessary.

For the fattening of fowls, this ration is suggested: One hundred pounds of corn meal, one hundred pounds of middlings, one hundred pounds bran, one hundred pounds of rolled oats and one hundred pounds of meat scrap.

HENS BECOME OVER-FAT.

Please tell me how much corn, oats, wheat bran and middlings to feed thirty hens each day during the winter to have them lay, and how should they be fed? Our trouble is that the hens become too fat during the winter.

Kalamazoo Co. E. E. P.

During the winter the best scratch feed consists of half corn and half wheat fed in a straw litter so the birds will have to scratch for every grain they find. Too heavy feeding of corn and too little exercise is the leading cause of hens becoming too fat through the winter. Feeding about two pounds of scratch feed per one hundred birds in the morning will keep the hens hungry and force them to eat more of the dry mash. Then they can be given another two pounds at noon and about six pounds at night. In the dry mash they will obtain plenty of egg-making material but not a ration that will make them too fat. An

POULTRY

500 PULLETS

We are now offering 500 more fine S. C. White Leghorn Pullets five months old and about ready to lay. The first week in December the pullets will be six months old and can be laying well by that time. Eggs from these birds this winter will nearly pay for the birds. A few 4 mo. pullets also of the same stock.

If interested write us at once for description as the pullets are to be sold immediately. We guarantee everything. Have you our 1920 catalog?

We still have 300 yearling White Leghorns for breeding at \$1.75 each.

Cockerels We still have 75 fine Barred Rock Cockerels from our well bred Barred Rock Colony. Send for description.

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Anconas from State Champion winners a few choice males for sale.
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BARRED ROCKS

Cockerels, Pullets, April hatched, get Norman's superior strain direct. Catalogue 25c. Circular free. NORMAN POULTRY PLANT, Chatsworth, Ill.

Barred Plymouth Rock cockerels large birds from a prizewinning laying strain \$5.00 each. J. A. BARNUM, Union City, Mich.

Barred Rocks egg contest winners, eggs from strain with records to 290 a year. \$2.00 per setting prepaid by P. P. Circular free. FRED ASTLING, Constantine, Mich.

BARRED ROCKS. Park's 200-egg strain cockerels which will produce fine layers next year, \$3 each. R. G. KIRBY, R. 1, East Lansing, Mich.

BARRED Plymouth Rock cockerels for sale, some brace thirty birds from prizewinning stock \$4 and \$5. George H. Campbell, R. 5, Box 70, Ypsilanti, Mich.

Fowler's Buff Rocks Cockerels, hens and pullets. Write for prices. R. B. FOWLER, Hartford, Mich.

50 Buff Orpington ecls., fine stock \$5 and \$8.2 good yearling cocks, \$5 each. Cash with order, guarantee satisfaction or refund. J. E. SECKINGER, Manchester, Mich.

HEIMBACH'S Heavy laying strain White Wyandottes—Martin foundation, splendid birds, true to form. Yearling hens, April hatched pullets and cockerels \$3 and up. C. W. Heimbach, Big Rapids, Mich.

Whittaker's Red Cockerels

Both combs. Special discount on early orders. Write for Price List. INTERLAKES FARM, Box 39, Lawrence, Mich.

S. C. White Leghorns. Foris 24 egg strain. Superior breeding cockerels only \$4 and \$5 each. Order now. ALVAH. STEGENGA, Portland, Mich.

Cockerels and Hens: Leghorns, Minorcas, Reds, Rocks, Orpingtons, Wyandottes, Houdans. Tyrone Poultry Farm, Fenton, Mich.

Rhode Island Whites If you have ever said there is no money in raising poultry try the R. I. White, stock for sale, order ahead. H. H. JUMP, R. 5, Jackson, Mich.

Single Comb White Leghorns

Cockerels from our exhibition matings April hatched \$3.50 each. Four fine cock birds \$5.00 each. SUNNYBROOK POULTRY FARM, Hillsdale, Mich.

S. C. Black Minorca Cockerels. from pen headed by S. C. our \$50, 11 1/2 lb cock bird. These cockerels will be very large with quality. R. W. Mills, Saline, Mich.

Silver, Golden and White Wyandottes. A few good cockerels for sale at \$5.00 to \$15.00 each. C. W. BROWNING, R. 2, Portland, Mich.

White Chinese Geese,

White Pekin Ducks, R. O. Br. Leghorns. Order early. Mrs. CLAUDIA BETTS, Hillsdale, Mich.

Gray African Geese fine stock \$4 each. ED. MILLS, Lakeview, Mich.

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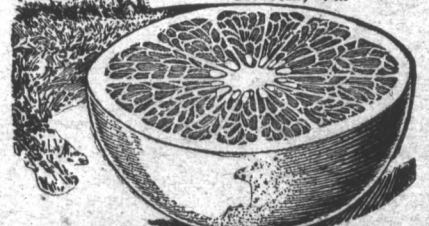
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occasional inspection of the hens at night while on the roost enables the poultryman to learn their physical condition, and then make changes that seem necessary in the amount of grain that is fed in the evening.

Young stock will need more grain than old hens of good weight. The pullets need a layer of fat to enable them to lay steadily. The amount for different breeds will not be the same. Handle the pullets often enough to see if they are solid and meaty and in good condition for laying.

A good mash can be made of equal parts by weight of beef scrap, corn meal, wheat bran, wheat middlings and ground oats. Mangels, sprouted oats and cull vegetables are a winter tonic for the birds and this green food is not fattening but helps to keep the hens in good laying condition. Sour milk is also a good egg producer. The beef scrap in the mash should be of good grade.

Some hens of the heavier breeds may show a tendency to become over-fat under the best possible management. They are apt to be hens that are not very good layers and such birds should be culled out and marketed. Breeding from the alert vigorous hens that do not seem to take on fat readily helps to eliminate that condition from the flock. We find that the heavy-laying hen is working hard enough to keep down fat and the bird that bags down with fat is apt to be a slacker.—K.

BEEKEEPERS' SCHOOLS.

THE series of bee-keepers' schools to be held in various counties of the state already has been commenced in Alpena and Cheboygan counties, and will be continued the remainder of the month as follows: Antrim county, November 15-16; Grand Traverse county, November 17-18; Washtenaw county, November 22-23. Although last year most of the schools were at county seats, an effort will be made to hold this winter's sessions in other communities so as to disseminate the information about scientific bee-keeping as widely as possible.

Announcement of the winter meeting of the Michigan Beekeepers' Association in Lansing on January 25-26-27 has been made by Secretary R. H. Kelty, of East Lansing. Because the appropriation for the inspection of state apiaries must be renewed, it is desired to time the session so as to permit conferences with members of the legislature. Although the official place of meeting will be Lansing, it is likely that the business of the association will be transacted at M. A. C.

Rather than hire a manager at great expense to supervise the sale of this year's crop, the recently organized Michigan Honey Producers' Exchange has authorized the secretary to list the honey for sale, advertise it and do everything possible to help move the Michigan crop at a satisfactory price.

F. W. HENSHAW.

SAVE POULTRY EQUIPMENT.

LIGHT poultry crates are a good investment. They should be occasionally cleaned and sprayed and always mended whenever slats come loose or wires break. It costs money to buy new crates and the old ones are good for indefinite service if they are given the right care. Even crates that are roughly handled during transportation can be used much longer if all breaks are mended promptly with strong wire. It does not pay to use heavy boxes for carrying poultry even when selling to local dealers. The buyers do not like to handle such crates and they cause heavy lifting and more work than is necessary. In the end a few light and strong crates will be the most profitable.

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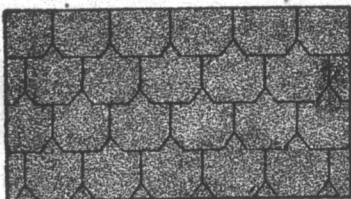
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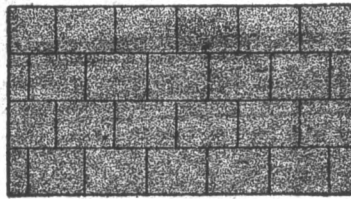
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Polled Shorthorn Sale
Thursday, Dec. 2nd, 10:00 A. M.
For catalog write J. H. Martz,
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Hereford Sale
Friday, Dec. 3rd, 1:00 P. M.
For particulars write R. J. Kinzer,
1009 Baltimore Ave., Kansas City.

Aberdeen Angus Sale
Wednesday, Dec. 1st, 1:00 P. M.
For particulars write Chas. Gray,
Union Stock Yards, Chicago.

Shorthorn Sale
Thursday, Dec. 2nd, 1:00 P. M.
For catalog write F. W. Harding,
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Friday, Dec. 3rd, 10:00 A. M.
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Wildwood Farms Angus

Effies Lass 238203 sold on May 6th for \$7100. She was sired by Black Monarch 3rd. We are offering for sale Editor of Wildwood 295059 a full brother in blood lines to Effies Lass also four more choice bulls which are old enough for service and sired also by the champion show and breeding bull Black Monarch 3rd.

Our herd is under State and Federal Supervision.

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Imported Herd Bulls
ELCHO OF HARVIESTOWN (45547)
by Jason of Ballindalloch (38048)
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For Sale Having decided to sell part of my herd of pure bred Aberdeen Angus cattle, consisting of males and females of different ages.
ANDREW P. EITEL, Vermontville, Mich.

FOR SALE

Serviceable May Rose Guernsey Bull. Dam record 553 lbs. fat 2 yr. old. Priced to sell. Herds Federal Accredited. Gilmore Brothers, Camden, Mich.

WANTED to purchase one to ten High Grade Guernsey heifers that have freshened since September first or are to freshen before December 31st. Tuberculin tested and guaranteed free from contagious abortion. Address with price, breeding and milking detail to
VILLAGE FARMS, Grass Lake, Mich.

For Sale Registered Guernsey bulls. May Rose breeding cheap if taken soon. Come or write. John Ebel R. 2 Holland, Michigan.

FOR SALE Registered Guernsey heifers, yearlings and calves.
E. A. BLACK, Route 3, Howard City, Mich.

Guernsey Bull Busto of Smallidge Farm, born the Ridge, who's dam Trixie of the Ridge holds first place in class EE in Michigan. Granddam Abbie of Riverside is champion of Mich. Dam May Kings Ezalia of Eau Claire an A. R. cow.
E. J. SMALLIDGE, Eau Claire, Mich.

Pure bred Guernsey bulls from one to four weeks old. Registered \$30, not registered \$25. Orders shipped in rotation received. No excuse for scrub bulls.
WALTER PHIPPS FARM, 80 Alfred St. Detroit, Geo. E. Currie, Mgr.

GUERNSEYS—Federal Inspected. Headed by only son of Carrie of Hillhurst, exchampion of A. A. class. 5 bulls under 10 mos., 1 a dandy whose dam in class D has given over 50 lbs. milk. No females to spare.
G. W. & H. G. RAY, 4 mi. east of Albion, Mich.

GUERNSEY BULL CALVES whose sire's dam made 19,460.20 milk, 99.05 fat. Their mother's sire's dam made 15,109.10 milk, 77.80 fat.
T. V. HICKS, Battle Creek, Mich.

Registered Guernseys
a 6 months old bull (100%) satisfaction for \$100. A nice heifer calf \$150.
J. M. WILLIAMS, North Adams, Mich.

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Reg. Holsteins For Sale. A few choice cows and heifers. 26.3w St. Johns.
J. R. EICKS, St. Johns, Mich.

Our Farm Bureaus

(Continued from page 625).

