

# MICHIGAN FARMER

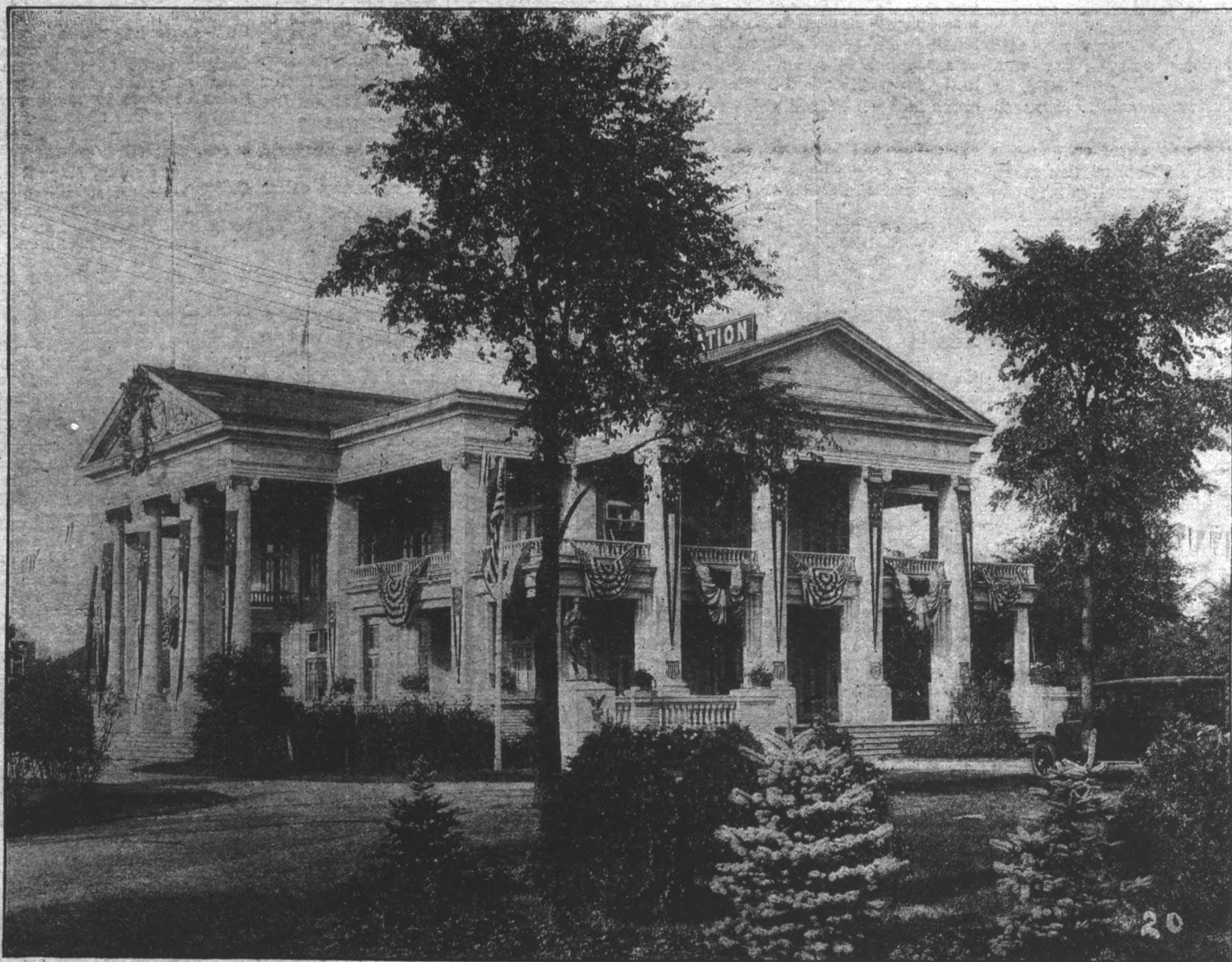
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## How to Make the Fair Pay its Way

THE SEASON for fairs has again rolled around in a year in which agriculture has made rapid strides. If there is any institution the value of which is so well known to farmers as to require no word of encouragement to stimulate general attendance, it is the good agricultural fair. It is essentially an educational institution. It should be the aim of every rural family to be represented at least at one good fair, either by the whole family or by one or more members. Exhibits which may contribute helpful information on some immediate

home problem should be carefully studied. Here is how some fair visitors get much from these annual events. They first make a rapid survey of all the departments, noting the special exhibits which they are interested in. After completing the general survey, they return to the things of special interest and devote such time as may be available to detailed study of the selections. These people invariably comment upon the valuable lessons to be learned at the fairs and coincident with this they are usually our most progressive farmers.

# The Michigan Farmer

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DETROIT, SEPTEMBER 4, 1920

## CURRENT COMMENT

### Michigan's Crop Outlook

ONE can not ride through the vast length of Michigan from south to north and return by rail and auto, covering a wide transverse section of the state, without being impressed with the achievements of Michigan farmers in the way of crop production, notwithstanding the handicaps with which they have had to contend. Faced with a serious labor shortage at the outset, it was generally believed that there would be a decline in production on Michigan farms, a belief which seems destined to be proven erroneous, as indicated by official and special reports and personal observation covering wide areas of the state. A special survey compiled from August reports and observations indicates a substantial increase in the farm value of Michigan crops as compared with last year, based on August prices for principal products, and fifty per cent of August prices for potatoes. Favorable weather conditions over most of the state have tended to better prospects since that estimate was made, and with average conditions for the balance of the growing season a generally satisfactory crop yield seems assured. As ever, there are spots where conditions are less favorable, and where drought or flood or hail, or insect pests beyond the farmer's ability to control have brought more or less severe local hardships, but the general results in prospect are a matter for congratulation and an indication of the high order of ability and resourcefulness of the farmers of Michigan, of which the state may well be proud.

And this ability and resourcefulness is equally, if not even more apparent in the developing agricultural territory in the northern counties than in the older farming communities in the southern portion of the state. Time was when many, if not most of the farmers in the newly developed territory were lumbermen first and farmers as a secondary occupation. Now they are progressive farmers, with an eye to scientific and economic methods which means much for the future of our agriculture. There could be no better illustration of this fact than the gathering of nearly three thousand farmers at the Upper Peninsula Experiment Station for their second annual round-up last month. Several hundred of these men spent two days at the station, in inspecting the experiment plots of potatoes, grains and forage crops, in comparing varieties, observing the influence of the date of planting, studying prevalent plant diseases and methods of combating them

and following the various demonstrations from which they could get ideas which would help them in their business of crop production. These men are also equally alive to the possibilities of business organization for their economic benefit. Progress of a similar order is to be equally noted in the developing area below the straits. New farms are being developed in all this territory which, under present difficult conditions for such development means that the young men of northern Michigan have a vision of the future of agriculture in that section and are making a wiser choice in sticking to the land than is the case in some of the older agricultural sections of the state and country.

One notable development to be observed in all the northern counties is the increasing use of sunflowers as a silage crop. They are used in combination with corn in the lower of these counties and frequently alone in sections where corn cannot compete with them in luxuriance of growth. Farmers who have fed the silage state that the cows like it as well and respond to it as liberally as to corn silage, and the crop produces a heavy tonnage in sections where corn is uncertain. With legumes and small grains in abundance and soil and climatic conditions peculiarly favorable for the growth of root crops and with large areas of undeveloped lands available for growing, the agricultural future of our northern counties is most promising, and the young men of this country who partici-

pate in its development may confidently look forward to the accrual of substantially increased land values in addition to their current earnings. And with modern means of communication and transportation they can at the same time enjoy the essential comforts and pleasures of life while providing a present and future livelihood for themselves and their families, to a degree which was wholly unknown to the pioneers of lower Michigan.

### A Correct Business Basis

At a recent meeting of the executive committee of the American Farm Bureau Federation, held in Denver, the members of the committee were unanimous in expressing the belief that the big work ahead of the organization is the development and perfection of cooperative companies to solve the problem of efficient marketing and distribution of farm products. This expression is in line with the belief of thoughtful farmers in every section of the country. It is economically sound. The business success of the farmer is chiefly dependent upon the two factors of economic production and the efficient sale and distribution of his products. The development of the latter factor has not kept pace with that of the former, hence the need of and opportunity for the development of business organization.

There undoubtedly are many other

## Vegetable Growers Meet

ANOTHER large cooperative selling organization, that of the canning crops producers in the various states was put in motion at a special meeting last week in Columbus at the close of the twelfth annual convention of the Vegetable Growers Association of America. Representatives of the existing canning crops producers' organizations in the states of New York, New Jersey, Maryland and Delaware met with farm bureau officials of Indiana, Ohio and Michigan and drafted the following resolution:

"Resolved, that those here assembled respectfully request the American Farm Bureau Federation to immediately take such steps as are necessary to organize and federate the interests of the growers of canning crops in the several states."

A committee of three, Lewis Taylor, secretary of the Indiana Federation of Farmers' Associations, chairman, Murray D. Lincoln, secretary of the Ohio Farm Bureau Federation, and L. R. Simons, of the New York State College of Agriculture, was chosen to present this matter to the proper officials of the American Farm Bureau Federation and express the ideas of those who inaugurated the movement. The temporary organization which was formed for the purpose of the discussion was B. L. Ross, of the Seaford, Delaware, Produce Growers' Company, and the Peninsula Tomato Growers' Association, chairman, and L. R. Simons, secretary.

The movement grew out of the various conflicts which the growers of tomatoes, corn and peas for the canning factories have with the factories in arranging contracts each season. Most of the tomato canning factories in New York state this year have contracted for tomatoes on the basis of \$22.50 per ton, while in parts of Indiana contracts were signed as low as \$15 to \$18 per ton. In Delaware and Maryland the eight thousand growers of the Peninsula Tomato Growers' Association are asking this year fifty cents per basket or close to \$30 per ton, and Mr. Ross, of Delaware, the representative of the eight thousand peninsula growers stated that the men were sticking to their demands.

The New York and middle western

growers did not contemplate any drastic action but their intention was to bring the growers of the various states together and establish a basic price for all the states with a differential adapting it to the different regions, the selling to be done through the ultimate organization which will be formed under the guidance of the American Farm Bureau Federation. It is expected that a conference will be called under the auspices of the national farm bureau similar to the recent grain marketing conference at Chicago where the different sections will get together and formulate the proposed organization, the American Farm Bureau Federation acting to organize the sections which are not now organized.

The Michigan representative at the meeting was Robert A. Wiley, secretary of the Michigan Cherry Growers and connected with the marketing department of the Michigan State Farm Bureau.

All the present officers of the Vegetable Growers' Association of America were continued in office at the twelfth annual convention at Columbus, Ohio, last week, except the vice-president, L. F. Miller, of Toledo, Ohio, who becomes the president. Mr. H. A. Dooley, president of the Cook County, Illinois, Farm Bureau, was elected to fill the vacancy created by the election of Mr. Miller to the presidency. The remainder of the officers are: E. A. Dunbar, Ashtabula, Ohio, junior ex-president; Sam W. Severance, Louisville, Ky., secretary; C. W. Waid, Lansing, Mich., organization secretary, and H. J. Cheney, Grand Rapids, treasurer. The board of directors are: Richard Hittinger, Belmont, Mass.; J. H. Rice, Ashtabula; M. S. Yoder, Barberton, Ohio; Thomas Delworth, Weston, Ont.; W. B. Davis, Aurora, Ill., and J. G. Hills, Newtonville, N. Y.

There were five hundred and seventy-five vegetable growers and greenhouse men, their wives and families in attendance. The principal action taken at the meeting was the formulation of plans by which the Vegetable Growers' Association of America will work in harmony with the American Farm Bureau Federation.

ways in which the same business organization may ultimately benefit its members. But they can well await the accomplishment of this most important work, on which the energies of national, state and local farm business organizations should be first concentrated.

## News of the Week

Wednesday, August 25.

UPPER SILESIAN districts are reported in the hands of Polish insurgents.—Poles recapture all the government districts of Poland except two.—Irish factions are reported to be uniting on a demand for full self-government from England.—A substantial increase in wages is granted to the coal miners of Indiana.—The census bureau announces that financial statistics for municipalities and states for the fiscal year of 1920 will be put off to enable the earlier completion of the fourteenth census.

Thursday, August 26.

GERMAN frontier guards are now firing upon Soviet troops who are attempting to cross into Germany.—Great Britain sells a large fleet of warships to South American republics.—The greatest dirigible airship in the world is being completed at Belfort, France.—Coal prices have been cut in Baltimore, following government action.—The Interstate Commerce Commission orders a readjustment of grain freight rates to stimulate the movement of grain on the Great Lakes.—Sales of wool in London show an advance in price of from five to ten per cent for greasy merinos and fine cross-breds.

Friday, August 27.

TWO American ships with United States volunteers are not allowed to land at Danzig.—The Russian soviet government withdraws one of its terms of peace that the Poles arm a workingmen's militia of 200,000 men.—James Wilson, secretary of agriculture in the cabinets of Presidents McKinley, Roosevelt and Taft, dies at his home in Iowa at the age of eighty-six.—Governor Milliken, of Maine, calls a special session of the legislature of that state to amend the registration laws so that the women may vote at the state election September 13.—A billion dollars will be spent by 142 American railroads for improvements.—Gordon Woodbury, of New Hampshire, is appointed assistant secretary of the navy by President Wilson.

Saturday, August 28.

THE Russian army has reorganized and is now opening a great counter offensive against the Poles, which promises to develop into a decisive battle near Grodno.—Labor officials in Washington declare that another coal strike looms as a result of the award of the government's anthracite coal commission.—A dispatch from Palestine states that 150 Christians have been killed by a band of Bedouins at Ajlun, a village about fifty miles north-east of Jerusalem.

Sunday, August 29.

THE number of Russian soldiers who are now prisoners in Germany is 245,000.—About 16,000 mill operators at Manchester, N. H., are laid off for a two weeks' vacation.—A world congress on foot-and-mouth diseases is to be held in Buenos Aires.—Bank clearances for the past week at leading centers in the United States show an expansion over last year's figures amounting to 1.9 per cent.—The Bolshevik forces are making a desperate stand at Grodno and Leon Trotsky, Bolshevik minister of war, is personally in command of the troops.

Monday, August 30.

A BATTALION of United States infantry arrives in West Virginia to take charge of the strike zone.—The Russo-Polish peace negotiations will now be taken up at Riga instead of at Minsk, where little progress has been made.—The wage dispute between the Ohio coal operators and miners is settled by granting the workers an increase of \$1.50 per day.—Eleven persons are killed and forty wounded during fighting on the streets of Belfast, Ireland.

Tuesday, August 31.

THE railroads of the United States begin operating on their own resources.—Dispatches from Constantinople report the massacre of four hundred Armenians by Kurds in Anatolia.—Rioting continues in Belfast where many lives have been lost and much property destroyed.—President Wilson accepts the majority report of the mine wage commission which gives the miners an average increase of seventeen per cent in wages.

# Poland China Breeders Active

*Our Circuit Rider Gets a Line on the Work of Several Central Michigan Breeders*

**I**NCREASING the popularity of the Poland China breed of swine in Michigan is the goal, ambition and heart's desire of several progressive breeders who have joined together to hold a circuit of public sales during the last week in October. These sales should prove of great value in bringing to the attention of farmers, as well as breeders, the necessity of developing Poland China swine along lines that add commercially to their value, and at the same time producing animals of the type most in demand

of forage and concentrates into marketable pork. It has also been thoroughly demonstrated that the small, very compact, "chuffy" hog is not the most profitable animal for Michigan conditions. Feeders know that it is not the thick, compact type of hog that tops the leading markets, but that, in most instances, a type showing considerable length, with proportionate depth of side and loin is most sought after by the packers. Incidentally, this is the profitable type, and the kind Michigan Poland China breeders must produce if they are to make the most of their opportunities and not surrender the present high position of the Poland China breed to some of its competitors who are flaming into popularity on the slogan of stronger bone, high backs and increased prolificacy.

In proof of the fact that breeders are awakening to the necessity for producing a more vigorous type of hog, practically all of the standard breeds of swine are now being bred more and more for size. A few years ago nearly all of the animals fitted for public sale and exhibition purposes showed much refinement, whereas now we see animals with much more scale and with more substance. Breeders of purebred hogs are laying much stress on big type, which is but another name for increased vigor in the breed. And along with these improvements we must not forget that mere size is not the all-

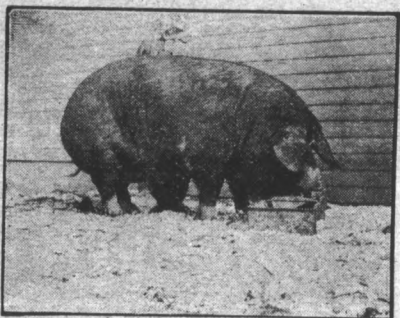
and still lack the nerve to go out and pay high prices for breeding stock from distant localities.

**T**HE first visit was at the farm of Wesley Hile, near Ionia. Mr. Hile began breeding Poland Chinas about five years ago with the idea of growing better hogs for market. He soon realized the need of a larger and more prolific type than could be found here in Michigan. As a result he made a trip through Iowa and Missouri and purchased a few good individuals of the big-boned type. Among the sows in his herd is Miss Columbia, a litter mate to The Yankee and The Pilot, for which he paid \$1,025. This young sow is one of the outstanding females of the breed and undoubtedly the best Poland China sow ever brought into Michigan. Miss Columbia is not only great in blood lines and individuality but she is a great mother and has farrowed forty pigs in her last three litters—all within a year.

Another excellent sow of immense size, wonderful depth, stylish carriage, strong back and good bone development is Gerstdale Jessie, a daughter of Bib Bob and out of Long Bess. She was bred by R. W. Halford, of Iowa. Then there is Quality Miss, a daughter of Royal Big Bob and out of Jumbo Giantess, a line-bred Mouw's Smooth Jumbo sow. Pigs from these good sows make up a prominent feature of the

grown and should be in fine condition by sale time. Both farmers and breeders will find plenty of good individuals to interest them among these offerings.

Charles Wetzel & Sons, of Ithaca, will present an offering of about forty head from such blood lines as Big Mastodon, Defender and Big Timm sows bred to their herd sire, Smooth Half Ton, a son of Big Half Ton and out of Buster Giantess. Smooth Half Ton is an excellent sire and combines the blood lines of two famous families



Snapped in Brewbaker & Sons' Yard.

throughout the great pork producing states. If Michigan is to become famous as a breeding ground for purebred Poland China swine it is time for her breeders to awaken to a realization of the fact that they must improve the type, size and quality of their breeding stock.

For several years men well-posted in Poland China affairs have realized the importance of breeding larger animals with four real legs and big, strong arched backs. It remained for such enterprising Michigan breeders as W. E. Livingston, Wesley Hile, C. A. Boone and others to begin to scratch their heads and look around for breeding animals that possessed the former size, type and prolificacy for which the breed was famous. They found them over in Illinois, Iowa and Missouri, and it is not hard to guess that it cost them quite a tidy sum to bring these breeding animals to Michigan to correct the weak points in their herds. The results of going out after some of the best animals of the breed, however, have more than warranted the money invested in better individuals of the breed. Today we have here in Michigan animals of the approved type from some of the most popular lines of breeding to be found in America.

**W**ITH one hundred or more animals of excellent type and popular lines of breeding offered in these sales successful farmers and breeders



Wesley Hile's "Miss Columbia."

here in Michigan should not be slow to take advantage of the situation and add some of these rangy, strong-backed animals to their present breeding herds. It has been demonstrated that rangy, strong-backed hogs have many advantages over the so-called quick-maturing type for producing large litters of vigorous pigs that are capable of profitably converting a large amount



Some Young Sows on the Boone-Hill Farm.

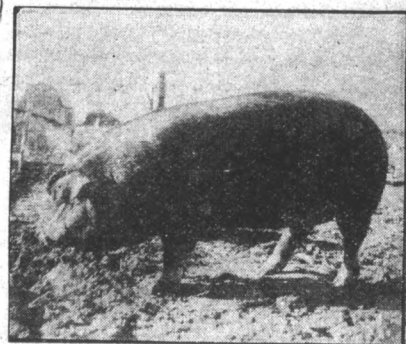
important factor to be taken into consideration. Along with it must come strong legs, arched backs and abundance of strong bone.

**A**T the request of the breeders of Poland China swine who have joined this circuit of fall sales throughout central Michigan the Circuit Rider made a trip of two hundred miles and inspected the breeding stock and growing pigs entered in the sales. Some of the animals listed in the sales show type and quality that should please the most critical breeders, others are too compact and have too light bone, but altogether the offerings are a credit to the breeders who are promoting the sales. Farmers who desire purebred Poland China hogs to improve their breeding stock, as well as breeders who are in need of animals of the more popular modern type are sure to find something of interest in these sales. Every person interested in the future of the Poland China breed of swine in Michigan should plan to attend one or more of these sales. Such a trip is sure to prove of great educational value, besides the men who have invested their money in better individuals of the breed from other states are deserving of the support of those who need the improving blood in their herds

offerings in the coming sale. Mr. Hile has seventy-three pigs from eight spring litters, which is rather convincing proof that his herd is not weak so far as prolificacy is concerned. For a herd sire he has the Clansboy, a son of the famous Clansman, a \$50,000 boar, and out of Gerstdale Jessie, one of his crack sows. Some of the other sows are safe in pig to the Clansman and Mr. Hile is looking for some great results from the matings.

Over near Elsie, W. Brewbaker & Sons have an excellent herd headed by Gerstdale Timm, a son of Gerstdale Jones and out of A Miss Timm. He is a boar of great depth of body and has an abundance of strong bone. Among the females in the herd is that grand old foundation mother, Extra Long Jumbo, a daughter of Big Type King and out of Jumbo Queen. Nearly all of the sows in the herd are daughters and granddaughters of Extra Long Jumbo, and they present a striking uniformity of type, size and appearance.

Another grand brood sow is Lady Wonder B, a daughter of Black Big Wonder and out of Monroe's Giantess. She is a big type sow of quality and good blood lines. Gerstdale blood will predominate through the offerings in this sale. About fifty animals have been listed. The young stuff is well



One of Mr. Leonard's Herd.

of the breed. Two boars and ten gilts listed in the sale are daughters of Kinneson's Gerstdale, a daughter of Gerstdale Giant and out of Dessie Mastodon. Both Smooth Half Ton and Kinneson's Gerstdale came from Line Lucken's herd of Indiana. The forty head listed from this herd make up a creditable bunch of young and mature stock.

**O**VER at St. Louis, Clyde Fisher and E. R. Leonard will present sixty head in a combination sale. Mr. Fisher's offerings are made up of sows from the Smooth Wonder, Big Bob and King Joe lines of breeding and pigs sired by Fisher's Orange, a son of L's Big Orange and out of Emrick's Chief. Fisher's Orange is a large vigorous boar of good type, and carries plenty of bone with good depth of sides and loins. The sows and pigs are a growthy lot and the blood lines represented in the herd are among the most popular.

E. R. Leonard, the veteran breeder and showman, will present thirty choice individuals from such sows as Lady Big Bone, a daughter of Des Moines A Wonder and out of Hazel Big Bone I. Queen of Walnut Brook, a daughter of Big Defender and out of Daisy Hadley is another crack sow in the Leonard herd. Five of the young sows listed in the sale are daughters of Queen of Walnut Brook and they are a fine bunch of individuals. For a herd sire Mr. Leonard has the Orange Clansman, a son of Lord Clansman, by the



Charles Wetzel & Son's Herd Sire.

Clansman, and out of Buster's Orange. All of Mr. Leonard's animals are in excellent condition and from popular lines of breeding.

**A**ND last, but not least, the Circuit Rider looked over the excellent offerings of the Boone-Hill Company, of Blanchard. Mr. C. A. Boone, manager, has the right idea about building up the Poland China breeding business (Continued on page 286).

# Holstein Tours Prove Great Success

THE two weeks' series of Holstein tours in southern Michigan counties proved to be a great success, and those who attended were unanimous in their approval of the idea. Coming at one of the busiest seasons of the year, while harvesting and threshing were in full swing, the attendance, which ranged from one hundred and fifty to three hundred each day, was extremely gratifying.

Publicity, tuberculin testing, calf clubs, and the adoption of a constructive breeding policy by the selection of a few strains upon which all the breeders of the state should combine were the principal subjects discussed.

## The Shiawassee Tour.

The first day of the series, which was spent in Shiawassee county, assured us of the success of the undertaking. Promptly at nine o'clock the machines, piloted by County Agricultural Agent H. E. Dennison, left Owosso for the southern part of the county, stopping first at the farm of Fred Martin. Mr. Martin has a small herd of very good quality and takes good care of them. One of the consignments to the Shiawassee County Holstein Breeders' Sale to be held at Owosso, October 21, will come from this herd. The next herds visited were owned by D. D. Dutcher and Charles Wilkinson, both of whom will consign some first-class individuals to the fall sale. The C. M. Spalding and James Sexton herds were visited before noon, and the herd sire at Sexton's aroused much favorable comment.

At noon we stopped at the beautiful farm home of Charles Paine for the basket lunch and program. After inspecting Mr. Paine's cattle, we called on Mr. James Hopson, who, in company with his neighbor, Mr. Spitler, owns two very good sires. Some very good cattle were seen here, and Mr. Spitler had a pair of very fine calves which were being fitted for the fair.

The Hillis herd, next on the list, consists of about thirty head of very fine individuals and is listed for dispersion in the Owosso sale, October 21. Johan Hengerveld Lad, one of the best sons of Hengerveld DeKol, heads this herd. This is one of the few cases where a bull has been kept until his value was proven, for he is now past fourteen years of age and has nearly seventy tested daughters, thirty-two of which range from twenty to thirty-one pounds of butter in seven days. All the cows in the herd are in calf to this sire, and this herd should form the basis for a great sale.

One other herd was visited late in the afternoon, the herd owned by Monroe & Lewis, and some very fine cattle were seen. This herd will also be dispersed this fall and a number of very good individuals with good records are included. This will be the first sale ever held by the Shiawassee county breeders and they are planning to make it a real sale.

## A Day in Saginaw County.

Competition was keen in Saginaw county, for it was circus day. Nevertheless, a good crowd of breeders were on hand to inspect the Thomas Phoenix herd of thirty head, which was the first to be visited.

The Stafford herd, which is a grade herd, was a fine object lesson in the results of upgrading by using a purebred Holstein sire. Here was a herd of twelve cows, including two two-year-old heifers, that had been built up from a scrub foundation by using good purebred Holstein bulls, and during the past year they had averaged about ten thousand pounds of milk per cow. This is more than double the average yearly production of the cows of the state.



The Gugel herd was inspected before stopping at the Frankenmuth Hotel for dinner—and a real dinner it was, too. During the afternoon the herds of Messrs. Stern, Hart, Bickel, J. Maurer, Hecht, G. Maurer, Roenicke, and Garber were inspected and many good cattle were seen.

The country around Frankenmuth is the garden spot of Michigan and no one could wish to see nicer fields of corn and oats, nor straighter rows of beans and sugar beets than these. The cattle here, like the farms, are well cared for and heavy producers.

At Conrad Hecht's we saw one of the best herds of the day, including a thirty-one-pound daughter of King Hengerveld Palmyra Fayne and her dam. Mr. Hecht has three daughters and a two-year-old son of this thirty-one-pound cow and they are all fine individuals.

Another herd of remarkable quality was seen at John Stern's. Mr. Stern believes in intensive agriculture, and his farm of forty-five acres showed the results. He kept only five cows during the past year, including a two-year-old and a three-year-old heifer, but they averaged nearly 14,250 pounds each. The records follow:

Age.	Milk Produced.	Length of Record.
Seven years .....	14,300	10 mo.
Six years .....	13,920	9½ mo.
Four years .....	15,400	11 mo.
Three years .....	16,400	9 mo.
Two years .....	11,200	9 mo.
	71,220	

These cows received the best of care and feed but were milked only twice a day. They are well-grown and well-cared for, as are all the herds in the territory about Frankenmuth.

## Tuscola Next.

Thursday was spent in Tuscola county and several herds were inspected which had been visited by the Saginaw breeders on the day before. These herds are in Tuscola county close to the Saginaw line, and we do not blame the Saginaw breeders for including them in their trip, as they are well worth going outside the county to see.

At L. J. Hart's we saw a sire owned by the Frankenmuth-Tuscola Bull Association, a group of about fifteen Holstein breeders who organized a bull association some years ago and started with a Michigan bred bull. Subsequent purchases made elsewhere have convinced them that Michigan bred bulls are good bulls and they are now negotiating for two of the home-grown variety. Going on, we visited the Ash, Schieffer, Schnell, Laux, and Ridgman herds and saw some fine cattle, the last mentioned herd having some extra good specimens.

The herd at the Michigan Farm Colony at Wahjamega is one of the newer state herds, as this institution has been established only recently. A very good barn equipment and a number of good animals were seen here, and they have a promising young sire coming on that should materially improve the general quality of the herd.

One other herd, the W. J. Gamble herd, north of Caro, was visited in the afternoon.

Local arrangements for this tour were handled by County Agricultural Agent Alex. MacVittie, and George A. Proctor, secretary of the Tuscola County Holstein-Friesian Association, and credit is due them for the success of

the meeting and the inspection tour. And Then Lapeer.

Clinton F. Smith, secretary of the Lapeer County Holstein-Friesian Association, has started recently in the Holstein breeding business. He has used good judgment in selecting his foundation and has a nice herd. Assembling here at 8:30, we went the rounds of some sixteen herds in Lapeer county and finished at six in the evening—a good day's work.

The Michigan Home and Training School has a herd of seventy milking cows, many of which show exceptional producing ability, but owing to someone's neglect only about half of them are registered. It's the old story—everybody's business is nobody's business, and the state of Michigan is the loser thereby to the extent of thousands of dollars.

Leaving the school, we visited the herds of R. V. Cutting, William Chrisinske, and Arthur C. Reek, and saw some very good animals, stopping at the last place for the lunch and program. Following the program, a short business session of the Lapeer County Holstein-Friesian Association was held and action taken to insure a good showing of Holsteins at the Imlay City Fair in September.

At the William Prieh's herd, the first herd visited in the afternoon, Mr. Pollock was called on for a demonstration on Holstein type, which was much appreciated, as a large number of new breeders were in attendance.

William Rider, Sam Park, H. P. Rollins, John Stock & Son, L. C. Walker, Frank Hartwig, H. F. Rice, Dewey C. Pierson, and H. C. Cramton were called on and many good cattle were seen. The last two herds were among the best visited during the day, the Pierson herd being one of the old established herds of the state and well-known on the fair circuit a few years ago, showing with good success at the National Dairy Show.

The Lapeer county breeders are for the most part young men who are starting in the business with plenty of energy and enthusiasm, and the industry will undoubtedly make great strides in that county as a result of their efforts. More testing will be done there during the coming year than in the past, though we saw a number of good record cows, including a thirty-one-pounder owned by Mr. Rice.

Local arrangements were made by County Agent Bishop and Secretary C. F. Smith, and everything went along smoothly, thanks to their efforts.

## Genesee on Saturday.

The Michigan School for the Deaf was one of the last of the state institutions to adopt Holsteins. They have made a fine start and already have a fair-sized herd, including two animals which Mr. Hoffman, the steward, purchased at the St. Paul National Sale. One of these heifers, Pontiac Monica, with a record of 22,206 pounds of milk and 939.24 pounds of butter as a senior two-year-old was bred by the Pontiac State Hospital, and the other, Traverse Inka Princess Wog, a twenty-three pound junior two-year-old, was bred by the Traverse City State Hospital.

Leaving the school, the caravan of sixty automobiles headed for Mr. Aitken's place, stopping en route at the Carter farm, where about sixty Hol-

stein cows are used to produce Grade A milk. At Mr. Aitken's, where a special grade of milk is produced also, we saw one of the finest sights of the week, a bunch of heifer calves sired by King Ona, every one a picture, as straight as a line and all in the pink of condition. In fact, all the cattle around the place are "easy to look at," and anyone seeing the herd must agree that D. D., who is a crank on type, practices just what he preaches.

We were not able to see them all, as ten members of the herd, including seven two-year-old daughters of King Ona, were away at the Loeb Farms at Charlevoix to be bred to Sir Pietertje Ormsby Mercedès 40th. All of these are on a 305-day test.

Two of the cows on long time test, each with records above thirty pounds in seven days, were brought out for a demonstration on type, Mr. Pollock officiating, and everyone was much interested. It would be well worth while for all the Holstein breeders of the state, especially those who are just starting in the business, to pay a visit to this herd and study the animals so as to get the correct type in mind. Mr. Aitken believes in a small herd of high-class individuals, rather than a larger herd of mediocre quality, and the herd is certainly worth seeing.

The next place was F. A. Dodge & Son's, who have a number of good record cows, including a thirty-one-pounder and half a dozen good ones on yearly work.

Spillane & Geiger, where we stopped for dinner, have practically the whole herd on yearly test and promise to make some very high records. Flint Pauline had 24,452.6 pounds of milk and 974.8 pounds of butter to her credit in 270 days, and still going fine. Five cows in this herd will produce together above 100,000 pounds of milk and 4,500 pounds of butter during the year, which is equivalent to the product of a herd of twenty-five cows showing the average production of the country.

During the afternoon we called on Walter Hill, Robinson Brothers, and J. F. Rieman, and saw some very good cattle at each place, finishing the day with Mr. Mott, who has a beautiful place right in the city of Flint and keeps nothing but purebred stock, including a half dozen very fine Holstein cows.

The Genesee County Holstein-Friesian Association is to be congratulated upon the number of very fine herds in the county and upon the success of the tour. Secretary A. C. Anderson, formerly Professor of Dairy Husbandry at the Michigan Agricultural College, and now with the Freeman Dairy Co., of Flint, as production manager, promises to keep the Genesee county breeders stirred up and we expect to hear from them frequently.

## Lenawee County.

Starting the second week of the series, we met at Adrian on Tuesday, August 3, for a tour of Lenawee county, the second Holstein county of Michigan, and one of the richest agricultural counties in the United States. Holstein herds are numerous in this county and only a small portion of the territory could be covered, none of the herds in the west half of the county being inspected.

An interesting feature of the trip here was the attendance of the calf club boys and girls, twenty-two out of twenty-eight members being on hand throughout the day with County Agricultural Agent Ralph Carr and County Club Leader Marjorie Place, in charge.

Leaving the Adrian Court House at 8:00 a. m., the first stop made was at (Continued on page 260).

# Uncle Sam's Men Who Serve You

*Dr. William A. Taylor, Works Quietly and Deliberately, But See What He and His Bureau Have Done—By W. J. Maddox*

THE club itself, together with its high-sounding name—Pathological Seminar—has become but little more than a memory, except in the minds of the handful of men who in the early days of the United States Department of Agriculture met at one another's home in Washington to discuss various questions connected with their work. They were all young men, at the outset of their careers—a group destined to produce some of the foremost leaders in their respective lines of work.

Among the men who foregathered at these informal talks was a quiet, thoughtful, painstaking young fellow, fresh from the fruit country of Michigan. He brought to the discussions not only the theoretical knowledge gained from a course at the Michigan Agricultural College, but the actual practical experience in fruit growing obtained on a real fruit farm where he spent most of his youth. He was a good listener, and soon gained among his companions that confidence usually given to quiet men of his type. His comments, when he made them, were always well thought out and aptly put, a characteristic that has marked his utterances ever since.

## A Thorough Investigator.

This man was Dr. William A. Taylor, who was to become one of the department's most efficient administrative officers, chief of the bureau of plant industry, and a man recognized throughout the country as one of the highest authorities on the growing, storage, shipment and handling of fruits. He is known as a very thorough investigator, one that carefully weighs all essential factors before arriving at a decision.

While Dr. Taylor came to the department shortly after graduation from college, he brought with him a great store of practical farming knowledge gained as a boy, which has stood him in good stead upon many occasions in making his bureau of actual, first-hand aid not only to the farmers of the country but to the people generally.

One very striking instance of this is revealed in the art played by the group of workers of which he had charge in coming to the aid of the orange shippers and the railways, who for a long time were at odds over the heavy deterioration of oranges during transit. The loss averaged about twenty per cent of the fruit shipped, due chiefly to blue-mold. The railways and the shippers appealed to the department of

agriculture. It was found that many slight abrasions were made in the fruit in picking and handling it. At the suggestion of department specialists the sharp points on the instruments used in cutting the fruit from the trees were filed down; the oranges were cut close without stems, and workers who handled the fruit were provided with gloves. By these measures the loss was cut down from twenty to two per cent. At that time the orange crop was valued

sure the necessary ventilation. This not only greatly reduced the cost of transportation, but also greatly lessened losses of fruit and vegetables in transit.

## Notable Work with Cotton.

The bureau has done notable work in the breeding and distribution of superior varieties of cotton. These have been established in commercial cultivation in different parts of the cotton-producing areas to which they are spe-

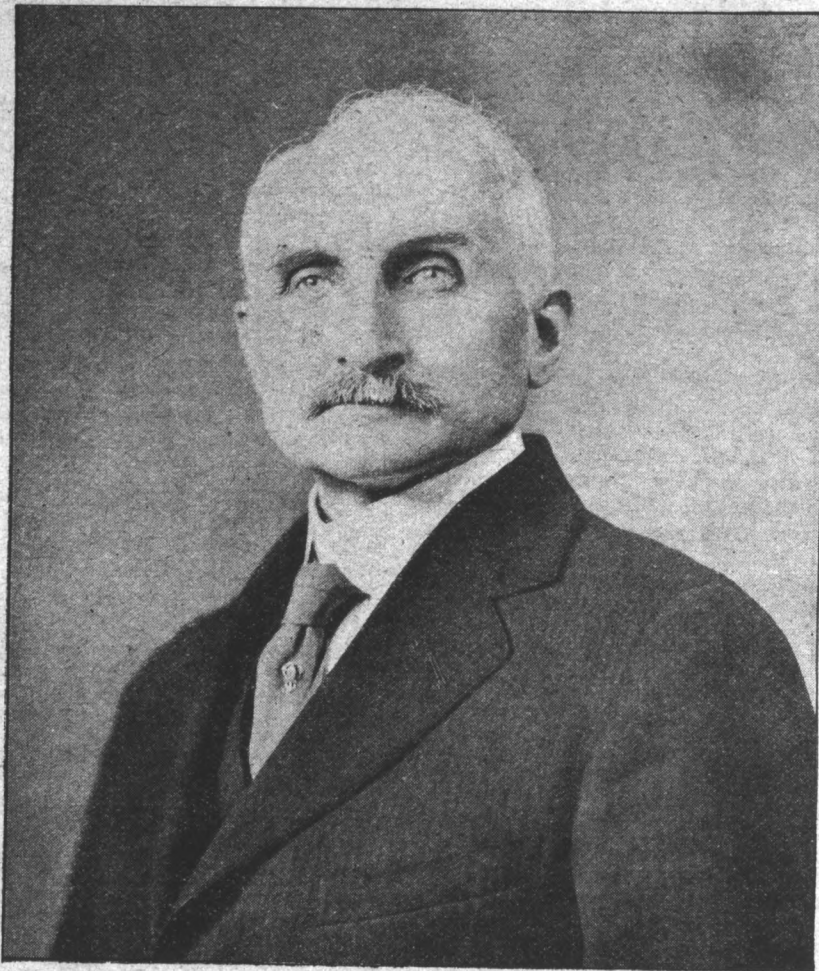
ing regions of Texas and adjacent states, probably to the extent of at least one million bales. On this basis the advantage to farmers in substituting Lone Star for competing varieties may be estimated from \$10,000,000 to \$20,000,000 a year.

The Pima cotton is the basis of the new Egyptian cotton industry of Arizona and California, in irrigated districts that grew no cotton only a few years ago. In the Salt River Valley alone the Pima crop of last year, valued at \$20,000,000, returned nearly twice the cost of all the reclamation works of the valley, including the Roosevelt Dam.

Among the new varieties of grain introduced and developed in this country by the bureau is the famous durum wheat. This achievement met with rapid success, and durum wheat is now grown on a large scale. The 1918 crop was estimated at slightly less than \$100,000,000. Not only this, but an entirely new industry for this country, the manufacture of macaroni, for which this wheat is particularly suitable, was established.

These are only a few examples of what Dr. Taylor and the highly efficient organization of which he is the administrative head is accomplishing for the producers, and consequently for the consumers of the country. It is impossible to estimate the value of the work of the bureau of plant industry to the people of the country in dollars and cents. We can point to any one case, such as that of the orange growers, and show what it meant to them to have their losses cut down from twenty per cent to two per cent. The immediate, obvious gain is to a very small group of interests, but there is no calculating the indirect benefits to business and the public generally. It requires nothing short of a Benthamite mathematician to reckon them. It is very much like the dropping of a stone into a pool of water. The ripples spread in all directions and their impulse is felt over a wide area. There is no telling where the commercial ripples from this pebble do not touch—the banks, the railways, the manufacturers of the many supplies incident to the business and others almost without end. With our present complex commercial life, it would hardly be an exaggeration to say that there is no line of business that does not feel the influence in some way.

The password of the bureau is "science for service." The bureau



Dr. Taylor is a Native of Michigan.

at about \$30,000,000 a year.

Among the important accomplishments of the bureau under Dr. Taylor's direction, is its work to improve methods of handling, transportation and storage of fruits, vegetables and other agricultural products. It demonstrated the importance of pre-cooling fruit before shipment and the necessity of shipping in ventilated cars. Its specialists worked out improvements in the construction of refrigerator cars to in-

cifically adapted. The most important varieties bred and distributed are the Lone Star, Trice, Acala, Columbia, Durango, Meade, and Pima. The value of this work can be realized when it is known that the present annual production of these varieties is estimated at between \$200,000,000 and \$300,000,000. The Lone Star cotton belongs to the Texas big-boll type, with Triumph and Rowden, but has superior fiber and is now grown largely in the chief produc-

## An Opportunity to Learn the Results of Fertilizers on a Variety of Crops on Muck Land



Corn at Left Grown on Muck without Fertilizer, while that at Right had an Application of Potash. One of the Sixty Experiments to be Considered at the Meeting of Michigan Muck Farmers to be Held Six Miles Southwest of Brown City, on Monday, September 6.

stands ready at all times to place the knowledge and labors of its highly skilled specialists at the disposal of any individual or group of citizens who seek advice upon any subject connected with plant industry—and this covers a very wide field, indeed. It includes investigations of the causes, prevention and treatment of diseases of plants, including fruit, ornamental, shade and forest trees; the introduction of new varieties of plants; the improvement and utilization of grazing lands; use of irrigated lands; soil fertility, and the improvement and production of cereals. Many others could be mentioned, for the work touches plant life in all its relations to the

various economic phases of agriculture. **Heads Large Staff.** Under Dr. Taylor's direction, there are approximately 2,103 employees, 868 of whom are located in Washington, D. C., and 1,235 engaged in the work of the bureau outside of that city. As occasion arises representatives are sent out to various foreign countries on exploration work in search of new plants that can be introduced and developed profitably in the United States, or to study plant diseases where there is danger of introduction to this country. Among the important field activities of the bureau is that of investigating and studying methods for eradication of plant diseases. It is endeavored to

diagnose and determine the cause of new plant diseases just as soon as they develop or are introduced into the United States so that measures can be taken without delay for checking their spread or means advised for restricting their further introduction. Notable work along this line has been done with regard to diseases of wheat, cotton, vegetables and fruit. Closely connected with this is the work of stamping out carriers of destructive plant diseases such as the common barberry which is considered responsible for the epidemics of black stem rust or wheat which so greatly reduces the crop of spring wheat in some seasons. It is as head of a work of such scope

that Dr. Taylor is in a position to place his great talents at the service of the country. He was born at Chelsea, Michigan, June 23, 1863. He was graduated from the Michigan Agricultural College in 1888 with the degree of B. S., receiving his doctor's degree from that institution in 1913. Before entering the government service he managed a fruit farm and nursery in Michigan. He entered the department of agriculture as an assistant pomologist in 1891 and served successively a assistant chief of division of pomology, pomologist in charge of field investigations, and as assistant chief of the bureau until his appointment as chief in March, 1913.

# Credits, Loans, Oils, Mills, Meats

**T**HE proposition to establish by act of congress a cooperative system of rural credits based on personal security is receiving the endorsement of many well-known farm leaders. The National Society of Record Associations through its secretary, Wayne Dinsmore, who is also secretary of the Horse Association of America, has appointed a rural credits committee composed of F. L. Houghton, secretary Holstein-Friesian Association of America; Frank W. Harding, secretary American Shorthorn Association; William H. Caldwell, secretary Guernsey Cattle Club; Robert J. Evans, secretary Duroc-Jersey Association, and himself, to prepare a rural credits bill to be presented to the congressional rural credit committee created by the recent agricultural appropriation act. Mr. Dinsmore has petitioned the chairmen of the committees of agriculture and banking and currency of both bodies for a judicial hearing on the bill to be pressed by the committee of the National Society of Record Associations, and has asked that September 1 be designated as the date when the bills may be presented to the committee and that October 15 be designated as the last date at which defenses may be filed by the interests which would be adversely affected by such bills, should any become a law. The hearings before the house and senate committees will begin on November 8.

The rural credit committee of the record society are agreed on the principles of the McFadden bill and have engaged R. C. Milliken, a Washington monetary statistician, as an expert to prepare a bill to be presented to the congressional investigating committee and appear before them to establish its merits.

"Nothing could be fairer," says Mr. Milliken, "than the hearing which the record association has asked for, for it gives every interest affected an opportunity to appear before the congressional investigating committee by an expert of its own selection and point out the defects of the bills presented by the farmers and stock raisers. This would force those adverse interests into open court to point out any objections they may make to such bills. But should any become a law. The hearing to meet the adverse interests, banks and insurance companies, either in the secret lobby or open court, and the farmers and stock raisers had best meet them in open court than attempt to do so in the secret lobby.

"The real purpose of the McFadden bill is to standardize productive farm credit paper, just as Great Britain has standardized commercial credit paper. Britain did that by creating the 'Acceptance House,' great importing firms which had established international credit. That enables English merchants of second rate credit to obtain the lowest open market rate for their commercial paper by inducing one of these great 'Acceptance Houses' to become their acceptor. The McFadden

## Our Washington Correspondent Finds Much News of Interest to Farmers

bill proposes to use one of the six biggest life insurance companies to take the place of the British 'Acceptance House.' Certainly that would give a wide market for our productive farm credit paper, as no other financial institution in the country is stronger than one of our larger life insurance companies."

**T**REASURY department officials report that they are receiving information from districts having large textile interests that there will be an early resumption of activities in these industries. Reports of manufacturers, they say, show that mills that have been closed will start again early this fall. Nevertheless they are predicting still lower prices for wool and woolen goods. As evidence of this they point to late reports showing more wool in the world today than ever before, and cancellations of orders, together with return of goods to the woolen mills have reached as high as \$200,000,000.

Friends of the French "truth-in-fabric" bill are urging sheep raisers' associations to make a united effort before congress convenes in December, to formulate a program of action which will enable their representatives to come before the congressional committees at the hearings, backed by the strongest possible support from the public, and with arguments which will enable them to answer satisfactorily and convincingly every question asked by members who are opposed to the bill. It is thought that failure to secure favorable action on the bill last spring was due to the lack of definite, organized team work in defense of the bill."

**A**T a recent meeting the National Board of Farm Organizations appointed a committee to investigate the importations of vegetable oils and certain other farm products and their effect upon American farm products in the home markets. These include cotton and corn, large quantities of the latter product being imported from the Argentine, according to C. D. Holman, chairman of the committee. At the September meeting steps will be taken by the committee to coordinate the work of all the farm organizations and various other interests concerned, so as to be able to give a uniform and logical presentation of the case before the tariff board and the congressional committees. There are now coming into this country from foreign ports many millions of pounds of vegetable oil products, including 258,229,102 pounds of copra, 133,212,423 pounds of peanuts, mostly shelled, 269,226,966 pounds of coconut oil, 2,064,363 gallons of peanut oil, and vast quantities of soy bean oil and cottonseed oil, which are used in the production of ole-

omargarine and other butter substitutes, lard compounds and the like, all coming into direct competition with American cottonseed, butter and other animal products. The bulk of this stuff comes from the Orient where costs of production are small, the work being performed by cheap Coolie labor. It comes into direct competition with the products of the stock and dairy farms in this country and it is the belief of the committee that the time has arrived when means should be provided for protecting the dairymen and stock raisers from this foreign competition.

As another means of combatting this competition of imported vegetable oils, Secretary A. N. Loomis of the National Dairy Union, suggests the education of the public to the comparative values of real butterfat and the vegetable oil substitutes. He quotes the Wisconsin Agricultural Experiment Station Bulletin 291 as saying that "no plant oils so far investigated, and these include cottonseed oil, almond oil, coconut oil, peanut oil, and sunflower seed oil, contain the fat soluble vitamins in appreciable quantities. It is false to claim these as substitutes for butterfat. We do not condemn them, for they are valuable food products as sources of energy and their use for that purpose should be encouraged, but they should sell under their own banner and be used in nutrition for exactly what they are worth. To remove the butterfat from whole milk and replace it with coconut oil and then claim that the product is equal to whole milk for the nutrition of growing children is not true."

**T**HE capitalization of the United States Grain Corporation has been further reduced from \$150,000,000 to \$50,000,000 by order of President Wilson. Last month the capitalization was reduced \$300,000,000, and the amount turned into the treasury. The \$100,000,000, which is the present reduction, will be turned over to the government, and the remaining \$50,000,000, with some \$30,000,000 profits, will be turned back to the treasury when the work of the corporation is ended.

The director of sales of the war department announces another big meat sale, asserted to be "the beginning of the biggest sale of canned meats ever known," and at figures "below pre-war prices." "Through the cooperation of thousands of wholesale and retail dealers, more than 60,000 postmasters, 5,000 bankers and mayors in virtually every city and town in the country, many million dollars' worth of canned corn beef, corned beef hash, hash, roast beef and bacon will be sold to the American public." These record-breaking price-wrecking meat sales are announced with big headlines in the city papers so frequently it would

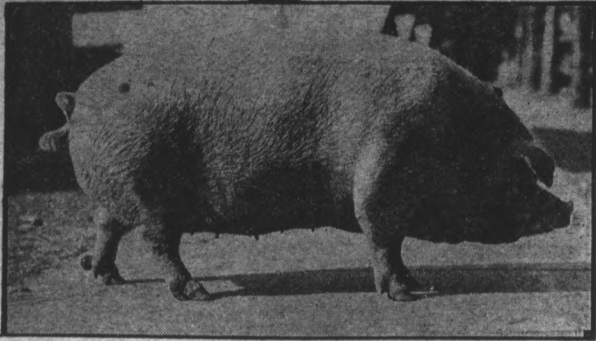
seem that the government would soon be able to dispose of its comparatively small stock of canned meats. It is evident, however, that these meats offered by the government are not popular with the public and sales are slow, regardless of much advertising and low prices. It is also evident that the war department officials are oblivious of the depressing psychological effect these sensational price slashing announcements might have on the meat producing industries.

**T**HE new movement to organize the farmer borrowers represented by the four thousand farm loan associations into a national organization is making rapid progress, according to the National Board of Farm Organizations, which is promoting this project. Farm loan associations in twenty-five different states have already joined the National Union of Farm Loan Associations, and in all the states they are meeting with much encouragement. Scores of letters approving the movement are being received. The union will be affiliated with the Board of Farm Organizations, but will be a separate organization with its own representative in Washington. The federal farm loan board, according to the latest information I have, has not given its approval to this new national union of loan associations, the officials feeling that there is no occasion at this time for the formation of such an organization.

A coming event of considerable interest to farm folks is the fifteenth international conference against alcoholism, which will be held in this country for the first time since it was organized forty years ago. The sessions will be held at the Pan American building in Washington, September 21-26. The program includes a special study to be made of the effect of prohibition in the United States and the effect of the great war in connection with alcoholism in various countries will be given attention. The conference is a scientific organization interested in studying alcoholism as a disease, and is said to be without prejudice for or against any one method of dealing with intemperance.

Since the wonderful development of the apple orchard industry in the United States and the exportation of fruits began this has become an apple eating world. Apples from American orchards are now being exported to eighty different countries, say the fruit market experts of the Bureau of Markets. Figures compiled by the bureau show that the average yearly exports of dried and fresh fruits for the pre-war period of 1910-1914 were 504,911,000 pounds. With two low years the average for the period 1915-1919 were 518,259,000 pounds, an increase of 2.6 per cent. The 1910-1914 imports of fruit averaged 252,708,000 pounds, as compared with 109,708,000 pounds, as compared showing a decided decrease since 1914.

E. E. REYNOLDS.



## Big Fair at Grand Rapids

*This West Michigan Institution is Building Up a Strong Farmer Patronage.*



IN spite of the recent fire losses which have made it necessary to limit space for certain exhibits, the management of the West Michigan Fair expects to set a new mark which will indicate in a convincing manner the progress the state is making along agricultural and live stock lines. Every effort possible is being made to bring out a large and complete exhibit of all kinds of farm crops and all the breeds of horses, beef cattle, dairy cattle, sheep, swine, poultry and pet stock, and at the same time have the judging of the exhibits so arranged as to answer many of the questions in the minds of those interested in better farm crops, better live stock and more profitable methods of farming. From the interest being shown by the farmers and stock men throughout the state there is sure to be a decided improvement in the quality of the crop exhibits and live stock entered and the number of farmers and breeders making initial shows. The swine entries in particular are expected to reflect the increasing interest in that branch of animal husbandry, and the almost total elimination of the smaller type of hogs held to so strongly by many of the older breeders of the state indicates which way the straws are blowing. Two prominent breeders of draft horses have signified their intention of entering some of their best animals in order to give the farmers of Michigan a better idea of what constitutes real merit in draft horses. In the dairy cattle exhibits, cow-testing association work and cost of producing dairy products will be given due prominence, and the exhibit will be in charge of an expert who can answer any question of interest to visitors.

President Lyman A. Lilly is strong for taking care of the many small exhibitors to the end that the fair may prove of the greatest educational value possible to the maximum number of visitors. For that reason he has refused to accommodate many large exhibits that would of necessity crowd

out individual exhibits from Michigan farms and various farm organizations in the state. This is a policy of fair management that is sure to bring the fair into popular favor among farmers, and cause the different farmers' organizations in the state to feel that the management is endeavoring to keep pace with the spirit of the times. It is to be regretted that the managers of some of our other big Michigan fairs have failed to recognize the importance of home exhibits instead of crowding out Michigan exhibits and attempting to show up, rather than build up, the agricultural interests of the state.

Live stock judging by club members and high school boys is to be made a special feature of this year's fair, and

the manager of successful county fairs he has steadily worked his way to the front until he is now looked upon as one of the most capable fair managers in the country. One reason why he has been successful along this line is due to the fact that he is a practical farmer who has a thorough knowledge of the farmer and his problems; therefore he has never failed to keep the agricultural features of the fairs he has managed before the public eye.

In order that the people of the city may see the sights at the fair without taking a day or two off, a night fair will be one of the features of the 1920 West Michigan Fair. All of the special features will take place in front of the grandstand and several entirely

mercialize on the exhibits to an extent that farm women may not feel perfectly free to visit the booths and familiarize themselves with the practicality of the appliances and conveniences for rural homes.

West Michigan seldom fails to bring out a praiseworthy horticultural show. Fruit of all kinds is plentiful this year, and many of the state's most prominent exhibitors have made plans to bring out better exhibits this fall than ever before.

Realizing the growing importance of the bee-keeping industry here in Michigan Mr. Lilly has arranged for the most interesting educational bee and honey exhibit ever put on here in Michigan. The exhibit will show the bees at work, bee-keepers' supplies and finished apiary products. All of the bee-keepers of the state and those interested in the industry may see the bees at work in glass cases and gain a knowledge of the various methods of handling them as well as refining the products and putting them up in shape to bring the top market prices. Bee-keepers from all parts of the state should plan to visit this exhibit, as many new phases of handling apiaries and apiary products will be thoroughly demonstrated in this exhibit.

No expense has been spared to make the special entertainment features of interest to all visitors at the fair, and at the same time weed out all of the fakes and indecent features.

These remarks are hazarded as revealing in indicating to our readers the action which the management of this big fair is taking in its special educational activities. The particular character and diversified types of farming dictate the kind of fair the management is endeavoring to hold at Grand Rapids this year. One must know something of the complex farming conditions of western Michigan to appreciate what it means to put on a fair at Grand Rapids that serves properly all of the interests represented in the success of the agriculture of that region.



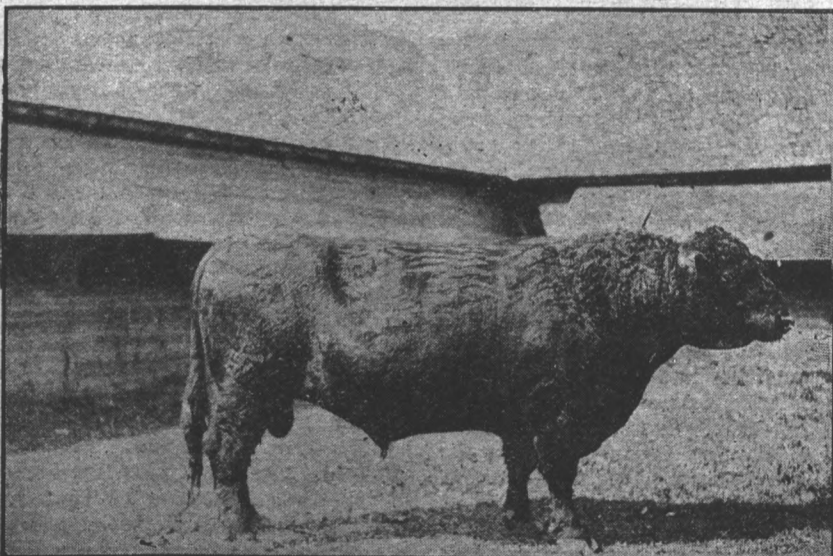
Everyone is Interested in the Live Stock Parade.

it is perhaps well to mention that older people as well as the boys may profit largely from some of these demonstrations. The work will be in charge of capable experts who are capable of explaining the reasons why certain animals excel others for the economical production of various products. Boys who are interested in pig and calf club projects will find much to interest them, even though they take no active part in the judging contests.

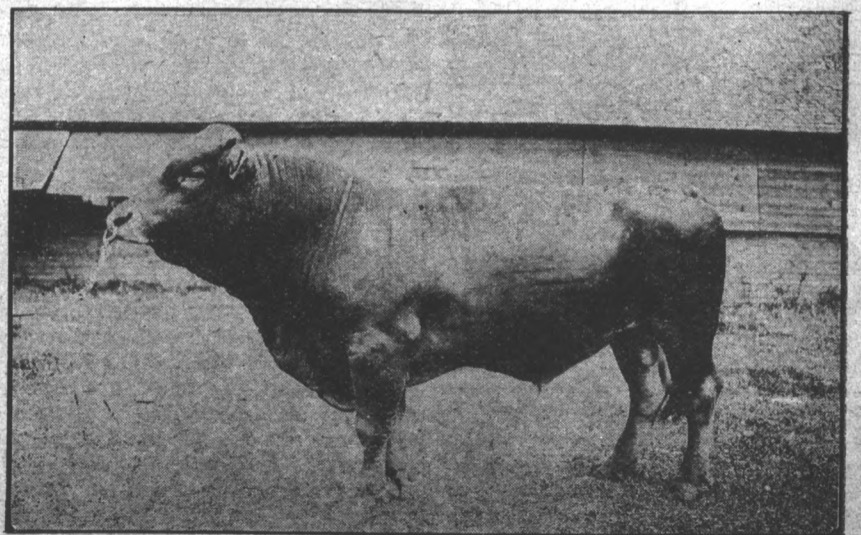
Mr. Lilly, the new president of the West Michigan Fair, has had more than twenty years' experience conducting county and state fairs, and all of his friends among the patrons of the fair are pleased to note that he now has a free hand in the management. Beginning some twenty years ago as

new features will be introduced. A general admission of twenty-five cents will be charged for the night fair, and fifty cents for those who enter the grounds before five o'clock in the afternoon. Mr. Lilly guarantees that under no conditions will this scale of admission charges be increased.

Special attention will be given to the exhibit of labor-saving devices for the rural home. One of Mr. Lilly's hobbies is that of making the fair of special interest to the farm women, and no effort has been spared to reserve abundant space for exhibitors of various mechanical aids to lessen the drudgery of housekeeping on the farm. All of these exhibits are going to be in charge of competent demonstrators, and no attempt will be made to com-



One of the Blue Ribbon Gallows.



The Fair Brings Together a Quality Exhibit of Island Cattle.

## INSURE YOUR NEW CAR

Before attending County and State Fairs. The increased traffic upon the highway and the visiting of the County and State Fairs causes many additional automobile accidents. The prudent business man and farmer will take out an automobile insurance policy and keep his automobile locked, also put the car in a fire-proof garage when visiting the large cities.

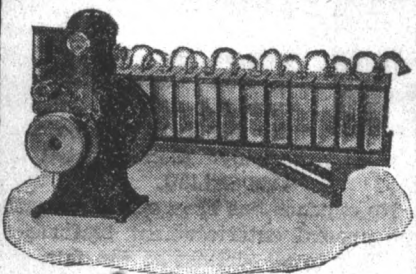
During the first six months of 1920 the Citizens' Mutual Automobile Insurance Company of Howell, Michigan, paid 840 claims, a total of \$119,575.16. The Company has about 400 agents scattered through the state and experienced officers, adjusters and attorneys to protect the policyholder.

In case of loss give the Company immediate written notice and in case of a serious accident notify us by telephone or telegraph.

The Company is carrying automobile insurance at a low cost, yet is building up a substantial surplus so that claims can be promptly paid. Why insure in a small company when you can insure with a large company with \$110,000 of cash and with an income prepared to pay the claims, promptly? Call on the local agent or write,

**Citizens' Mutual Automobile Insurance Co.**  
Howell, Mich.

## REGALITE



### Farm Lighting Plant

A 1/2 k.w. generator directly connected with a 2 H.P. air cooled motor. Capacity 45 20-watt lamps. Willard storage battery. Dealers wanted. Write for particulars.

**REGAL GASOLINE ENGINE CO.**  
Grand Street, Coldwater, Mich.

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Easily Sawn by One Man with new OTTAWA. Get your own fuel at less than 2c a cord, then supply big demand for fire wood at \$20 a cord up. Beat the Coal Shortage!

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Over 4 H.P. 310 strokes a minute. Wheel-mounted. Easy to move, cheap and easy to run. Engine runs other machinery when not sawing. New clutch lever starts and stops saw while engine runs. Cash or Easy Payments. 30 Days' Trial. 10-Year Guarantee. Send for Big FREE BOOK and Special Low Factory Price NOW. Write to Ottawa Mfg. Co., 1509 Wood St., Ottawa, Kansas.

## WRITE QUICK!

Big Special Offer on Kerosene Engines, Power Saws and Drag Log Saws. Direct from Factory. Catalog Free. **WITTE ENGINE WORKS**  
2190 Empire Bldg., Pittsburgh, Pa. 2190 Oakland Ave., Kansas City, Mo.

## LANDOLOGY

Special Number just out containing 1920 facts of Clover Land in Marinette County, Wisconsin. If for a farm home or as an investment you are thinking of buying good farm lands where farmers grow rich, send at once for this special number of LANDOLOGY. It is free on request. Address **SKIDMORE-RIEHL LAND COMPANY**  
381 Skidmore-Riehl Bldg., Marinette, Wisc.

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# News of the Agricultural World

### RAIL SITUATION IMPROVING.

THE greatest improvement in the car shortage situation since January is now being accomplished by the railroads of the country, the railroad car service commission declared in a recent statement.

Commercial freight loaded during the week which ended August 7 comprised 942,000 cars, compared with 914,000 cars during the previous week and 872,000 cars for the corresponding period in 1919.

The car shortage for the week ending August 6 amounted to 125,219 cars, compared to 132,370 cars for the previous week. The roads during the week of August 13 were unable to move 72,213 cars, while for the previous week the car accumulation was 84,949.

### REDUCE LAKE GRAIN RATES.

READJUSTMENT of ex-lake grain rates to stimulate the movement of grain via the Great Lakes to the Lake Erie ports and thus relieve congestion on the rail lines between Chicago and New York has been announced by the Interstate Commerce Commission. Special permission was given to the railroads to make effective September 1 rail rates from the lower Lake Erie ports to the Atlantic seaboard, which will result in making the lake-and-rail rates about three cents per hundred pounds lower than the all-rail rates. Heretofore the rail rates were higher.

"In the hope of stimulating a movement of bulk grain from Lake Superior and Lake Michigan ports to Erie ports for movement by rail beyond the Atlantic seaboard territory, both for export and for domestic use, and thus relieving congestion on the all-rail lines between Chicago and the Atlantic seaboard, releasing cars at the western lake ports for return to the grain fields and reducing the long haul of empty cars from the seaboard to the west," the commission said, "the commission suggested to the trunk line carriers from the Lake Erie ports to the seaboard the advisability of promptly readjusting the ex-lake rates on grain in bulk from Buffalo, Erie and Fairport by applying to those rates lower percentages of increase than were authorized by the commission in ex parte No. 74, increased rates, 1920."

### WOULD HOLD WHEAT.

ORGANIZED farmers of Missouri, Kansas, Oklahoma and Nebraska are planning to bring about an advance in the price of wheat, to the end, they say, that they may make a reasonable profit on their product. At a conference in Kansas City recently of about thirty representatives of the Farmers' Union from Kansas, Oklahoma and Nebraska and the farm clubs of Missouri, it was decided to urge the farmers of the four states represented to withhold their wheat from the market, and thereby obtain a minimum terminal market price of \$3 a bushel.

### IS PEAK OF INFLATION PAST?

MANY changes in business conditions are taking place. The monthly statement of the federal reserve board says that the month of July has been unmistakably a period of business and credit transition. The transition has been marked not only as regards industrial developments themselves, but also as regards credit. It has been particularly exemplified in the relationship between business and lending conditions. Notable among the months' developments has been a tendency on

the part of commercial rates of interest to go to slightly higher figures, notwithstanding the maintenance of the same rates of discount at federal reserve institutions; the further development, although still upon a very moderate scale of unemployment in some lines of business due to cancellation of orders and poor transportation of fuel and materials; the liquidation of stocks of commodities which had been held upon a speculative basis; and the gradual elimination from banks of paper collateral by such goods.

### CZECH SUGAR CROP 237,038 TONS.

ACCORDING to reports at the Department of Commerce, Czechoslovakia produced 237,038 tons of sugar during the nine months' period ended April 30. Of this total 71,715 tons was refined, 109,140 tons crystalized, and 34,477 tons raw sugar.

### HOLSTEIN TOURS SUCCESS.

(Continued from page 256).

J. W. Ladd's, where greatest interest centered about three calves owned by the three boys as members of the club.

E. L. Smith, Oscar Carlson, N. S. Curtis & Son, Myers Brothers, and C.

E. Winne exhibited their herds for the benefit of the visitors during the forenoon, and the party returned to South Park in Adrian for the basket picnic and program.

During the afternoon the herds of Fred Taylor, R. Baker, L. W. Harwood, Reed Brothers, George Knisel, Fred Knopf, Jr., and C. B. Faler were visited, and some very fine cattle were seen. At Reed Brothers' farm Mr. Pollock gave the calf club members a demonstration of Holstein type, which was very interesting and instructive to the boys and girls and to the older breeders as well. The way some of the boys answered the questions "Polly" asked showed that they had been receiving good instruction regarding dairy cows.

At the Knopf herd another demonstration was given on the type of the sire, using a son of King Ona, owned by Knopf and Knisel. The Knopf herd was one of the best seen during the day. Mr. S. H. Munsell, who is inspecting for the next state sale, selected a cow at Knisel's and one at Knopf's, which will be sold at the state sale at Jackson, October 19. Judging from the remarks of many in attendance, the day was very well spent and another trip will be planned for next year, covering some of the other portions of the county. (Continued next week).

## Farmers' Auto Tour

By J. H. Brown

THE "Michigan Farmer's Automobile Tour" for 1920 is over and recorded as the greatest and finest ever pulled off in the entire country. There were seventy-one cars registered on the west side and thirty-seven on the east side of the state. Over four hundred tourists took part and rode over the whole or a large portion of the route on both pikes to Mackinaw. Just thirty-seven cars and over one hundred and fifty tourists followed the Michigan Farmer "Official Car" across the Straits of Mackinaw and up to Sault Ste. Marie.

Among the tourists were leading farmers and their wives from nearly every county in the southern half of the lower peninsula. Nearly every farmer in the tour belongs to the Farm Bureau and many of them are officers and members of the Grange. There were sons and daughters from the farms to the number of fifty or more whom we call young people because they are from fifteen years downward.