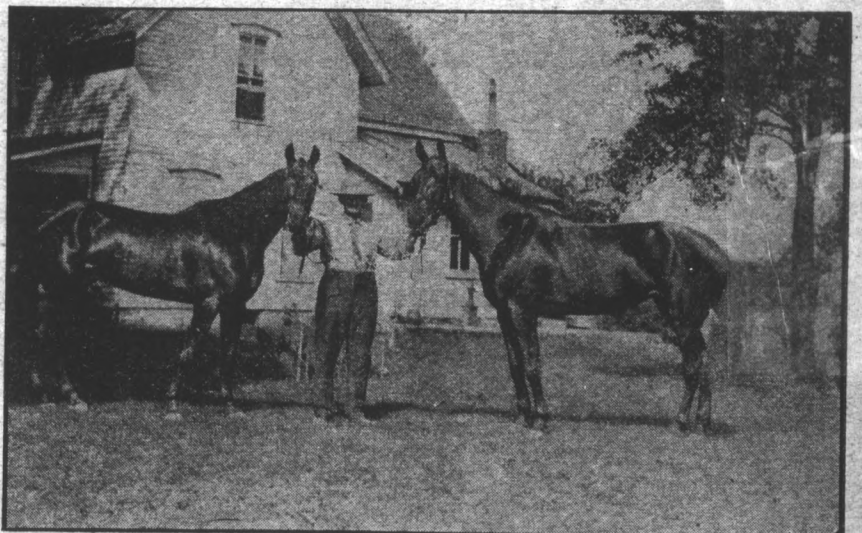
lines of breeding, both of which are recognized as among the best in the breed. Few regions are better adapted for producing Merino and Delaine sheep than Michigan and there would be no trouble in finding a good outlet for all the good ram lambs that farmers could produce, provided they have enough to sell on the carlot basis.

A FEW miles from Osseo we visited the three hundred acre farm and stock feeding plant of Andrew Reynolds & Son. Here we found one of the most complete sets of farm buildings and equipment for feeding cattle, sheep and hogs in Michigan. The Reynolds' feed about sixty cattle, one thousand sheep and one hundred and fifty hogs each year. This year they have been practicing hogging and lambing down corn. The pigs and lambs make good gains and clean up the fields with practically no waste of grain or forage. The three big silos furnish a lot of good feed for the winter.

One of the leading Shorthorn breeders in Hillsdale county is J. M. Southworth, who owns and operates a fine farm a few miles from Allen. The herd numbers about thirty-five head of Scotch and Scotch-topped animals. The herd sire, Valiant's Lad, is a remarkably good individual and was bred by Rosenberger of Ohio. Mr. Southworth also breeds Percheron horses. Always active in promoting the breeding of better live stock in Hillsdale county,

W. S. Adams and looked over his herd lines of breeding, both of which are recognized as among the best in the herd numbers about fifty head. For many years Mr. Adams has been a prominent exhibitor at the state fairs and live stock exhibitions. During the fourteen years he has been breeding Tamworth swine he has produced many of the prize winners of the breed and pulled down hundreds of dollars of prize money. Mr. Adams knows the breeding and showing game from A to Z and while the members of his "road troupe" may lack some of the refinements of form commonly found among other "show troupes," he always manages to take in sufficient gate receipts (prize-money) to make the next week stand. And that is more than some of our other showmen always succeed in doing. As producers of choice bacon and for use in crossing on the more refined types of lard hogs the Tamworth has a definite place among the popular breeds of swine.

A few miles south of Hillsdale we made a short stop at the farm of John French. Mr. French's father was one of the early settlers in the county. The present barn was erected in 1850 and is still in good shape. Mr. French is one of the pioneer sheep feeders of the state. In discussing the business he said: "I have always managed to make a profit from feeding lambs for market. Some years prices have been disappointing, but the man who feeds a bunch of good lambs each year is sure to come out a winner during a series



Andy Adams at Home.

he has been one of the leaders in conducting the sales of the Southern Michigan Shorthorn Breeders' Association at Hillsdale.

ANOTHER pleasant and interesting visit was at the farm of A. J. McCutcheon & Sons. Here we found a herd of fifty pure-bred Jersey cattle of St. Lambert, Raleigh and Flying Fox lines of breeding. The farm consists of three hundred and thirty-five acres and the cows are kept as strictly a dairy proposition and no effort has been made to sell the stock for pure-bred prices; the main product is butter, which is made on the farm and shipped to New York. About one hundred hogs are fed out each year, but during the past two years the firm has been working into pure-bred Duroc Jerseys and expect to go ahead and develop one of the good herds of the county. Another department of the farming that pays substantial profits is the flock of several hundred White Leghorn hens. Butter, eggs and pork make up a line of products that has made it possible for the McCutcheons to maintain and increase the fertility of their farm and at the same time add a respectable sum to their bank account each year. Cattle, hens and hogs have turned the trick.

Just outside of Litchfield we visited splendid farm and equipment for hand-

It is a business that one must follow each year. On our farm we keep a flock of sheep and buy some lambs to feed out during the winter. We ship our lambs to the Buffalo market. We are farming and grazing about three hundred and fifty acres and prefer sheep to other kinds of live stock. Over at North Adams, J. M. Williams owns and operates two good farms and breeds Guernsey and Holstein cattle. At the head of the Guernsey herd of eighteen females is Fillmore's Royal Regent, a son of Prince Regent of Meadowbrook and out of Topsy of Edgewater, who produced 11,715 pounds of milk and 560.58 pounds of butter at two years of age. She is a granddaughter of Imported Golden Secret, sire of eighteen A. R. daughters. Most of the females in the herd are of the May Rose line of breeding. Mr. Williams also has a herd of excellent Holstein cattle. The day we visited the farms he was out of town, consequently it would be useless to discuss further the breeding of the animals. Both herds are good individually and kept in good condition.

A few miles from Pittsford we visited the three hundred and fifty acre farm of Elisha Bailey & Son and looked over their herd of forty pure-bred Holstein cattle. Bailey & Son have a

ling their stock. The females in the herd are bred along Hengerveld De Kol and Pontiac Korndyke lines. During the past two years the firm have made some very good records in their official test work, and animals from the herd have been sold to buyers from eastern states at long prices.

Another Duroc Jersey swine breeder near Waldron who is making good in the game is Harry Cramton. Mr. Cramton was not at home when we visited his farm, but we looked over the hogs and found them of good quality. The herd sire is of Oakland Orion breeding and an excellent individual. The sows are large type animals with strong backs and built on foundations that will support great weight. The spring pigs showed plenty of quality and were a good growthy lot. A real good herd that is sure to be heard from within the next few years.

Over near Hudson we visited the farm of John Hoffman, popular breeder of Poland China swine, and auctioneer. Mr. Hoffman has about sixty animals in his herd at the present time. One particularly good individual is the young herd sire, a son of Lord Clansman and out of F. E. Haynes' crack sow, Nemo Lady. This young boar has a wonderful arched back and stands up well on his toes. The other boar is a grandson of Big Des Moines. Among the brood sows are a number of good ones from popular lines of breeding. Mr. Hoffman has a good farm and is in a position to produce high-class hogs.

M. G. Mosher & Sons own and operate a splendid one hundred and ninety acre farm in Adams township and breed Berkshire hogs, Holstein cattle and Hampshire sheep. An excellent foundation has been laid with all three breeds and the firm is sure to be heard from in the near future.

Among the men who were active in putting over the farm bureau drive in Hillsdale county there was no more faithful worker than J. C. Gear, of Amboy township. Mr. Gear owns and operates a good farm and breeds Short-horn cattle. He is one of the real farm leaders of the county and has been of great assistance in getting the work under way. Mr. Gear was the choice of many farmers for a place on the executive board of the County Farm Bureau, but could not serve because of holding another public office.

The Circuit Rider wishes to thank F. E. Haynes and John Bowditch for piloting him among the stockmen. After the smash-up in County Agent Sim's universal car these two gentlemen came to the rescue next morning. The day proved one of the most interesting and instructive spent in any county in the past season.

TO ENCOURAGE CONSUMPTION OF MEAT.

A meeting of producers of all kinds of live stock will be held during the International at the Assembly Room, Saddle and Sirloin Club, Union Stock Yards, Chicago, on Thursday, December 2, at 1:30 p. m., to inaugurate a campaign to counteract the widespread propaganda that is now being circulated, and which is calculated to decrease meat consumption.

CROPS IN HIGHWAY.

Do berries and nuts growing in the roadway belong to the owner of the land? If not why is it that other crops such as potatoes are grown in the roadway and belong to the farmer?—G. L.

Any person using the highway for any purpose other than travel is a trespasser. The adjoining owner owns to the center of the highway subject to the easement of public travels; and is therefore the owner of the trees, grass, etc., growing in the highway, and has a right of action against anyone injuring it more than is naturally occasioned by public travel.—J. R. R.

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

Advice through this column is given free to our subscribers. Letters should state fully the history and symptoms of each case and give name and address of the writer. Initials only are published. When a reply by mail is requested the service becomes private practice and \$1 must be enclosed.

Eczema.—Our four-year-old mare has skin diseases which causes great itches, especially when she perspires. J. B. D., Onsted, Mich.—Occasionally wash her with soap and water. Apply one part coal tar disinfectant and twenty parts water twice a day. In cool weather dust on flowers of sulphur and cut out other treatment.

Some Blood in Milk.—Some eight weeks ago my cow came fresh, second calf, remained well until three weeks ago when she began to give bloody milk and kept doing so ever since. J. D. B., Leslie, Mich.—Rough milking is one cause, or the udder becoming bruised from coming in contact with any hard substance, a kick from colt, or hooked by another cow are all common causes of cows giving bloody milk. Apply fluid extract of witchhazel twice a day.

Lumpjaw.—My two-year-old heifer has a hard bunch on jaw which is increasing in size. I am inclined to believe it is lumpjaw. Is there any cure for it, and is my other stock likely to become infected? J. L. O., Clarksville, Mich.—When the bone is affected and bunch cannot be removed the case should be considered as incurable. No the ailment is neither infectious or contagious. Market her for beef, but of course, the head should not be used.

Barrenness.—My three-year-old cow freshened last year, bred her again, she aborted during the summer. She comes in heat every week or ten days, but fails to get with calf. Had she better be sold for beef? A. E. J., Kalamazoo, Mich.—Doubtless she will prove unprofitable for dairy purposes, perhaps never get with calf; therefore you had better fatten and dispose of her to the butcher.

Mouth Ailment.—Have a cow that freshened May 1; two weeks later she commenced to drop saliva and slime from her mouth, occasionally corruption runs from nostrils and when she drinks part of water drips from mouth. Food packs in one side of mouth every time she chews. L. Y., Lachine, Mich.—If you will make a careful examination of the mouth, you will perhaps find a diseased tooth, or foreign body which, when dislodged, the cow will recover. Giving her drugs will not help her.

Cows Fail to Come in Heat.—I have three cows that fail to come in heat, but they are seemingly healthy. H. E. R., Maple City, Mich.—Give each cow half a dram of ground nux vomica and two drams of ground capsicum at a dose in feed twice a day until they come in heat.