There were included three candidates for governor of Michigan, several judges, preachers, city superintendents of schools, high school teachers, state and county officials, prominent officials of the State Grange and Michigan Farm Bureau. State Highway Commissioner Frank F. Rogers joined us at Mackinaw City. These tourists made up as fine a crowd of farmers as ever got together anywhere. They got so well acquainted with each other, and enjoyed the daily programs held each afternoon and evening at the camping controls, that we finally called them together on the extreme point of the lower peninsula where the waters of the straits rolled about us, and suggested that we organize the members of the tour into an association for annual reunions at some central point in southern Michigan. The suggestion was enthusiastically received and we called Mrs. Dora H. Stockman to act as chairman. Elmer E. Ball, of Albion, secretary-treasurer of the Calhoun County Farm Bureau, was elected president; Mrs. Dora H. Stockman, member of the State Board of Agriculture and

lecturer of the Michigan State Grange, was made vice-president. The writer is secretary-treasurer. The organization will be known as the "Michigan Farmer's Automobile Tour Association." Every tourist who participated in the tour to Mackinaw and the Soo has become a member of the organization and the object will be to hold an annual reunion camp at some central point that will be most convenient for the four hundred tourist-members.

Mrs. Stockman suggested that the reunion next year be held on the Michigan Agricultural College campus, to which we all agreed. And so next June, just before commencement, we will all pack up our camp equipment and hike for M. A. C. for a two-nights' camp. Many, many times during the tour, after we reached the Traverse City fair ground camp, the tourists came to us to speak words of praise for the wonderful time they were having. "It is the greatest time of our lives," and "We will never forget the Michigan Farmer for making it possible for us to enjoy such a tour together as one family and see nearly a thousand miles of Michigan country, such fine farms and fruit orchards, such a wilderness of potato fields, the finest we ever saw anywhere." Frank Rodgers said: "It is the greatest sight I ever saw and this big company with the cars and equipment are traveling together in perfect military order without any mishap. It will certainly be an eye-opener to many of these four hundred tourists, and an educational treat to the young people in the tour." Milo D. Campbell said: "In all my life I never saw such a large crowd of farmers and city folks traveling together over the country in such fine order, with everything going like clock work. The camp scenes I will never forget and the tourists all say they are having the time of their lives. It's wonderful and they can thank you and the Michigan Farmer for this, the greatest tour I ever heard of in my life. It ought to be repeated next year because it has been such a tremendous success this time." (Continued on page 283).



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*"The use of a truck on Goodyear Cord Tires has increased my land value by bringing my farm closer to town. Power machines, assisted by this pneumatic-tired truck, offset my labor shortage. The Goodyear Cords on my truck have traveled about 10,000 miles to date. Solids can't go into the soft fields; pneumatics go through easily—haul 450 crates to 40 by team. Hard to sell a second-hand truck on solids here."*—Glenmore Green, Farmer, Fort Valley, Georgia

**E**XTENSIVE rural experience, like that related above, has confirmed the tendency of farm land prices to increase when Goodyear Cord Tires are used to cover long or difficult hauling routes.

Fertile acreages, ten or twenty-five miles from the nearest town, have become more profitable and hence more saleable due to improved transportation on these able and rugged pneumatics.

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**GOODYEAR**  
**CORD TIRES**

# OUR SERVICE DEPARTMENT

## FENCES ON HIGHWAYS.

How far should we place a fence from the middle of the road on our own land, so as to be sure it is on our own land? Do telephone poles form the boundary of the road? If the fence is on our own land, has any person without permission, the right to break through the fence with machinery, for instance, threshing engines?—M. N. T.

The width of the highway is ordinarily sixty-six feet. The statutes (Comp. Laws 1915, Sec. 4401), and following provide how the highway commissioner may have encroachments removed. It has quite generally been held that a traveler finding the highway obstructed by a sudden flood, washout, snow-drift, fallen tree, or the like, may go over the adjoining land without liability if there is no other route available that is not unreasonably long, or which the traveler had sufficient notice that he might have avoided the obstructed point. Even then he would certainly be liable for any injury unnecessarily inflicted. No decisions by the supreme court of this state on the subject have been found. J. R. R.

## ESTABLISHING PERMANENT BLUE GRASS PASTURE.

I have a field that I am summer-fallowing for wheat, which I would like to seed to bluegrass for permanent pasture. When can this seed be sown to the best advantage, this fall or next spring? Should it be sown alone? Where can I get the seed? I would like general information on bluegrass culture.

Huron Co.

J. C. C.

Early fall or early spring are the best times for seeding bluegrass. The most unfavorable time is at the beginning of hot dry weather in summer.

Bluegrass is not a rapid growing plant, hence it is advisable to sow timothy, rye grass, red-top or orchard grass along with the bluegrass. These grasses grow much more quickly and furnish considerable top growth while the bluegrass is becoming established and forming a good sod that will be permanent.

In choosing a mixture of grasses one should consider the fertility, drainage, and acidity of the soil. On the more fertile soils, timothy, red clover, and white clover may be used with the bluegrass, while on the less fertile soils it is better to use red-top, orchard grass and alsike clover. All of the last named plants will stand acidity, and poor drainage, better than will timothy and red clover.

In that wheat is to be sown on this land it is concluded that it is quite fertile. Under such conditions an excellent practice is to sow six or eight pounds of timothy and six to eight pounds of bluegrass with the wheat this fall. Next spring sow four to six pounds of high-grade red clover and one to two pounds of white clover, or one may use a mixture of three to four pounds of red clover, two pounds of alsike and two pounds of white clover.

The first two years timothy and clover hay may be harvested and by then the bluegrass and white clover will have formed a sod that will stand the tramping of cattle and provide a very good pasture which will be of considerable permanency.

Only the best of seed should be used. It being important that the clover be of high germinability and free of weeds.

The germinability of bluegrass seed is very low and often the seed contains considerable chaff, causing it to vary in weight from twelve to thirty pounds per bushel. Good bluegrass seed should weigh at least twenty pounds to the

bushel and germinate at least fifty per cent. Bluegrass is such a persistent plant that good results are obtained from using small amounts of seed even though its germinability is low.

Seed may be obtained through the Farm Bureau Seed Department, Lansing, Michigan.

In managing a bluegrass pasture one should remember that during hot, dry weather the bluegrass plants usually become dormant and the leaves may entirely die and dry up.

When in the dormant stage the stock should be removed or much of the benefits of the pasture may be lost. When the fall rains and cool weather appears the plants quickly revive and will grow late in the fall and thus provide a good pasture.

Old bluegrass pastures may become unproductive. If the sod becomes root-bound the use of a disk or harrow may improve it, but this is not very widely practiced.

Top-dressing with 200 pounds of acid phosphate has often been a boom to such pastures but with present prices it is rather doubtful as to the economy of such a practice.

About the most practical manner in which to handle an old bluegrass pasture is to destroy the weeds and apply stable manure. If there are bare or very thin patches existing it is advisable to reseed these.

A. L. BIBBINS.

## VETCH CULTURE.

Would winter vetch be likely to catch well if disced in or cultivated in with spring-tooth harrow after rye, on a loose sandy soil? What is the mode in this locality of harvesting winter vetch for seed?

Winter vetch is very often seeded in rye stubble by discing. In order to harvest the seed crop it will be necessary to use rye with the vetch. The rate of seeding varies, but the use of fifteen to twenty pounds of vetch with one bushel of rye appears to be the general practice. A large amount of vetch may cause trouble at harvest time. With the mixture suggested the crop may be harvested with a grain binder. As vetch shatters badly when dry, less seed will be lost if the cutting and handling can be done when the grain is tough with dew. No method of handling will prevent the loss of some seed. On this account some farmers on sandy land use the same field for rye and vetch for several years in succession, thus utilizing the seed which falls on the ground. The first time a field is used for vetch the seed ought to be inoculated with the proper culture of nitrogen-fixing bacteria. The mixed grain is easily and completely separated by the use of a spiral vetch separator.

H. L. B.

## SHOULD COWS BE FED?

Should cows be fed grain before they freshen when in fair condition? If so, what kind of grain is best suited to their needs? What is the best feed for little pigs when fed in the form of a slop? What is best when fed dry with a self-feeder?

J. H. B.

Ingham Co. If the cow has the run of a good pasture no grain feed is needed before freshening. If confined to dry roughage, or hay and silage, a light ration of bran and linseed oil meal is desirable. The amount of grain feed to be regulated by the condition of the cow and quality of the roughage.

Middlings and oil meal make a fine grain mixture for feeding young pigs. A little tankage, say one pound of tankage to ten pounds of the grain mixture, will help out wonderfully where skim-

milk is not at hand. If self-feeders are used ground corn and oats, say one pound of tankage to nine pounds of the grain mixture should prove more palatable and give good results, particularly when the pigs have the run of grass and green forage crops.

W. M. E.

## RATIONS FOR DUCKS.

My half-grown ducks become weak in legs, their necks crook, and then they die in a few days. They are out on range. I feed cracked corn. They grew fine until recently.

Mrs. J. L. C.

Leg weakness in ducks is often caused by too much concentrated food and not enough exercise. Instead of so much cracked corn try a mash containing about fifteen per cent of corn meal, ten per cent of beef scrap and the remainder bran, with possibly a little low-grade flour if it can be obtained. Five per cent of coarse sand can also be added to the mash with good results. The ducks also need plenty of green feed and will eat more clover or green rye if it is mixed with the mash.

Another easily made mash sometimes used consists of six parts of wheat middlings, six parts of corn meal and one part beef scrap. This can be moistened and made into a crumbly mash and the ducks given all they will clean up in a few minutes. Do not overfeed so any of the mash will be left after their appetites seem about satisfied. Ducks need plenty of water in dishes deep enough so that the nostrils can be covered when they drink. They also need shade on their range on hot summer days as growing ducklings do not thrive when exposed too much to the hot sun.

## HENS BECOME DROOPY.

Every few weeks one of our hens gets droopy, then so weak it cannot walk, and would finally waste away and die, if we did not kill it previously.

B. H. F.

Oakland Co. The symptoms described indicate that the hens may have tuberculosis. Perform a post mortem on one of the hens and see if the liver is covered with the greyish-white nodules which indicate tuberculosis. If this is the case it will pay to kill off the flock and start again with healthy birds after the house and yards have been thoroughly cleaned and given a chance to rest. From the brief description we cannot tell much about the conditions and if you have a large and valuable flock of poultry it will certainly pay to have a veterinarian inspect the flock and give what information he can concerning the trouble. He can also pass on the food value of any birds that have to be killed to prevent them from coming down with the disease.

Tuberculosis is a very dangerous disease to poultry because there is no cure and it spreads rapidly.

## IS WHEAT SMUT SPREAD THROUGH MANURE?

Would you kindly inform us whether the spreading of barnyard manure in which there is smutty wheat straw, would have a tendency to spread this disease, especially where the manure is used as a top-dressing for wheat. Would you also state whether treating the wheat for smut would overcome the difficulty.

No. Infection of wheat with smut takes place when the grain is sprouted. Top-dressing wheat, therefore, with manure containing smutty straw will not lead to infection of the young wheat plants. It is a perfectly safe practice and one which has been practiced for years in Michigan. Treating

wheat for smut will eliminate the danger from wheat smut, but naturally has no connection with the subsequent maturing of the field. The function of the seed treatment is merely to disinfect the grain which is planted in order to allow the young sprouts to grow without becoming infected with the wheat smut fungus. Since the infection period is restricted to the short period in which the sprout is coming out from the kernel and does not take place after the plant gets above the ground, seed treatment gives remarkable results in preventing smut. For full discussion of methods of treatment, send for Extension Bulletin No. 17 of the Michigan Agricultural College.

G. H. C.

## SUCKERS ON SUGAR CANE.

I have a patch of sugar cane which I drilled in rows and now it is about fourteen or sixteen inches high and there is from three to as high as eight suckers on each stalk, and as the stalks are only about twelve to fourteen inches apart, it will make too heavy a stand. The ground is so very dry that I am afraid to cut so many suckers off for fear that it will sap the stalk too much.

It is not advisable to attempt cutting the suckers from sorghum plants. It is usual for sorghum to produce a great many more suckers than corn. Since the plant is grown for forage and syrup purposes in Michigan and not for seed, the prolific suckering does not cause much damage.

J. F. C.

## COOPERATIVE THRESHING.

I have bought a new threshing machine, and want to sell stock (shares) to my neighbors. If we go together and buy this machine, have we a lawful right to thresh our own grain without threshing for others who refuse to invest in stock of machine? And should we thresh grain for one who has not invested in this machine, does it make us liable as a (public) thresher to thresh for all and pass none by? And must we incorporate in order to satisfactorily and lawfully cooperate together with this machine in our neighborhood?—C. H. K.

If the writer wishes to incorporate and sell shares, he must also get the approval of the Michigan Securities Commission before he can sell stock, and for the purposes of incorporation and of obtaining approval by the commission he should employ an attorney near by to handle the matter. There is no duty to thresh for every applicant. Unless the cooperators incorporate they are each individually liable for all debts without limit, and personally liable for injuries received by anyone through accident.

J. R. R.

## HEN WITH TUMOR.

One of my hens had a swelling at side of the head which has now extended the length of the neck to the crop. This swelling is very hard. The hen cannot eat nor drink. What would you call this, and what can I do for it?

Sanilac Co.

A. C.

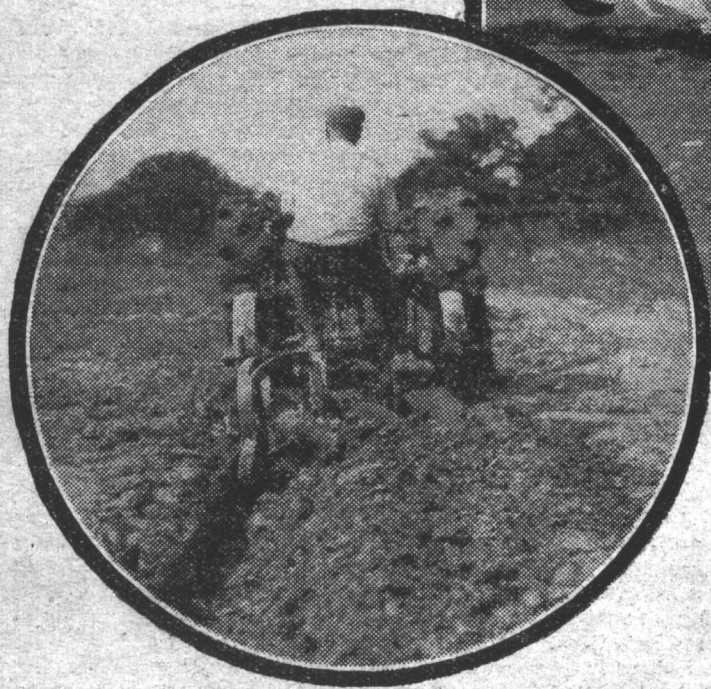
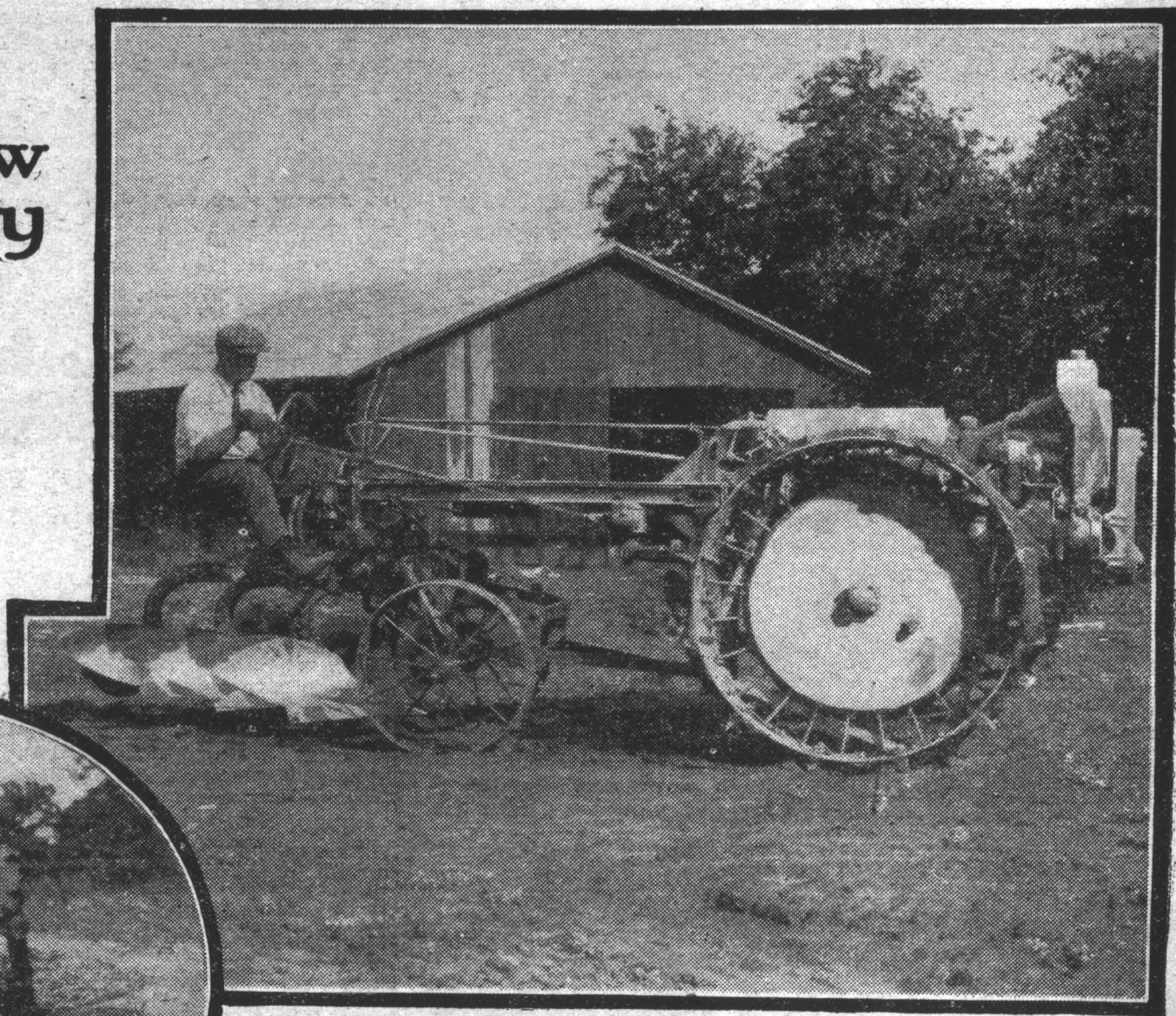
Hens are subject to tumors of various kinds and this may be such a growth. It will probably be best to kill the bird as there is no cure for such cases in hens that would be practical. It is not apt to occur often and probably would not be contagious. But in all cases of that kind it pays to immediately destroy the bird and eventually through breeding from strong vigorous birds many such ills seem to become nearly eliminated from the flock.

Black unbarred mosquito netting is a satisfactory and not unsightly wire screen. If the netting is cut two or three inches larger than the opening, the edge may be rolled so as to make a substantial mass through which to tack.

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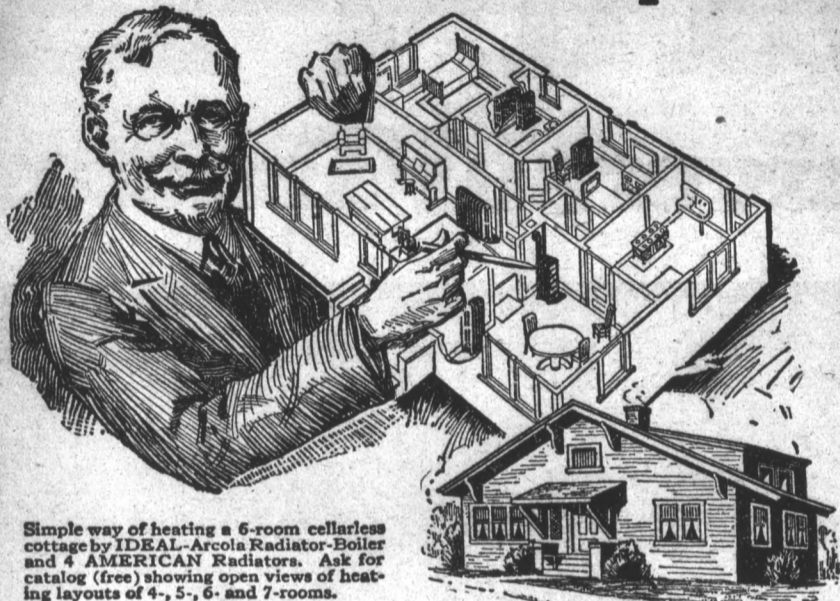
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	200-B	"	"	"	7700

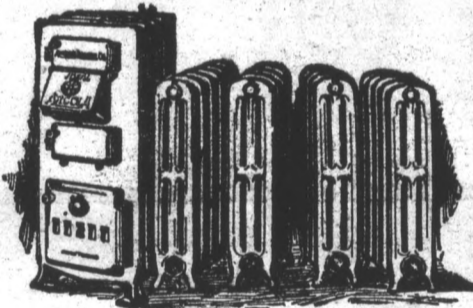
Prices include Expansion Tank and Drain Valve. Prices do not include labor, pipe and fittings used in installation and which are supplied by the local dealer at extra charge. Radiation is of regular 38-in. height 3-column AMERICAN Peerless, in sizes as needed to suit your rooms. Outfits shipped complete f. o. b. our nearest warehouse, at Boston, Providence, Worcester, Springfield (Mass.), Albany, New York, Philadelphia, Harrisburg, Pittsburgh, Baltimore, Washington, Richmond, Buffalo, Cincinnati, Indianapolis, Birmingham, Detroit, Chicago, Milwaukee, Minneapolis, St. Paul, Des Moines, or St. Louis.

Shipped complete for immediate installation

The beauty of the IDEAL-Arcola method is that no cellar is needed. Everything is on one floor. The Arcola is placed in any room that has a chimney connection. No running to cellar. Same water is used over and over again for years. No fire risk.

Buy now at present attractive prices for outfits complete!

IDEAL-Arcola outfits consist of the boiler and radiators to heat various size houses. Write us your requirements! Unlike stoves, there are no coal-gas leaks into the living-rooms. The IDEAL-Arcola delivers the soft, radiant warmth of hot water—not the dry burnt-out atmosphere of stove heating. There is no fire risk to building—no danger to children—fire lasts for hours! The Arcola burns hard or soft coal.



The outfit consists of an IDEAL-Arcola Radiator-Boiler and 4, 5, or 6 AMERICAN Radiators and Special Expansion Tank—everything except labor, pipe and fittings, which any local dealer will supply. See prices below for various sizes of outfit.

Catalog showing open views of houses, with the IDEAL-Arcola Boiler in position will be mailed (free). Write today

Sold by all dealers. No exclusive agents.

**AMERICAN RADIATOR COMPANY**

Write to Department F-3 Chicago

**MINERAL HEAVE COMPOUND** In use over 50 years  
**CURES HEAVES**  
Booklet Free  
\$3.25 Box guaranteed to give satisfaction or money back.  
\$1.10 Box Sufficient for ordinary cases. (Includes War Tax.)  
MINERAL HEAVE REMEDY CO., 463 Fourth Ave., Pittsburgh Pa.

**NEWTON'S FOR HORSES, CATTLE, HOGS.**  
28 YEARS SALE  
Cures Heaves by correcting the cause—Indigestion. Prevents Colic, Staggers, etc. Best Conditioner and Worm Expeller. Three large cans guaranteed to cure Heaves or money refunded.  
\$.65 and \$1.30 per can (Includes War Tax). At Dealers' or mail. Largest packages. Dose is small. Cheapest to use.  
© THE NEWTON REMEDY COMPANY, Toledo, Ohio

For Sale Bred White Rabbits, \$3 per pair, will ship anywhere. Address GILDA LEICHSENBERG, Marcellus, Ohio Co., Mich.

Pedigreed Red Rock Seed for sale one bu. to car. Apply to The JENNINGS FARMS, Bailey, Mich

Mention The Michigan Farmer When Writing Advertisers

**New \$15.00 Lamp FREE**  
Gives a soft, brilliant, glowing light; restful to the eyes; an ideal illumination.  
**400 CANDLE POWER**  
A hundred times brighter than kerosene lamps. Burns 96 per cent. air and 4 per cent. common gasoline. Clean—odorless—economical.  
**ABSOLUTELY SAFE**  
Can be carried anywhere—perfectly safe, even if tipped over.  
**LIGHTS WITH ONE MATCH**  
New patented twin mantle burner lights with one match easily and quickly. Greatest improvement of the age.  
Simply write for Catalog. **AGENTS**  
SEND NO FREE Lamp Offer, also free **WANTED** MONEY trial offer. Don't delay; act now  
**THE AKRON LAMP CO.** 389 Lamp Bldg. Akron, O.

**Tire Agent**  
We want one exclusive representative in each locality to use and sell the new Mullinger Extra-Fly hand made tires. Guarantee Bond for \$5000.00. (No seconds). Shipped prepaid on approval. Sample sections furnished. Don't buy until you get our Special Direct Prices. Write **MULLINGER TIRE & RUBBER CO.** Dept. 967 Kansas City, Mo.

## Fruit Growers Enjoy Tour

Michigan Horticulturists Visit Some of the Fine Orchards of Our Northwestern Counties.

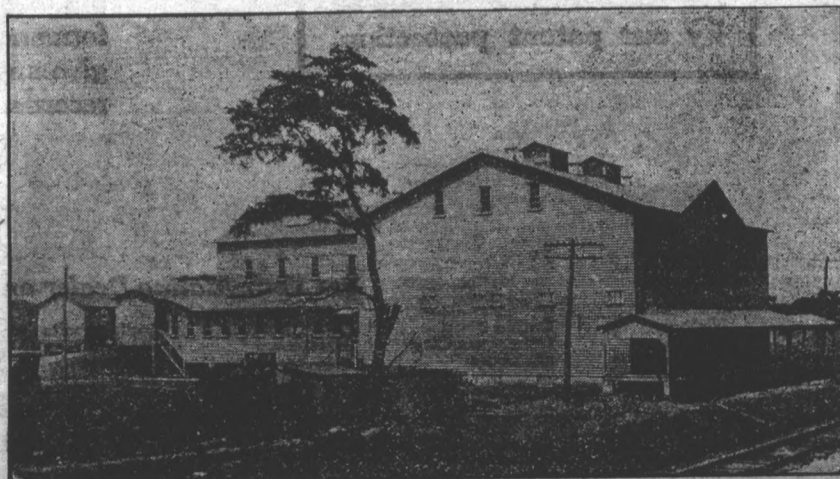
THE Michigan State Horticultural Society followed its usual custom of recent years by making an excursion to the orchards of some of its members. The trip this year included portions of Manistee, Benzie, Leelanau and Grand Traverse counties.

The party left Manistee in automobiles on Wednesday morning, August 18. Led by Carl H. Knopf, county agricultural agent of Manistee county, the first halt was made at the Nellie Whitney Fruit Farm, five miles northeast of Manistee. This orchard consists of fifty-one acres of peaches on the right hand side of the road, opposite of which is one hundred and fifty-two acres of peaches, pears, apples and cherries. Below the latter is a block of one hundred and seventy-four acres of apples containing 10,837 trees six and seven years old. This orchard is receiving excellent care under the management of J. E. Merritt. The varieties are: Wagner, Grimes Golden, Spy, Jonathan and McIntosh. Three tractors and one team are required in the operation of this farm.

Lake View Orchard, owned by the Buckley & Douglas Lumber Company, and managed by F. A. Mitchell, was next on the route. This farm consists of six hundred and ten acres of improved land, of which five hundred acres is planted to fruit trees. The orchard consists of approximately 40,000 trees, of which forty per cent are apples, twenty-five per cent peaches, twenty per cent cherries, ten per cent apples with peach fillers, and five per cent plums and pears. Over 100,000 pounds of cherries have been harvested, and 2,500 to 3,000 bushels of peaches and 2,500 barrels of apples are expected this year. Much of this orchard has not reached the bearing age. One hundred and five cherry pickers were required to harvest the crop this year, twenty-three men are regularly employed on the farm, and thirteen horses are used in operating it. It is producing a quantity of hay and grain in addition to the fruit crops.

Arlie L. Hopkins' one hundred and twenty-acre bearing orchard at Bear Lake was next visited. This well-kept orchard consists of 3,000 apples, 2,500 peach, five hundred cherry, and four hundred and fifty plum trees. Mr. Hopkins, aside from being an extensive fruit grower, operates several hundred acres of farm land, and is a leading member in the state legislature. He harvested 7,000 barrels of apples last year. He is a believer in thorough tilling and pruning, as well as the other modern orchard practices, and he explained to the visitors his system of low heading of trees by which he was able to pick as many as ten barrels of apples last year from many single trees, using only a nine-foot ladder. His

(Continued on page 268).



Experimental Packing Plant Erected by the State of West Virginia.

# En-ar-co

## SCIENTIFIC REFINING

### "Crude oil is like a rainbow"

The elements of crude oil are so completely blended that it is as difficult to separate them as to separate the blended colors of the rainbow. To get complete separation through repeated distillations we make countless tests. Only in this way can the absolute purity of oil products be insured.

## "The Oil of a Million Tests"

The secret of successful scientific oil refining is painstaking care and unceasing vigilance. In making EN-AR-CO oils we average over a million tests a year. It is only by this multiplying of tests that perfect products can be made. This thoroughness in our scientific refining processes is the protection we offer to users of our products.

### EN-AR-CO Oil Saves Motor, Saves Costs, Saves Troubles

Good motor oil, pure motor oil, is just as essential to your engine as good, pure water is to your body.

Just as impure water will injure your body so do impure, imperfectly refined oils ruin your motor, whether it be auto, truck or tractor.

EN-AR-CO oils will keep your motor healthy, always responsive and free of troubles. They will save you repair costs, and will free your motor of the engine troubles that are so common where poor oils are used.

The scientific refining of EN-AR-CO motor oils is done with such

painstaking care that there is never any danger of impurities, sediments or imperfectly refined products to cause engine troubles.

All EN-AR-CO motor oils are tested to stand up under the terrific heat generated in the engine without carbonizing cylinders or clogging valves.

Many engine troubles are caused by insufficient lubrication and the old bible saying might be paraphrased to "spare the oil and spoil the motor." Use plenty of EN-AR-CO Motor Oil and ride in comfort and security.

### WHITE ROSE GASOLINE

Clean—Uniform—Powerful

### NATIONAL LIGHT OIL

For Tractors, Lamps, Stoves

### EN-AR-CO GEAR GREASE

For Differentials, Gears, Transmissions

### THE NATIONAL REFINING COMPANY

2139 Rose Bldg., Cleveland Ohio

Five Modern Refineries

Branches in 92 Cities

### EN-AR-CO AUTO GAME FREE

Here is a fascinating game in which autos compete in a cross-country race. Two, three or four can play. Only one game to a family.

#### Get this game for the children

Grown folks too will like it. Sent free only to auto or tractor owners, to acquaint you with the merits of EN-AR-CO MOTOR OIL. USE COUPON.

### USE THIS COUPON

THE NATIONAL REFINING COMPANY,  
2139 Rose Building,  
Cleveland, Ohio.

Enclosed find 2-cent stamp to partially cover postage and packing. Please send EN-AR-CO game free. I have never received an EN-AR-CO game.

Name.....

Street or R. F. D. ....

Post Office .....

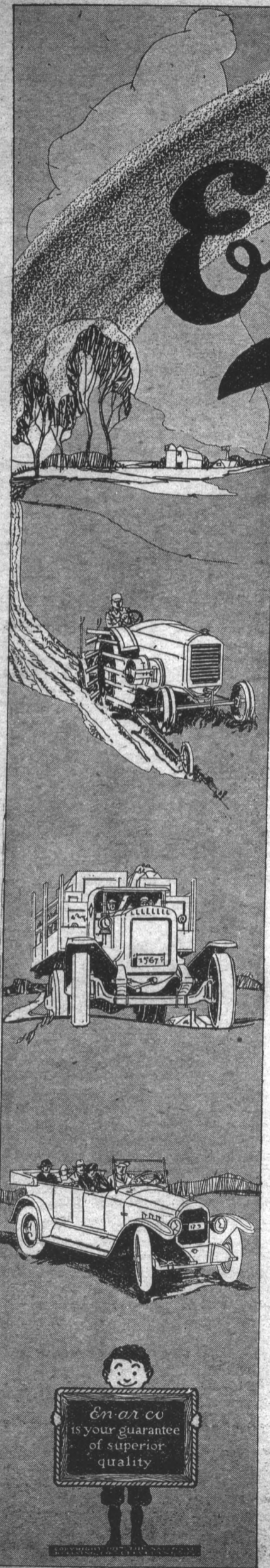
County..... State.....

I own .....

(Make of automobile or tractor)

and am at present using..... motor oil. I will be in the market for more oil again about..... (give date).

Please quote me price on..... gallons EN-AR-CO motor oil.





## See How Essex Proved Economy

*A Nation-Wide Demonstration  
No Motorist Can Overlook*

**Connecticut**—With 12 cars over Mohawk Trail and Hoosick Mountains and 12 over a coast route—many owner driven—216 miles average distance per car, 18.7 miles per gallon were shown. One car with 35,000 miles service averaged 21.2 miles per gallon.

**Nebraska**—A Hastings, Neb. woman drove her Essex from Lincoln to Hastings, 109 miles, averaging 28 miles per gallon.

**California**—Four women drove from Los Angeles to San Francisco and return averaging 22.3 miles per gallon. A San Francisco Essex made the round trip, 846 miles, in

33 hours with 23 miles per gallon. Hood and radiator sealed.

**San Antonio, Tex.**—In a 166 mile run to Austin and return, Essex averaged 25.5 miles per gallon.

**Sacramento, Calif.**—Defeated 19 entries and took Tallac Cup for highest gasoline, oil and water mileage in Sacramento dealers reliability run.

**Baltimore, Md.**—Essex sedan, on original tires with 15,000 miles service, traveled 221 miles over Maryland hills, averaging 23 miles per gallon.

**Florida**—On a measured gallon an Essex covered 23 miles and with-

out change or adjustment of any kind showed speed of 68 miles per hour.

**49 Cars Average 18.9 miles Per Gallon**—Records cover every kind of test at a speed of from 5 to 72 miles per hour.

**Los Angeles, Calif.**—To San Francisco over 828 mile route of steep grades and frequently far from water supplies Essex which had previously gone 28,000 miles and under U. S. Marine observation made trip sealed in high gear with sealed hood and sealed radiator. Average 22.8 miles per gal. gasoline.

### Also Broke World's Dirt Track Record—1261 Miles

*Made at Dallas, Texas, by a car That Had Already Gone 12,000 Miles*

From the mere standpoint of gasoline mileage, Essex in its nation-wide tests showed a performance worthy of cars which possess that advantage as their principal quality.

Records were kept on 49 cars. They averaged 18.9 miles to the gallon.