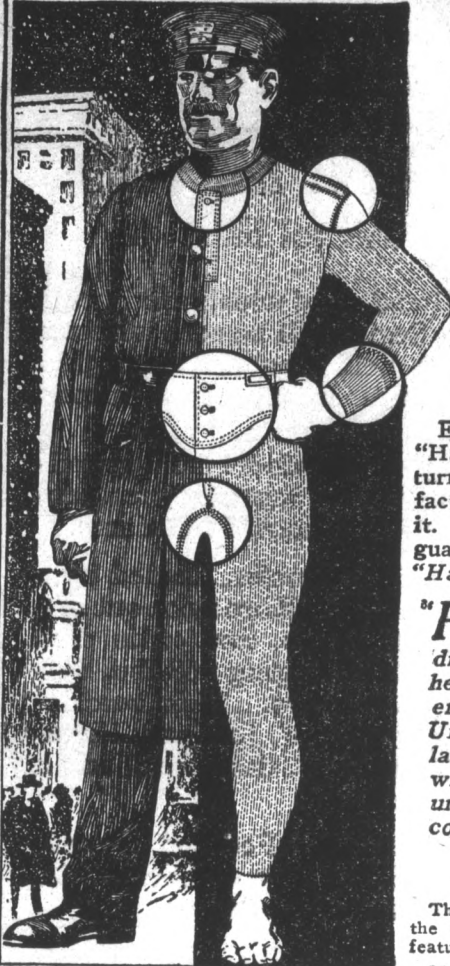
Indigestion—Worms.—Have an eight-year-old mare, weight 1,400 pounds, that eats plenty of food, but fails to lay on flesh. She is thin and weak, passes a few worms. A. M. H., Grawn, Mich.—Her molar teeth may require floating. Give her one dram of ground nux vomica, one dram of powdered sulphate of iron and a tablespoonful of powdered gentian at a dose in feed two or three times a day. Increase her grain ration.

Sprained Fetlock Joint.—About eight weeks ago my mare sprained ankle joint; have applied blister, but she is no better. A. S., Linden, Mich.—Give her rest and apply equal parts tincture of cantharides, two parts turpentine, and five parts raw linseed oil to fetlock joint twice a week.

Pinworms.—Will you please tell me what to do for a horse that is troubled with pinworms. A. D. W., Holland, Mich.—Purchase one pound of quassia chips, make a strong tea, then wash out rectum daily for a few days. One part coal-tar disinfectant and fifty parts water is also a useful remedy.

Lumpy Jaw.—What is the cause of lumpjaw? If the flesh of such an animal is unfit for food, can it be safely fed to fowls? C. G., Jeddo, Mich.—The cause of lumpjaw is a thread-like fungus, its common name being the ray fungus. It is found on various kinds of grasses, but particularly on the awns and glumes of barley and related grasses, especially when these have grown on bottomlands subject to overflow. The infection is taken up through the mucus membrane, usually of the mouth, or through wounds in the skin. The disease is not contagious. In most cases the meat is passed by meat inspectors as fit for food.

"HANES"—the national nameplate on underwear is an unfailing guide!



HANES

ELASTIC KNIT UNDERWEAR

BUY "Hanes" winter underwear for men on the strict business basis of the most unusual quality, comfort and service ever sold at the price!

Every garment bearing the "Hanes" national nameplate returns in wear and in absolute satisfaction far more than you pay for it. Our guarantee is your safeguard. It proves our faith in "Hanes"!

"Hanes" underwear is made in heavy weight and medium weight Union Suits and heavy weight Shirts and Drawers. The new medium weight Union Suit carrying the yellow label, meets the demand of men who prefer a medium weight union suit. It is made of full combed yarn and silk trimmed.

"Hanes" for Boys

This extra-value underwear duplicates the men's Union Suits in all important features with added fleeciness.

Made in sizes 20 to 34, covering ages 2 to 16 years. Two to four year old sizes have drop seat. Four desirable colors.

See "Hanes" Underwear at your dealer's. If he cannot supply you, write us immediately.

P. H. Hanes Knitting Co., Winston-Salem, N. C. New York Office 366 Broadway

Next Summer—You'll want to wear Hanes Nainsook Union Suits!

NOTICE

The Winwood Herd

on Nov. 1st will move their Herd of Pure Blood Holsteins to their new home, 1 1/2 miles south of Rochester, Mich. and for the next 30 days we will sell what bull calves we have cheap as we will be unable to get our buildings complete before winter. So get busy if you want a son of Flint Maplecrest Boy at your own price.

JOHN H. WINN, (Inc.)
Roscommon, Michigan

OUR HERD SIRE

Model King Segis Glista

By a 30 lb. son of Lakeside King Segis Alban De Kol. His dam Glista Fenelle 32.37 lbs. Her dam Glista Ernestine 35.96 lbs. His three nearest dams average over 30 lbs and his forty-six nearest tested relatives average over 30 lbs. of butter in seven days. Write for prices on his sons.

Grand River Stock Farms
Cory J. Spencer, Owner Eaton Rapids, Mich.

The Traverse Herd

We have what you want in BULL CALVES, the large, fine growthy type, guaranteed right in every way. They are from high producing A. R. O. ancestors. Dam's records up to 30 lbs. Write for pedigrees and quotations, stating about age desired.

TRAVERSE CITY STATE HOSPITAL
Traverse City, Mich.

Superior Holsteins

Bulls all sold but are now booking orders for our expected fall crop of

Bull Calves
sired by my new herd bull, a grandson of
May Echo Sylvia

My sire's two nearest dams average over 35 lbs. butter and 800 pounds milk in seven days.

A. W. COPLAND
Birmingham, Mich.
Herd under state and federal supervision

Holstein Friesian heifer and bull calves, purebred registered and high-grade. Price \$20 up. Splendid individuals and breeding. Write us your requirements. Browncroft Farms, McGraw, N. Y.

Segis Pietertje

Gilt Edge Ormsby

Born Aug. 9, 1919. Every dam in the first 4 generations has a good 7 day record and each of these, excepting two in the fourth generation, has a good yearly record. Three WORLD records. If you want individuality, and breeding, backed by both long and short time records, don't look farther. And he is some bull too. Herd under Government Supervision.

L. E. CONNELL, Fayette, Ohio

Holsteins of Quality

For sale, Heifers from 8 to 24 months old. All registered and sold subject to tuberculin test.
E. A. HARDY, Rochester, Mich.

"Top Notch" HOLSTEINS

Buy a "milk" Bull of Quality from the Breeders of the world's only cow to produce 800 lbs. milk in 7 days, having an 800 lb. daughter.

Bull advertised last week was bought quickly by an Allegan County Dairyman.

Here's another "Top Notcher":
King Colantha Genieve Pietertje,
No. 272177, Born Feb. 3, 1919.

Sire's dam a 30 lb. cow with a 31 lb. daughter, who has a 31 lb. 4 yr. old daughter.

Dam's record:—Butter 7 days 23.26 lbs. at 4 yrs.

Dam's sire's three nearest dams average 30.87 lbs. butter in 7 days. Color: about half and half.

Price \$150.00 f. o. b. Howell.

McPherson Farms Co. Howell, Mich.

All herds under U. S. Supervision.

Hatch Herd

Ypsilanti, Mich.

(In Government Accredited list) offers young registered sons from 34 lb. King Korndyke Sadie Vale bull for \$150 to \$250.

A Good Note accepted in payment of finely bred registered Holstein bull calves. Quality of the best, and at prices within reach of all. Write GEO. D. CLARKE, Vassar, Mich.

DOUBLE DISPERSION SALE

at the
H. CHRIS. HANSEN FARM

2½ Miles Northwest of

LANSING, MICH.

at noon

THURSDAY, NOV. 24, 1920

41 Registered Holstein Cows and Heifers 41

The Hansen herd of 17 head, 9 of which are in calf to Model Glista King Segis, will be sold without reserve. There will be 2 heifer calves from this great sire and a yearling bull from a good record dam.

Two daughters of King Segis Model from granddaughters of King Hengerveld Palmyra Fayne. Several A. R. O. cows and heifers from A. R. O. dams.

The A. E. Chase herd of 24 females, headed by a good grandson of Pontiac Aaggie Korndyke, out of a 19 lb. 2 yr. old daughter of a 33 lb. cow. His dam and granddam have records averaging 968 lbs. butter and 22097 lbs. milk in 365 days. This herd includes 12 heifers sired by a son of Johanna Korndyke DeKol, sire of 48 A. R. O. daughters and a grandson of Belle Korndyke.

Both Herds under State and Federal Supervision and guaranteed free from tuberculosis. Sold with 60-90 day retest privilege.

Sale Managed By

Michigan Holstein-Friesian Association,
H. W. Norton Jr., Field Sec'y.
Old State Block, Lansing, Mich.

EATON COUNTY HOLSTEIN BREEDERS' FIRST ANNUAL SALE
NOVEMBER 23, 1920

AT FAIR GROUNDS, CHARLOTTE, MICH.

60 head of choice registered cows and heifers mostly due to freshen this fall and winter and bred to thirty pound bulls, also 3 good A. R. O. bulls ready for service.

Sale starts at 11 o'clock. Meals served at Fair Grounds.

Auctioneer **R. Austin Backus**
Col. D. L. PERRY **In The Box**
For Information and Catalog, Write
A. N. Loucks, Secy, Charlotte, Mich.

AUCTION SALE OF STOCK AND TOOLS

The Westview Duroc Farm 2 miles south 1-2 mile east of Northville or 1 mile north 1-2 mile east of Plymouth, will sell at Auction Stock, Tools and

50 HEAD OF DUROC JERSEY SWINE 50

Consisting of two herd boars, seven spring boars, 3 bred sows, open sows, gilts and fall pigs. Herd boars used in herd. Cherry Premier 2nd No 102819, by Pal's Cherry Orion No. 82089, by Pal Orion. Home Farm Tippy Orion 3rd No 152141, by Brookwater Tippy Orion by Tippy Col. Gibson. Taxpayer 2d No 156677, by Brookwater Taxpayer, by Taxpayer, a fine bunch of sows and gilts, a good time for the boys to start in the best of blood lines. Come to the sale and bring the boys along.

Tuesday, November 23, 1920

Albert Ebersole, Prop., Plymouth, Mich.

The Frankenmuth Spotted Poland China Breeders Association
of Frankenmuth Twp., Saginaw County, Mich., will sell at

PUBLIC AUCTION
ON DEC. 3rd, 1920

on Alfred Grueber's Farm, two miles east and two miles north of Frankenmuth Junction at 12 o'clock noon. 40 head of Registered Spotted Poland China Hogs, tried and bred, open and bred gilts and a few boars. The tops of 3 herds will be sold at this sale. Catalog will be sent free upon request.

ALFRED GRUEBER, Secretary

R. 2, Frankenmuth, Mich.

JERSEYS

THE PROFIT BREED

JERSEYS produce the best milk earlier, longer and most economically. They thrive under all conditions, are always willing to work, and breed true to type. Jerseys save you many years in building a profitable dairy herd.

Ask the Jersey Information Bureau for any cow information you want and also for "Jersey Facts" and "The Key to Dairy Profits."

THE AMERICAN JERSEY CATTLE CLUB

324-R West 23rd St., New York

An Institution for the Benefit of Every Jersey Owner



An Introduction

Mr. Dairy Farmer, Mr. Holstein Breeder Meet
KING FLINT

ALL THREE are working to a common purpose—to increase the production of Michigan Dairy herds.

We believe all three should work together. We feel sure that no Michigan bull has ever been better equipped for the work.

We have it on high authority that there are none better individually.

His three nearest dams each averaged to produce 100 lbs. butter and 2100 lbs. milk per month for a full lactation period with an average of 3.8% fat.

His dam is one of Michigan's greatest families—three full sisters that have produced over 30 lbs. butter in seven days, two of them producing over 700 lbs. milk, and two of them producing more than 1000 lbs. butter and 21000 lbs. milk in ten months.

His sire is the direct descendant of three generations of 30 lb. cows and two generations of 1200 lb. yearly record cows.

His first three sisters to enter yearly test will each produce more than 800 lbs. butter and 17000 lbs. milk as heifers.

Let King Flint Help You Improve Your Herd Through One Of His Sons

A son of this great young sire suited to head any herd in Michigan, grade or purebred, can be secured in Genesee County and we want them all to stay in Michigan.

Write us about your herd, tell us what you need and what you feel you can afford to pay and let us help you find just what you want in Genesee County, the center of Michigan's long distance dairy cattle.