But bear in mind this was not done by taking advantage of every device possible to increase gasoline mileage. Under conditions of that sort, Essex showed as high as 37 miles to the gallon. However, men don't drive that way. How obviously unfair it would be, therefore, to offer such carefully economized fuel mileage tests as typical of all Essex cars.

In the Essex tests, conditions and performances adverse to gasoline economy obtained.

These cars were being driven at speeds from 5 to 72 miles per hour. They were reeling

off thousands of miles over all sorts of roads in inter-city runs that set new time marks. They were making new hill-climb, acceleration and endurance records.

Many were owner cars—owner driven. Women piloted some.

Some of the Essex cars used had already traveled upwards of 30,000 to 35,000 miles.

So you must not view Essex economy merely by its gasoline consumption. You must also consider its endurance and reliability.

If there were nothing more striking about the Essex than its gasoline mileage, it would be a worthy subject of our advertising. But important and impressive as that fact is, does not its other qualities take first rank in your consideration?

**Essex Motors, Detroit, U. S. A.**



**WATCH the ESSEX**



### Farms and Farm Lands For Sale

**Woman Owner Must Sell, Includes Cows, Crops, Machinery,** 5 acres potatoes, 10 acres buckwheat, 4 acres oats, lot hay, 8 cows, poultry, harness, wagons, valuable machinery, gasoline engine, all tools, go quick buyer; 75 acres machine-worked fields, excellent hay, potato and grain land; 15-cow creek watered pasture, valuable woodlot, apple orchards; 125 sugar maples, outfit, 2-story, 12-room house, bath room, maple shade, furnace heat; big barn, silo, poultry, houses; quick-action price \$3500, easy terms. Details page 30. Strout's Big Illustrated Catalog Farm Bargains 33 States. Copy free. STROUT FARM AGENCY, 814 BC Ford Bldg., Detroit, Mich.

**120 Acre Farm** For Sale. Heavy clay soil. Good house and fair outbuildings. Well, cistern. Small spring brook furnishes stock water. Orchard. Creamery adjoining property. Town also adjoins property, having bank, churches, Normal and high school. Located in northeastern Michigan. Can give immediate possession. Price \$4000.00, half cash, balance easy payments. Bargain if taken at once. Address Box C 104 care of Michigan Farmer, Detroit, Mich.

**80 A. Farm.** An excellent home. This is a bargain. 70 A. well improved, 10 A. timber and pasture, over 800 rods woven wire fence, nearly all seeded clover and alfalfa, 2 barns, granary, henhouse, 7 room dwelling, 2 good wells of water. A good general crop farm. Only \$5000 if sold at once. P. R. SPRAGUE, Owner, Sears, Mich.

**80 A. FARM** All improved. Borders city. 1 mile to high school and college on state road. I am prepared to give you the highest bargain ever. Address Box A 814 care of Michigan Farmer, Detroit, Mich.

**FOR SALE**—120 acres. Good buildings, 80 acres improved; flowing well, water in house and barn. Also stream through pasture. Will sell part or all. Price \$80 per acre. For further information write: Wm. VANDEPOL, R. No. 4, Marion, Mich.

Additional Farm Ads. on Page 291

Best for Every Farm Use

## Red Seal Dry Batteries



Avoid ignition troubles by using Red Seal Dry Batteries. These batteries are in reality convenient storehouses from which electric current can be drawn at will. They furnish fat, hot sparks that spur your tractor or farm engine into action and keep it running at par. Recommended as the most efficient, satisfactory and economical medium of ignition for all purposes.

**The Guarantee Protects YOU!**

Under every condition, regardless of weather, and no matter how rough the going, these famous batteries will supply you with reliable farm power at least cost. Thousands of tractor owners will use no other! Absolutely best for tractors, farm engines, autos, door bells, hand lanterns, telephones, etc. Study the label! Insist on genuine Red Seal Dry Batteries.

**ASK YOUR DEALER**

Under our plan, every dealer's supply of "Red Seal" is always fresh. No chance for you to get run down stock. Ask for them by name. When you buy Red Seal Dry Batteries, ask your dealer for FREE book, "How to Run the Gas Engine" our famous handbook for engine owners.

**MANHATTAN ELECTRICAL SUPPLY CO., Inc.**

New York—Chicago—St. Louis—San Francisco  
Factories: at Jersey City; St. Louis; Ravenna, Ohio

### VITAMINES ESSENTIAL TO GROWTH.

**B**UTTERFAT is a vital food. It is such because it contains the fat soluble vitamins so necessary to the growth of children and animals. The substitution of cheaper vegetable fats which lack these vitamins for butterfat offers a temptation that is fraught with real danger to the rising generation. On this very important subject a bulletin issued by the Wisconsin Experiment Station has the following to say:

"Vitamines are as yet unidentified chemical substances in foods and are absolutely necessary for growth and reproduction. Without them no growth will take place. If we take such a mixture of foodstuffs which do not allow an animal to grow and stir into it a small quantity of egg yolk, say for a pound of the ration, an ounce of egg yolk, growth can be induced. The same result would be obtained if we had put in an ounce of evaporated milk instead of the egg yolk. Suppose next that we take all the fat out of this satisfactory ration by extracting it with something that dissolves fats. It will be found that though the ration will be able to maintain young rats without any increase in weight for about a month, it will no longer be able to induce growth. Only on restoring the extracted fats to the ration will growth be made.

"A similar result could have been obtained by adding butterfat or fats obtained from certain animal organs, but other fats such as lard, almond oil and cottonseed oil would not have brought about the same result.

"These facts might well cause us to stop and think. Because of the fact that some fats naturally contain substances necessary for growth, while other fats do not contain such substances, there has arisen the necessity of speaking of the presence or absence of a fat soluble vitamin.

"There is a tendency to use plant oils as substitutes for butterfat, even claiming for them a value equal to that of butterfat. No plant oils so far investigated, and these include cottonseed oil, almond oil, peanut oil, coconut oil, and sunflower seed oil, contain the fat soluble vitamins in appreciable quantities. It is false to claim these as substitutes for butterfat.

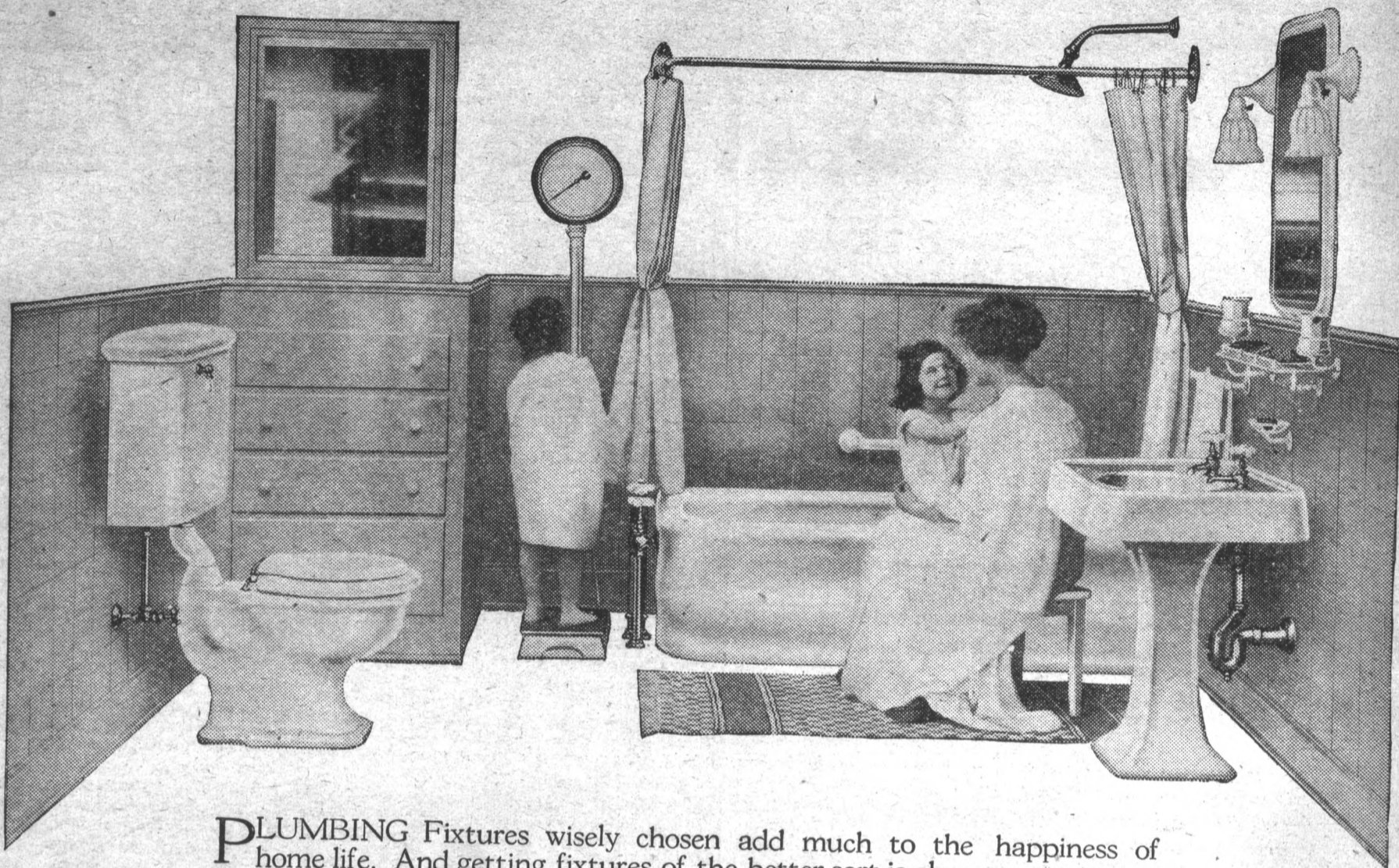
"We do not condemn them, for they are valuable food products as sources of energy and their use for that purpose should be encouraged but they should sell under their own banner and be used in nutrition for exactly what they are worth. To remove the butterfat from whole milk and replace it with coconut oil and then claim that the product is equal to whole milk for the nutrition of growing children is not true.

**INDIANA FARMERS LOSE \$5,750,000 IN YEAR.**

**H**ESSIAN fly damaged the Indiana wheat crop to the extent of \$5,750,000 during the past year, according to the estimates based on reports from throughout the state to the soils and crops department of Purdue University. The fly was so bad in some sections that the wheat was not worth cutting and in many places it was plowed under this spring and the ground planted to corn or oats.

This loss can be prevented the coming year by late sowing of wheat, or seeding after the "fly-free" dates, according to Prof. A. T. Wiancko, head of the soils and crops department of Purdue. Purdue and government entomologists have established by several years of experimental work dates for various parts of the state for seeding so that the wheat will not be damaged by the fly.

Cheap, nourishing, palatable is mush and milk—good any time; as a Sunday night lunch it can't be beat.



PLUMBING Fixtures wisely chosen add much to the happiness of home life. And getting fixtures of the better sort is always an economy when their cost is spread over years of service.

Give your home a *modern* bathroom. Why wait until the family grows old? Passing years should be no less pleasant than the years still to come, and it is better to install the best fixtures the first time and enjoy the advantages of their service.

Get in touch with a Contracting Plumber in your vicinity and let him help you solve your problem. Get the benefit of his years of training and experience.

Write for our color-printed catalogue "*Standard*" Plumbing Fixtures for the Farm." It illustrates all types of fixtures.

Standard Sanitary Mfg. Co., Pittsburgh

# "Standard"

## PLUMBING FIXTURES

"Standard" Showrooms and Branch Houses

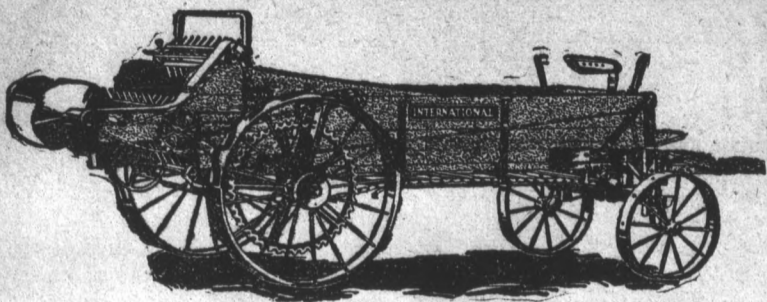
NEW YORK.....35 W. 31ST.  
BOSTON.....136 DEVONSHIRE  
PHILADELPHIA.....1215 WALNUT  
WASHINGTON.....SOUTHERN BLDG.  
PITTSBURGH.....445 WATER  
PITTSBURGH.....106 SIXTH  
CHICAGO.....14 N. PEORIA  
ST. LOUIS.....810 N. SECOND  
EAST ST. LOUIS.....10 N. MAIN ST.

CLEVELAND.....4409 EUCLID  
CINCINNATI.....533 WALNUT  
TOLEDO.....311 ERIE  
COLUMBUS.....255 S. THIRD  
CANTON.....1106 SECOND ST., N. E.  
YOUNGSTOWN.....458 W. FEDERAL  
WHEELING.....3120 JACOB  
HUNTINGTON.....SECOND AVE. AND TENTH ST.  
ERIE.....130 W. TWELFTH

ALTOONA.....918 ELEVENTH  
MILWAUKEE.....426 BROADWAY  
MILWAUKEE.....311 FIFTH ST.  
LOUISVILLE.....323 W. MAIN  
NASHVILLE.....315 TENTH AVE., S.  
NEW ORLEANS.....846 BARONNE  
HOUSTON.....COR. PRESTON AVE. AND SMITH  
DALLAS.....1200 JACKSON  
SAN ANTONIO.....212 LOSOYA

FORT WORTH.....828 MONROE  
KANSAS CITY.....201 RIDGE ARCADE  
SAN FRANCISCO.....149-55 BLUXOME  
LOS ANGELES.....216-224 S. CENTRAL  
ATLANTA OFFICE.....1217 CITIZENS & SOUTHERN BANK BLDG.  
DETROIT OFFICE.....414 HAMMOND BLDG.  
CHICAGO OFFICE.....1010 STANDARD OIL BLDG.  
SEATTLE OFFICE.....1226 L. C. SMITH BLDG.

Service at "Standard" Branches In the cities marked (\*) are carried complete lines of Plumbing and Heating Supplies; Farm Lighting and Water Supply Systems. Write or call on nearest branch.



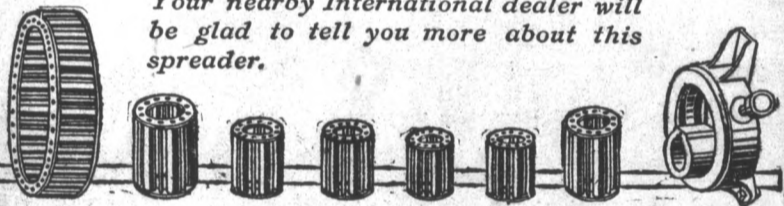
## The Easy-Pull Spreader

**T**HE outstanding feature of the International Manure Spreader, among a number of exceptional features, is its light draft.

Equipped with roller bearings at seven points, it runs with almost the smoothness of a sewing machine.

Two rapidly revolving steel beaters tearing tough chunks of manure into bits; a heavy load carried on the main axle, to be moved steadily back to the beaters — these things ordinarily would tend to create heavy draft. But roller bearings in the new International Spreader smooth out the hard work and convert what otherwise would be "heavy draft" into a horse-saving, spreader-saving "Easy-Pull".

Your nearby International dealer will be glad to tell you more about this spreader.



INTERNATIONAL HARVESTER COMPANY  
CHICAGO OF AMERICA USA

## Every Grain is Separate in COLONIAL SPECIAL FARMER'S SALT



No lumps or cakes in this pure, full strength salt, and it will never harden, if given reasonable care. Perfect for every farm purpose and for the farm home. Packed in convenient, non-leaking 70 pound bags. Look for the name on every bag.

Manufactured only by  
**THE COLONIAL SALT CO.**  
AKRON, OHIO

Chicago, Ill. Buffalo, N. Y.  
Boston, Mass. Atlanta, Ga.

Send for Catalog

### FARM WAGONS

High or low wheels—steel or wood—wide or narrow tires. Wagon parts of all kinds. Wheels to fit any running gear. Catalog illustrated in colors free.

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

### PHOTO FINISHING

5 HRS. SERVICE  
Films developed free. Prints, vest pocket size 3c; Brownie size 4c; all other sizes to P. cards 5c; P. cards 6c. Stamps accepted. Room 19, 307 Genesee, Saginaw, Mich.

Mention The Michigan Farmer When Writing Advertisers

### Hoosier WOOD SILO

Yellow Pine or Oregon Fir, with or without hinged doors. Best Anchoring system on the market. We can furnish one-piece staves in Pine up to 24 feet long. Fir up to 32 feet long. Prompt shipment from stock.

### Steel Roofs, Chutes, and Paints

Complete line of steel roofs and chutes for silos. Paints for all kinds of farm buildings at money-saving prices direct from manufacturer to buyer. Write for prices and special agents' proposition.

**HOOSIER SILO CO.**  
Dept. M-27 Muncie, Ind.

## Fruit Growers Enjoy Tour

(Continued from page 264).

omitted for lack of time. The latter orchard, owned and managed by Mr. O. R. McClary, a progressive young orchardist, is well located on high ground near Empire, and consists of one hundred and thirty acres of apples that are just coming into bearing. The Northern Spy predominates in this orchard.

A brief call was made at the packing house of the Wilce Farm & Orchard Company, just at the edge of the village of Empire. Mr. Wilce being away from home, Superintendent D. P. Roach cordially greeted the visitors and answered their numerous questions. This company has one hundred and twenty-five acres of orchard, all of which is apples except about ten acres. A ten-year-old cherry orchard of seven acres was pointed out, from which \$3,300 was received this year. Seventy-five acres of the apple orchard is in full bearing. The varieties grown are: Wagner, Grimes Golden, Baldwin and Spy. The owners expect sixty-five per cent of a crop this year. The first day's run ended at this point.

Much credit is due Mr. McClary for being able to arrange hotel accommodations for eighty-five people on about an hour's notice when less than fifty were expected. Mr. Wilce had his hotel building, which has not been in operation for several years, reopened for the occasion. Mr. McClary was able to arrange for the overflow at Glen Lake, Glen Arbor and Glen Haven hotels. Supper and breakfast were taken at a hotel on the shore of Glen Lake, about four miles northeast of Empire. The second day's start was made from this point, under the leadership of Dr. J. P. Houston, acting agricultural agent for Grand Traverse county. The trail led along the scenic west side of Leelanau county where splendid views of Lake Michigan could be had at frequent intervals, and where the Manitou Islands were plainly in view. From one elevated point, the Fox Islands could be discerned. Several beautiful inland lakes were passed on the route. The nearest approach to the North Pole was the Cherry Home Orchard, a few miles northeast of Northport and near the extreme north end of Leelanau county. This orchard is owned by the Northport Canning Company, and consists of one hundred and forty acres of Montmorency cherries, the largest single block of this variety in the state. The last picking was being completed on this day, and the first glimpse of real cherry pickers was obtained here. The pickers were young women from southern Michigan cities quartered in houses built for the purpose, and were under the supervision of competent chaperons. A few members of the touring party then visited the canning plant while the others proceeded on the return trip. At Omena, a side trip was made to Snyder & Hawley's orchard which had suffered a severe attack of scab, which is quite prevalent in that part of the state this year, notwithstanding the vigilance and efforts of the growers. This orchard was dusted instead of sprayed this year, but the difficulty cannot be safely attributed to this method, which has proven a favorite with many of the best growers in the state. It is, however, further proof that no method is infallible under all conditions.

The party was met at Sutton's Bay by Mr. A. A. Lasch and conducted by him to his fine home and orchard. Dinner was served by ladies from one of the local church societies on Mr. Lasch's lawn and, notwithstanding the enormous appetites acquired from the long forenoon drive, the supply of good things to eat far exceeded the demand. The dinner was so much appreciated and so well prepared and served that, at the happy suggestion of President

Nicol, all insisted on paying one dollar per plate instead of the seventy-five cents charged by the ladies. Mr. Lasch is a thorough business man and has demonstrated his ability as a successful fruit grower through the large and fine orchards he has developed on the west shore of Traverse Bay. He has recently planted eight hundred Hyslop crab apples, and an orchard of Damsen plums. He is one of the large cherry growers of the Grand Traverse region, and has recently planted another orchard of five thousand trees.

With a hearty handshake, the party bid Mr. and Mrs. Lasch adieu and proceeded along the shore route to and through Traverse City, and from there out on the Grand Traverse Peninsula, one of the most scenic and interesting spots in America. The peninsula is twenty miles in length, and from one to four miles in width. Grand Traverse Bay is in sight of the road either on one or both sides of the peninsula throughout the entire length. The peninsula is the original home of the northern Michigan cherry industry, and is climatically adapted to growing all of the tree fruits, as evidenced by the fine orchards dotting the hillsides throughout its entire length.

A brief stop was made at Titus Brothers' fine orchard of cherries and other fruits. They have thirty acres of cherries, two-thirds of which are in bearing, and have made some extensive and satisfactory experiments with the dusting method this year.

The next orchard visited was that of D. R. Murray. He has fifty acres of orchard consisting of apples and cherries. With the exception of five hundred young trees his orchard is all in bearing, and much of it is of mature age. Experiments have been conducted this summer with the use of nitrate of soda, the application varying from five pounds per tree in the old apple orchard to three pounds per tree in other parts of the orchard. A very marked beneficial effect was noticeable in the remarkable growth made and the deep-colored healthy foliage.

Milton Gore's splendid young cherry orchard shows the results of careful attention and brought forth much favorable comment during the stop made to look over his large orchards. As it was becoming late, the only other orchard visited was that of E. O. Ladd. Mr. Ladd is too well known to need introduction or comment. He is a pioneer and leader in fruit growing, and has some very choice blocks of cherry and apple trees, a fine and pleasantly located home, and a genial disposition. The orchard of Mr. Guy Tompkins is in the same locality and was observed in passing, as was the splendid apple orchard of Mr. James Lardie and several others. A quick run was made to Old Mission for a brief view of that beautiful and historic spot. The party then returned, some going to the Great Lakes Way Camp for supper and to spend the night, the remainder returning to Traverse City. This was the conclusion of one of the most profitable, interesting and scenic tours undertaken by the society, and all expressed themselves as greatly pleased and benefitted by the trip.

### UNILATERAL CONTRACT.

At present there is a land company in this section listing farms. They take an option for one year and bind the option by a contract which states that the owner cannot sell the land by a personal sale. Naturally, the contract states the price asked and the rate of commission. There is no agreement on their part to do a thing. I wish to know if a contract with consideration for only one of the parties is binding by law?—A. B. M.

A unilateral contract is void as a contract, but it may be a good offer, from which a contract may arise by performance before revocation.—R.

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Get the Benefit of it**

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The Soft Corn of 1917?**

**These Men Say Martin Crib  
Cured It O. K.**

I had corn in 10 different cribs  
of the 1917 crop and the corn I  
had in your Martin Crib was the  
only No. 2 corn of that crop deliv-  
ered to market in my whole  
county.  
PETER J. LUX,  
Shelbyville, Ind.

I experimented with the Martin  
Crib with corn that was green on  
the stalk and that corn is as dry  
and good as any mature corn  
right now.  
W. I. A. LaRUE,  
Henderson, Ky.

I have put pretty green corn  
in my Martin Crib and it always  
came out in the best condition.  
GEO. L. MULZER, Galena, Ohio

Last year (1917) was an ex-  
ceptionally bad year for corn.  
Our corn in the Martin Crib kept  
good while the corn in the wood  
cribs spoiled much.  
L. W. ROSECRANS,  
Westport, Ind.

shortage of freight cars make it absolutely necessary for you to store your corn on your own farm and hold it until the railroads can handle it.

If you store it in the old fashioned wood cribs or makeshift rail pens, you are going to lose and waste enough to almost pay for one of these modern, indestructible steel cribs. The old out-of-date, lax methods of storing your valuable corn are causing you to lose at least 10% of your crop. Think of it! 10 bushels out of every 100 lost.

This loss did not amount to so much 30 or 40 years ago when corn sold for around 20c a bushel, but nowadays when the price is ten times higher, how long can you continue to spend months and months of hard work in sowing, cultivating, and harvesting the crop—and then dump it into some old unsafe crib or bin, where the rats, mice, fire, weather and thieves spoil and steal 10 per cent of it right out from under your nose.

**Stop Your Corn Losses With**

**Martin Crib**

**Ratproof—Fireproof—Weatherproof**

That's why we say, "you are Paying for this Martin Crib whether you Buy it or Not." Be cause a Martin Crib on your farm will stop all of the needless waste—stop this loss and pay for itself. Why not put one on your farm this year? It will save every bushel of your corn crop—bring you higher prices for it and make more money for you.

These modern steel structures are made of heavy corrugated galvanized steel. They are far cheaper than wood cribs or bins in the long run—easier to erect—never need repairs and will last a lifetime. They are the only metal crib that will successfully store either corn or small grains such as wheat, oats or rye.

Martin Steel Crib are built in circular style and oblong style in all sizes to fit the needs of any farm from 100 to 10,000 bushels capacity.

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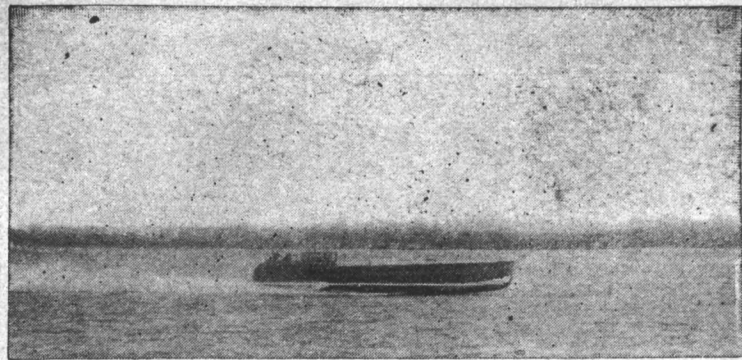
State..... R. F. D.....

I am interested in a corn crib holding about.....bushels.  
I am interested in a grain bin holding about.....bushels.

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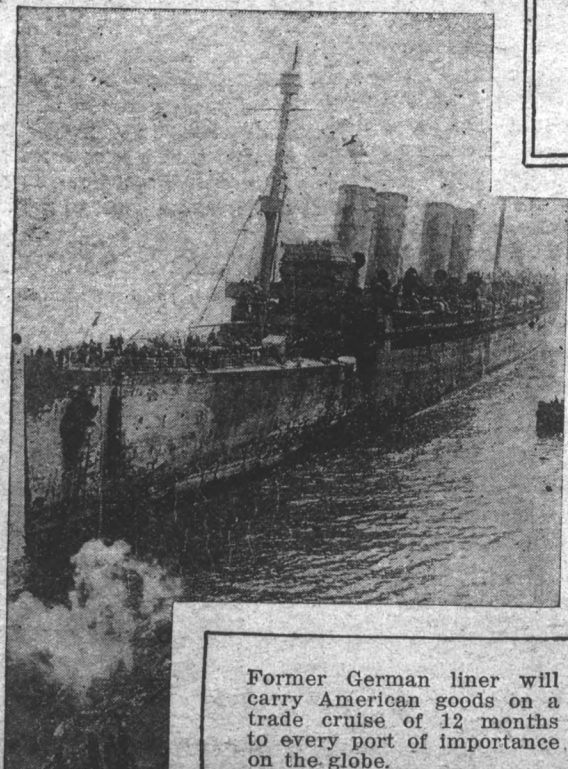
Dr. Voronoff, who holds theory of extending life by transfer of glands.



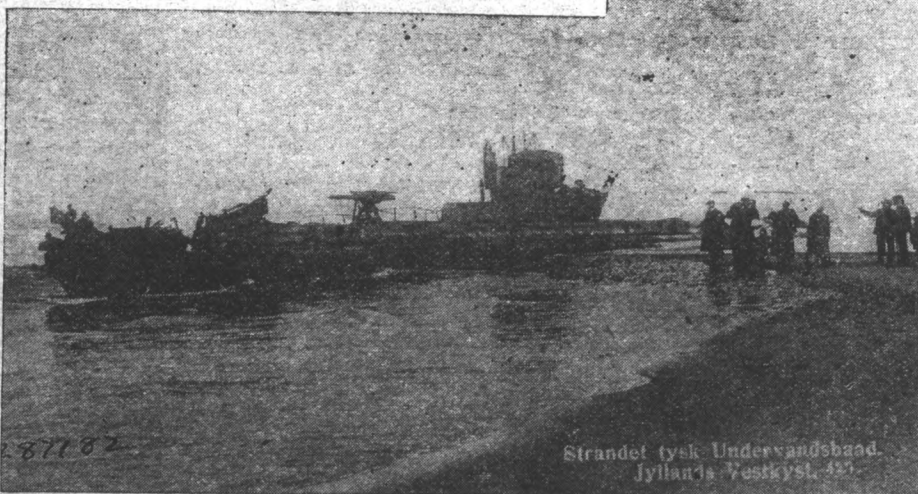
The son of General Wrangel, whom France has recognized as head of the defacto government of Russia.



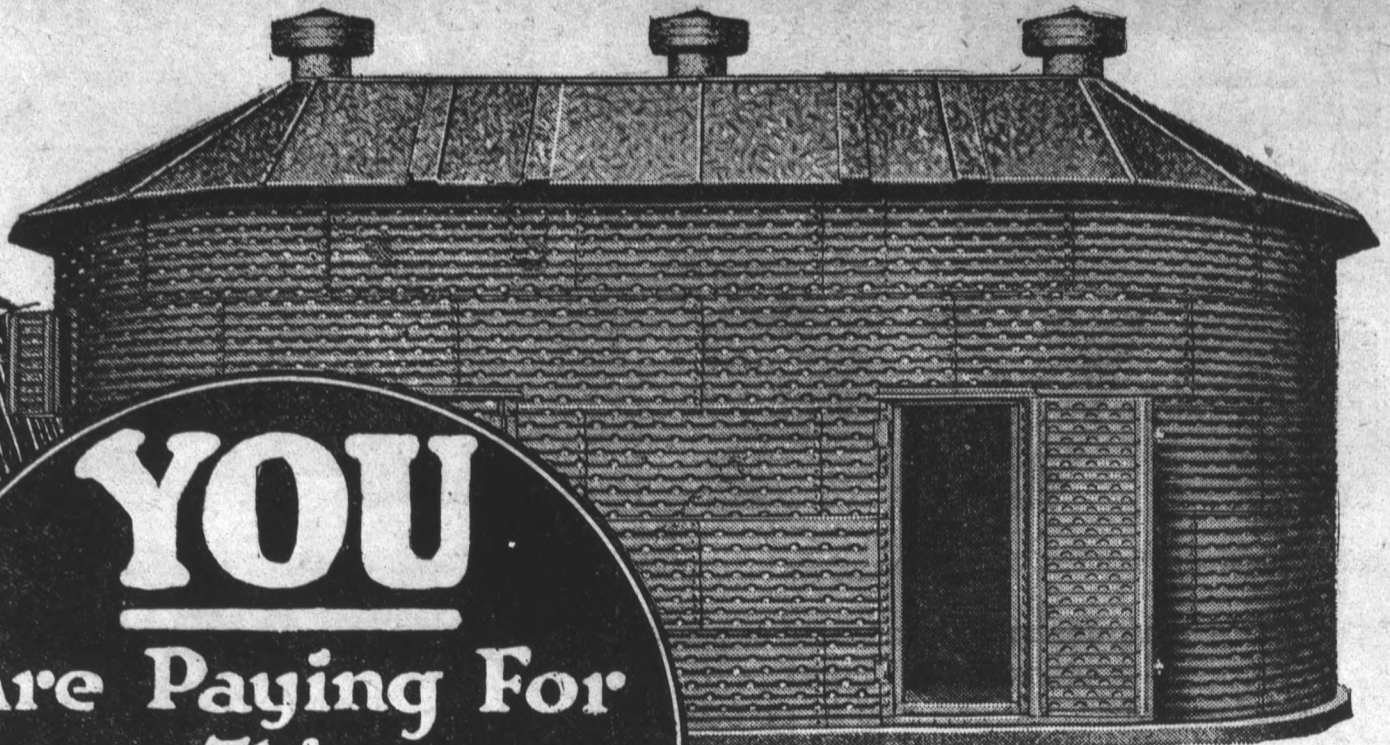
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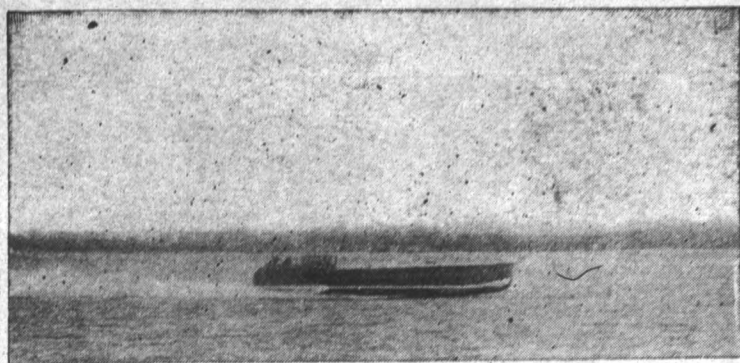
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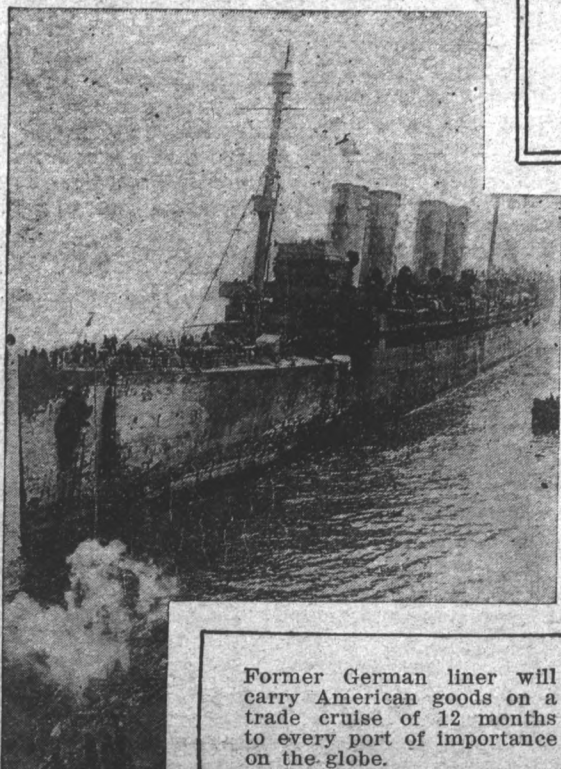
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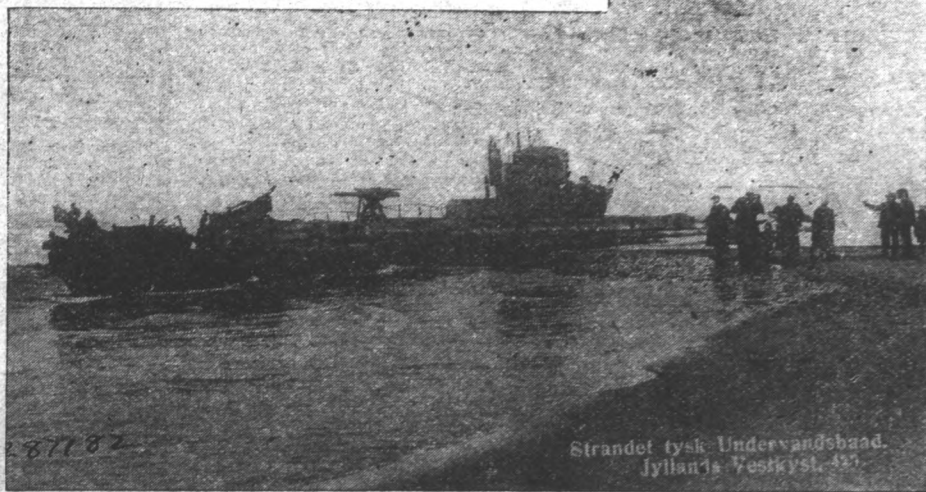
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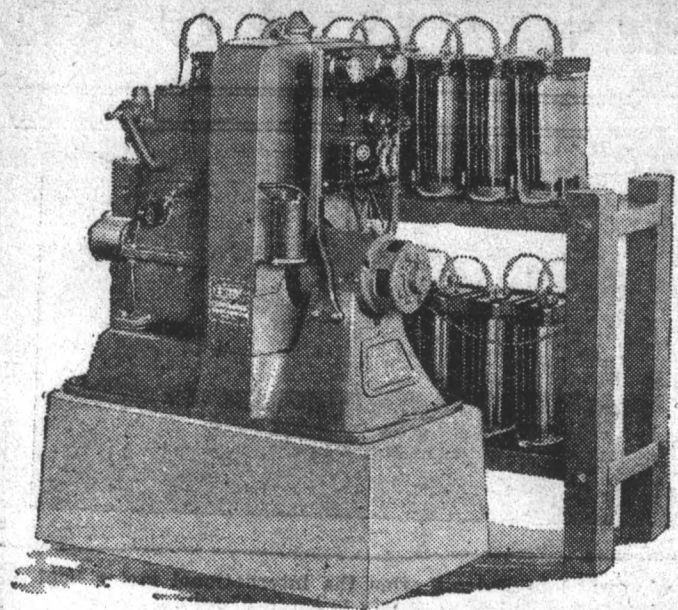
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- LOCATION:** 337 acres of Navels and Valencias, located just 53 miles from Los Angeles, and 3 miles from Riverside reached by trolley. R. F. D. and deliveries by Riverside stores. Freight and Passenger Depots at groves.
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- CROPS:** Navels from these groves have tested from 8.5 to 9.8 per cent sugar as early as November 15. Navels picked by January 1; Valencias by May 30, avoiding competition with Eastern deciduous fruits.
- WATER:** Water furnished with each grove separately; in some of the groves from a 350 inch water company, with 2 nominal assessments annually, and in other groves from a turbine pump on the ground. Every grove has available ALL THE WATER YOU WANT AT ALL TIMES!
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- FRUIT:** 60 per cent runs famous "SUNKIST" Brand commanding top market prices. Marketing thru Bloomington Fruit Assn., affiliated with Fruit Growers' Exchange. Fruit from one grove captured Sweepstakes Prize at San Bernardino, California, Orange Show, for most Perfect Orange.
- DATE OF SALE:** Sale begins Thursday, Oct. 14, 1920, AT PUBLIC AUCTION! Set your own price. These groves will be sold to close an estate. Liberal and convenient terms may be arranged. References: Hellman Commercial Trust & Savings Bank, or Union Bank and Trust Co., both of Los Angeles.

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## How Much Do You Owe?

Our Weekly Sermon—By N. A. McCune

ONE of the things that Christ emphasized was the fact that men will be called upon to give an account to God. The more a man has of wealth, leisure, time, opportunity, the more will be exacted from him. He expressed this in many ways, but always the same moral was arrived at. As someone has condensed it, "To have is to owe." "For the kingdom of heaven is as a man traveling into a far country, who called his servants and delivered unto them his goods. And unto one he gave five talents, to another two and to another one; to every man according to his several ability." The old conception was, that God called some men to be missionaries, some to be preachers, and the like, while all the rest of mankind were free from any particular obligation in the way of service. But the close reading of Scripture gives the lie to that. Preachers and missionaries and Y. M. C. A. secretaries are not the only ones who are owing God. All who own owe. Take time, for instance. The great thinkers of all ages have been misers of time. Time is money, but it is more than that. Time is life, time is everything. He who wastes time in trifles is a robber of one of the Creator's greatest gifts. "Sixty minutes gone, and gone forever," exclaimed a great worker. "Lost, between sunrise and sunset two golden hours. No reward is offered, for they are gone forever." Idle young people form a pathetic sight. Time consumed in youth for sowing wild oats usually consumes old age in reaping Canada thistles. Memory supports this idea. Looking back, our most enduring satisfaction come from memories of the hours used in some form of service. And—

"It's not the thing you do, dear,  
It's the thing you leave undone,  
That gives you a bit of heartache  
At the setting of the sun."

AND then there is education. Education is common today. Our boys and girls graduate from high school and thousands of them pass on into college. The educated man has better training than others. He has come in contact with professors who are specialists, and he has been directed into the great literature of the world. Having had more invested in him, more is required of him. The state has spent money on him. Father and mother have spent money and love and perhaps sacrifice on him. His education is so much capital. He is a trustee of that capital, and from him society expects more, his parents expect more, God expects more, he expects more of himself. The individual who has prepared himself for life with college and university work and who regards this training as so much capital to be used in the spirit of service, is one of the finest sights of our time. Such persons, whether men or women, save the race from mortal putrefaction. Such a man was the late W. W. Borden, millionaire. He was a graduate of two eastern universities, a splendid athlete and social favorite. All that money, ability, opportunity offer, were his. And he invested these in the foreign missionary field, entering one of the most difficult places that the pagan world offers.

AND, there is our stewardship of money. Or call it business ability, if you will. It is the faculty of making and accumulating. It has been pointed out that Christ taught more on the subject of money than any other. And we fail in the use of money more than

An emergency might arise when even in any branch of Christian teaching. To the man-guest would appreciate the give away a certain per cent of one's mending basket placed in the guest income because it is God's portion, is room.

He was working for a soap firm. By and by he became a partner, and then sole owner. But each year a tenth of his income was set aside as belonging to God. At length he made so much that he gave away one-fifth of his income. This was the beginning of the great firm of Colgate, now known throughout the world. Another man who followed the same rule became bankrupt. It did not look as though God honors those who honor Him. He lost all, and, with his large family, was in sore straits. He had pledged \$2,500 to the Y. M. C. A., and he mortgaged his home to pay it. He struggled along for a few years, then discovered a marketable product that brought large returns, and is still bringing large returns. I will not state that a man will become a millionaire because he gives away a certain portion of his income. But that using one's income in the manner described in the Bible does produce financial soundness and prosperity, there can be no doubt. Experience confirms it.

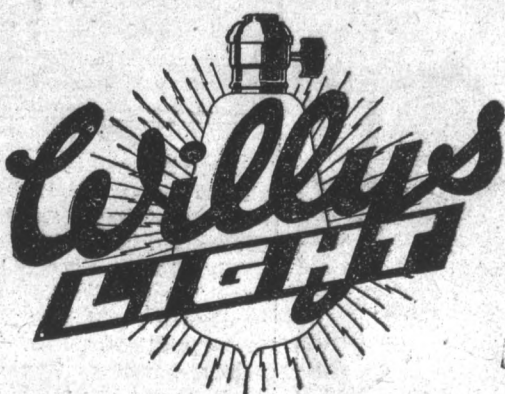
AND, too, there is the social gift. Some people are born to lead, in a social way. When they enter a group they are the life of it. They can make people feel at ease, they can conduct parties for young people, when there is not a dull minute. Such people have it in their power to do big things for the community where they live. Such a gift consecrated to God who gave it, and used in such ways as circumstances offer, is one that yields immense returns. To use it so, is to be a good trustee of the goodness of God. In a church there was no class of young men. A man undertook to build up such a class. Doing the best he could, he pushed along sometimes with fear and trembling. Today that class is so large that a new room for meeting is required, and there is a waiting list of boys who want to join.

### Sunshine Hollow Items

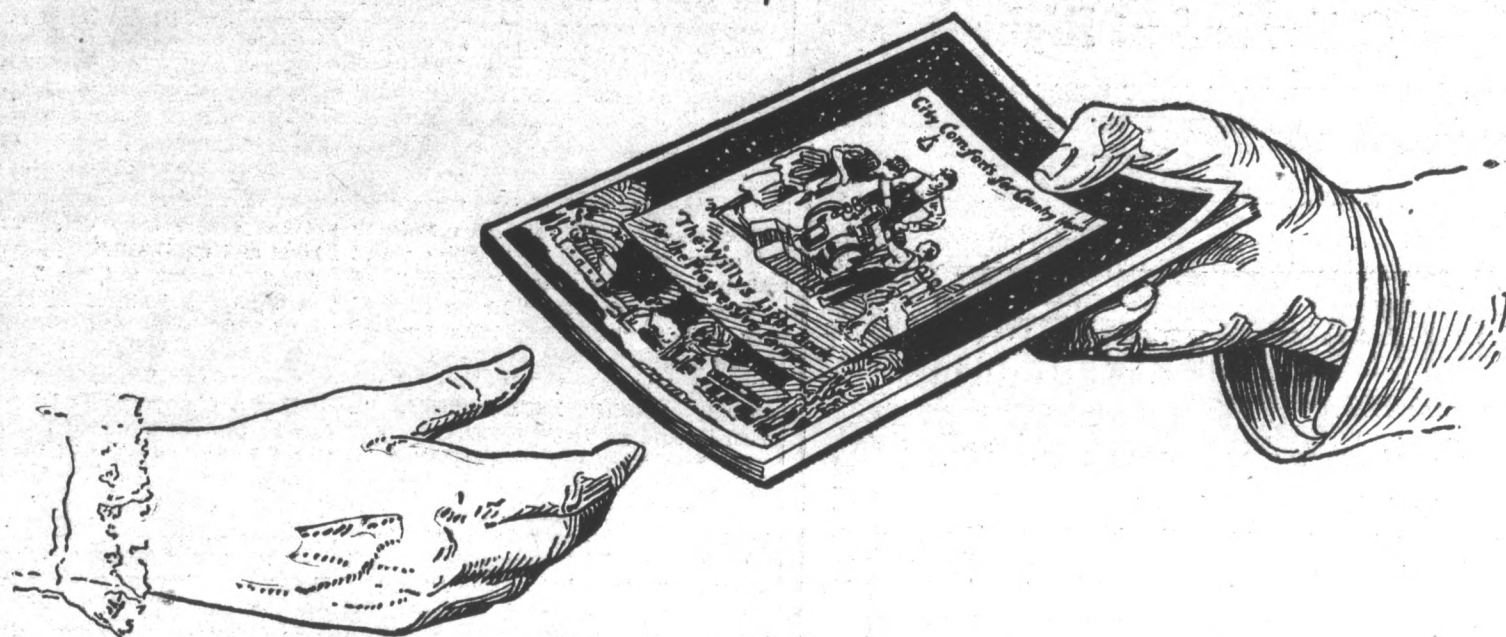
By Rube Rubicon

Max Welton says he knows how to get a hired man and make money on a farm. First you rent your farm to a rich city guy and hire out to him for wages to run the place. Then the rich guy motors out to help you every day and it doesn't cost anything for his help. He buys the seed and helps with the repairs and pays you your wages promptly each month. Max says there is seldom any doubt but what your renter will give the place back at the end of the first year. Then you can rent it to another rich city guy on the same plan.

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wife made happier by relief from toil, boys and girls content to remain on the farm.

More than a vision, this actual condition can be yours, as this book explains. You can have this same better home, happier wife, and more contented family. These are the things you have earned and deserve. And the book tells you how to get them.

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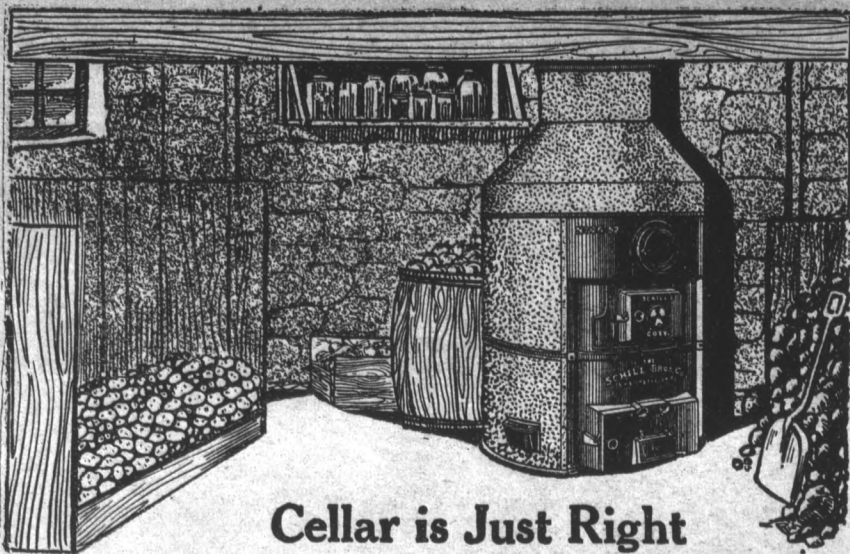
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E.P. 9-4



## Cellar is Just Right

With this perfect furnace, your cellar never freezes and it never gets hot. Perfect storage of vegetables, fruits and foodstuffs is the result.

Viewed from any point, you cannot lose when you add to your home the

**COZY** The Perfect  
**PIPELESS FURNACE**

Your protection is the most sweeping guarantee of satisfaction ever made, backed by thousands of commendations from satisfied users who have found this furnace comfortable, convenient and economical—all a furnace should be.

Fills your home from its single register with balmy, healthful heat, circulating to every corner. Requires little attention; regulated from the living rooms, and wonderfully economical. Costs less to operate than two or three stoves.

Can be installed in any house, old or new, in a day's time. Let the dealer show you, or write to us for our informing book "The Last Word in Economical Heating," sent free on request.



THE SCHILL BROS. COMPANY  
CRESTLINE, OHIO

The Morley-Murphy Company,  
Saginaw, Mich., Distributors.



## THE VALLEY OF THE GIANTS

A ROMANCE OF THE REDWOODS

By Peter B. Kyne

Bryce listened to her gravely as with all the sweet innocence of her years and unworldliness she laid the Ogilvy proposition before him.

"By all means, accept," he counselled her. "Buck Ogilvy is one of the finest gentlemen you'll ever meet. I'll stake my reputation on him. You'll find him vastly amusing, Moira. He'd make Niobe forget her troubles, and he does know how to order a dinner."

"Don't you think I ought to have a chaperon?"

"Well, it isn't necessary, although it's good form in a small town like Sequoia, where everybody knows everybody else."

"I thought so," Moira murmured thoughtfully. "I'll ask Miss Sumner to come with us. Mr. Ogilvy won't mind the extra expense, I'm sure."

"He'll be delighted," Bryce assured her maliciously. "Ask Miss Sumner by all means."

When Moira had left him, Bryce sighed. "Gosh!" he murmured. "I wish I could go, too."

He was roused from his bitter introspections presently by the ringing of the telephone. To his amazement Shirley Sumner was calling him!

"You're a wee bit surprised, aren't you, Mr. Cardigan?" she said teasingly. "I am," he answered honestly. "I had a notion I was quite persona non grata with you."

"Are you relieved to find you are not? You aren't, you know."

"Thank you. I am relieved."

"I suppose you're wondering why I have telephoned to you?"

"No, I haven't had time. The suddenness of it all has left me more or less dumb. Why did you ring up?"

"I wanted some advice. Suppose you wanted very, very much to know what two people were talking about, but found yourself in a position where you couldn't eavesdrop. What would you do then?"

"I wouldn't eavesdrop," he told her severely. "That isn't a nice thing to

do, and I didn't think you would contemplate anything that isn't nice."

"I wouldn't ordinarily. But I have every moral, ethical, and financial right to be a party to that conversation, only—well—"

"With you present there would be no conversation—is that it?"

"Exactly, Mr. Cardigan."

"And it is of the utmost importance that you should know what is said?"

"Yes."

"And you do not intend to use your knowledge of this conversation, when gained, for an illegal or unethical purpose?"

"I do not. On the contrary, if I am aware of what is being planned, I can prevent others from doing something illegal and unethical."

"In that event, Shirley, I should say you are quite justified in eavesdropping."

"But how can I do it? I can't hide in a closet and listen."

"Buy a dictograph and have it hidden in the room where the conversation takes place. It will record every word of it."

"Where can I buy one?"

"In San Francisco."

"Will you telephone to your San Francisco office and have them buy one for me and ship it to you, together with directions for using. George Sea Otter can bring it over to me when it arrives."

"Shirley, this is most extraordinary."

"I quite realize that. May I depend upon you to oblige me in this matter?"

"Certainly. But why pick on me, of all persons, to perform such a mission for you?"

"I can trust you to forget that you have performed it."

"Thank you. I think you may safely trust me. And I shall attend to the matter immediately."

"You are very kind, Mr. Cardigan. How is your dear old father? Moira told me sometime ago that he was ill."

(Continued on page 276).



## One oiling a year

provides ample lubrication for  
Model 12 STAR  
WINDMILLS

No-Oil-Em Bearings save many trips up the tower, insure positive lubrication, and prevent extravagant use of oil. Ask the Star Windmill dealer in your community to show you one of the No-Oil-Em Bearings.

Catalogue No. 95 sent on request.

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Department C Kendallville, Indiana

**HOOSIER**  
Water Service  
Provides an independent supply of water for farm homes. Easy to install—simple and economical to maintain. Write for Bulletin F.

## DYNAMITE

Blast out those Stumps and Boulders with Dynamite. Magazines in all parts of United States. Write us for prices. **ACME EXPLOSIVES CO.** Terre Haute, Indiana.

### Buy a Farm Tractor

Farm Tractors for Sale—All makes—some now exhibited at Fairs; others little used at demonstrations—guaranteed. Lowest cash prices, or on installments. Write for tractor and engine bulletin; also, farm machinery—all kinds. **FARMERS EQUIPMENT CO.** Jersey Shore, Pa.

### ASH WANTED

Carloads, 3x38 inches. Split or sawed. Must be straight grained. Highest price. **HILTON COLLINS CO.**, Incorporated, Louisville, Ky.

**CORN HARVESTER** One man, one horse, one row. Self-Gathering. Equal to a Corn Binder. Sold direct to Farmers for 25 yrs. Only \$25 with feeder binder. Free Catalog showing pictures of Harvester. **PROCESS CORN HARVESTER CO.**, Selma, Kans.

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

## Stormy Days

don't worry the man who works in a

**Fish Brand Reflex Slicker**  
He has the best waterproof garment made

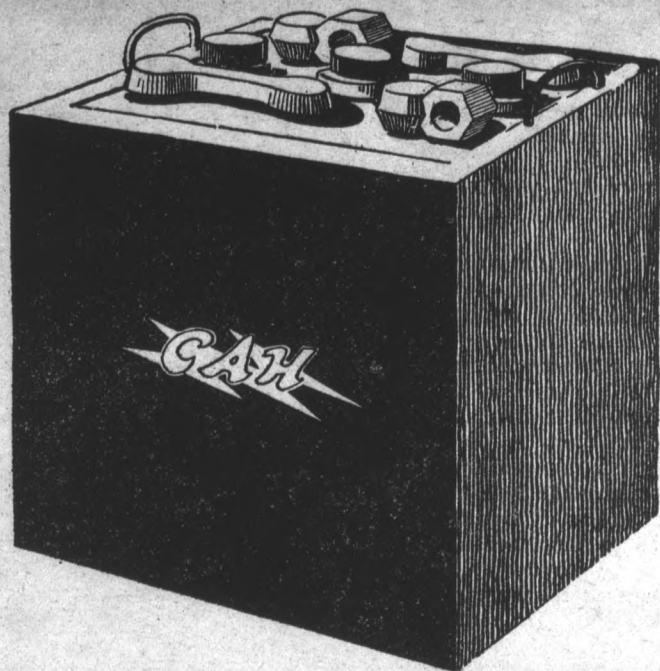
Look for the Reflex Edge

**TOWER'S FISH BRAND**  
A.J. TOWER CO. ESTABLISHED 1836 BOSTON, MASS.

DEALERS EVERYWHERE

The Mighty Falleth While Those of Low Degree Are Exalted. —By F. R. Leet





**This Guaranteed  
6 Volt 80 Ampere  
CAH  
Storage Battery  
for \$22<sup>10</sup> other sizes at  
proportionately  
low prices—**

# WE SAVE YOU 50%

**H**ERE is a storage battery designed and built for long, steady, dependable service—a storage battery backed up with the strongest kind of a guarantee and **sold to you direct at a big substantial saving.**

In construction, C. A. H. Batteries are equal to any standard batteries built. Extreme care is taken in every detail of their manufacture, and only materials of the highest grade are used in their make-up.

They are built rugged and strong to withstand the jars and jolts to which a battery is always subjected, and we doubt if there is another battery on the market to-day that will stand up under as much abuse as the C. A. H.

## Features That Mean Long Life and Dependable Service

There is no secret to the long life of C. A. H. Batteries—Their sturdy construction **plus** the fact that no single detail is skimmed in any way are the real factors back of the splendid service that these batteries render.

To begin with the box is strongly made of carefully selected and well seasoned material. The cell connectors are **extra** heavy, containing nearly twice as much material as you will find in many batteries. Another important feature is the plates used in C. A. H. Batteries—they also are **extra** strong—and not only are they scientifically designed to expose the greatest amount of active material to the acid solution, but they are also of more than ordinary thickness. This means longer life for the plates and greater discharge capacity for starting in cold weather. Even the sealing compound we use is made for us from a special formula. In fact every feature such as jars, separators, terminals, etc., are made with great care and rigidly inspected and tested.

Moreover **each and every battery** is given a **final test** just previous to shipping.

## Easy To Care For

Contrary to general opinion, a storage battery is not a difficult part of a car to keep in

condition. Especially is this so when you have a well made battery built with an **extra margin of strength** to withstand hard service. Furthermore, with every battery sold we furnish simple instructions that will enable anyone to easily keep their battery in perfect condition.

## Shipped On Approval

You take no risk in buying C. A. H. Batteries. We ship them to you with a distinct understanding that if the battery is not fully up to your expectations it can be returned to us and your money immediately refunded.

## Our Guarantee Is Your Protection

Read our guarantee carefully. Note that it gives you fifteen days in which to try out the battery thoroughly.

Furthermore, we back up every C. A. H. Battery with a most liberal kind of a guarantee for a period of **one year**. And our guarantee is written in plain straightforward terms with no qualifying clauses or special provision. If your battery goes wrong we simply replace it immediately without question.

We can afford to make this kind of a proposition because **we know just how good C. A. H. Batteries really are**—we know that if you will give your battery ordinary care, it will serve you many months beyond the period of our guarantee.

## How To Order

Select the size battery that fits your car. The list in center panel gives the sizes most used and cars to which they are adapted. However, we can furnish batteries for **any car**. If the car you drive is not in the list, all you have to do is to **measure your old battery** and give us the dimensions in **length, width and height**. Also name of car and year.

**Send five dollars (\$5.00) with your order.** We then ship battery subject to examination. If satisfactory, you pay express agent the balance, otherwise have battery returned to us (charges collect) and your \$5.00 deposit will be refunded immediately.

You can order by letter, or if convenient, you can use the coupon printed below.

C. A. H. BATTERY SALES CO.  
53 Bagley Ave., Detroit, Mich.

**Clip the coupon today, and order your C. A. H. Battery at the first sign of trouble. Our prices are more economical than expensive repairs.**

C. A. H. Battery Sales Co.,  
53 Bagley Ave.,  
Detroit, Mich.

Enclosed find five dollars (\$5.00) for which please send me one type \_\_\_\_\_ battery. Size of my old battery \_\_\_\_\_ Length \_\_\_\_\_ Width \_\_\_\_\_ Height \_\_\_\_\_

Name of car \_\_\_\_\_ Year \_\_\_\_\_

It is understood that if, upon examination, battery is not satisfactory, it is to be returned at your expense and my money refunded.

Name \_\_\_\_\_

Town \_\_\_\_\_

State \_\_\_\_\_

R. F. D. \_\_\_\_\_ M 1

## C. A. H. Starting and Lighting Batteries

This list gives the five standard sizes in which C. A. H. Batteries are furnished, and a number of cars to which each size is adapted. If the car for which you desire a battery is not listed, you can easily determine the correct battery to order by measuring your old battery for height, width and length.

**Type C.** 6 Volt, 80 Ampere  
Length, 8 1/4 ins.; width, 7 1/4 ins.; height, 8 ins.; weight, 42 lbs. **Price \$22.10**

Fits Ford, Overland "75," Dort, Buick Light Six, Chevrolet, Saxon, Chalmers, Oldsmobile, Oakland Light Six, Liberty, Essex, etc. etc.

**Type A.** 6 Volt, 120 Ampere  
Length, 10 1/4 ins.; width, 7 1/4 ins.; height, 9 ins.; weight, 52 lbs. **Price \$22.97**

Fits Studebaker, Hudson, Cole, Paige, Reo, King, Hupmobile, Chandler, Haynes, Mitchell, Nash, etc.

**Type H.** 6 Volt, 120 Ampere  
Length, 19 1/4 ins.; width, 4 1/4 ins.; height, 9 ins.; weight, 52 lbs. **Price \$22.97**

Fits Cadillac, Overland, Willys-Knight, Briscoe, Glide, National, Premier, etc.

**Type O.** 12 Volt, 35 Ampere  
Length, 11 1/4 ins.; width, 7 1/4 ins.; height, 9 ins.; weight, 55 lbs. **Price \$25.27**

Fits Dodge Bros., Ford, (Fisher Starter), Marmon, Maxwell ('18 and '19 models) Franklin.

**Type L.** 12 Volt, 35 Ampere, (Split assembly).  
Length, 11 1/4 ins.; width, 7 1/4 ins.; height, 9 ins.; weight, 55 lbs. **Price \$25.27**

Fits Maxwell, Dort and Ford.

We can also furnish special batteries for any make of car at proportionately low prices.

Guarantee No. \_\_\_\_\_



Date \_\_\_\_\_

## Guarantee

The C. A. H. Battery Sales Company hereby guarantees C. A. H. Battery No. \_\_\_\_\_ Type \_\_\_\_\_ against any defects, damage or injury whatever, except recharging, and agrees to replace the battery with another one of the same size and capacity, free of charge, should same become defective within twelve (12) months from above date, provided battery is returned to the company, transportation charges prepaid.

The C. A. H. Battery Sales Company, hereby agrees to refund the full purchase price of the C. A. H. Battery covered by this guarantee providing the purchaser returns same, transportation charges prepaid to the company, not later than fifteen (15) days from above date.

All batteries must be sent to the company for replacement and all matters connected therewith handled by them.

C. A. H. BATTERY SALES COMPANY,

Per \_\_\_\_\_

"What is it, son?" he demanded  
 gently as Bryce came up the low steps.  
 George, choke that contraption off."  
 (Continued next week)



GRAND RAPIDS  
**J. FLOYD IRISH**  
 SEC'Y AND MANAGING UNDERWRITER  
 PENINSULAR FIRE INS. CO.

**COLON C. LILLIE**  
 PRESIDENT

BAY CITY  
**HARMON J. WELLS**  
 SEC'Y AND GENERAL MANAGER  
 PENINSULAR CASUALTY INS. CO.

**MORTGAGE LOAN DEPARTMENT**  
 DETROIT  
**COMFORT A. TYLER, Manager**

## The Peninsular Casualty Insurance Company

### The Peninsular Fire Writes:

Fire, Hail, Tornado, Automobile, Tractors, etc.

Farm buildings and the farmers' household goods are invariably under-insured.

The Peninsular Fire rates farm property according to location of buildings and fire preventative construction—no other company does.

Combined fire and tornado policies will save you money.

Immense amounts of money are lost every year by hail storms. Save this with a policy in the Peninsular.

The farm Tractors as well as the Automobiles should be covered by a Peninsular Policy.

Is the new name given to the Michigan Live Stock Insurance Company. The new name makes it a more fitting running mate for the *Peninsular Fire Insurance Company*. Michigan's Two Peninsulars practically under one management can write any line of insurance except life that the farmer may desire.

### The Peninsular Casualty Writes:

Health and Accident, Employees' Liability, Fidelity, Bonding, Live Stock, etc.

Special five year Farmers' policies insure the farmer against loss of time resulting from sickness or accident.

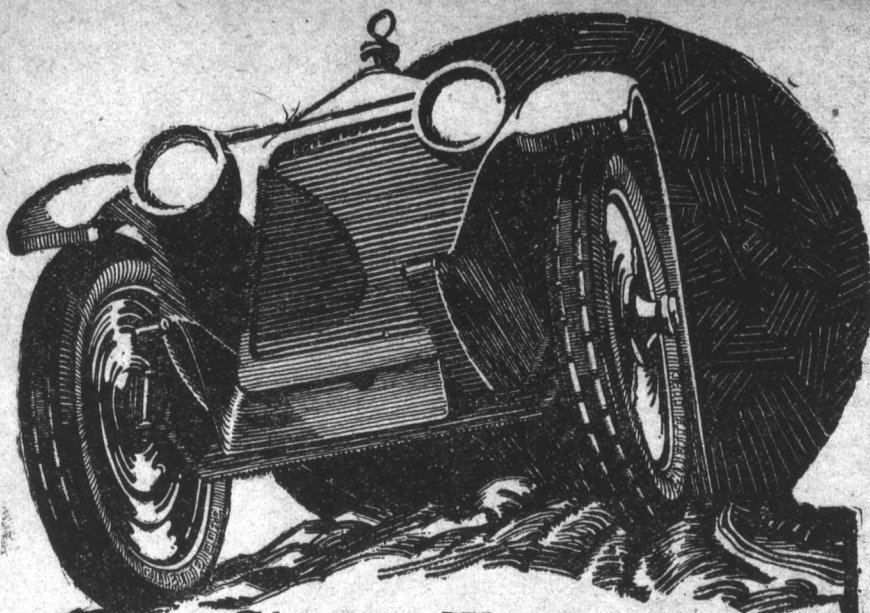
### Employers' Liability Insurance

(Workmen's Compensation)

protects the farmer from liability caused by accident or death of his hired help.

Many farm organizations require their officers to be bonded, also County and Township officials, etc. The Peninsular Casualty writes all kinds of fidelity bonds. Give us your business.

Insure your farm animals—horses, cattle, sheep and swine against death from accident or disease.



### Greatest Worth— Proved by Greatest Growth

THE second year sale of Gillette Tires was greater than the second year sale of any other tire ever placed on the market. They render more service—give greatest mileage at least cost. That is the reason.

This greatest of mileage value is gained through might derived from the perfected Gillette Chilled Rubber Process, which toughens Rubber as iron is toughened when changed to steel, prevents tread and fabric separation—reduces sand blisters and blowouts—increases resistance—multiplies endurance—makes rubber heat-proof and cold-proof, resulting in the most serviceable tire for any motoring service on any machine. Cord and non-skid. Put one or a full set on your car. Lower tire costs. Get rid of tire cares. If there is no Gillette dealer in your town write our General Sales Office.

Gillette Rubber Company, Factory, Eau Claire, Wisconsin  
General Sales Office, 1834 Broadway, New York

# Gillette

TIRES A BEAR FOR WEAR TUBES

### World's Best Roofing

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"Reo" Cluster Metal Shingles, V-Crimp, Corrugated, Standing Seam, Painted or Galvanized Roofings, Sidings, Wallboard, Paints, etc., direct to you at Rock-Bottom Factory Prices. Positively greatest offer ever made.

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cost less; outlast three ordinary roofs. No painting or repairs. Guaranteed rot, fire, rust, lightning proof.

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### Special LOW Price—

Write me immediately! I am ready to make you the lowest price offer ever made on a sanitary, scientifically designed, handsomely constructed indoor chemical closet. Write right now and learn WHY I can beat all price competition and get a

#### Detroit Indoor CLOSET

ON 30 DAYS FREE Trial

Greatest farm and town-home convenience ever devised. Insures complete privacy. Comfort winter and summer—positively guaranteed. If not completely satisfied return it and I will pay charges both ways.

Albert Coleman, Pres.  
DETROIT INCUBATOR CO.  
Dept. 103 Detroit, Mich.



### 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.

**POTATO BAGS** Sound and free from holes. Sold direct to growers at wholesale prices. WRITE LINCOLN BAG CO., Dept. D, Springfield, Ill.

"I Saved  
\$95.00  
With You  
Folks"

—"and I am entirely satisfied," says Jos. L. Rudolph, Duffy Maw, Pa., one of the thousands of owners of Kalamazoo Pipeless Furnaces. WRITE FOR OUR NEW CATALOG See what you can save. Get a quality furnace for less than a good stove costs. Easy to install. Quick shipment. We pay freight. Cash or credit. MAIL A POSTAL TODAY. Also get offer on stoves, cream separators, indoor closets, etc. Ask for Catalog No. 909

Kalamazoo Stove Co. Manufacturers Kalamazoo, Mich.  
Kalamazoo Direct to You

### The PERFECT CORN HARVESTER

Sold Direct \$23.50 JUST THE THING FOR SHOCK or SILO CUTTING



Works in any kind of soil. Cuts stalks, doesn't pull like other cutters. Absolutely no danger. Cuts Four to Seven Acres a day with one man and one horse. Here is what one farmer says:

Dear Sirs:—In reply to your letter will say that the machine can't be beat. I do not know how many shocks I cut, as I went so fast I lost count. Yours truly, T. C. HARTUNG, Springport, Mich.

**SOLD DIRECT TO THE FARMER** Send for booklet and circulars telling all about this labor-saving machine; also testimonials of many users. LOVE MANUFACTURING COMPANY Dept. 4 Lincoln, Illinois

## Our Boys' and Girls' Page

# Boys' and Girls' Books

Growing Stronger by the Things We Read—Uncle Ed.