Genrida Farm **Elmcrest Stock Farm**
Walter T. Hill **G. L. Spillane & Son Co.**
Davison, Mich. **Clio, Mich.**

Cluny Stock Farm

Offers the best selection of young bulls from 8 to 12 months we ever raised; Out of dams up to 29.76 for aged cows and over 26 lbs. for 2 yr. olds. Yearly records up to 24000 lbs. milk and 1000 lbs. butter. Sired by our Senior Herd Sire, Maplecrest Application Pontiac, whose dam made 35 lbs. butter in 7 days and 1344 lbs. butter and 23421 lbs. milk in a year, or by Dutchland Konigen Sir Rag Apple, our Junior Herd sire, whose dam is a 30 lb. 40 yr. old maternal sister of Dutchland Colantha Denver who made 36 lbs. in 7 days and 1315 lbs. butter and 25431 lbs. milk in 1 year. Several carry the blood of both these sires.

They are extra well grown, straight and right. One of these at the head of your herd is bound to increase production.

Send for pedigrees and prices.

R. Bruce McPherson, Howell, Mich.

\$100

Registered Holstein Bulls

Best blood in America. Ready for service, grandson of King of the Pontiacs. Herd sire King of the Pontiac Segis. Herd under State and Federal Supervision.

JAMES B. JONES FARMS
ROMEO, MICH.

Federal Accredited Herd Bull For Sale
Old enough for service. Dams records, 7 da. milk 467.80, butter 20.85, 395 da. milk 16,115.3, butter 648. She has 2 A. R. O. daughters. His sire a 34 lb. grandson of Colantha Johanna Lad. Price \$200. Write for particulars. Vernon Clough, Parma, Mich.

HOLSTEINS 2 purebred, bull calves, extra individuals. Sire's dam gave over 14000 lbs. last year milked but twice a day. Dams very large and heavy milkers. Bred right, 40 and 55 dollars. Guaranteed to please. B. E. KIES, Hillsdale, Mich.

Registered Holstein Bull Born Dec. 19, 1919. Sire a son of King Ona. His dam is a 21 lb. daughter of a 21 lb. cow. Price \$90 delivered your station. Write for pedigree. EARL PETERS, N. Bradley, Mich.

\$75 gets 6 weeks old grandson of Maple Crest Korn Heng. and Flint Heng Salina 2/28 butter 561.2 milk in 7 days. Calf's dam is the best upstated cow. Terms, M. L. McLAULIN, Redford, Mich.

Reg. Holstein-Friesian Bulls ready for service and priced to sell. Light in color and richly bred. B. B. REAVEY, Akron, Mich.

Your Choice of 20 high grade young Holstein cows due this fall and winter. HARRY E. COVERT, Leslie, Mich.

Herefords Double Disturber bull at head of herd. Offer 52-yr olds, bred, 9 yearling and 5 heifer calves. Fairfax breeding. Bulls any age. EARL C. McCARTY, Bad Axe, Mich.

The Wildwood Farm
Jersey Cattle, Majesty strain, Herd on State accredited list, R. of M. testing—constantly done. Bulls for sale. ALVIN BALDEN, Phone 143-5, Capac, Mich.

BUTTER BRED JERSEY BULLS
CRYSTAL SPRING STOCK FARM
Silver Creek, Allegan County, Michigan.

JERSEY BULLS Ready for service. Lad, Majesty breeding. Meadowland Farm, Waterman & Waterman, Packard Rd., Ann Arbor, Mich.

For Sale Jersey bull calves of Majesty breeding from good producing stock. Herd on Government "Accredited List." Write for price and pedigree to C. A. TAGGETT, R. 2, Fairgrove, Mich.

Lillie Farmstead Jerseys 2 R. of M. bull calves, one year old this fall. C. C. LILLIE, Coopersville, Mich.

Young Man A-Hoy!

What is it?

stop breeding those scrubs.

Get a pure bred sire.

Jersey Bulls are noted for their prepotency.

Jersey Cows For their early maturity, long life, economical production.

Write Secretary Henrickson of Shelby, Mich., for free Jersey literature. Do it now.

Jersey Bulls from R. of M. dams \$75 to \$150 each.
NOTTEN FARM, Grass Lake, Mich.

Jersey bulls for sale: From Marguerite's Premier, a grandson of Pegis 99th and R. of M. dams. SMITH & PARKER, R. 4, Howell, Mich.

Claradale Milking Shorthorns

Are Officially Supervised by Michigan Agricultural College. The two year old Fancy Duchess Maid 8.336 lbs. milk, 378 lbs. fat, 4.55 percent average. Rose Mist 8.709 lbs. milk 425 lbs. fat, 4.75 percent average. Fancy King 772 lbs. milk 267 lbs. fat 8 mo's. Peri Duchess 27th 6964 lbs. milk 292 lbs. fat percent 4.21, 2'd calf. We have other good cows under state supervision, our records are made under every day farm pasture conditions twice a day milking only. We can price you bulls from 2 months to two year olds, sired by the the Great Bulls Lord Burrington 5th and Green Leaf Master Imp. Your success is our success. Come and see us, or write your wants to
F. W. JOHNSON, Box 26, Custer, Mason Co., Mich.

BIDWELL SHORTHORNS
BUY A BULL

that will put weight on your dairy calves—the difference will pay for the bull. Now selling good Scotch and Scotch-topped yearlings, reasonably priced. We guarantee every animal to be a breeder. Federal Test. One hour from Toledo, Ohio, N. Y. C. R. R.

BIDWELL STOCK FARM,
Box D, Tecumseh, Michigan

The Maple's Shorthorns

Kirklevington Lad, by Imp. Hartford Welfare. In service bulls, for sale.
J. V. WISE, Gobleville, Mich.

Milking SHORTHORNS. Clay bred bull calves Herds under Federal Supervision
Davidson & Hall, Beland & Beland, Tecumseh, Mich

Richland Shorthorns

Imp. Lorne, Imp. Newton champion and Sterling Supreme in Service. We offer for quick sale: Five Scotch Bulls, best of breeding. Three whites at \$1000 each. One roan at \$500, one red at \$400. No females for sale. Public sale Chicago Oct. 28th.
C. H. PRESCOTT & SONS,
Tawas, City, Mich.

BRANCH COUNTY FARM

Breeders of
American Polled Shorthorn Cattle
For Sale two splendid bulls now ready for service, and two younger ones that will be ready for light service Jan. 15th. We also are offering at this time a few bred cows and heifers. Herd headed by Victor Sultan and Sultan's Gift. Prices very reasonable, write your wants. Geo. E. Burdick, Mgr., Coldwater, Mich.

Maplewood Shorthorns

Two bull calves of good milking dams and sired by our herd bull, Maplewood Jeweller, both calves are splendid individuals. Harter & Easton, Jenison, Mich.

Shorthorns Good Scotch bred bulls, cows and heifers priced right.
W. B. McQUILLAN, R. 7, Howell, Mich.

MEADOW HILLS Shorthorns. Herd headed by Silver King, full brother of Lavender Sultan Purdue University's great sire. For sale females of all ages, a few young bulls. Geo. D. Doster, Doster, Mich.

Milking Shorthorns of best Bates breeding, bulls 6 to 8 mo. old for sale.
E. H. KURTZ, Mason, Mich.

Milking Shorthorn 3 mos. heifer calf \$125 bred heifers and serviceable bulls at farmers' prices. Central Mich. Shorthorn Assn. Oscar Skinner Sec. Gowan, Mich.

MICHIGAN STATE HOLSTEIN SALE.

At the second state Holstein-Friesian sale held at Jackson, October 19, the following animals sold for the following prices:

Consigned by Traverse City State Hospital, Traverse City, Mich.:

Traverse Segis Johanna Hartog, to E. G. Stevenson, Ontario, \$4,000.
Traverse Ninetta, to Edward Wagner, Wheeling, W. Va., \$300.
Traverse Walker Duchess, to Edw. Wagner, Wheeling, W. Va., \$430.
Traverse Korndyke Girl, to E. G. Stevenson, Ontario, \$1,000.
Traverse Inka Korndyke, to E. G. Stevenson, Ontario, \$825.
Traverse Ninetta Segis, to E. G. Stevenson, Ontario, \$725.
Traverse Clothilde 2nd, to Milan L. Cook, Ithaca, Mich., \$440.
Traverse Duchess Hengerveld 2nd, to Edward Wagner, Wheeling, W. Va., \$320.

Consigned by Robin Carr, Fowlerville, Mich.:

Rainbow Hengerveld De Kol Meredith, to Michigan School for the Deaf, Flint, Mich., \$600.

Female born January 1, 1920, to Wm. Gibson, Fowlerville, Mich., \$230.

Consigned by R. J. Bird, Ypsilanti, Mich.:

Elzever Rag Apple Butter Girl, to Bazley Stock Farm, Ypsilanti, Mich., \$290.

Consigned by F. S. Jenkins & Son, Eagle, Mich.:

Beach Segis Pontiac Queen, to E. G. Stevenson, Ontario, \$800.

Consigned by Sinlinger Bros., Lake Odessa, Mich.:

Female, born April 7, 1920, to Boardman Farms, Jackson, Mich., \$330.

Alcartra Pontiac Elzever Vale, to Michigan School for Deaf, Flint, Mich., \$500.

Consigned by Lake Side Dairy, Lake Odessa, Mich.:

Weedie Canary De Kol, to Boardman Farms, Jackson, Mich., \$410.

Consigned by Wm. R. McDonough, Howell, Mich.:

China Pontiac Champion Mobile, to Colver Farms, Colver, Penn., \$270.

Consigned by F. S. Taylor, Adrian, Mich.:

Ophelia Segis, to C. E. Winne, Adrian, Mich., \$410.

Consigned by Musloff Bros., South Lyons, Mich.:

Urmagelsche De Kol Hartog, to Edward Wagner, Wheeling, W. Va., \$230.

Segis Glenburnie Pieter, to Edward Wagner, Wheeling, W. Va., \$250.

Artis Ona, to G. L. Spillane & Son Co., Flint, Mich., \$400.

Sir Pieter Korndyke Lyons, to W. L. Rundell, Saline, Mich., \$700.

Belle Bernardo Segis Pieter, to W. H. Wernett & Son, Plymouth, Mich., \$500.

Segis Pieter Butter Girl, to E. M. Starkweather, Northville, Mich., \$500.

Butter Maid Segis Pieter, to W. H. Wernett & Son, Plymouth, Mich., \$700.

Alfalfadale Pontiac Sue 2nd, to John P. Hehl, Detroit, Mich., \$200.

Stoneacre Lunde Pontiac Canary, to E. M. Starkweather, Northville, Mich., \$500.

Aaggie Texal Segis Pieter, to Michigan School for Deaf, \$1,100.

Consigned by John P. Hehl, Detroit, Mich.:

Count Veeman Hengerveld De Kol, to J. M. Williams, North Adams, Mich., \$500.

King Thyrsa De Kol K. K. S., to M. J. Roche, Pinckney, Mich., \$325.

Consigned by A. W. Copeland, Birmingham, Mich.:

Strawberry Creamelle Korndyke, to Michigan School for Deaf, Flint, Mich., \$300.

Pieterje Creamelle, to Michigan School for Deaf, Flint, Mich., \$440.

Zilla Winona 2nd, to James Nye & Son, Pontiac, Mich., \$360.

Consigned by J. A. Campbell & Son, Parma, Mich.:

Ann De Kol Segis Polkadot, to W. H. Wernett & Son, Plymouth, Mich., \$300.

Consigned by Myers Brothers, Adrian, Mich.:

Grandview Ormsby Segis, to Michigan School for Deaf, Flint, Mich., \$810.

Consigned by Vernon Clough, Parma, Mich.:

Netherland Helen Marshall, to E. G. Stevenson, Ontario, \$460.

Consigned by E. E. Sturgis, St. Johns, Mich.:

Lady Houwtje Hengerveld Korndyke, to M. J. Roche, Pinckney, Mich., \$350.

Pieterje Anza Burke, to Mark H. Piper, Flint, Mich., \$205.

Beryl Pieterje Wayne, to Mark H. Piper, Flint, Mich., \$310.

Continued on page 651).



KOW-KARE

70¢ and \$1.40 Sizes

Exchange Pennies for Dollars

It pays to invest in cow health. The cost of a package of Kow-Kare, the great cow medicine, is measured in cents; the increased milk income from a healthy cow is reckoned in dollars.

Kow-Kare enjoys a quarter-century record of leadership in the prevention and successful treatment of all cow ailments due to weakened digestive or genital organs, such as Barrenness, Retained Afterbirth, Lost Appetite, Scouring, Bunches and Abortion. The Kow-Kare treatment is inexpensive but produces prompt and visible results. One trial will convince you.

Buy Kow-Kare from feed dealers, general stores or druggists.

DAIRY ASSOCIATION CO.

LYNDONVILLE, VT.

NOTE: The Trade-mark name has been changed from KOW-KURE to KOW-KARE—a name more expressive of BOTH the PREVENTIVE and CURATIVE qualities of the remedy. There is not the slightest change in formula or manufacture.

MICHIGAN LIVE STOCK INSURANCE COMPANY

INDEMNIFIES Owners of Live Stock—Horses, Cattle, Sheep and Hogs
Against Death by Accident or Disease

308 Davidson Building,

Bay City, Michigan

REG. BELGIAN HORSES
AT AUCTION

On my Farm at Vestaburg East, 80 rods N., 1-2 mile from the P. M. Depot on the R. R. between Alma and Edmore Michigan.

WEDNESDAY, NOVEMBER 24, 1920

It includes my Imported Stallion Mouton deNil No. 2937 American, 497 Foreign. Bay with black points 90 per cent of his Colts are Bay.

La Veta Bay 4 years old No. 5763. Bred by Mouton deNil. DeaCeal Roan 4 years old No. 5764 Bred by Mouton deNil 7 months Fillic Boy from La Veta and Mouton deNil. I will pay R.R. fare to the man that Buys.

Jake Hilman, Auctioneer,

Roy Marsh, Prop.

O. I. C. BOARS

Choice individuals; shipped to you c. o. d. express paid and guaranteed right or your money refunded. All stock registered in buyer's name.

J. CARL JEWETT, Mason, Mich.

CATTLE

Red Polled cattle for sale bulls from 4 to 18 mos. also cows with calves by side and heifer's.

G. A. CALHOON, Bronson, Mich.

Reg. Red Polled cattle choice young bulls from 6 to 18 mos. old for sale.

FRANK KEBLER, R. 1, Grand Ledge, Mich.

Reg. Red Polled Bull calves for sale, from 3 mos. to 1 year old, sired by Famous Charmer grand son of Charmer 1919 International Grand Champion.

WESTBROOK BROS., Ionia, Mich.

HOGS

Registered Berkshires, Gilts, and Sows bred for April May and June farrow. A yearling Boar and a few younger Spring pigs. Chase Stock Farm, Marquette, Mich.

Fine Registered Berkshire pigs for sale, prolific, large litters.

C. H. WHITNEY, Merrill, Mich.

Brookwater Duroc Jerseys

BOARS—Ready for Service

Big type, large bone and rugged with plenty of quality. This is your chance to buy high class individuals at reasonable prices.

Open Gilts

of choice breeding and right type. Panama Special, The Principal 4th, Orion Cherry King, and Great Orion families. Now is the time to buy before the demand takes all of the good ones.

Write us for Prices and Pedigrees. Mail orders a Specialty. Satisfaction guaranteed.

BROOKWATER FARM

ANN ARBOR, MICHIGAN

H. W. Mumford, Owner J. B. Andrews, Mgr.

DUROC JERSEY SWINE

for sale 2 yr. old herd pigs, yearling boars and boar pigs, also bred sows and gilts. Write for pedigrees and prices. Come and see them.

THOS. UNDERHILL & SON, Salem, Mich.

DUROCS WITH QUALITY

Spring pigs by Walt's Orion, First Sr. Yearling

Detroit, Jackson, Gd. Rapids and Saginaw 1919

Phillips Bros, Riga, Mich.

For Sale Duroc Jerseys of the big heavy boned type.

CHAS. BRAY, Okemos, Mich.

Duroc sows and gilts bred to Walts King 29499 who has sired more 1st and 2nd prize pigs at the State Fair in last 2 years than any other Duroc boar. Everyone will be a money maker for the buyer. Cat and price list.

NEWTON BARNHART, St. Johns, Mich.

DUROCS spring boars. A few gilts bred for Sept. farrow at bargain prices.

W. C. TAYLOR, Milan, Mich.

Duroc Boars ready for service. Sired King number 169259 son of the \$10,000.00 Champion

Jacks Orion King 2nd fall large type and heavy bone out of good sows.

THE JENNINGS FARMS, Bailey, Mich.

Duroc Jerseys Boars Boars of the large heavy boned type at reasonable prices. Write or better come and see.

F. J. DRODT, Monroe, Mich.

Michigan Farm Durocs. Service boars and open gilts for sale at \$40 and \$50. These are real hogs. Satisfaction guaranteed.

O. F. FOSTER, Mgr., Pavilion, Mich.

Write Me at once I have just what you want heavy bone registered Duroc Jersey boars ready for service.

W. H. MAYES, L. B. 505, Durand, Mich.

Duroc Jerseys of the right type, good blood lines and in good condition at a price you can afford to pay. Guaranteed to suit you.

W. E. Bartley, Alma, Mich.

DUROC JERSEYS

Carey U. Edmonds, Hastings, Mich.

DUROC JERSEYS Boars and gilts by Mich. Pathfinder.

E. D. HEYDENBERG, Wayland, Mich.

PLEASANT View Durocs. Choice spring boars and gilts. Come and see or get our prices before buying.

W. C. BURLINGAME & SON, Marshall, Mich.

DUROC Jerseys, July and Sept. farrow, either sex, 15 to 25 dollars, satisfaction or money back.

B. E. KIES, Hillsdale, Mich.

Raise Chester Whites

Like This the original big producers

I HAVE started thousands of breeders on the road to success. I can help you. I want to place one hog from my great herd in every community where I am not already represented by these fine early developers—ready for market at six months old. Write for my plan—More Money from Hogs.

S. S. BENJAMIN, R. F. D. 10, Portland, Michigan

SPECIAL prices on Fall, Winter and Spring boars during October.

WEBER BROS., R. 2, Royal Oak, Mich.

Big Type Chester Whites Spring boars sired 2nd. Hill's Big Bone, Col. Wyckoff, Smith's Giant and Champion X J. R. and out of good big dams. Cholera immune and satisfaction guaranteed. Also fall pigs, either sex, not related.

N. L. HILL, Jr., Mackinaw, Ill., Tazewell, Co.

O. I. C's choice spring pigs either sex. Booking orders for fall pigs. We register free and ship O. O. D.

A. J. BARKER & SON, Belmont, Mich.

O. I. C's Eight young boars and spring pigs for June shipment.

CLOVER LEAF STOCK FARM, Monroe, Mich.

Central Mich. O. I. C. Swine Breeders Ass'n.

Hogs of all ages of popular blood lines. Every sale guaranteed by association.

DR. H. W. NOBLES, Sales Mgr. Coral, Mich.

For Sale O. I. C. Swine, Strictly Big Type with good boars and gilts left of same type and blood lines, that won for us at Ohio and Michigan State Fairs. Priced very cheap. Write us before you buy.

NEWMAN'S STOCK FARM, R. 1, MARLETTE, MICH.

O. I. C's. One last fall boar wgt. 425, two last fall gilts, bred lots of spring pigs and this fall pigs either sex, good growthy stock 1/2 mile west of Depot. City's Phone 124. Otto B. Schulze, Nashville, Mich.

O. I. C's June and July boars and open gilts. Recorded and express paid for next 30 days each one a guaranteed feeder. F. O. Burgess, R. 3, Mason, Mich.

O. I. C. Serviceable boars. A few extra good boars at farmers' prices.

H. W. MANN, Dansville, Mich.

Big Type P. O. Bred gilts. Fall yearlings, prize winners, out 1100 lb. sire and mammoth sows from Iowa's greatest herds. E. J. Mathewson, Burr Oak, Mich.

O. I. C's 2 March boars \$40 each. Fall pigs by C. C. Big Calloway.

C. J. THOMPSON, Rockford, Mich.

Closing out sale of big type Poland Chinas, which represents the work of 25 years of constructive breeding. Everything goes, including our three great herd boars, "Mich. Buster", "Giant Buster", "A Giant", "Butler's Big Bob". Two of the best yearling prospects in Michigan great length, big bone, come get your pick. Jno. C. Butler, Portland, Mich.

Large type Poland China's spring boars ready to ship. Everything immune from Cholera.

A. A. FELDKAMP, R. No. 2, Manchester, Mich.

Poland Chinas

Spring boars and gilts from the Sr. Champion boar at the State Fair at Detroit this year also Grand Champion at West Mich. Fair at Grand Rapids weighing 1025 lbs.

If you want something that will give you satisfaction let us sell you a boar or gilt.

ALLEN BROS., Paw Paw, Mich.

L. S. P. C.

Everything sold previously ad. 25 spring pigs placed on the bargain counter for mo. of Sept. pairs or trios not akin.

H. O. SWARTZ, Shoolcraft, Mich.

Big Type Poland Chinas

Our herd is representative of the best in Big Types. Choice boars for sale now.

Wesley Hile, R. 6, Ionia, Mich.

Poland China Special pig sired by Hoyer's Giant 12975 and from our best sows are the best we ever offered. Write for particulars.

DORUS HOVER, Akron, Mich.

6 boar pigs best I have raised in my 15 years of breeding sired by Big Bob Mastodon a son of the world's champion. Price \$50 and 50 fall pigs send orders now.

C. E. GARNANT, Eaton Rapids, Mich.

I am offering Large Type Poland Chinas, bred to F. Orange, at reasonable prices; also fall pigs. Write or call Clyde Fisher, St. Louis, Mich. R. R. 3.

My! Oh My! What An Opportunity

We are now offering a few choice big type Poland Chinas Boars, from Big Smooth Jones, one of the best sires, from dams by such noted sires as Grand Master, Hillcrest Wonder, Mastadon Wonder and Hillcrest Bob.

You can't get better breeding. Individually they will please you. Price \$50.00.

HILLCREST FARM, Kalamazoo, Mich.

L. T. P. C.

70 head of Poland Chinas at private sale. Am offering spring boars from \$40 to \$50 and gilts the same price. Summer and fall pigs \$25 each. The first check will bring you the first choice. HART, FULCHER & CLINE, Address F. T. Hart, St. Louis, Mich.

Big Type Poland Chinas with quality, at reasonable prices. Pigs of both sex, and bred sows and gilts.

G. A. BAUMGARDNER, R. 2, Middleville, Mich.

Big Type P. C. a few first class, 200 lb. boars left also some fall boar pigs good enough to herd any herd. Come and see or write.

E. R. LEONARD, R. 3, St. Louis, Mich.

BARGAINS on Big type spring and summer Poland China Pigs also yearling Shorthorn bulls, bull and heifer calves.

Robert Neve, Pierson, Mich.