GO into the room of a boy or girl "he is going to preach us a sermon on and you can pretty nearly tell the value of the Bible as literature." whether you would want to be But you will be mistaken. No such very intimate with them, just by looking at the books and the papers you purpose is in my mind; but this I am sure you will let me say; and that is, see there. In these days you would you may read books and papers by the ton and if you leave out this one book, not visit many young folks that you you have left out the book that counts did not find some sort of reading matter on the table, or perhaps on the floor. for most in the building of character. bed, or scattered about on the floor. No helpful book was ever written, none ever will be published that is not based upon the Bible.

How would you like others to judge of your character in this way? What would be the kind of books and papers one would find in your room were he to respond to an invitation to visit you? This is so important a matter that it is well worth while for us to think about it a few minutes.

#### Life in What We Read.

Have you not often wondered how it is that right out of the same spot of ground, roses and thistles will grow? One flower with the sweetest perfume will lift up its head out of the earth, while close beside it another plant that smells so disagreeable that you cannot bear to hold it to your nose will come up and grow luxuriantly. And if you think of it, you know that the secret of it is in what the roses and the vile-smelling plants gather up from earth and sunshine and dew and rain.

It is quite like that with you and me. The books we read and the papers and magazines on our tables put something into our lives. Will we gather up from our books the things that will help us to be good and strong and pure and true? Or will we be compelled some day to admit that our thoughts have been tinged with the bad by what we have read? Thoughts make life. Good or bad literature makes or mars the wonderful thing we call the mind.

#### What Do You Long To Be?

Stop just here and ask yourself, "What do I want to do and to be most of all?" I am sure not one of us but has some idea of the kind of man or woman he or she would like to be. Not one of us, I know, would deliberately say, "I am going to be mean and unkind and selfish." We would be indignant if anyone should even suggest that this is the thing we are planning to do and to be.

And so we need to have very clear ideas as to our future lives, and having decided just what we would like most to be, we are to bend every effort in the direction of building character to correspond with our ideal.

#### The Foundation Book.

"Now," you will not say, I am sure,

Do you think as highly of the Bible as you ought? Business men will tell you that the need of the world today is for living that is based on the Bible. They know that men and women who take this Book for their guide will not go far astray, but they will win the best there is in life.

#### A Voice that Should be Heard.

On the table before me as I write to the boys and girls of the Michigan Farmer whom I have come to love very dearly, there now lies a copy of a paper published at Washington, called "The United States Bulletin." On the first page of this paper every week is this line printed: "Presenting such news as is necessary to keep business men properly informed on current events." By business men, then, and for business men this paper is published every week. In the issue for June 28, 1920, I find this paragraph:

"We do not attempt to say whether the church people of this country should vote for the republican or the democratic candidate in November; but we do say that all such men, and women where they can vote, should get down on their knees and ask God for guidance in the casting of the ballot. We believe that this ballot should be cast for the party standing for the most Christian principles."

This is the strongest kind of argument that could possibly be used on behalf of the living taught by the Bible.

#### The Thing that Will Follow.

Taking it for granted that you do love the Bible best of all books, there is little danger that you will not love other books and papers that help in building Christian character. The boy who goes away from home with a copy of the Bible in his trunk is not very likely to put in with it any book that he would be ashamed to bring out and show the best friend he has in the world; and surely no girl would be seen with a bad book in her room under

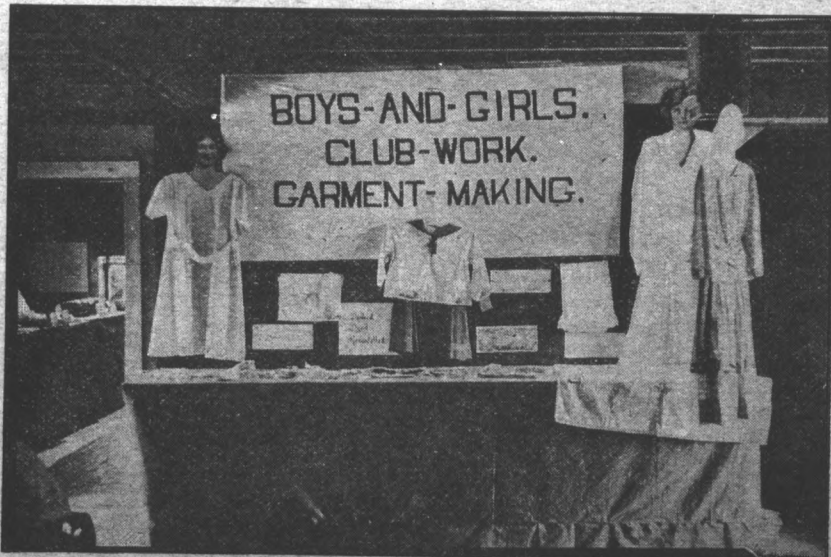


Exhibit by Girl Club Members at Recent Upper Peninsula Round-up.

any circumstances if the Bible is the book she prizes most highly.

So while a great many articles have been written, giving lists of books the young person should read, that will not be my purpose. Just read the very best books you can find, books that those who love you most and long most sincerely for your best good tell you are most helpful.

#### How Much Shall I Read?

There is not much danger in our times that you will read too much. The great thing is to read carefully and thoughtfully, trying to understand every sentence. If you see that you are getting so tired that thoughts slip through your mind without leaving any impression, stop and do something else. One book read and thoroughly mastered is better than a hundred lightly skimmed over.

It is fine to begin early to save good books. If you cannot buy a costly bookcase, make you one of boards, cover it over with pretty paper and set it up in the best place in your room. You will love it more and more the more books you get.

#### FIFTEEN TEAMS ENTER JUDGING CONTESTS, NATIONAL DAIRY SHOW.

AS the closing day for entries for state teams of boys and girls for junior judging contests rolls around, entries from fifteen states are filed with the show management, and three or four other states are asking for a few days' grace as they need more time to make arrangements to send a team before making entry. Teams are entered so far from the following states: Delaware, Idaho, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Ohio, Pennsylvania and South Dakota.

The dairy show management has made hotel reservations for forty-five boys and girls who will be guests of the show, at the Y. M. C. A. Hotel and the Y. W. C. A. Hotel, respectively, and if any of the parents or friends of the boys or girls are coming along, reservations can be made for them. These hotels are as comfortable as any in town, so far as comforts go, and some of the luxuries may be found at both. They are both scrupulously clean, central of location, and handy for elevated and surface cars to the show buildings. The boys and girls will be looked after in every respect.

The National Dairy Show is the leading agricultural and industrial fair in America, and is filled with everything a dairyman should be kept in constant touch with.

The boys and girls fortunate enough to be sent to this show's contests will derive a benefit that will be life-lasting, and will get inspiration that will be bound to have an influence in the shaping of a successful career.

The men of vision in the several states who are making it possible that these boys and girls can participate in this wonderful event in their young lives, and the parents and the relatives of the children can all well afford to come to the show to see just what the whole show means to the dairy industry, and perhaps get as much out of it as the young people.

The show dates are October 7-16, and the big day for the boys and girls is Friday, October 8. Sunday, October 10 they will see some of Chicago's big industries, and hear men of national standing speak on religious and agricultural topics.

With plenty of flowers to be had for the picking, it's well to remember that many a hospital shut-in would be grateful for the dash of color posies would bring to the bedside.

Burlap sacks represent real money these days. Those with small holes or rips are well worth mending.



Unhitching the horses by the light of a Western Electric Lamp

**N**OT being able to get any steady help, I have been doing most of my work myself. It worried me to think that every hour I spent milking cows, turning a grindstone or chopping wood was just so much time taken away from necessary work in the fields.

"Last spring I became interested in the question of a farm plant. But I delayed buying one, because those I first saw were not much more than lighting plants. They didn't show up well in a power test for heavy work."

"Now my idea of a piece of farm machinery is that it must be useful first of all."

#### An outfit that does a man's work

"I kept on looking till I found the plant that came nearest to satisfying my need for power — A Western Electric Power and Light Outfit. I'm not saying that this outfit can mow the hay or do any plowing. But it certainly is do-



Carry the motor right to the job you want done

ing some real, honest-to-goodness work for me, saving time and labor. "In the first place the Western Electric Outfit has an engine that can operate pretty near all the machinery on the average farm. It runs my fanning-mill, feed-mixer and milking machine."

"Then with the generator and batteries in action—or the batteries alone—I let electricity milk the cows. The utility motor, which I can carry around and connect to any lamp socket, is mighty handy for such jobs as running the churn or

the grindstone, or in fact, turning any machine I used to turn by hand."

"All this means time saved—and time is money when a man is in the middle of his planting or harvesting."

#### Long life to your battery

You may be interested to know that the engine to which

## There was once a man called "farmhand"

"If farmhands grow much scarcer, we will soon forget what the word means. Help is certainly hard to get. But I have found help in another form—an electric power and light outfit. I want to tell you what these plants can do for you, and some of the things they can't do."

*H. Bowman*

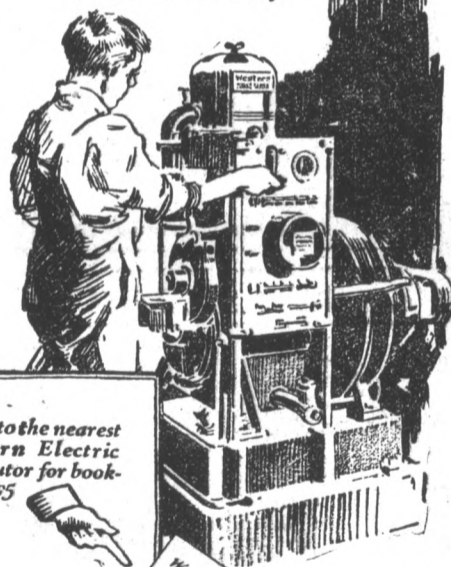
Editor's Note: Mr. Bowman's farm is located near Ames, Oklahoma.

Mr. Bowman refers is of the dependable valve-in-head, air-cooled type, burning gasoline or kerosene.

The battery lasts long because of the famous "tapering charge", a Western Electric feature. An automatic control very gradually decreases the rate of flow as the battery fills, till the current stops gently by itself. This takes all strain off the battery.

A postcard for booklet MF5 will bring you more facts about the powerful Western Electric Outfit. Write to the distributor nearest you.

A 12-year-old boy can operate the Western Electric Outfit



Write to the nearest Western Electric distributor for booklet MF5

Western Electric distributors in your neighborhood:

Clayton Gibson, Tekonsha, Mich.  
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## Western Electric Power & Light

Makes the battery last longer

## SPECIAL SILO OFFER

WRITE FOR IT  
GOOD ONLY THIRTY DAYS

Save that corn crop. Put it into a Saginaw Silo. We can make immediate shipments. Act Quick. Write us today.

**McCLURE CO., SAGINAW, MICH.**

Used Fordson Tractor, in good condition, for sale. TOM KAIN, Coral, Mich.

GREATEST HOG FEED on the market. Broken Ice Cream Cones at \$50 per ton f.o.b. Detroit. THE ROYAL CONE COMPANY, 535-43 Franklin St., Detroit, Mich.

Underwood Typewriter Co.

Can best repair the machine it made. It can also rent you a better

#### UNDERWOOD

Call up the local office of the Underwood Typewriter Company when you want to rent an Underwood or have one repaired.

UNDERWOOD TYPEWRITER CO., INC.  
Sweeney-Huston Bldg.  
DETROIT, MICH.

**WANTED** Married man to work 15 acre dairy farm, close to Detroit, state age and qualifications. Box 7104, care of Michigan Farmer, Detroit, Mich.

## COLGATE'S RIBBON DENTAL CREAM



### At Bedtime

**W**HEN you go to bed with teeth unbrushed, you give germs an eight-hour start on their work of destruction.

Those teeth enemies are most active while you sleep, because they can work undisturbed between the teeth where particles of food may remain.

So clean your teeth with Colgate's Ribbon Dental Cream every night. Use Colgate's every morning, too—safe, sane and deliciously flavored.

*Colgate's is Recommended by More Dentists Than Any Other Dentifrice.*

*Colgate's is sold everywhere—or send 2c for generous trial tube*

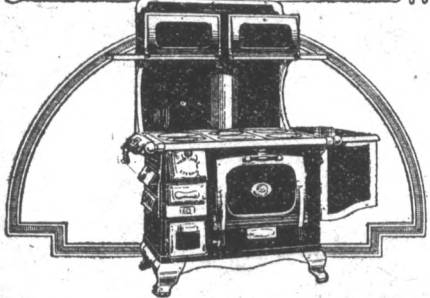
COLGATE & CO.

Dept. 44

199 Fulton Street New York



### The Range Eternal



**A**LL good things are found by comparison. And comparison with other kitchen ranges will prove to you why we suggest that you do not buy any range until you know—the Range Eternal.

But—so many farsighted and economical women have been buying this one real kitchen service range that—

### You may not be able to get one just now

However—the Range Eternal dealer near you may have a range or two on hand. If you can find one—buy it. You'll certainly know a new kitchen joy with this kitchen masterpiece in your home. If you can't get one now—take our advice and WAIT—you will regret it if you don't.

### All Good Things Are Worth Waiting For

Our immense factory facilities are running to capacity to produce Range Eternals. And as we are rapidly increasing our production—ALL dealers' stocks should be adequate in the near future.

You may not have to wait very long for a Range Eternal. But in the meanwhile—get along the best you can with your old range.

**Engman-Matthews Range Co.**  
South Bend Indiana

Two Generations of Malleable Range Builders

## Woman's Interests

### What is Freedom?



**I** SUPPOSE a great many tired women will read this paper this week. I can see them now, countless farm wives dropping down on the couch just after the mid-day meal, and picking up the Michigan Farmer for a few minutes. Many of them will be tired out by hard work, but many more will be tired from worry and thinking more than by the real labor.

I suppose that doesn't sound nice, when we all know that the farm women in America work harder today than any other class, not even excepting the few who still go out by the day in cities to clean and wash. But just the same, a great deal of the tiredness comes from the state of mind. You can prove it to yourself.

Does the thing you like to do tire you as much as the task you absolutely hate? It may involve more actual muscular work, but don't you get through the job feeling fresher than when you finish the one you dislike? Of course you do.

There's dusting. Of all the despicable tasks, that's the limit for this housekeeper. I hate it above all things on earth, and always hunt up everything else I can think of to do first, hoping it will be so late when I'm through with everything else, that I won't have time to dust till next day.

I can—with the aid of an electric machine—do the washing for a family of six, three children, and four beds included, and not feel so tired as I do after I've dusted the living-room.

Why? Because I like to wash. I'm cheerful and contented while I'm at that job. But I hate dusting, and every whisk I give with the dust cloth is a protest of rebellion against a world that made dusting fashionable. When I finish I'm disgusted and cross and tired out.

You see it is largely a state of mind. If we could only keep cheerful about

all our tasks, and jolly ourselves into thinking we were having a good time, we'd keep lots fresher. Of course, there is no end to the things a woman has to do, especially a farm woman. But nine times out of ten it isn't the things we do, but the ninety-and-nine we are thinking we have to do that tire us.

One job at a time, and the rest forgotten. That is the best rule a worrying housekeeper can make. You don't have to make the beds until the dishes are washed, so why keep thinking about how they are waiting? And while you are out picking the fruit to can, why not enjoy the fresh air and the bird song, instead of keeping in a stew about the bread rising in the house, and the cans that must be carried up out of the cellar? If you could educate your mind to work in that way, you'd add no end of enjoyment to your life.

There is a great deal of dissatisfaction among womankind today. Wom-

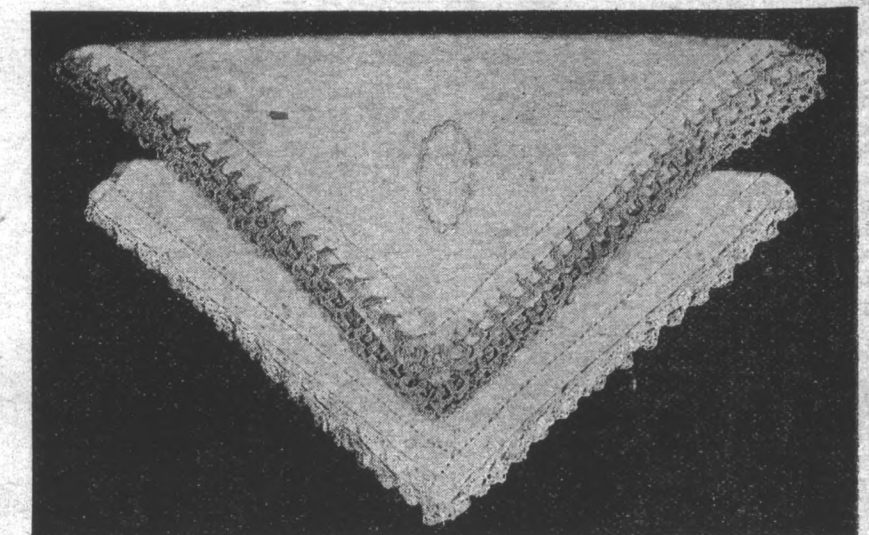
## Dainty Borders for Everyday Handkerchiefs

**T**HE plainest of handkerchiefs can be made pretty, at very little expenditure of time and money, by adding a crocheted edge in white or one of the pastel colors. The handkerchiefs here shown were worked with the No. 70 tatting thread, and are very simple and easy to do.

No. 1 has a border of half-stitch done in a delicate pink thread with a fine needle, No. 11 or 12. The thread is fastened in the corner of the handkerchief and the border worked right on it as follows:

Ch 6, \* join with sc into edge of handkerchief about a quarter of an inch from where ch begins. Turn 5 sc into 6 ch turn, 6 ch, repeat from star all the way around handkerchief, making the holes a little closer together in rounding the corners. Then go all around the edge, making 5 sc into each mesh or hole, with 4 ch between each mesh. This completes the pattern.

No. 2 is also crocheted right on the handkerchief, with white thread. Begin in the corner with \* 4 ch. In the second ch from needle make 1 sc, in the third ch, 1 dc (thread over once), and in the fourth ch, 1 tr, (thread over twice). Join into edge of handker-



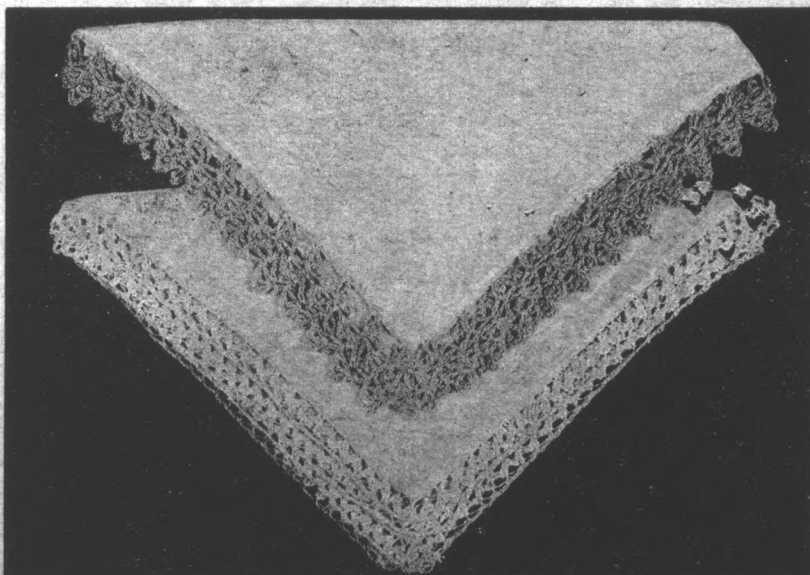
Nos. 1 and 2 Are Worked Right on the Handkerchiefs.

chief about a quarter of an inch from beginning of ch, repeat from \* all around, making the corner points a little closer together.

No. 3 is a variation of the old-fashioned mile-a-minute crochet. It is work-

ed in lavender thread. Ch 5, \* dc into first ch, ch 2, dc into first ch, ch 2 repeat from \* till there are four dc in the ch with 2 ch between each. Ch 5 turn. Make 4 dc with 2 ch between each into first hole from needle, instead of into the center hole as in mile-a-minute, ch 5, turn and repeat till the crochet is long enough to go around the handkerchief, allowing for extra fullness at the corners. Then make the top by ch 5, sc into 5 ch of lace, all the way along, and sew this top to the handkerchief.

No. 4 is white double hair pin work, with a finish of blue chain, and a top of white chain. The thread is tied in a loop round one prong of a medium sized hairpin. The thread is passed around the other prong, and pulled through the loop on the first prong in 1 sc. Make two more sc into the same loop. Pass thread around prong and make three sc in loop made by passing thread around first time. When the pin gets full of loops, pull the work off and insert prongs in the last two loops. Continue till there is enough to go around the handkerchief. Finish outer edge with 4 ch in blue between each loop and top with 3 ch in white, between each loop. HELEN COMBES



Nos. 3 and 4 Are Adaptions of Simple Stitches.

en—mothers—are pining to get away from home duties and try their fortunes in the world. And writers who should know better are doing their bit to encourage the unrest. That unrest is simply a state of mind, too, and the dissatisfied home-makers would be equally dissatisfied in an outside job. They are pining for freedom, and they think they'll get it by hiring themselves out to work for someone else. Why, who has more freedom than the woman at home? She has her duties to her family, but what adult worth while would want to be without some duty? The mother in the home is freer than any other woman. She is giving orders, not taking them, while it is only the exceptional woman in business who rises to a place where she has people under her, and that takes years of time. The great mass of women workers outside their own homes are far from being free. They are slaves to the fear of losing their job, and under orders from several "higher ups." And they're a long way from being freed from drudgery. Every office has its tiresome tasks, and the woman draws them every time.

Freedom is largely a state of mind, anyway. You can be a slave to your job, or make it your servant, just as you like. And it doesn't matter whether the job is running a farm kitchen or running the ship of state.

DEBORAH.

#### IN CLOVERLAND.

WE are apt to think of the northern part of Michigan as a mining section, and to claim that the agricultural part of it is confined to the lower peninsula. The county agents and home demonstration agents can tell a different story. Take Gogebic county alone; there are five hundred farmers on the mailing list on whom County Agent C. E. Gunderson can rely to want the latest and best methods in farming, and whose wives are just as anxious to have Miss Sylvia Richardson, the home demonstration agent, give them the best thought on nutrition and clothing, health and civics. And the women aren't a bit averse to having the latest things in fashions or the newest stitch in fancy work.

They are doing things in Gogebic county. For one thing they have just employed a county veterinarian, the first county in the state to take this step. They have also organized a cow-testing association and hired a cow tester. This last was done at the recent county farmers' picnic and girls' club achievement day in Ironwood. City folks and country folks got together on this day and separated with a little better knowledge of one another's needs and ideals. The Commercial Club of Ironwood gave the prizes to the garment clubs, which Miss Richardson had been directing throughout the year. There was community singing and folk dancing, songs and drills by the different girls' clubs, and then a speech and presentation of prizes by E. R. Oxnam, secretary of the Ironwood Chamber of Commerce.

After this the men and boys and the women and girls separated into two groups. Miss Aurelia Potts, in charge of the extension work in the northern peninsula gave a cooking demonstration and instructions for drying fruit and vegetables to the women; Miss Richardson demonstrated the fireless cooker; certificates of achievement were given the garment club members, and there was a mock track meet and games.

County Agent Gunderson addressed the men, and J. A. Waldron, of the agricultural college dairy department, gave an address and a stock judging demonstration. John Anderson and Carl Silberg had a program for the boys which included all sorts of athletic matches.



# Lily White

"The Flour the Best Cooks Use"

## Is Guaranteed to Please

Three generations of Michigan women have used our flour with success for all the requirements of home baking. In all these years we have guaranteed it to be not only a good flour but the best they ever used.

We back LILY WHITE without reservation.

It is a flour milled from choicest selection of soft and hard wheat grown in America. The soft wheat improves the flavor and color. It insures the baking of a good looking loaf of bread. The flour is correctly balanced to make as good bread as it does biscuits and pastry. There is just enough hard wheat in LILY WHITE to make it the ideal all-around flour.

After being cleaned four times it is scoured three times, then actually washed, so that every bit of dirt is removed from the kernels of wheat.

It has absolute uniformity of granulation, superfine texture and color.

Everything baked from LILY WHITE, an all-around flour, has unexcelled flavor, is light, tender, good looking, delicious tasting.

Make your next sack of flour LILY WHITE—and remember our guarantee that it must give you complete satisfaction.

Ask for it at your dealer's.

VALLEY CITY MILLING CO.

GRAND RAPIDS, MICHIGAN

"Millers for Sixty Years"

## The Modern Table Drink

A combination of good flavor, economy, efficiency and health satisfaction

# INSTANT POSTUM

This pure and wholesome beverage contains none of coffee's harmful ingredients. Especially valuable in families with children.

Sold by all Grocers

Made by Postum Cereal Co., Inc., Battle Creek, Mich.

## GENUINE ASPIRIN



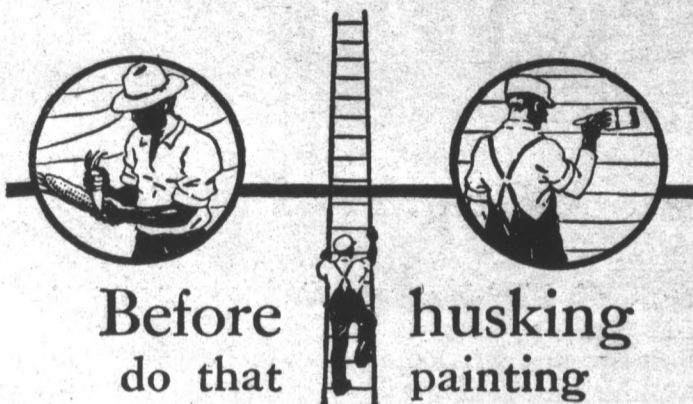
Name "Bayer" identifies genuine Aspirin introduced to physicians in 1900. Insist on unbroken packages of

BAYER-TABLETS of ASPIRIN

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

Please Mention The Michigan Farmer When Writing to Advertisers

# Lowe's



By that painting, we mean any painting that needs to be done. When it gets to be this time of year most of us kind of like to put off things until next Spring. If you do that with your painting, it's going to cost you more to paint, just as sure as corn grows on a cob. Cost more, because you will have to use more paint; and because paint itself may then be costing more.

If you can't get the time this Fall to do your painting, then

be wise enough to buy the paint at once, that you will need for next Spring.

And while you are thinking of paint, drop us a postal for a valuable piece of advice called—"Figure Your Paint Costs with a Brush—Not a Pencil." It will show you how to save money on both your paint and your painting.

Remember that Lowe Brothers' Barn Paint is always sold by the one best dealer in each town.

The Lowe Brothers Company

499 EAST THIRD STREET, DAYTON, OHIO

Boston New York Jersey City Chicago Atlanta Kansas City Minneapolis Toronto

## Paints

### POULTRY

#### PULLETS

We have a supply of Pullets that will interest you and that will give winter eggs to add to your profits. 8 Weeks Old Leghorns

There are 500 S. O. White Leghorns; also 75 8 weeks old Anconas.

1000 Yearling Pullets  
White and Brown Leghorns, now laying; Anconas, Minorcas, Rocks, Reds and Wyandottes. Let us tell you what we have.

Cockerels—English White Leghorns only; no others.  
STATE FARMS ASSOCIATION,  
Kalamazoo, Mich.

#### BARRED ROCKS

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

**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.

#### COCKERELS

Improve your next year flock with Papes Triumph mating strain S. C. Black Minorcas Cockerels, price reasonable. Mrs. W. H. Morrison, R. 3, Jonesville, Mich.

Pullets and cockerels. From thorough-bred Baron White Leghorns the type that are bound to make good producers. Raised on free range. Every bird guaranteed and shipped on approval. Send for prices and catalog. A few Barred Rock Pullets. Brummers Poultry Farm, Holland, Mich.

**BABY CHICKS** of superior quality from record laying purebred stock. All varieties. 12 cents each up. Postpaid. Live arrival guaranteed. Guaranteed none better. We give quickest delivery. Catalog free. SUPERIOR O.K. HATCHERY, Clinton, Mo.

#### Whittaker's Red Cockerels

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

**Barred Rocks** egg contest winners, eggs from strain with records to 230 a year. \$2.00 per setting prepaid by P. P. Circular free. FRED ASTLING, Constantine, Mich.

**Chicks,** Leghorns, Minorcas, Spanish, Houdans, Cam-pines, Reds, Rocks, Orpingtons, Brahmas, Wyandottes. Tyrone Poultry Farm, Fenton, Mich.

**FOR SALE** S. C. White Leghorn cockerels from Ferris 230-264 egg strain hatched in April and May \$2.75 each. SAM HILL, Box 142, Trout Creek, Mich.

**Fowler's Buff Rocks.** We are now booking orders for eggs. A few choice cockerels left. R. B. FOWLER, Hartford, Mich.

**LOOK! BABY CHICKS \$14 A 100 UP!**

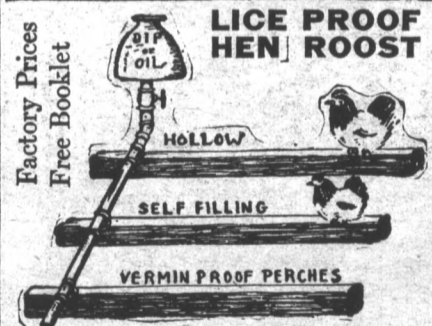
By insured parcel post, postage paid. 40 breeds chicks. 4 breeds ducks. Aug. and Sept. chicks for February and March layers. Catalog free, stamps appreciated. NABOB HATCHERIES, GAMBIER, OHIO

### ABSORBINE

TRADE MARK REG. U.S. PAT. OFF.

Reduces Strained, Puffy Ankles, Lymphangitis, Poll Evil, Fistula, Boils, Swellings; Stops Lameness and allays pain. Heals Sores, Cuts, Bruises, Boot Chafes. It is a SAFE ANTISEPTIC AND GERMICIDE

Does not blister or remove the hair and horse can be worked. Pleasant to use. \$2.50 a bottle, delivered. Describe your case for special instructions and Book 5 R free. ABSORBINE, JR., antiseptic liniment for mankind, reduces Strains, Painful, Knotted, Swollen Veins. Concentrated—only a few drops required at an application. Price \$1.25 per bottle at dealers or delivered. W. F. YOUNG, INC., 268 Temple St., Springfield, Mass.



The lice and mite Proof Roost that so many hundreds of poultry people are using; prices and poultry booklet Free. Agents Wanted. ALLIUM VERMIN PROOF PERCH CO., Dexter, Michigan

**R. C. Brown Leghorn C'h'rls**  
\$1.00 each. White Pekin ducks \$2.00 each. Mrs. Claudia Betts, Hillsdale, Mich.

Silver Laced Golden and White Wyandotte eggs from best quality only \$1.75 per 15, \$3.25 per 30 by prepaid parcels post. O. W. Browning, R. 2, Portland, Mich.

**S. C. W. Leghorns** Large stock, great layers. Choice hens. Some pullets. Very reasonable. V. A. MORSE, Ionia, Mich.

**S. C. White Leghorns.** Ferris 264 egg strain. Cocks that linger around for three or four years without paying their board. Alvah Stegenga, Portland, 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.

#### Rhode Island Whites

Are the best all purpose birds being year round layers. Egg and chicks and a few good males. H. H. JUMP, Jackson, Michigan.

## September Poultry Duties

FOR two weeks we were out of oyster shells as none were for sale in the community. Then the Farmers' Cooperative Elevator Company received a shipment and sold them at \$1.25 per hundred pounds. We stocked up and the hens made up for lost time in eating shells. When shells were lacking some of the eggs produced had very thin shells and were not safe to preserve in waterglass. The strong appetite of the laying hen for oyster shells proves that they are necessary.

Next year goose eggs will be scarce and many breeders will plan on starting a flock. Now trios of geese can be purchased at moderate prices and a trio will be a sure road to the development of a nice flock of geese next year. They are grass eaters and there is a good sale for breeding stock. Farmers with waste land and a liking for geese should not neglect to own a nice pure-bred flock.

The White China geese seem to be very popular. They are not as large as Toulouse or Embden geese, but just about right for the average farm table. They seem less greasy than some of the larger breeds. A flock of White Chinas will add to the attractiveness of any farm.

When there is no time to mix a balanced ration at home it will pay to purchase the commercial egg laying mixtures. In ton lots the cost is usually less per one hundred pounds. And a good supply in the feed room takes a lot of worry out of the business of feeding poultry. If the mash hoppers are full every hen in the flock is sure of square meals that are balanced to help in the production of eggs.

The safest poultry business, however, will always be on the farm where the bulk of the feed is home-grown and home-mixed, and when the egg and broiler money arrives it does not have to be turned over to the feed dealer.

When the hens lay large double yolked eggs it is not a cause for rejoicing. The profitable hens lay eggs of a normal size and plenty of them. The large egg may simply use up the energy that might have been placed in two or three marketable eggs.

At the Beltsville, Maryland, Experiment Station, a hen called Lady Victory has produced 779 eggs in five years. In her pullet year she laid 214 eggs, which marked her as a bird worth keeping. Hens of that type will make a great change in the poultry business. If they can be developed in large number it will ease up on the necessity of replacing so many of the layers each year. Now it is an annual struggle for the poultryman to obtain plenty of thrifty pullets. The dairyman develops a herd and he has an asset for several years. But no sooner does the poultry keeper own a nice flock of hens and they are aged birds ready for the market and they must be replaced.

A Plymouth Rock or Rhode Island Red pullet does not complete her first year of egg production until about twenty months old. A hen already a year old can complete another year of egg production in one year. The first eight months are approximately the period of development and represent only expense. While the pullet may lay more eggs in her first laying year the hen does not have to be hatched and grown on expensive feed before she is ready to lay. Farm poultry keepers need more hens that are good for two and three years of profitable laying. This does not mean the kind of hens that linger around for three or four years without paying their board.

Concrete floors will be more warm and dry if a couple of inches of clean sand are placed between the floor and the straw litter. Garden loam is not a substitute for sand. The loam is soon changed to dry dust and the scratch-

ing of the hens will keep the air in the house full of dust. This is unhealthy for the birds and the poultryman who must care for them.

Poultry keepers who can attend the show at the State Fair are sure to be encouraged by the large number of fine fowls on display. It seems as if these early shows are growing better in both quality and quantity and it is a stimulation to study the different breeds and note the interest in poultry among other breeders. Sometimes the poultryman may feel alone in the business, especially if he lives on a side road and does not see other breeders often. It helps to get acquainted with other men and women who have the same problems to solve.