L. T. P. C. Spring boars and gilts now ready to ship. Something good for bred water price.

W. J. HAGELSHAW, Augusta, Mich.

Edgewood Hampshires

All bred gilts sold. Now booking orders for gilts bred for fall farrow, and pigs for pig club work only.

Depew Head, Edgewood Farm, Marion, Ohio.

HAMPSHIRES spring boars and fall pigs at a bargain, book your order now for bred water.

JOHN W. SNYDER, R. 4, St. Johns, Mich.

SHEEP.

Delaine Rams B. & O. type, having size, quality, best of breeding, priced to sell, write.

S. H. SANDERS, R. 2, Ashtabula, O.

WHITTUM FARM SHROPSHIRE

A fine lot of imported and home bred yearling ewes and rams for sale. A fine chance to start a new flock or improve the old one call at the farm or write for just what you want.

O. H. WHITTUM, Eaton Rapids, Mich.

Hillcrest Shropshires

A nice lot of Ewes and Rams of all ages our flock is headed by McKerrrow 3164 a son of Senator Bibby write or call on

R. J. & C. A. WILLIAMS, Middleville, Mich.

Additional Stock Ads. on Page 651

LATEST MARKET REPORTS

GRAIN QUOTATIONS

November 17, 1920.

Wheat.

Detroit.—Cash No. 2 red \$2.10; December \$2.04; March \$2; No. 2 white and No. 2 mixed \$2.08.

Chicago.—No. 1 hard \$1.95½; December \$1.87½; March \$1.77½.

Corn.

Detroit.—Cash No. 2 mixed 91c; No. 2 yellow 96c.

Chicago.—No. 2 mixed 84@85c; No. 2 yellow 86¼c.

Oats.

Detroit.—Cash No. 2 white 57½c; No. 3 white 56c; No. 4 white 54c.

Chicago.—No. 2 white 52½@53c; No. 3 white 50½@52c.

Beans.

Detroit.—Immediate and prompt are steady at \$4.50@4.60 per cwt.

Chicago.—Market easy. Hand-picked beans choice to fancy \$4.75@5; red kidney beans \$9@9.50 per cwt.

New York.—Market continues dull. Choice pea \$5.90; do medium \$6@6.25; red kidney \$11 per cwt.

Rye.

Detroit.—Cash No. 2 rye \$1.64.

Seeds.

Detroit.—Prime red clover \$12.25; December \$12.40; alsike \$16.25; timothy \$3.40.

Toledo.—Prime cash at \$12.25; December \$12.35; alsike \$16.50; timothy \$3.45.

WHEAT

Factors which ordinarily influence prices upward are no longer effective. The wheat situation statistically justifies a stronger market but with bakers failing to buy flour in normal volume while their higher-priced holdings are being absorbed millers have no orders upon which to base purchases of wheat and the market is at the mercy of foreign demand which is intermittent and only prominent upon pronounced declines. England, which is our chief buyer, purchased no wheat from July 29 to November 10, and after making fairly large purchases on that day, the Royal Commission announced that it would not buy more except on a basis about 25 cents lower. Other European countries are buying in spite of weak exchange which betrays their necessities. Germany's wheat crop is officially estimated at 88,000,000 bushels and rye 193,000,000 bushels against a five-year average of 152,000,000 bushels of wheat and 400,000,000 bushels of rye. However, export sales and such news as that concerning Germany is not sufficient to give the market firmness in the absence of domestic buying.

CORN

Total supplies of corn for the 1920-21 season including crop, carryover and visible supply, aggregates 3,351,000,000 bushels, or 361,000,000 bushels more than last year. In 1912-13 the aggregate supply was 3,193,000,000 bushels which were consumed during the season. The quality of the corn crop this season is the highest known, being 7.7 per cent above the average. Average weight of oats per measured bushel is 33.1 lbs; wheat 57.4 lbs; last year oats averaged 31.1 lbs, and wheat 56.3 lbs. This factor adds several million bushels to the feeding value of these grains. When it is considered that the total live stock population is ten or fifteen million greater than in 1912 the outlook for feed grains is not so bearish as it may appear to be. Corn has yet to discount the effect of the new crop movement although it is getting under way, Chicago receiving 15 cars at the close of the week. Car shortage supported the price last fall but this year this factor will not be operative so that fresh declines may take place although all the evidence indicates that these will not carry downward much further.

OATS

Oat prices are dragging because of the big stocks in terminal markets which continue to mount. There is little likelihood of marked improvement in corn and oats prices for three months.

BUCKWHEAT

Weather has been more seasonable for buckwheat consumption, although

the usual habit of stocking up for winter requirements is not noticeable. The market is mostly slow, though Chicago quotes it higher at \$2.50@3 per 100 lbs, while Milwaukee runs \$2.25@2.50. The November 1 returns indicate a crop of 14,321,000 bushels, compared with 16,301,000 last year and an average of 15,305,000 during the preceding five years.

BEANS

Bean prices declined a trifle during the past week, influenced by general bearishness. Colder weather is helping the demand, although it remains far below seasonable volume. Growers refuse to sell on declines so that the outlook favors an advance. Michigan beans are quoted in carlots f. o. b. common shipping points at \$4.75 per 100 lbs. The latest returns put the crop at 9,364,000 bushels in six states compared with 11,488,000 bushels last year and 13,213,000 bushels as the average of the preceding six years. The strong statistical position eventually should assert itself.

SEEDS

Instead of a reduction in the clover seed crop which was anticipated because of abandonment of acreage the last government estimate was 1,593,000 bushels, compared with 1,099,000 bushels last year, 1,197,000 two years ago, and 1,488,000 three years ago. France and England have good crops, but Italy, another source of imports, is short. Prices declined during the week along with nearly everything else, but are still above pre-war levels.

FEEDS

Only minor changes took place in feed prices in spite of the fresh declines in feed grains. Some distributing points show slight advances while others receded. Linseed meal which has been out of line with cottonseed meal lost more of its premium. Light production of mill feeds continue as strongest supporting influence. Feeding demand is expanding slightly but is still below the usual volume.

Chicago.—Brans \$37; standard middlings \$42; flour middlings \$46; cottonseed meal, 41 per cent \$50; cottonseed meals, 36 per cent \$42; gluten feed

\$45; hominy feed \$42; old process oil meal \$63; tankage \$80@90.

Detroit.—Bran \$43; standard middlings \$45; flour middlings \$54; coarse corn meal \$44; cracked corn \$47; chop \$38.

HAY

Cold weather stimulated the demand for hay at western markets, while receipts are light. The south is buying much less than usual. The outlook does not suggest much higher prices, and lower prices for timothy and clover would not be surprising although holding by producers would offset this tendency for the time being.

Detroit.—No. 1 timothy at \$29@30; standard \$28@29; light mixed \$28@29; No. 2 timothy \$27@28; No. 1 mixed \$27@28; No. 1 clover \$27@28; rye straw \$14.50@15; wheat and oat straw \$13.50@14.

POTATOES

The government's report for November showed a slight increase in the potato crop to 421,000,000 bushels as against 358,000,000 bushels last year and 362,000,000 as the average of the preceding five years. The potato markets continue nearly steady to firm with price changes slight in most consuming markets. Shipments held up to about 1,000 cars daily. Some Canadian potatoes are reported on the way. Numerous box cars of potatoes were frozen in the cold wave. Northern round white stock is quoted mostly at \$1.85@2 per 100 lbs sacked, f. o. b. Minnesota, Wisconsin and Michigan shipping points. At Chicago, Whites bring \$1.75@2.60 per cwt; at Cleveland Michigan round whites, 150-lb sacks \$3.50@3.60; Cincinnati, Michigan 3.75@4 per 150 lbs; Detroit, Michigan at \$3.35@3.50 per 150-lb sack.

BUTTER

Fresh butter has held at practically unchanged prices all week. The only advance outside of that on centralized at Chicago was an advance of one cent at New York on Friday. The storage market has not done so well. While storage stocks on the four markets have moved fairly well the buying is largely of privately owned stocks rather than on the open market. Prices

show a wide range and buyers have been very critical. The chief trouble with this market is a lack of confidence. Fine butter continues short of trade needs but sentiment favors holding prices in check so as to continue present consumptive trade. Medium grades have been clearing fairly well but some very low prices have been reported on real undergrades. Closing tone of the market is steady to firm with 92 score quoted at 62½c; Chicago 65c New York; 60c at Boston, 64c at Philadelphia.

EGGS AND POULTRY

Egg prices continue to favor the producer, the farm price for a dozen probably exceeding the value of a bushel of corn in most cases. There is a prospect of still higher prices because of the scarcity of the best grades. Texas has a big turkey crop but many other sections are below the average. Prices were as follows:

Chicago.—Eggs, fresh firsts 67@68c; miscellaneous 57@64c. Poultry, spring chickens 25½c; hens, general run, at 18@25c; roosters 22c; ducks 25@28c; geese 26c; turkeys 38c.

Detroit.—Eggs, fresh candled 68@72c. Live poultry, spring chickens 25@26c; Leghorns 20@22c; hens 25@26c; small hens 18c; roosters 18c; geese 25c; ducks 30@32c; turkeys at 35@36c.

CHEESE

Cheese markets at distributing centers opened firm. When country markets advance asking prices were generally raised on all markets. The advance contracted demand and trading developed into exchanges of small lots for immediate needs. The markets held firm. Confidence is expressed in the situation as the demand is sufficient to clear current receipts fairly well. Eastern markets have had considerable dealings in held goods, prices being firm. Dealers generally are not using any more of their storage goods than they have to as they are now able to move fresh at a profit.

APPLES

Apple shipments decreased slightly but are still nearly up to 1,000 cars a day. Baldwins A-2½ continued steady at \$4.25 f. o. b. New York shipping points and \$4.50@5 in eastern consuming markets. Chicago was weak with Kings and Wageners quoted at \$4.50@5.25; Baldwins and Greenings \$4.25@5 and Jonathans \$8@8.50; Baldwins in Minneapolis reached \$6.

NEWS OF THE WEEK.

(Continued from page 622).

gallon by large oil companies.—The first hearing before the Kansas court of industrial relations at which employers are charged with curtailment of production in an essential industry is set for tomorrow.

Monday, November 15.

BOLSHEVIK forces are reported to have taken Sebastopol and British destroyers are now patrolling the Black Sea to prevent the Russians from communicating with Turkey.—The French naval budget for 1921 amounts to over one billion francs.—Six children are killed and twelve persons seriously hurt when a false alarm of fire is given in a New York theater.

Tuesday, November 16.

IN the Greek elections early reports indicate that the government has lost in practically every province.—Refugees are fleeing from Crimea as General Wrangel's forces make their last stand before the Russian bolsheviks.—The entire crew of the ill-fated steamer Widlar has been safely landed at the Soo.—Turkish nationalist forces and the Armenian government have taken steps to bring about peace, the main issue being the fixing of boundaries.

COMING LIVE STOCK SALES.

Duroc Jersey.—November 23, Albert Ebersole, Plymouth, Michigan.
Holstein.—November 24, Chris Hansen Farm, Lansing, Michigan.
Belgian Horses.—November 24, Roy Marsh, Vestaburg East, Michigan.
Poland China.—December 3, Alfred Grueber, Frankenmuth, Michigan.

Live Stock Market Service

DETROIT

Cattle.

Market is dull, common thin grades practically unsaleable.

Best heavy steers	10.00
Best handy wt bu steers	7.50@8.50
Mixed steers and heifers	7.00@7.25
Handy light butchers	6.00@6.50
Light butchers	4.00@5.50
Best cows	6.25@7.00
Butcher cows	5.00@6.00
Common cows	4.00
Canners	3.00@3.50
Choice bulls	6.50@7.00
Bologna bulls	5.75@6.25
Stock bulls	4.00@5.75
Feeders	7.00@9.00
Stockers	5.00@7.00
Milkers and springers....	65@100

Veal Calves.