Sanitary poultry dishes remain in that condition because of scrubbing with hot water at frequent intervals. We find that clean corn cobs are rough enough to make fine scouring tools for gummed-up dishes. The cobs can be thrown away after the dishes are clean and they are the cheapest and most satisfactory helpers for doing such work.

It pays to have the clean litter in the poultry house before the cold rainy fall days arrive. Then the hens have a fine scratching place and do not have to be on the windy range. It helps in keeping down fall colds and the flock that goes through the unsettled fall weather in good condition is much easier to keep thrifty until spring.

The poultryman's camera can be used to advantage in selling stock. A few small photos of the prize-winning birds or high egg producers are attractive to a prospective buyer. Such photos can be made up at a moderate expense and frequently one additional order will pay for enough photos to last a year.

R. G. KIRBY.

### YOUNG TURKEY TROUBLES.

Will you kindly advise me what ails my young turkeys? I hatched fourteen out of fifteen eggs, and ten of them lived until they were nearly feathered out. They are now eight weeks old and have been allowed free range all ways after grass was dry in the morning, with very little feed, only what they picked up at night when I feed my little chicks, which consisted of cracked corn, rolled oats and a few times bread wet with water, but it did not seem to have any bad effect on them at the time. I cannot see a thing wrong with them. They are O. K. in the morning and at night the hen comes home with one missing, or else in such a weak condition that it dies before morning. I have only two left now. Have also examined for lice but cannot find any.

Mrs. H. H.

Possibly some of the young turkeys may have been taken by hawks while on the range. If they have been dragged through wet grass by the mother they may have become weak and not have strength to return at night. Young turkeys sometimes have diarrhea the same as hen chicks. It can be controlled by feeding hard-boiled eggs and stale bread sprinkled quite heavily with pepper. It can largely be prevented by using the greatest precautions to keep their food clean. The eating of spoiled fruit sometimes makes turkeys sick. Drinking unclean water is another cause of mortality. Possibly the loss of the young turkeys may be due to inbreeding or a lack of vigor in the parent stock. Bronze turkey flocks have often been improved in vigor by making crosses with wild turkeys. Farmers seem to find it more difficult to raise turkeys every year and the flocks seem to be growing more scarce. In a measure it is probably due to the fact that the birds need such a large range that it is difficult for the owner to control all the conditions on the range. It is not possible to determine from the above inquiry the many causes which may be responsible for the loss.

R. G. K.

## FARMERS' AUTO TOUR.

(Continued from page 260).

During the last week before we started on the tour to Mackinaw we refused to accept forty-seven cars of tourists who decided at the last moment to take the trip. These cars had no equipment and we wrote the owners that we could not possibly provide more sleeping accommodations. Several of these owners joined us on the way and said they would like to go on their own responsibility and would provide for themselves. They got along all right, being fortunate in securing rooms at hotels and private homes where we camped.

Each car was decorated with pennants and flags and had a windshield record giving the name of the owner, his address and names of the passengers in the car. We have not the complete list of all the tourists, as some joined at the last minute and our record is incomplete. We wish the owner of each car would write us as soon as possible, giving the names and post office address of each passenger so we can prepare a correct list of members of the new "Michigan Farmer's Automobile Tour Association."

The pictures we took have been developed and are all good ones. Many gave orders to us for certain ones and these will be mailed soon.

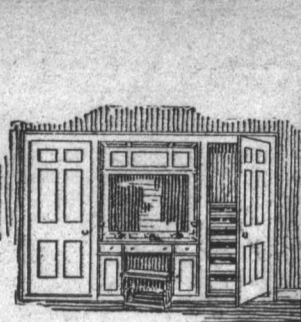
We wish to thank all the tourists for their cooperation in making the tour such a complete success. All gave us a handshake as we separated, and thanked us for the good time they had. The greatest surprise was a letter handed to us, just before we left the Soo camp, with a list of thirty-five farmers and their wives, containing a purse of \$35.00. We wish these friends to know that we fully appreciate their evidence of friendship and the present was a testimonial that the tour had been even a greater success than we anticipated. These thirty-five farmers who followed us across the straits drove nearly nine hundred miles before they got home again and they all said they had the most pleasurable trip of their lives and learned more about Michigan than they expected to before starting out from their homes.

On the west pike we had great times in camp at Grand Rapids, Manistee, Traverse City, Harbor Springs, Mackinaw City, Sault Ste. Marie and Boyne City. At each one of these places, after leaving Grand Rapids, we were met by committees of city officials, chambers of commerce, bands, and even a fire department truck at the Soo. At some places from six to twenty automobiles met us several miles out on the way and escorted us in and through the main streets and on to our camp.

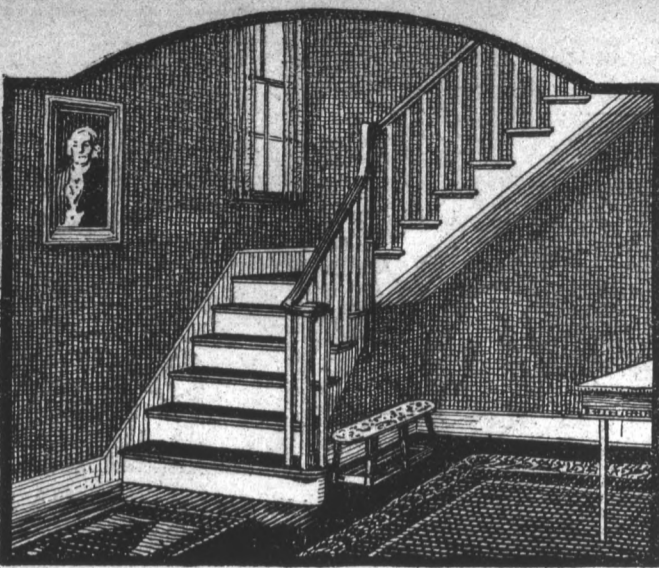
At each city we were the guests of honor and programs were carried out with considerable variety and elaborateness. The barbecue at Traverse City was a novelty. The two bands and the jackies from the Great Lakes Training Station helped the citizens entertain us at Harbor Springs for two days. At the Soo the Pomona Grange of Chippewa county gave us a picnic and fine dinner in a grove near the Soo. Band music and speeches made up the program, in which the leading business men of the Soo participated.

The tour lasted for two weeks and not a single really serious disaster occurred along the way. Mr. and Mrs. W. H. Noble, of Quincy, had a spill on the road near the Soo and received some cuts and sprains. Several of us had punctures and blowouts of tires. We cautioned repeatedly about the railroad crossings. At last we are home again safe and sound.

Next week Thursday we expect to drive our car to Detroit and camp again on the State Fair grounds in the same location as last year, in the Boys' State Fair School section. Our car will be Michigan Farmer Touring Camp Headquarters and we shall be glad to see any of "Our Folks" who come along.



Upstairs  
Downstairs  
and in



## My LADY'S Chamber

STAIRCASES in which beauty is the first consideration, for the bedrooms built-in dressing tables that are a part of the house itself, mantels that carry out the architectural type of the house—these are items of Curtis Woodwork. Like the doors we build, and the china closets, the windows, the wall paneling, the cupboards, the bookcases, and all the interior woodwork which, built into a home, make it livable and lovable, they are all part of the Curtis plan to place beautiful homes within the reach of all who would build.

For over fifty years Curtis Woodwork has been known as good woodwork—honest craftsmanship. But we began to see our business as something more than a mill making a good product. We believed we could help America toward a happier type of architectural expression.

With the cooperation of Trowbridge and Ackerman, New York architects, we are able to offer home-builders portfolios of Better Built Homes, in four different architectural types—Colonial, English, Western, and Southern. Each portfolio contains

illustrations of exteriors, interiors, and floor plans, with complete descriptions of 32 homes. These houses range from 3-room cottages to 8-room homes. Curtis Woodwork and built-in furniture for these homes was designed by the same architects that designed the houses, to insure harmony of expression.

The designs and sizes of Curtis Woodwork being standardized, the lowered cost of production has brought the price of beautiful woodwork lower than it has ever been before.

Curtis Woodwork is sold through lumber dealers. Curtis dealers have the complete catalog to show. They can obtain free for prospective builders our portfolios of "Better Built Homes." Specify whether you want Volume VI (32 homes of 3, 4, and 5 rooms); Volume VII (32 homes of 6, 7, and 8 rooms), or Volume VIII (32 houses suitable for farm use).

If there is no Curtis dealer in your town, send 25 cents with the coupon checked for the portfolio you want. (50 cents if in Canada.)



Pendroy, C-532  
A charming 5-room house of Western expression, with the same plan as the Colonial house shown here.

CURTIS SERVICE BUREAU, 4098-5098 So. Second St., Clinton, Iowa

Manufacturing and Distributing Plants at  
Oklahoma City, Okla. Detroit, Mich. Lincoln, Neb. Sioux City, Iowa  
Wausau, W. S. Topeka, Kan. Chicago, Ill. Clinton, Iowa  
Minneapolis, Minn. Dayton, Ohio

Eastern Offices at Pittsburgh, Baltimore, Akron, and New York

The makers of CURTIS Woodwork guarantee complete satisfaction to its users

"We're not satisfied unless you are."



Bradley, C-530  
This is the Colonial expression of the same plan as Pendroy, C-532.

# 1866 CURTIS WOODWORK

"The Permanent Furniture for Your Home"

CURTIS SERVICE BUREAU

4098-5098 So. Second Street, Clinton, Iowa

Enclosed find ..... cents in stamps for which please send me  
Portfolio of Better Built Homes, Vol. VI (1, 4, 5 room houses) 25c;  
Portfolio of Better Built Homes, Vol. VII (6, 7, 8 room houses) 25c;  
Portfolio of Better Built Homes, Vol. VIII (houses for farm use) 25c.  
(Please check the one you wish)

Name.....

Street or R. F. D.....

Town..... State.....

## GEHL

An Ensilage Cutter that is remarkable for its fine clean cutting, capacity, durability, safety, and light power requirements.

### Any 8-16 Tractor Runs a Gehl 17

Due to its separate control of cutter head and blower speeds the Gehl Cutter never wastes power on any silo—has six fan low speed blower, heavy all steel frame, positive safety device, and a self feeder that

### Requires No Man at the Feed Table

Here is an example of economy—a machine that not only fills your silo, but can also grind alfalfa hay—dry corn stalks, soy beans, sweet clover or any other form of dry roughage. This means a saving of from 20 per cent to 50 per cent.

Our new catalog gives complete information about Gehl Cutters and some useful ideas about conserving and getting more profits out of dry feeds. Write today.

**GEHL BROS. MFG. CO.**  
111 South Water Street  
WEST BEND, WIS.

Give us the height of your silo, size of engine and size and speed of pulley and we'll forward complete information about the right size of Gehl Cutter.



Examining the tire layers after 15,000 miles

**Tread Patented**

Center tread smooth with suction cups, to firmly grasp wet asphalt. Geared-to-the-Road side treads mesh like cogs in dirt.

**From California**

Gilman Bros., of San Jose, sold 1,200 Miller Cords in nine and a half months, have only made one adjustment. One of these tires went 53,000 miles on a heavy stage. Another 49,987. And a third 38,000 and still running.

**From Colorado**

The La Junta Motors Corporation, La Junta, report that Millers average 15,000. They have not had one adjustment in two years.

**From Florida**

W. R. Link, tire dealer, of Orlando, reports four tires going over 28,000 miles on a car owned by the Hutchins Realty Company.

**Tire Mileage Doubled**

Costs us \$150 for each added mile

Miller Tire experts, in the past five years, have doubled their average tire mileage. They have cut the cost-per-mile in two. That will save Miller users this year some \$50,000,000.

The cost of these betterments, on the Cord type alone, has been \$1,136,419. Just the laboratory and testing expense last year averaged \$10,000 monthly. These thousands of added miles have cost us about \$150 each.

**New-Grade Tires**

The result is a new-grade tire. To hundreds of thousands it has brought a new conception of good tires.

Now Miller Tires are everywhere discussed. They are used exclusively in some of the hardest services. The demand in five years has multiplied 20-fold.

**Costly Methods**

We keep 250 tires constantly running under observation. We destroy 1,000 tires yearly to learn how to improve them.

We separate tires after long, hard use to watch the effects on layers.

We spend \$1,000 daily just to watch and test tires and materials. We sign every tire, so each returned tire teaches us its lessons.

Now Millers offer mileage which a few years ago was undreamed of. And they offer treads which, by countless tests, outlast the best of others by 25%.

You owe yourself a test. Learn what this doubled mileage means on your car. Compare the Miller Tire with others. Let the figures tell you which tire to adopt.

A maker who has made good tires twice better deserves a trial from you.

**Miller Tires****CORDS****Geared-to-the-Road**

Reg. U. S. Patent Office

**FABRICS****The Supreme Attainments****THE MILLER RUBBER COMPANY, Akron, O.**

Also makers of Miller Inner Tubes, built layer-on-layer. Based on 24 years of fine-rubber experience. Red or Gray.

**BREEDERS' DIRECTORY**

Change of Copy or Cancellations must reach us Ten Days before date of publication

**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.

**WILDWOOD FARMS ORION, MICHIGAN**

W. E. SCRIPPS, Prop., Sidney Smith, Supt.

**WOODCOTE ANGUS**

Imported Herd Bulls  
ELCHO OF HARVESTOWN (45547)  
by Jason of Ballindalloch (39048)  
EDGARDO OF DALMENY (45501)  
by Escort of Harvestown (36006)

Woodcote Stock Farm, Ionia, Mich.

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

**Guernsey Bulls**

a two year old and a three year old purebred May Rose bull. Dams, advanced registry, splendid individuals, none better for herd sires. Prices \$175 and \$200 respectively to sell them at once.

**Chetwood Farm, Northville, Michigan**

Address John Stucey, Manager

**SPRING DELL FARM GUERNSEYS**

For sale: Choice of two bulls two and three years old; also bull calves three to twelve months. Registered. Splendid individuals and breeding. Prices right. WHITE BROTHERS, R. 2, Box 20, La Porte, Indiana.

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.

**For Sale:** Guernsey bulls from 3 months to 6 months old. Their sire is DOTIE'S PRINCE No. 44696; his dam has an official yearly record of 67 lbs. butter fat. L. J. BYERS, Coldwater, Mich.

**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.

**Registered Guernseys** a very fine show calf is out of a cow milking 40 lbs. a day, the price will surprise you. better get his pedigree. J. M. WILLIAMS, North Adams, Mich.

**GUERNSEY BULL CALVES** whose sire's dam made 19,480.20 milk, 909.05 fat. Their mother's sire's dam made 15,109.10 milk, 775.80 fat. T. V. HICKS, Battle Creek, Mich.

**GUERNSEYS**—REGISTERED BULL CALVES Containing blood of world champions. HICKS' GUERNSEY FARM, Saginaw, W.S. Mich

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

May Echo Sylvia Bull, calf. 2 crosses to May Echo Sylvia, and 3 crosses to King of the Pontiacs. Dam a 2 yr. old daughter of a 29 lb. cow. 6 of his nearest tested dams average 34.49 lb. of butter and 759 milk. C. H. GIDDINGS, Gobleville, Mich.

**LONG DISTANCE HOLSTEINS HERD** (Prince Ona) 236555 Five dams av. 1186 lbs. butter and 2471 lbs. milk in 1 yr. Only 1 good bull calf left, born Nov. 18th '19, dam untested, \$100. State and Federal supv.—a clean herd. A. FLEMING, Lake, Mich.

**31.06 lb. butter** 571.46 lb. milk in 7 days, is average of 9 nearest tested dams of 2 mo. old bull. Price \$150. Terms. M. L. McLAULIN, Redford, Mich.

**-WinnWood Herd- Flint Maplecrest Boy No. 166974**

Has Made Good one of his SONS will raise your herd to a higher standard and better production we have them for sale at moderate prices.

**A Few Females For Sale****—OUR JUNIOR HERD SIRE—**

Sir Ormsby Skylark Burke No. 264966 A brother to the world champion cow over all breeds.

**DUCHESSE SKYLARK ORMSBY** Michigan's best bred Ormsby bull. Better get on the list for one of his sons out of a daughter of Flint Maplecrest Boy.

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

Additional Stock Ads on Page 286

**STARTS LIVE STOCK EXCHANGE.**

THERE has been started a state live stock exchange by the Live Stock Marketing Department of the Illinois Agricultural Association that will be a medium through which feeders and breeders can purchase and sell their stock. Two lines of buying and selling in the exchange are now ready for operation. Mr. Lee Divine will handle the hog feeder buying and Mr. E. M. Clark will assist in the buying and selling of grade and purebred dairy cattle. The exchange hopes to be in a position soon to purchase feeder cattle. After these lines are well under way, it is probable that the exchange will act as a medium through which to buy and sell purebred live stock.

This exchange will operate through the eighty-seven County Farm Bureau organizations of the state, and probably similar to their present county exchanges. A monthly bulletin will be issued to all farm bureau offices containing the "for sale wants" of all the state, and it is likely that this list will be advertised. The "for sales and wants" will come to the I. A. A. office and the exchange will act as a clearing house. It is the plan to charge enough for this service to make it self-supporting.

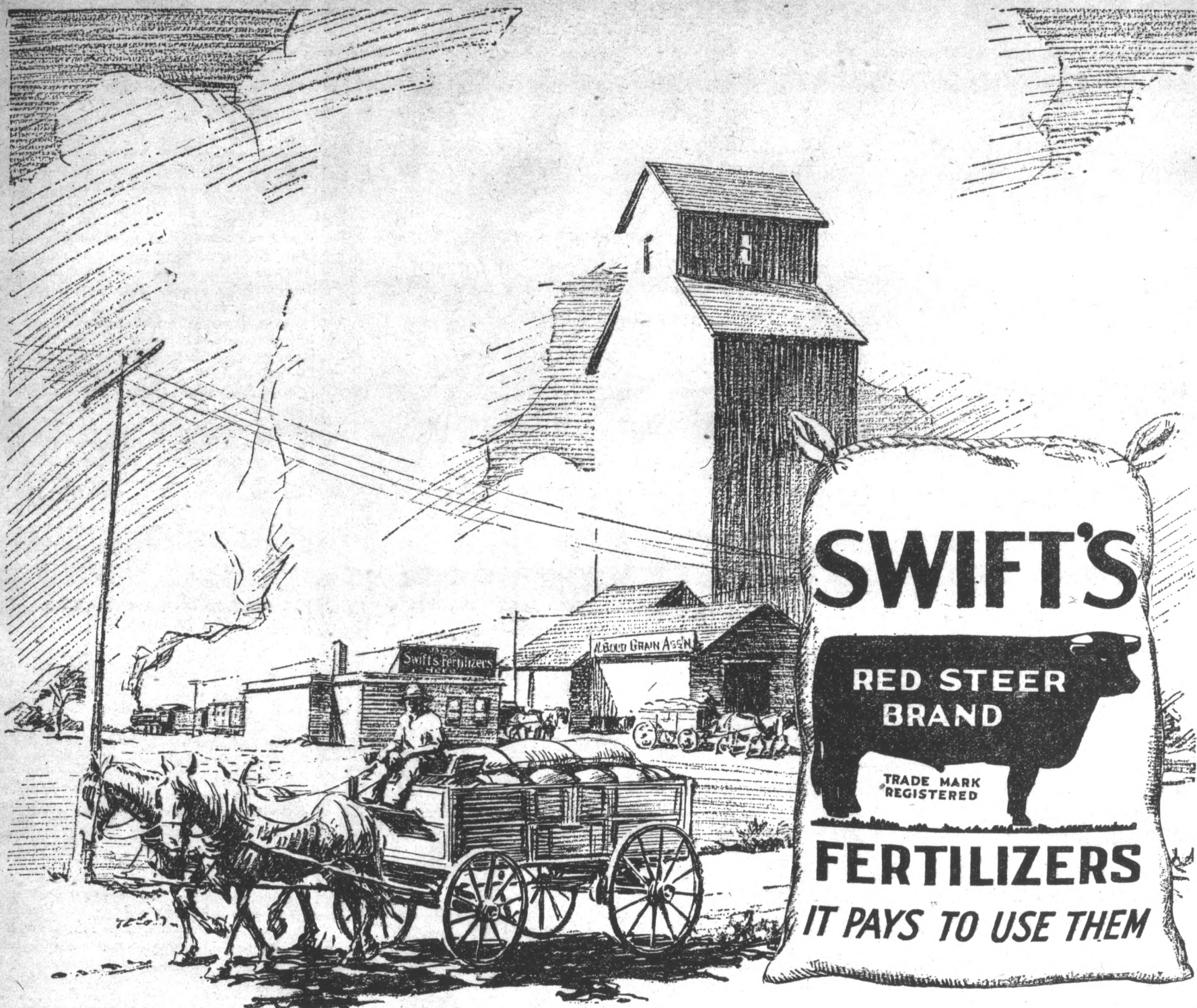
**AMERICAN FARM BUREAU EXECUTIVE MEETING.**

TWO outstanding developments of the quarterly executive committee meeting of the American Farm Bureau Federation held in Denver last week were decisions to attempt to make sure that any revision of national taxation laws, as is contemplated, does not shift a greater burden from industrial interests to the public and the creation of a traffic department. Both are subjects of vital interest to the thousands of farm bureau members of the various states.

The decision on taxation followed a review of agitation, which has been inspired by some industrial interests, for repeal of the present excess profits tax, which takes from net earnings of corporations and other businesses forty per cent of all profits in excess of twenty per cent net profit upon investment. This tax last year raised for the government almost two billion dollars. Several substitutes have been suggested but all would operate to shift this tax burden in a more or less degree to the individual consumers.

The American Farm Bureau Federation's idea is that the big tax burden of the countryside should be borne largely by the interest most able to pay and should not be paid out of the living wage which is all that the individual consumer has. It is also contended that the excess profits tax has not "crippled" business to any discernible extent and that it seems a conservative tax, when it is considered that Great Britain levies a similar tax of sixty per cent instead of forty. Prof. T. S. Adams, of Yale University, and chairman of the United States Treasury Department Advisory Board on taxation during the war, outlined the present problems of administration of national taxes.

The decision to organize a traffic department immediately was influenced largely by a comprehensive report on difficulties in the movement of farm products to market made by Clifford Thorne, of Chicago, a national authority on transportation matters. It is intended that this department keep closely informed as to car requirements of various agricultural regions, rate situations and kindred matters, and work with the different State Farm Bureaus in improvement of transportation conditions that the last few years have cost the farms of the country millions of dollars.



## There's still time to fertilize

**S**WIFT'S Red Steer Fertilizers are manufactured in 24 factories equipped with the most modern machinery.

One or more of these factories is located at an advantageous railroad shipping point near you—ready to give you prompt service.

If you haven't invested in Swift's Red Steer Fertilizer or if you want to make the application per acre heavier, now is the time to place your order.

Remember that one acre fertilized is generally good for more profit than two acres without fertilizer. And it's the heavy application that pays the farmer the biggest profit.

Get the most plant food for your money by buying Swift's Red Steer Fertilizers containing 14% or more plant food.

Don't wait. Place your order with our local dealer now or write our nearest sales division.

Swift & Company, Dept. 48  
Fertilizer Dept., Union Stock Yards, Chicago, Ill.

### Brands specially recommended

We recommend the brands given below as the most profitable to use under general farming conditions.

	Analysis		
	Ammonia	Phosphoric Acid	Potash
Swift's Champion Wheat and Corn Grower	2	12	2
Swift's Clay Soil Special	2	12	0
Swift's 12-2 Fertilizer	0	12	2
Swift's High Grade Acid Phosphate Fertilizer	0	16	0

**AMMONIA** gives the plant a quick start, particularly necessary when seeding is delayed to combat the fly, increases vegetative growth, and aids in stooling.

**PHOSPHORIC ACID** increases root growth, aids in stooling, plumps the berry and hastens maturity.

**POTASH** stiffens the straw and aids in starch formation.

Select from the above list the brand best suited to your requirements. Other brands on request.

**REMEMBER**—The higher the analysis, the cheaper the plant food per pound.

Swift & Company

" I T P A Y S T O U S E T H E M "



## "Here's Where I Learned How to Make My Cows Produce"

That has been the beginning of larger milk profits for thousands of dairymen—the day they learned about Larro and the Larro "more milk" guarantee. There is no chance or uncertainty when you are feeding Larro—because the Larro guarantee reproduced below means just what it says, you get more milk or you get your money back.

### A Balanced Feed—Based Upon a Knowledge of the Cow

That's why you get more milk—because Larro isn't a one-sided ration but a nutritious, balanced feed. Larro comes to you as a scientific mixture of just these ingredients—cottonseed meal, corn gluten feed, linseed oil meal, dried beet pulp, standard wheat bran, standard wheat middlings and a little salt—all compounded upon a definite knowledge of the needs of the cow.

### This "More Milk" Guarantee Has stood back of Larro for seven years

This is the same guarantee of more milk which has stood back of Larro for seven years. To the man who is not yet a Larro user it is an absolute promise of better results from his cows—to the veteran Larro user it is double assurance that Larro today is the same as it was in the beginning—that its quality will never be changed. If your local dealer does not carry Larro get in touch with us at once.

DEALERS: Ask for Proposition

The Larro-Milling Co., 513 Larro Bldg., Detroit, U.S.A.

# Larro-feed

THE READY RATION FOR DAIRY COWS



### ARE CONDENSARIES MAKING FILLED CONDENSED MILK?

Whether or not there are any real facts available to support the contention of cheese and butter manufacturers in certain sections of the country, rumors have become quite pronounced of late that certain milk condensaries are making a filled condensed milk. Those who are familiar with the agitation of several years ago when it was discovered that many manufacturers of cheese were making a filled cheese undoubtedly will understand the meaning of filled condensed milk and no further elaboration on the subject would be necessary so far as they are concerned. However, it may be well to state that a filled cheese is one made from milk wholly or partially skimmed to which is added certain foreign fats, usually of vegetable origin, thus bringing the percentage of fat content up to normal. Reports supposed to be authentic claim that in the condensaries alluded to, a practice is in vogue whereby the butterfat is removed from the milk and coconut oil is substituted. As there are laws in most states prohibiting the use of foreign fats in the manufacture of butter and cheese, the manufacturers of those products are up in arms against allowing the practice in condensaries.—L.

### POLAND CHINA BREEDERS ACTIVE.

(Continued from page 255).

In Michigan, and it is due largely to his untiring efforts that the breeders in his territory are pulling together to buy better breeding stock and build up their herds to a point where they can compete successfully with those from other states. A few men have seen the light and more must see it when they visit these sales and compare the difference in the bids for animals of the improved type and those of the "chuffy" compact type.

The Boone-Hill Company have gone in strong for the great big-boned type with four good legs and plenty of light underneath. Prominent among the firm's offerings are Bouncer Giantess, a daughter of Disher's Giant and out of Disher's Bride, a daughter of Big

## Facts in BLACK & WHITE

### Long-lived Purebred Holstein Cows

Leave out of consideration the greater direct cash return and Holsteins are still the best investment you can make. Great strength and constitutional vigor make the typical Holstein long-lived, free from disease and sure to produce many healthy calves. A thirteen-year-old Holstein owned by the Kansas Agricultural College finished a year's record of 15,773 pounds of milk and 513 pounds of butterfat. This record indicates the dollars and cents value of Holstein vitality.

Send for free Illustrated Booklets. They contain valuable information for every Dairyman.

THE HOLSTEIN-FRIESIAN ASSOCIATION  
164 Hudson Street  
Bridleboro Vermont.

### 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 39 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.

**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.

Registered Holstein cows and heifers due to freshen this fall. Some bred to a 42 lb. bull. Price \$20 to \$400 each. B. B. REAVEY, Akron, Mich.

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.

## "TOP NOTCH" HOLSTEINS

McPHERSON FARMS COMPANY  
has raised many great milk cows—

- 1 Officially Produced
- 842 lbs. milk in 7 days
- 3994 lbs. milk in 30 days
- 129 lbs. milk in 1 day
- 811 lbs. milk in 7 days
- over 10000 lbs. milk in 100 days
- 105 lbs. milk in 1 day
- 696 lbs. milk in 7 days
- 2669 lbs. milk in 30 days
- 100 lbs. milk in 1 day
- 20654 lbs. milk in 1 year
- 100 lbs. milk in 1 day
- 659 lbs. milk in 7 days
- 18675 lbs. milk in 1 year

Others under test are making large milk records. A fine lot of young bulls from 3 months to 2 years old for sale. Get a "milk" bull, and increase milk production in your herd.

Our herds are under U. S. supervision. McPHERSON FARMS CO., Howell, Mich.

## HOLSTEIN BULL CALVES FOR SALE

From dams with good records.  
BULL CALVES Sired by 45 lb. BULL.  
BULL CALVES Sired by 34 lb. BULL.  
BULL CALVES Sired by 33 lb. BULL.  
PRICES VERY REASONABLE.  
Privilege of return if not satisfied.

**A. W. COPLAND,**  
Birmingham, Michigan.  
Herd under State and Federal Supervision.

## CLUNY STOCK FARM

A Semi-Official Bred Bull to Head Your Herd

Maplecrest Application Pontiac No. 132652, heads Our Herd

His dam's record is 1344.3 lbs. butter 23,421.2 lbs. milk in 365 days, and 35,103 lbs. butter and 515'6 lbs. milk in 7 days.

One of his sons from our good record dams will carry these great blood lines into Your Herd.

For Pedigrees and Prices write to R. Bruce McPherson, Howell, Mich.

## 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.

## 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.

## Increase the Efficiency

of your  
**DAIRY HERD**

by using a

## Registered Holstein Sire

We have bulls of all ages listed at reasonable prices.

Also grade and pure-bred cows and heifers.

**Michigan Holstein-Friesian Asso.**

Old State Block,  
Lansing, Mich.

**BARGAIN PRICES** on pure bred Holstein heifers and young bulls ready for service. JOSEPH H. BREWER, Grand Rapids, Michigan

## HEREFORDS

20 Cows and Heifers of popular breeding for sale also bulls not related.

**ALLEN BROS.**

PAW PAW, MICHIGAN

**Herefords.** Just purchased 3 new herds, now have 150 head; we offer you anything desired either sex, horned or polled, any age. Priced reasonable. THE McCARTYS, Bad Axe, Mich.

**Herefords:** 4 Reg. bulls 5 to 8 mo. old. Prices reasonable for quick sale visitors welcome. Reed Schultz, R. 3, Homer, Mich.



Brood Sow Owned by Wesley Hile.

Wanderer. Another sow of approved type and proven prolificacy is Boone's Mollie Buster, a daughter of Great Big Half Ton, and out of Mollie Buster. Two of her boar pigs listed in the sale are sure to attract the attention of buyers when they enter the sales ring. A majority of the gilts offered in the sale are daughters of Monster Big Bob and C. A. King Joe. Monster Big Bob is a son of Lucken's Big Bob and out of Bob's Queen. He was bred by Linc Luckens, of Indiana, and is generally recognized as one of the best Poland China sires in Michigan. C. A. King Joe is a son of Big Joe and out of Monarchia 3. He was bred by W. B. Wallace, of Missouri. For a Junior herd sire they have The Eminent Clansman, a son of Clansman Again and out of Miss Jumbo I. All of the animals in this herd are in good breeding condition and no effort has been spared to put up individuals that will insure the success of the sale.

No city in the nation is removed from starvation more than two weeks.—Asbury F. Lever.

## LIVE STOCK COMMISSION MEN IN DILEMMA.

LIVE stock commission men find themselves placed in the proverbial position between the devil and the deep blue sea. In 1919 the legislature of Minnesota gave the state railroad warehouse commission authority to regulate the charges of live stock commission merchants. The commissioner proceeded to exercise its authority by lowering the prevailing rates. The commission men took the case to the courts, alleging that the order was invalid, first because the commission men were then under regulation by the federal government, and second because the act was unconstitutional. The court has just decided the case in favor of the live stock commission men solely on the grounds of the first objection. Now, Secretary of Agriculture Meredith has used the federal power to order the cancellation of the commission charge increases recently put into effect and to reduce the charges for handling carloads belonging to several different owners. At first these orders were fought by the commission men on the ground that they were not really under federal regulation, but the decision in the Minnesota case seems to close that avenue of escape.

It was reported late last week that an injunction had been issued at Kansas City restraining the government officials from revoking licenses of commission merchants under the secretary's order until after September 18. Such a restraining order is being sought but one of the government officials involved has just stated to the writer that he has not yet been served with the order.

The commission men who so blandly raised their charges in the face of the known losses of most live stock producers during the preceding year might have expected trouble. Commission men cannot permanently work at a loss and farmers will not object to justifiable increases, but the method of the commission men was not conciliatory, and the time chosen for the boost of about thirty-three and a third per cent in their rates was certainly most inopportune.

## WHEN A HEDGE DOES NOT PROTECT.

FARMERS are supposed to derive benefit from dealing in grain for future delivery on boards of trade and chambers of commerce through the opportunity it affords the operators of elevators, shippers, exporters and others who engage in the merchandising of grain, to hedge their purchases or sales. Supposedly, this eliminates the risks of ownership and enables the purchaser at the country loading point to pay the farmer a price nearer the central market price than he could pay if he had to assume the risk of market changes between the time of purchase and the time of arrival at the terminal.

Since trading in wheat has been resumed, the speculative interests have held such bearish views that the prices of the grain futures have been considerably below those in the cash market. The result is a widening of the spread between the farm price and the terminal market price. Farmers in the northwest who are obliged to deal through privately owned elevators are selling their wheat on the basis of a price for December delivery at Minneapolis less the freight and handling charges. The cash grain is twelve or fifteen cents higher than the December. It is doubtful if the margin would be any greater if there were no hedging facilities whatever. The alleged benefits of speculation are not evident in this instance. The opportunity to hedge may protect the elevator operator but it does not protect the farmer. Growers in the northwest may be suffering more than any others, but all farmers who are selling wheat are affected in a greater or less degree.



## Delivering full Power from Your Fordson

The supreme duty of the tractor belt for your Fordson is to deliver in the greatest degree the full power of the tractor motor to the belt machine.

A considerable wastage of power through slippage, often leads the Fordson owner to imagine his tractor is not developing its rated horse-power. But the Little Giant tractor belt, because it eliminates all this wastage, has been specially designed for the Fordson.

First, it is designed to maintain a clinging grip on the pulley, because the slip-proof belt not only prevents loss of power through slippage, but also the serious wear to the belt that slipping causes.

Second, it is built to withstand the effects of rain, snow, heat, cold and the abuse that every farm tractor belt must meet.

It is an endless canvas belt, made of four folds of a single piece of highest grade, heaviest weight canvas duck, stitched as a belt has never been stitched before, and specially treated to give increased toughness and wearability. Double stitching at the edges, an exclusive feature of this belt, eliminates edge wear.