Market dull and 50c lower.
Best\$15.00@15.50
Others6.00@12.50

Hogs.

Market steady to 25c higher; pigs and yorkers \$13; mixed hogs \$12.75.

Sheep and Lambs.

Market 25@50c lower.
Best lambs\$11.00
Fair lambs9.00@10.50
Light to common5.00@7.75
Fair to good sheep5.00@5.50
Culls and common2.00@3.00

CHICAGO

Hogs.

Estimated receipts today are 28,000; holdover 7,287. Market fairly active; mostly 10@15c higher. Bulk of sales \$12.40@12.85; tops \$13; heavy 250 lbs up medium, good and choice at \$12.50@12.90; medium 200 to 250 lbs medium, good and choice at \$12.65@12.90; light 150 to 200 pounds common, medium, good and choice at \$12.50@12.85; light lights 130 to 150 lbs common, medium, good and choice

\$12.40@12.90; heavy packing sows 250 lbs up smooth \$11.90@12.35; packing sows 200 lbs up rough \$11.65@11.90; pigs 130 lbs down medium, good and choice \$12.25@13.25.

Cattle.

Estimated receipts today are 18,000. Best grades are steady; others lower. Beef steers medium and heavy weight 1100 lbs up choice and prime \$15.25@17; do medium and good \$9.25@15.25; do common \$7.75@9.25; light weight 1100 lbs down good and choice \$12.25@16.75; do common and medium \$7@12.25; butcher cattle heifers, common, medium, good and choice \$4.50@12.50; cows, common, medium, good and choice \$4.25@10.25; bulls, bologna and beef \$4.50@9.25; canners and cutters, cows and heifers \$3@4.25; do canner steers \$3.50@5.50; veal calves light and handy weight medium, good and choice \$15@15.25; feeder steers, common, medium, good and choice \$7@10.50; stocker steers common, medium, good and choice \$4.25@8.50; stocker cows and heifers, common, medium, good and choice \$4@6.75; western range cattle beef steers, medium, good and choice \$8@12.25; do cows and heifers medium, good and choice \$5.25@9.50.

Sheep and Lambs.

Estimated receipts today are 27,000. Market 25@50c lower. Lambs 84 lbs down medium, good, choice and prime \$10.50@12; do culls and common \$8@10; spring lambs, medium, good and choice \$8.25@10.25; ewes, medium, good and choice \$4.50@5.25; ewes cull and common \$2.50@4; breeding ewes, full mouths to yearlings \$5@7; yearling wethers medium, good and choice \$11.50@12.50.

BUFFALO

All classes of hogs sold here today (Wednesday) at \$13.75; lambs \$12.75@13, and calves up to \$18.

WOOL

More actual business was reported in the wool market circles the past week, but the prices are not flattering. About a quarter of a million pounds of choice Ohio delaine was sold outside of Boston at a clean basis of about \$1.23 for wools of 66's-70's grade, while Boston reports these wools at 50c in the grease. Montana fine and fine medium in the original bags at 30 @33c or about 90c clean basis, and Texas twelve months at 85c clean basis. Australian auctions report a firmer market on the fine staple wools, super 64's figuring about \$1.15 clean, landed at Boston. American buyers are fairly active, presumably trying to anticipate tariff legislation. Retailers are quoting lower prices in the effort to clear stocks. It will not be surprising to see the market become steady at around the present basis. Quotations, mostly nominal, as issued from Boston are as follows:

Ohio and Pennsylvania fleeces.—Delaine unwashed 50@52c; fine unwashed 38@40c; half-blood combing 42@45c; three-eighth-blood combing 37@38c per pound.

Michigan and New York fleeces.—Fine unwashed 38@39c; delaine unwashed 48@50c; half-blood unwashed 42@44c; three-eighth-blood unwashed 36@38c.

Wisconsin, Missouri and average New England.—Half-blood 40c; three-eighth-blood 32@34c; quarter-blood 28@30c.

FARM BUREAU MARKET REPORT.

Elevator exchange business is very good. Dealers are filling postponed requirements. No export demand for wheat, although Europe purchased heavy the early part of the week, advancing market 10c. Local mills report no demand for flour but have a heavy demand for bran and middlings at present prices. Exchange added six additional associations, totaling 32. Reports disclose very little grain moving although grain marketed through exchange shows sales to exceed other bids to associations five to seven cents. Seed department has made extensive purchases of Grimm in west for members of the farm bureau. Demand for Grimm increased materially throughout northern states. Supply available is not large, due to partial crop failure in Dakotas and Montana. All the seed markets are weaker but seed department able to make a number of sales outside of the state at price considerably above current market. Much imported and southern seed on market, but some sections willing to pay premium for Michigan grown.

STATE HOLSTEIN SALE.

(Continued from page 649).

Consigned by R. Bruce McPherson, Howell, Mich.:

Burtondale Lady Pieterje 2nd, to E. G. Stevenson, Ontario, \$560.

Moonlight Colantha Genevie, to Edward Wagner, Wheeling, W. Va., \$400.

Cluny Maplecrest Pontiac Hartog, to Bazley Stock Farm, Ypsilanti, Mich., \$300.

Consigned by Carl Hitchcock, Charlotte, Mich.:

Traverse Colantha Minita, to E. G. Stevenson, Ontario, \$300.

Consigned by R. J. Bird, Ypsilanti, Mich.:

Ypsilant Leona De Nijlander, to Edward Wagner, Wheeling, W. Va., \$300.

Valley Jewel Banostine, to Bazley Stock Farm, Ypsilanti, Mich., \$330.

Consigned by Russell H. Blake, Jackson, Mich.:

Belle Perfection De Vries, to Michigan School for Deaf, Flint, Mich., \$500.

Blackberry Belle Burton, to Colver Farms, Colver, Pa., \$250.

Blackberry Belle Pontiac, to E. K. Mason, Athens, Mich., \$215.

Broadmead Pontiac King Della, to R. W. Chivers, Jackson, Mich., \$200.

Consigned by Boardman Farms, Jackson, Mich.:

Oriskany Korndyke Bessie, to E. G. Stevenson, Ontario, \$350.

Ithlea Retta Korndyke, to H. C. Jones, Marion, Mich., \$220.

Consigned by N. S. Curtis & Son, Adrian, Mich.:

Mary Elizabeth Colantha 2nd, to Colver Farms, Colver, Pa., \$310.

Notwithstanding the cheaper corn and roughage, the country-ward movement of cattle continues of only moderate volume. The October movement from Kansas City was only about two-thirds that of a year ago when, however, shipments to the country were practically at a record rate.



UNITED STATES CREAM SEPARATOR

WITH PERFECTED DISC BOWL

World's Record Skimming

Interchangeable Discs

Easy bowl to clean

So easy to clean

Milking done; the separator run finished—what then?

Either a mussy, fussy period of washing up and re-assembling—or a quick, sanitary wash-up that's a matter of moments.

---Depends entirely on how wisely you've selected your separator.

The Perfected Disc Bowl of the United States takes the drudgery out of the clean-up. No chance to get the discs mixed; they're interchangeable. Just slip them on the handy disc transfer—at one stroke—wash in warm water, rinse in boiling water, and the job's done.

The United States is a Separator you can live with in peace.

Write for catalog

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Crank or Power on either side

One Piece Frame

Get This MILL For A

\$5 Bill

Biggest mill value you can buy—improved—highest in operation and upkeep, and adjusted easiest, and guaranteed to do uniform work.

100% RIGHT

Because they are made with positive gear drive—Pivoted adjusting and self-conforming Duplex Grinding Burrs—Double Hand Screw Burr Regulator—Self-sharpening Upper Crushers and Upper Force Feed—all of which means less power, less speed, and larger capacity.

Write for catalog, prices and full particulars of our \$5 position.



GRINDS every kind of small grain. Ear corn and cob with or without husks. Kafir corn in head—Pens and vines, sheaf oats, beans, etc.

The E. W. Howe Co., Dept. B Springfield, Ohio

SIX SIZES! That means a size for every need, at a price for every purse.

WE USE THE DE LAVAL Cream Separator

There are more than 2,500,000 De Laval Cream Separators in use, and this Sign is a universal mark of separator satisfaction the world over.

THE DE LAVAL SEPARATOR CO.

New York Chicago San Francisco

SHIP YOUR POULTRY, VEAL and HOGS

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Eastern Market

You Will Get a Square Deal and Returns Daily.

Want a Sheep? Let American Hampshire Sheep Association send you a booklet with list of breeders. Write COMFORT A. TYLER, 22 Woodland Ave., Detroit, Mich.

HORSES

BAY MARE

For Sale, sound and right in every way, weight about 950 lbs. Most at once come and see her or write L. J. Hamlin, 486 Huribut Ave., Detroit, Mich.

Percheron Stallions and mares at reasonable prices; inspection invited. **KING & SON.** Charlotette, Mich

Farms and Farm Lands For Sale

The Future Live Stock and General Farm Section of America

Is what a professor in a Northern Agricultural College said about the south. The reason is that live stock and crops yield larger net returns than in any other part of the United States because of fertile soils, short winters, long pleasant summers and convenient markets. Two or more crops a year can be grown on the same land. Long grazing seasons and winter cover crops reduce feed costs. Lands cost from one-third to one-half as much as similar lands in Northern and Western States. Good roads, schools, churches and good people make the South a delightful place to live. Locate now while land prices are still low, make money and build up a good property. For full information write to J. C. Williams, Manager, Southern Railway Development Service, 1312 Pennsylvania Avenue, Washington, D. C.

Attention Farmers!

If you want to sell or exchange, your farm for Detroit city property, write to us for quick results.

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Record Crop Farm With Horses, Cattle, Tools, Produce

158 acres near good R.R. town; well cultivated fields, wire-fenced pasture, valuable wood, variety fruit; new 5-room house, new basement barn, making big money, but owner called away, must sell, includes pair mules, 14 cattle, colt, pigs, machinery, potatoes, grain, hay, etc.; \$8,000 takes all, part cash, balance easy terms. Details page 82 Strout's Big New Illustrated Catalog Farm Bargains Wisconsin, Minnesota, Michigan, Illinois and 29 other states. Copy free. **STROUT FARM AGENCY, 814 BC, Ford Bldg., Detroit, Mich.**

200-Acre Farm. 25 miles east of Philadelphia, near Lincoln Highway, 6 miles from Trenton 2 to main line station. Fine stone house, electricity, water pressure system, heater fireplaces, tiled bath, 6-room bungalow, bath, good farm house, large barn, new silo, large hog house, lightning rods, 40 acres of meadow, 10 in valuable timber, 2 in fruit. Land nearly level and worked with tractor. Excellent loamy soil for alfalfa, corn, potatoes, grain, hay and fruit. Most of the land and manure buildings cannot be replaced under \$40,000. Price \$150 an acre or actual value of land without buildings. Will sell stock and complete equipment of implements and machinery very reasonable. Good reason for selling. Bank references and photographs of Maple Crest Farm. **J. M. WATKINS, Owner, Oxford Valley, Bucks Co., Pa.**

Ionia County Farm

140 acres of almost level clay loam land, nicely located on state road, close to town, church and school, 19 acres of wheat, good orchard, farm is all well fenced and there is an excellent set of buildings consisting of a 10 room house and one of the best 70 ft. full basement barn in the county, good silo, large hog house, sheep house, hen house, tool house and an excellent supply of water. Price is \$100 per acre, on liberal terms. **SEND FOR OUR NEW FALL CATALOGUE OF FARMS.**

FRED A. GODFREY, Lowell, Michigan

For Sale 120 acres near city of 5000 population, on trunk line road, two good schools, good markets on water pipe to house and barn, good shade, fruit of all kind, clay and sand soil, 6 acres timber, no waste land. If sold at once price \$8,000. Buy from owner. **K. C. CONKLIN, Vickeryville, Mich.**

Owner Obligated To Go To Another State offers fully equipped 200 acre dairy farm, convenient to best schools, colleges and university divisible into two good homes at big sacrifice, if taken now, with or without cattle and equipment. **WILLIAM B. HATCH, Ypsilanti, Michigan**

180 Acres Waukesha Twp. splendid maple soil, level, 150 a. tillable, 20 a good timber; splendid house; 1 new barn 34x75 another 36x40, cement stave silo 12x40, good fences, windmill and gas engine; 50 a. clear seeding. Great bargain at \$135.00 per acre. Oscar E. Burnham, 507 Bank Bldg., Kalamazoo, Mich.

Buy farms in New York State through the Farm Brokers' Association, Inc., an old established organization which will give you thoroughly reliable information and service. Offices throughout the State, write The Farm Brokers' Association Inc., Central Office, Oneida, N.Y. for brief list and state your requirements.

FARM BARGAIN

120 acres in Midland County. Good soil large house and barn, silo stone road to Bay City and Gladwin. Requires \$3,500.00 cash. Write **EDWARD HESSE, 580 Gratiot Avenue, Detroit, Michigan.**

\$75 per acre buys one of the best farms in the vicinity of Ann Arbor 25 acres, 35 acres heavy timber if sold will net half the price of farm, no trades considered. **Mr. McADAMS, 1256 W. Euclid, Detroit, Mich.**

For Sale Grain, Dairy and Fruit farms at bargain prices. Market at your door, one hour from Detroit the heart of the country. Write **J. W. SALLARD, Romeo, Mich.**

176 acres dark loamy soil, some muck, good house, barn, farm tools, valuable timber, price only \$2,800 details on request. **Mrs. George T. Smith, R. 3, Williamstown, N. Y.**

Farm For sale or rent 80 acres 5 miles from Gladwin half cleared with buildings and fences. Address **MENNO GROSZ, Gladwin, Mich.**

Good Reading

OFFER No. 103.

The Michigan Farmer, one year.. \$1.00
American Boy, one year..... 2.50

Total value 3.50
Both for \$3.00.

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Fancy Select Fruit. Fresh from our groves to you, large boxes, contain about 200 Oranges and Grapefruit mixed, \$5.00. Half boxes, \$3.00. We have all kinds. Fifty Havana Cigars, \$3.00. The People's Fruit Co., 934 Twigg St., Tampa, Fla.

SHEEP

FOR SALE 35 Registered Shropshire yearling rams and ram lambs. Also some choice Duroc Jersey boars and gilts. **CLIFFORD MIDDLETON, Clayton, Mich.**

SHROPSHIRE Yearling and Lamb rams sired by Imp. Harry No. 163 for sale. Also a few ewes. **ARTHUR DODDS, Lapeer, Michigan**

Shropshires sire imported Minton Ram Lambs \$20, some ewes, 2 yearling rams. **DAN BOOHER, R. 4, Ewart, Mich.**

Shropshire Rams lambs, yearlings and one 2 yrs. old, priced right. **CARL TOPLIFF, Eaton Rapids, Mich.**

Shropshires Yearling and rams, with quality, from imported stock. **W. B. McQUILLAN, R. 7, Howell, Mich**

Shropshires yearling rams. Ewes of all ages. Priced right. **W. B. KELLY, Ypsilanti, Mich.**

Shropshire Rams yearling or lambs for sale. **ARMSTRONG BROS., R. 3, Fowlerville, Mich.**

Wool-Mutton Shropshire Rams. Good strong individuals, bred, priced right. **A. H. FOSTER, Allegan, Mich.**

Registered Shropshire Rams and ewes all ages for sale. Well-wooled with size and quality. Priced to sell. **H. F. Mouser, R. 6, Ithaca, Mich.**

Maple Lawn Farm Shropshires, rams and ram lambs of choice breeding. Woolled from nose to toes. **A. E. Bacon & Son, Sheridan, Mich.**

Registered Shropshire Ewes and rams. **Jno. Grieve, R. 3, Fowlerville, Mich.**

SHROPSHIRE Yearling rams, right in price and quality. **W. E. MORRISSE, R. 5, Flint, Mich.**

For Sale. Registered Hampshire yearling rams and ram lambs. Yearlings weigh 175 lbs. price \$40.00. Lambs weigh 120 price \$30.00. **OTTO C. KNOB, R.R. 3, Monroe, Mich.**

Registered Hampshire Rams ready to ship. 40 yearlings, 20 ram lambs also a few good ewes. **A. M. Welch & Sons, J. B. Welch, Manager, Ionia, Mich.**

Reg. Hampshire Down ram lambs. one registered & 1 Shorthorn bull calf. 9 mo. spring and fall farrowed Berkshire pig. **M. G. Mosher & Sons, Oseco, Mich**

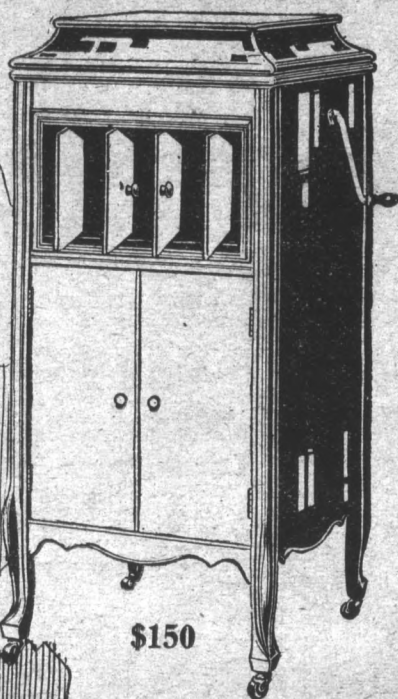
For Sale Oxford ram lambs registered and delivered \$25.00. Guaranteed. **GEO. T. ABBOTT, Palm, Mich.**

OXFORDS Rams, all ages \$20.00 to \$25.00 ewes cheaper breeding the best. **O. M. YORK, Millington, Mich.**

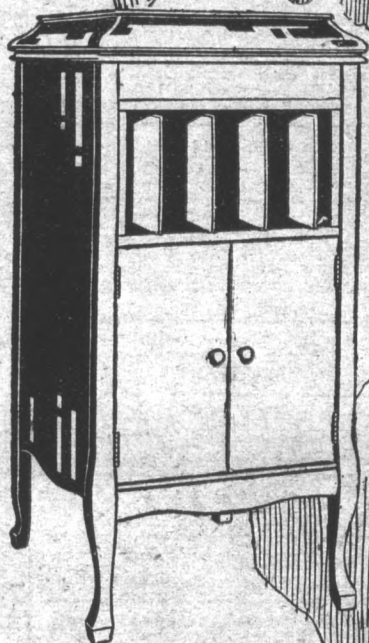
Columbia Grafonola



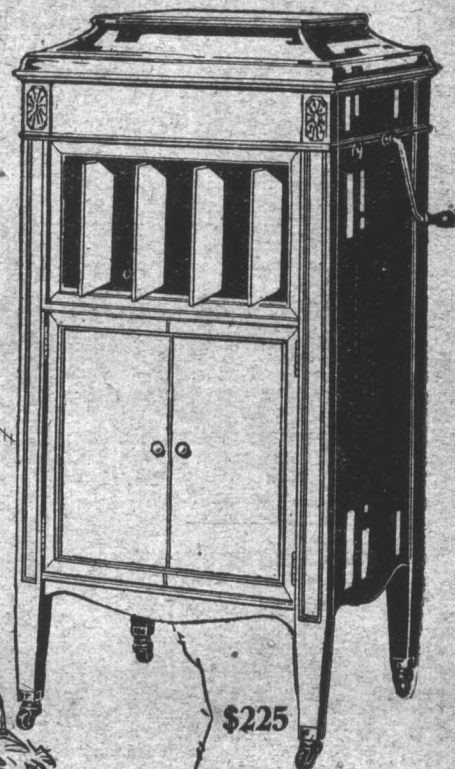
\$75



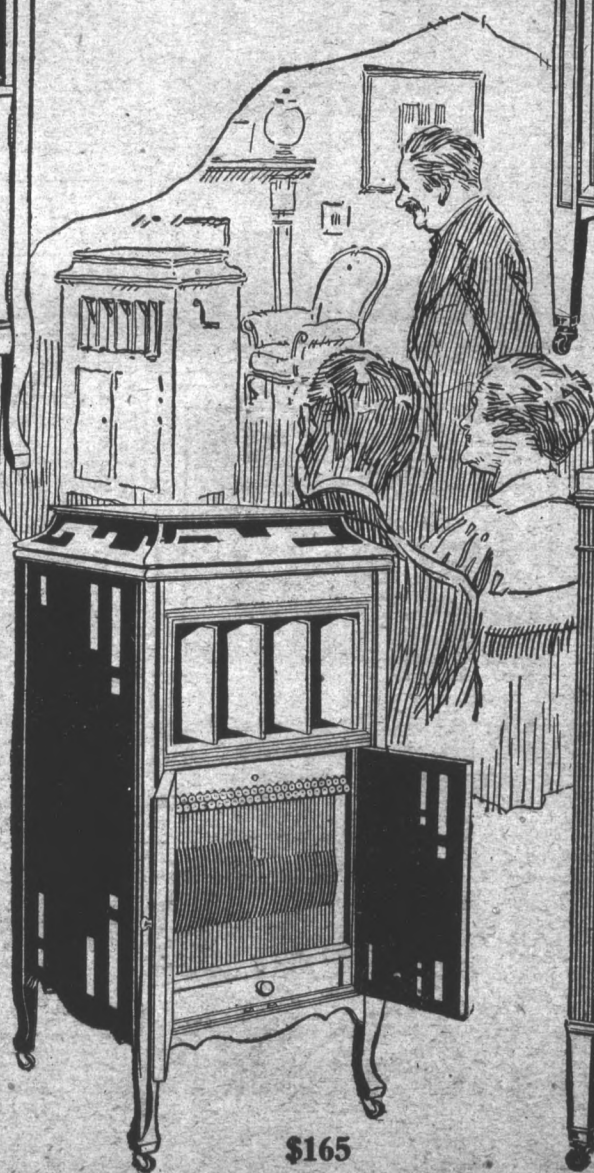
\$150



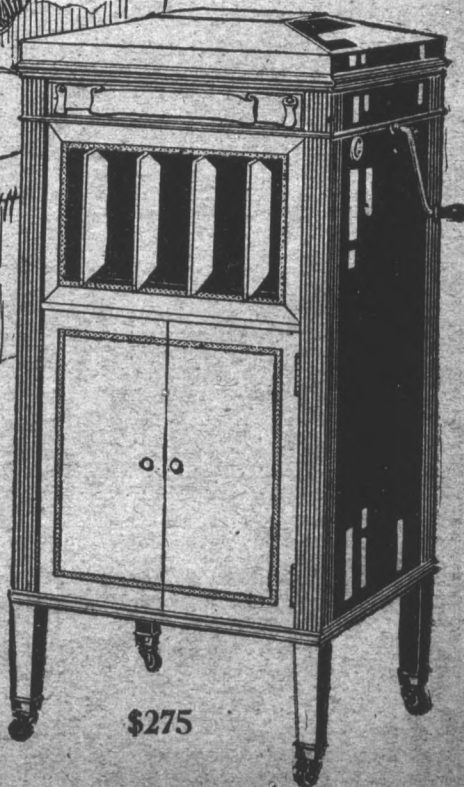
\$120 with Racks
\$125 with Shelves



\$225



\$165



\$275

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