Your Fordson dealer has a stock of Little Giant belts in three lengths—50 ft., 75 ft. and 100 ft. If you are buying a Fordson, get a Little Giant belt at the same time—if you are now a Fordson owner, insure your tractor's maximum performance on the belt by using a Little Giant.

**United States Rubber Company**

Distributed by  
S. W. RAYMOND AUTO SALES CO., Adrian, Mich.  
ADDISON FORD CO., Dearborn, Mich.  
HUBBELL AUTO CO., Saginaw, Mich.  
E. G. KINGSFORD, Iron Mountain, Mich.  
For sale by all authorized Fordson Dealers

## Auction Sale Of Holsteins

Sept. 8 1920, Sale at 1 P. M. Sharp

Segis and Pontiac Breeding

Herd headed by Almer Dunbar Segis No. 240348. Great grand son of Colantha Johanna Lad. 13 head of Reg. and grade females, 5 fresh in Aug. and Sept. George H. Landenberger, 3/4 Mile North of Williamston, Mich.

## O. I. C. SOWS FOR SALE

One of the Best Herds in Michigan

Young sows due to farrow in September. Spring boars ready for shipment. Choice individuals of BIG TYPE breeding. I ship C. O. D. pay express and register in buyer's name.

J. CARL JEWETT,

R. 5, Mason, Michigan.

## HEREFORDS

D. S. Polled Herefords

Herd headed by Renner Bullion. 815933. (18342) son of grand champion Bullion 4th.

For Sale—A few good polled and horned cows bred to this great bull. Also three fine bull calves not related to him. Correspondence solicited.

Cole &amp; Gardner, Hudson, 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 FOR SALE**  
CRYSTAL SPRING STOCK FARM,  
Silver Creek, Allegan County, Michigan.

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—A few heifers bred to freshen soon, heifers bred to freshen next fall, 3 cows, R. of M. bull calves. C. C. Little, Coopersville, Mich.

**Jerseys For Sale,** Register of Merit Smith and Parker, Howell, Michigan.

For Sale. Jersey bull ready for service sired by Flying Fox's Gay Lad. Dam record 472.5 lbs. butter 96% lbs. milk. Notten Farm, Grass Lake, Mich.

**BIDWELL SHORTHORNS**  
You Can Buy

a bull that will put weights on your dairy calves—the difference will soon pay for the bull. Now selling good Scotch and Scotch-topped yearlings, reasonably priced. A roan, senior yearling, a Missle of Villager breeding, a herd bull prospect, Federal Test.

**BIDWELL STOCK FARM,**  
Box D, Tecumseh, Michigan

St. Joseph Valley Shorthorn Ass'n has for sale males and females of all ages and best breeding. AARON HAGENBUCH, Sec-treas. Three Rivers, Mich.

## We Now Have

a number of choicely bred scotch females of any age for sale also three bulls from 6 to 18 months old. Visit our herd before buying. Sold 5 calves for \$400. CARR BROS., & CO., Bad Axe, 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 &amp; SONS, Tawas, City, Mich.

**Shorthorns** New list 39 bulls, 49 females. Central Mich. Shorthorn Assn. write OSCAR SKINNER, Sec., Gowen, Mich.

**Shorthorns** Scotch and Scotch Topped bulls and heifers priced right. Sultan Champion heads herd, one scotch two yr. old herd bull by Red Cumberland priced right. H. J. FLOWER & SON, Milo, Mich.

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

**Shorthorns of Merit** Both males and females for sale. ARTHUR DODDS, Lapeer, Michigan

**Shorthorn Bulls** Eight to ten months old Topped breeding. Lawrence P. Otto, Charlotte, Mich.

**SHORTHORNS**—Imp. Mysie Prince in service bred by J. Durno, sire bred by Wm. Duthie. Stock for sale. J. A. BARNUM, Union City, Mich.

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Save feed and get your hogs ready for market in less time. Prove at our risk that you can save fully one third your feed, making it possible to feed every third hog free by feeding

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Milkoline has a base of pasteurized and sterilized, modified Buttermilk. It is guaranteed not to contain any sulphuric acid or anything of an injurious nature to hogs or poultry.

**Aids Digestion:** Thousands of the most successful hog raisers from New York to California during the past seven years have proved that Milkoline helps and assists digestion, tending to insure perfect assimilation of feed. It helps tone up the system so that hogs are less subject to disease, and practically insures gains of 2½ pounds per head per day.

**University Tested** Professor W. B. Combs while Ass't. Prof. of Dairy Husbandry at Missouri University conducted a scientific test on Milkoline and found that Milkoline fed hogs put on more weight and showed 82.57% more profit than hogs not fed Milkoline. W. H. Graham a successful feeder of Middletown, Mo., said \$30 worth of Milkoline made him an extra profit of \$420. Lee Jackson of Wappingers Falls, N. Y., says Milkoline fixed up a bunch of shoats in fine style and is great for brood sows.

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**30 Day Guaranteed Trial.** You are safe in ordering any quantity of Milkoline today. Feed one half the shipment to your hogs and poultry in a thirty day test, then if you aren't entirely satisfied return the unused part to us at our expense and we'll immediately refund every cent you paid us. We are so confident that you will find Milkoline the best money maker on the farm that the S. W. Boulevard Bank of Kansas City substantiates this offer. You are the sole judge. Send money order, or check, to us or our nearest dealer and we will ship immediately. Our booklet, "How to Hush Heavy Hogs to Market" will be sent free on request—your name on a card will do.

**Saginaw, Mich.**

**For Sale** 19 Shorthorn registered good breeding will sell cheap to close out. Apply The JENNINGS FARMS, Bailey, Mich.

**For Sale** 4 registered Shorthorn cows, 3 to freshen. Priced to sell, 1 yearling bull. H. W. MARSHALL, Oakland Co. Highland, Mich.

**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 mo. old for sale. FRANK KEBLER, R. 1, Grand Ledge, Mich.

**Steers For Sale** Several bunches of good stockers and feeders weighing from 650 to 1050 lbs. Each bunch even in size and color write at once stating your wants. W. W. DYER, Ottumwa, Iowa.

## HOGS

**Berkshires** size with quality is our specialty. Write your wants to M. G. MOSHER & SONS, Osseo, Mich.

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

## Brookwater Duroc Jerseys

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**Phillips Bros, Riga, Mich.**

## DUROC JERSEY SWINE

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

**OAKWOOD FARM DUROCS** We can furnish you with anything from a weanling pig to a boar of herd heading caliber at reasonable prices. Your inspection and correspondence is solicited. RUSH BROS., Romeo, Mich.

**12 Choice** Duroc gilts bred to farrow July and Aug. 1st. Daughters of Michigan Cherry Col. bred to Jacks Cherry Oriol King Number 169259. Son of the \$10,000.00 champion Jacks Orion King 2nd. All large type, heavy bone gilts, 250 to 300 lbs. THE JENNINGS FARMS, R. 1, Bailey, Mich.

## Duroc Boars and Gilts

for sale at \$25 to \$50 each, crated and registered in buyer's name. Satisfaction guaranteed. These are some of the best pigs in the state. Visitors welcome. MICHIGANA FARM LTD., 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

E. D. HEYDENBERG, Wayland, Mich.

**DUROCS** spring boars. A few gilts bred for Sept. farrow at bargain prices. W. C. TAYLOR, Milan, Mich.

**DUROC JERSEYS.** Spring pigs ready for delivery, \$10.00 each. LAKE SIDE STOCK FRUIT FARM, Pinckney, Michigan.

**Big Type** Chester Whites. Choice, stretchy spring boars, also tried sows and fall gilts bred for Sept. litters. These hogs are big and will fatten at any age. Grand champion blood lines of the breed, Wildwood Prince Jr., Rajah, and Champion X. Cholera immune. Satisfaction guaranteed. N. L. HILL JR., Mackinaw, Tazewell Co. Ill.

**CHESTERS** two good fall gilts bred to a boar of Wildwood Prince Jr. for Sept. farrow; spring pigs. F. W. ALEXANDER, Vassar, Mich.

**O. I. C. BOARS,** 1 two year old, weight 500, Apr. boars. Write for breeding and prices. We ship O. O. D. and reg. free. GEO. M. WELTON & SON, Alto, Mich.

**O. I. C.'s** A few choice late fall and winter boars, also a fine two year old boar. WEBER BROS., R. No. 2, Royal Oak, Mich.

**Raise Chester Whites**

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

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big type O.I.C.'s. Stock of all ages for sale. Herd headed by Calloway Edd, the World's Champion O. I. C. boar assisted by C. C. Schoolmaster. Grand Champion boar of Michigan, New York and Tennessee state fairs. Also, C. C. Giant Buster, undefeated Senior boar pig wherever shown and Grand Champion of Oklahoma state fair. Get our catalogue of Crandell's prize hogs, Cass City, 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.

**O. I. C.** Gilts bred for July and Aug. farrow. Also spring farrowed pigs. G. P. ANDREWS, Dansville, Mich.

**O. I. C.** Gilts bred for Sept. farrow and spring pigs. F. C. BURGESS, R. 3, Mason, Mich.

**O. I. C.'s** Eight young boars and spring pigs for June shipment. CLOVER LEAF STOCK FARM, Monroe, Mich.

**O. I. C.'s** Booking orders for spring pigs, we register free and ship O. O. D. A. J. BARKER & SON, Belmont, Mich.

**O. I. C.'s** 5' last fall boars and 15 last fall gilts bred for fall farrow. Weight 230 to 325 lbs. extra good stock. Also this spring's pigs not akin, ¼ mile west of depot. Citizens phone 124. Otto B. Schulze, Nashville, Mich.

**Look** for Miller Meadows L. T. P. O.'s at Marshall Calhoun Co. Fair, Sept. 21-25. OLYDIE WEAVER, Ceresco, Mich.

**FOR SALE** Registered Big type Poland China gilts bred for Sept. farrow, weighing 225 lbs. for \$50, spring pigs all sold, guarantee satisfaction. DORUS HOVER, Akron, Mich.

## SHIPPERS OF LIVE STOCK MAKE PROTESTS.

At the annual meeting of the managers of the cooperative live stock shipping associations of Michigan, at Lansing on August 19-20, a most emphatic protest against the unjust advance in commision rates for selling live stock, was voted. A further protest was made against the adoption of a car partition for live stock shipping, that is calculated, to all appearances, to be for financial gain to the promoter rather than for rendering service to the shippers.

In this connection State Manager Compson impressed upon the managers the necessity for all the associations using the partition gate adopted by the exchange for the reason that such use would stimulate a strong influence with the railroad officials when they once understood its advantages.

Secretary Willets explained the relations between the local associations and the state exchange. In his report he stated that to date eighty of the two hundred local associations of the state have become members of the exchange.

Producers are being called upon to suffer unusually heavy losses in the large number of animals killed and crippled before they are sold at the stock yards. Mr. Cruikshank and others have observed that the largest per cent of deaths and cripples occurred after the stock is unloaded at the terminals. The sentiment was strong in favor of a campaign looking toward the reduction of these casualties. To this end Manager Compson was requested to interview superintendents of stock yards urging these officials to use their authority in compelling a more humane handling of stock at the terminals.

The question of a contract agreement proved exceedingly interesting and showed a decided sentiment in favor of conducting the sales work on a definite contract basis. The discussions were comprehensive and favored the use of contracts which would oblige all members to sell their surplus stock through their local associations and the local associations to dispose of their offerings through the state exchange. A resolution was passed requesting the directors of the Michigan Live Stock Exchange to draft a contract for tying up members to the local associations and to submit this contract to the various locals for consideration. Professor Tenant, of the Extension Department of M. A. C. made an earnest appeal advising the use of the contract agreement and suggested further the organization of a commission firm to handle the farmers' live stock offerings.

In the matter of extension work the association went on record as favoring state aid in assisting Manager Compson in his work of affiliating the various local organizations. The directors of the exchange were also asked to arrange for district meetings, and if found advisable, a general meeting to be called after the local meetings and before the regular annual meeting of the association.

Although the managers of these associations have many local and general problems to work out, there was a real optimistic tone to their reports and a general feeling that the cooperative live stock shipping business will soon be entirely in the hands of the farmers and their agents.

The greater number of four-horse teams and even some five-horse teams on fourteen-inch sulky plows for fall plowing is accounted for by the fact that plowing in the fall is usually about one inch deeper than in the spring, and also by the fact that the ground is generally dry and hard to turn. On an average, outfits of the same size cover about a half acre less per day in the fall than in the spring.



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## HOGS

## Poland China Special

Born pigs sired by Monster Big Bob and from our best sows, priced right for immediate shipment. Big-boned, strong-backed, smooth fellows from popular blood lines. Write for information or visit the farm.

BOONE-HILL CO., Blanchard, Mich.

## L. S. P. C.

One 400 lb. sow and 7 pigs by side, price \$100.00. One 275 lb. gilt and 6 pigs by side, price \$85.00. Two choice boars.

H. O. SWARTZ, Schoolcraft, 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.

**L. T. P. C.** We have a large number of spring and summer pigs ready to ship sired by such boars as "Hart's Black Prince," "Leonard's Big Bob," the "Model Clansman" and "Prospect Yank" a great son of the \$40,000 Yankee. Write for prices or come and look them over if you are in the market. **HART, FULCHER & CLINE**, address F. T. Hart, St. Louis, Mich.

## Bred Sow Sale at Fairgrounds

August 5th. Carey U. Edmonds, Hastings, Mich.

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

**Big Bob** Mastodon pigs takes the cake, book your order now. Fall boars and gilts sired by a grandson of Disher Giant, open or bred to Big Bob for Sept. 23 yearling sons. **C. E. GARNANT**, Eaton Rapids, Mich.

## Large Type Poland China

pigs, both sexes now ready, write for description and prices. **RALPH SHEREK**, Caledonia, 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 T. P. Chinas** for sale. A few tried sows, spring boars. Aug. pigs both sex. Recorded free in buyer's name. **L. L. Chamberlain**, Marcellus, Mich.

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

## Lindhurst Poland Chinas

Stock for sale at all times. Public Sale Oct. 23. **WM. H. LIND**, Alto, Mich.

## POLAND CHINAS

**W. J. HAGELSHAW**, Augusta, Mich.

**LARGE TYPE P. C. SWINE.** One yearling boar, one fall yearling boar, fall pigs, a few more bred sows. **R. W. Mills**, Saline, Mich.

**Leonards B. T. P. C.** See exhibit at Mich. State Fair. Get your name on mailing list for public sale Oct. 23. Double immune. **E. K. Leonard**, St. Louis, Mich. R. 3.

**Large Type Poland Chinas.** Everything immunized by double treatment. Meet me at Detroit, or Jackson Fairs. **A. A. Feldkamp**, R. 2, Manchester, Mich.

**BARGAINS** on Big type spring and summer Poland China Pigs also yearling Shorthorn bulls, bull and heifer calves. **Robert Neve**, Pierson, Mich.

## HAMPSHIRE

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Choice Spring boars, popular breeding. Booking orders for fall pigs. All stock Cholera immunized and guaranteed Breeders. Satisfaction guaranteed.

## STEUBEN'S HAMPSHIRE FARM

R. 3, Angola, Ind.

## 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** get your boar pigs, now a few bred gilts left new blood lines of quality. **JOHN W. SYNDER**, R. 4, St. Johns, Mich.

## YORKSHIRES BRED GILTS

**WATERMAN & WATERMAN**, Ann Arbor, Mich.

## SHEEP.

## Put Your Faith

in better breeding stock. For the best in Shropshire and Hampshire Rams write or visit KOPEKON FARMS, S. L. Wing, Propr. Coldwater, Mich. See our exhibit at the Ohio and Mich. State Fairs.

## Hillcrest Shropshires

A nice lot of Ewes and Rams of all ages our flock is headed by McKerrow 3164 a son of Senator Bibby write or call on **R. J. & C. A. WILLIAMS**, Middleville, Mich.

## SHROPSHIRE

Yearling and Lamb rams sired by Imp. Berry No. 183 for sale. Also a few ewes. **ARTHUR DODDS**, Lapeer, Michigan

**Shropshires** Am offering one choice two year ram and a few good yearlings. **C. J. THOMPSON**, Rockford, Mich.

**Shropshires** sire imported Minton Ram. Lambs \$20, some ewes, 2 yearling rams. **DAN BOOHER**, R. 4, Ewart, Mich.

## HAMPSHIRE

Registered Rams all ages. Bred for size, type, quality. Sire at head of flock, I. S. O. No. 25463. Half brother to the Grand Champion ewe at International 1918, Bred by Iowa State College. Also a few good ewes. **W. W. CASLER**, Ovid, Mich.

**Want a Sheep?** Let American Hampshire Sheep Association send you dandy booklet with list of breeders. Write **COMFORT A. TYLER**, 22 Woodland Ave., Detroit, Mich.

**Wool-Mutton Shropshire Rams.** Good strong individuals, royally bred, priced right. **A. H. FOSTER**, Allegan, Mich.

**Cotswolds** yearling rams, ram lambs, Cotswolds ewes all ages sired by **Cana**. Cotswolds dian rams. **A. M. BORTEL**, Britton, Mich.

**Reg. Oxford Rams** ready to ship at \$30. \$35 and \$40, reg. and delivered. **J. Robert Hicks**, St. Johns, Mich.

**For Sale** Oxford rams and ewes sired by McKerrow 3800, Assn. No. 8347. Write your wants, **Geo. T. Abbott**, Palms, Mich. Phone 78-3 Deckerville

## POLAND CHINA BREEDERS HOLD PICNIC.

THE first annual picnic of the members of the Central Michigan Poland China Breeders' Association, their families and friends, was recently held at Crystal Lake, Montcalm county. The address of N. M. Wiles, of Indiana, was the feature of the occasion. He pointed out the unusual possibilities for the production of hogs here in Michigan. To him the future of the business is promising. He emphasized the fact that Michigan as an agricultural state has not been advertised and as a result uninformed farmers of other states think of it as composed of sand dunes. A survey of the land discloses, however, large sections with as high grade soil as may be found anywhere in Ohio, Indiana, Illinois or Iowa.

The organization is growing. The membership has doubled since last spring. The first sale circuit ever held in Michigan will occur in October when five firms will sell registered Poland China stock. The purpose of organizing the members is to encourage the keeping of better hogs and to promote public sales of this particular breed, as well as to advance the interests of the breed throughout the state.

## Veterinary.

CONDUCTED BY DR. W. C. FAIR.

**Surfeit Sores.**—Several of my horses are breaking out in small sores. Whatever the ailment is it causes itchiness. **C. B., Bitely, Mich.**—Dissolve ¼ lb. hyposulphite of soda in one gallon of water and wet sore and itchy parts of body once or twice a day. Give each horse half an ounce of Fowler's solution of arsenic in feed or water two or three times a day. Every one of the horses should be washed with soap and water twice a week.

**Abortion.**—I have a two-year-old heifer that was due to freshen this coming October, but a day or two ago she lost her calf. She seems to be in good health, but has not yet cleaned. I have been feeding her a tonic which seemingly failed to do her much good. **M. A. C., Marcellus, Mich.**—Dissolve 1 dr. of permanganate of potash in one gallon of tepid water and wash out vagina daily; use a fountain syringe. She should not be bred until vaginal discharge ceases.

**Rheumatism.**—I have a cow that first went lame in one hind leg then after a time she got over it, but soon showed lameness in the other hind leg; now she is stiff in hind quarters. **C. H., Marion, Mich.**—Give her 1 dr. doses of sodium salicylate in feed three times a day.

**Garget.**—Have a cow that is troubled with garget; she gives stringy milk; the last milk drawn is mixed with blood. She runs on pasture day and night. **G. S. L., Fenton, Mich.**—Give her ½ oz. of fluid extract of poke at a dose three times a day. Apply one part extract of belladonna and nine parts olive oil to congested part of udder every day or two.

**Small Worms.**—My seven-year-old mare is troubled with small worms in rectum. She frequently passes a few. What shall I do for her? **E. T., Roscommon, Mich.**—First wash out rectum with tepid water, then use one part coal tar disinfectant and fifty parts water. She should be treated three times a week.

**Swollen Throat.**—My three-year-old heifer is troubled with swelling in the throat. She runs on river bottom land. **L. G., Harford, Mich.**—Apply one part iodine and eight parts fresh lard to throat three times a week. Give her a teaspoonful of acetate of potash in water twice a day.

## HISTORY OF 1919 INTERNATIONAL.

The Official History of the Twentieth Anniversary of the International Live Stock Exposition, will soon be ready for distribution. Only a limited number have been printed, and while the supply lasts, a copy will be mailed to any applicant upon receipt of \$1.00. Address International Live Stock Exposition, Union Stock Yards, Chicago.



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Post Office..... State.....

# LATEST MARKET REPORTS

## GRAIN QUOTATIONS

September 1, 1920.

### Wheat.

Detroit.—Cash No. 1 red, \$2.54; December \$2.36; March \$2.32; No. 1 white and No. 1 mixed \$2.52.

Chicago.—No. 2 red \$2.51½@2.53; December \$2.34½; March \$2.30¼.

### Corn.

Detroit.—Cash No. 2 mixed \$1.65; No. 2 yellow \$1.70.

Chicago.—No. 1 mixed \$1.50@1.52; No. 1 yellow \$1.50@1.54.

### Oats.

Detroit.—Cash No. 2 white 77c; No. 3 white 76c; No. 4 white 75c.

Chicago.—No. 2 white 68@70½c; No. 3 white 66@68½c.

### Beans.

Detroit.—Immediate and prompt at \$6 per cwt.

Chicago.—Hand-picked choice to fancy \$6.75.

New York.—Choice pea \$7.50.

### Rye.

Detroit.—Cash No. 2 \$1.97.

### Seeds.

Detroit.—Prime red clover, spot, October \$18; December \$18.50; alsike \$18.50; timothy \$4.25.

Toledo.—Prime cash \$18; October \$18.65; December \$18.45; alsike \$18; timothy \$4.

## WHEAT

It is claimed that the United States will have cleared around 70,000,000 bushels of wheat by September 1, and that additional sales for export total an equal amount. This means that about 140,000,000 bushels of our exportable surplus of around 275,000,000 bushels have already been placed. So far this season the clearances for export have exceeded the rate of arrival at primary markets. Importing countries must rely largely upon North America for their supplies until January and the present rate of movement is the result. Immense sales were made for export some time ago, and the sellers are trying to secure the cash grain which accounts for the sharp upturn recently with Chicago in the lead. Premiums advanced the past week to the highest basis on the crop at Chicago and in the southwest. The British commission remains out of the market and seems to be speculating on the outcome of the southern hemisphere crop. Canadian wheat is now being offered for export at lower prices than the domestic. Rye finds ready takers but there is no stock of consequence at terminal markets and receipts find a good market. Barley shows more firmness, due to limited receipts.

## CORN

While there has been more or less damage to corn as the result of dry weather, recent rains were highly beneficial, and the great need now is for hot dry weather to force the crop along to maturity so that it will escape killing frost. Some damage has been done by frost already in extreme western Nebraska, which is a range country, and in parts of North Dakota. The government report as of September 1 is expected to show a condition somewhat lower than that of last month, but a yield in excess of the 3,003,000,000 bushels reported at that time. Old corn is commencing to move more freely, as threshing is practically completed. The new freight rates are in effect and prices at interior points have dropped relative to the terminal markets. The reports of numbers of live stock on farms indicate that the corn consuming population will be much less than last year. Stocks of hogs on farms July 1, as given by the Department of Agriculture, were around 16.6 per cent less than last year; cattle 7.7 per cent less and sheep 3.3 per cent less.

## OATS

Surplus oats are leaving the farms at a fairly rapid rate, although the scarcity of cars tends to restrict receipts. Many country elevators are full. It is expected, however, that the car situation will show gradual improvement, and that after September 1 there will be a noticeable betterment in the efficiency of the railroads. As a

whole, farmers show a decided disposition to bin as much oats as possible and sell the surplus. Export demand is very slow, with foreign sorts offered materially below those from this country.

## SEEDS

Prices are now about half what they were at the high time last winter. The recent break has been brought practically to a standstill, prices showing but little change compared with a week ago.

## FEED AND HAY

The gradual reduction in numbers of live stock on farms, the slump in cotton and the reduction of lumber operations are subtle influences making for low prices on hay and feedstuffs. And furthermore, all sections of the country seem to be blessed with an abundance of forage. The car shortage, however, will be a counteracting influence in maintaining prices, especially for hay. The markets have gone through a severe slump and it is doubtful if quotations will go much below their recent low point. Another sharp advance featured the market for feedstuffs the past week. Quotations on feedstuffs per ton in 100-lb. bags in carlots are: Milwaukee—Bran \$45@46; standard middlings \$56.50@57; flour middlings \$61@62; red dog flour \$74; hominy feed \$64; old process linseed meal \$64@65.

Detroit.—Bran \$53; standard middlings \$69; cracked flour, middlings at \$72.50. Prices for hay and straw at Detroit are: Timothy, No. 1 \$33.50@34; standard \$32.50@33.50; No. 2 \$31.50@32; light mixed \$32.50@33; No. 1 mixed \$31.50@32; No. 1 clover \$29@

30; wheat and oat straw \$11.50@12; rye straw \$12.50@13.

## BUTTER

With light supplies of fine butter arriving on the markets, and consumptive demand still good there was a little improvement in prices the past week and the tone was fairly firm for the top grades and all butter of table quality. Undergrades alone are very hard to move, even with quoted prices on the lower scores approximately ten cents cheaper per pound than fine butter. Never has quality been better rewarded than at the present time. One cargo of Danish of 1,900 casks arrived at New York during the week. The net gain in prices for the week was about a half cent, but the closing tone on the larger markets was a little top-heavy. Closing price of ninety-two score butter at New York was 57c; at Chicago 55½c; at Boston 58c, and at Philadelphia 58c.

## EGGS AND POULTRY

Receipts of eggs at the principal cities are running somewhat behind those of last year but are about equal to the average of the last three years. Storage supplies are being drawn upon to some extent. Prices are gradually creeping higher. Poultry prices were easier the past week. Quotations at the week's close were as follows: Detroit—Eggs No. 1 fresh rehandled 49c asked; storage packed extras 49½c; live poultry, spring chickens 33@40c; hens 33@37c; roosters 20@22c; geese 18@20c; ducks 36@38c; turkeys at 40@44c.

## POTATOES

The general tone of the market for the past week has been steady, with moderate to good demand. Trade is

gradually turning from barreled to sacked and bulk stock as the eastern barreled supply is usually marketed by this time. Northern shipments are increasing steadily, Wisconsin and Michigan having started carlot shipments and the total for the United States is also increasing. Chicago—Barreled cobbles \$5.25; Minnesota Early Ohio \$2.75@2.90.

Detroit—Barreled Virginias, No. 1, \$5@5.50.

## PEACHES.

A firmer tone has existed this week, particularly for Illinois Elbertas, which closed at \$4@4.25 per bushel at Chicago. Detroit—Georgia \$3.50@4 per bu.

## APPLES

A large amount of bulk stock is arriving, due apparently to high prices of containers. Chicago—Duchess in bulk \$2.15; Transparents, fancy stock, bushel baskets \$1.75@2. Detroit—Michigan \$1@1.50 per bushel.

## WOOL

A very slight increase in activity in wool circles was perceptible last week. Observers close to the trade believe that the market will open up soon upon a moderate price basis. A few sales of quarter-blood at around 40c have been made. The managers of the Michigan pool have rejected bids running from 35@67½c for part of their supply. The British auctions have been renewed, with the fine wools in strongest demand at a price somewhat heartening to American growers. The British government has made public its holdings on June 20, 1920, including stocks in Australia, Boston and Antwerp as well as the United Kingdom. The total is 2,905,554 bales, or about 958,650,000 pounds. Quotations are largely nominal.

## DETROIT CITY MARKET

There is a good supply of products, with the demand fair. Quotations are: Apples, fancy \$2@2.50; firsts \$1.50@1.75; cabbage 40@50c; crab apples at \$2.50@3.50; cucumbers, large 75c@1; do dill \$2@3; do pickles \$4@6; corn 90c@1.25 per 4@7 dozen; dry onions \$1.75@2; peaches at \$4.50@5; pears \$2.50@4; plums \$2.50@4.50; potatoes \$1.75@2; tomatoes \$1.25@2; turnips \$1@1.25.

## COMING LIVE STOCK SALES.

Holsteins—September 8, George H. Landenburger, Williamston, Mich.  
Poland-Chinas, Oct. 26, Wesley Hille, Ionia, Mich.  
Big Type Poland-China Sale Circuit in Central Michigan, October 26-30.

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## Live Stock Market Service

### DETROIT

Detroit live stock markets will be open Labor Day, Sept. 6.

#### Cattle.

Receipts 300. Market steady.

Best heavy steers	\$12.00@13.50
Best handy wt bu steers	10.50@11.75
Mixed steers and heifers	8.75@9.75
Handy light butchers	7.75@8.50
Light butchers	6.00@7.50
Best cows	8.50@9.50
Butcher cows	7.25@8.25
Cutters	5.00@5.25
Canners	4.00@4.75
Choice bulls	7.50@8.50
Bologna bulls	6.00@7.00
Stock bulls	5.50@5.75
Feeders	9.00@10.00
Stockers	7.00@9.00
Milkers and springers	\$75@140

#### Veal Calves.

Receipts 400. Market strong. Prospects lower.

Best	\$19.00@20.00
Others	7.00@16.00

#### Hogs.

Receipts 1500. Market steady.

Mixed hogs and yorkers	\$16.25
Pigs	16.00
Heavies	15.50
Rough	13.00
Stags	8.00@10.00
Boars	8.00

#### Sheep and Lambs.

Receipts 1600. Market very slow. Bulk of best lambs \$13, and few extra choice at \$13.50. Prospects lower.

Best Lambs	\$13.00
Fair lambs	10.00@11.50
Light to common	5.00@7.00
Fair to good sheep	6.00@6.50
Culls and common	2.00@4.00

### CHICAGO

#### Hogs.

Estimated receipts today, 14,000; holdover, 8,930. Market mostly closing at yesterday's average. Bulk of sales, \$16@16.15; heavy 250 lbs. up, medium, good and choice, \$14.65@15.80; medium 200 to 250 lbs. medium, good and choice, \$15.20@16.10; light 150 to 200 lbs. common, medium, good and choice, \$15.50@16.10; light lights 130 to 150 lbs. common, medium, good and choice, \$15@16; heavy packing sows 250 lbs up, smooth, \$14.15@14.50; packing sows 200 lbs up, rough, \$13.95@14.15; pigs 130 lbs down, medium, good and choice, \$13.70@15.75.

Market steady. Best heavy steers, \$11.50@17; butcher steers, \$9@16.50; heifers, \$6@12.50; stock cows, \$9.50@10; heavy cows, \$8.50@9; good, \$7.25@8.25; cutters, \$4.50@5; canners, \$2.50@4.

#### Hogs.

Market strong; heavy, \$16.25@16.50; yorkers, \$17@17.25; pigs, \$16.50@16.75.

#### Sheep.

Lower. Top lambs, \$14.50; yearlings, \$10@10.50; weathers, \$8.50@9; ewes, \$7@7.50.

#### Calves.

\$7@20.50.

### BUFFALO

#### Cattle.

Market steady. Best heavy steers, \$11.50@17; butcher steers, \$9@16.50; heifers, \$6@12.50; stock cows, \$9.50@10; heavy cows, \$8.50@9; good, \$7.25@8.25; cutters, \$4.50@5; canners, \$2.50@4.

#### Hogs.

Market strong; heavy, \$16.25@16.50; yorkers, \$17@17.25; pigs, \$16.50@16.75.

#### Sheep.

Lower. Top lambs, \$14.50; yearlings, \$10@10.50; weathers, \$8.50@9; ewes, \$7@7.50.

#### Calves.

\$7@20.50.

## CATTLE VALUES RISE.

**C**ATTLE receipts have been running lighter than those of a year ago for many weeks, but not till last week did the tonic influence of shortage produce any effect. Practically all classes and grades of cattle shared in the advance in which higher eastern markets and purchases for eastern shipment were a factor. Prime steers advanced twenty-five cents at Chicago, good and choice grades about fifty to seventy-five cents. Cows and heifers, of both the butcher and canner classes, are twenty-five to fifty cents higher. Butcher bulls are a shade higher, and bolognas about steady. Veal calves had a sensational advance, some eastern markets reaching the \$22 level.

Prime cattle are specialties whose values may do anything regardless of the rank and file. The known scarcity of such grades indicates a strong probability that they will work into higher ground during the coming weeks. Packers' buyers are trying to hold down the score, however, and refuse to advance the top as fast as they advance the grades lower down. Good and choice grades of steers are reasonably abundant, the best of the grassers which received corn last winter reaching \$16.50 at Chicago. There is no evidence that the marketing of the southwestern range crop is near completion. While there is no justification for a decline much below the present level it is doubtful if the current week's advance upon such kinds is more than a temporary spurt.

Fireworks can be expected in the veal markets at this season as the price usually reaches its pinnacle some time in September. Growers who can market inside the next three or four weeks will have this normal seasonal tendency in their favor.

## DEMAND FOR FEEDERS NOT ROBUST.

**F**EEDER buying is not aggressive. There were few buyers at Kansas City until the last two or three weeks and Chicago is mainly dependent upon the Lancaster, Pa., district. Prices are higher than they were two weeks ago, but have made little gain the past week. The cattle-feeding public has not forgotten the experience of last winter. Many will reconsider their decision not to feed again, but it is certain that the number put in feedlots this fall will be less than a year ago. There will be no rush of feeder buying unless frost arrives early. January and February are usually slump months, especially in the lower grades of steers. That will be especially true of the coming winter if a lot of frosted corn must be salvaged through cattle. Feeders now are disposed to take mostly the light, cheap grades, the kinds which made money or at least lost but little last winter and spring. Of course each year departs more or less from the average, but usually the finished product from such light cattle does not sell to good advantage before March.

## HIGH-TIME HOG PRICES TO PASS SOON.

**E**ASTERN markets seem to have assumed the price-making role recently. Declining markets eastward took the shipper buyers out of western markets, causing the slump of two weeks ago and the rally the past week was preceded by an advance at eastern points which brought shippers to the bargain counter. Hog supplies on farms are sixteen per cent lighter than a year ago, but receipts at the markets continue too large for prices to show much buoyancy. Ultimately the effect of the reduction in the hog population will be felt, but there are large stocks of lard and meat on hand and the new crop of hogs will cause a substantial increase in receipts by the first of October or shortly thereafter. No such decline as occurred a year ago is in prospect, but hogs shipped within the next thirty days will find a stronger market than those arriving later on.

## SHARP RISE IN LIVE MUTTONS.

**S**HEEP growers are hoping that the worst is over in their business. The long slump ended as suggested a week ago and a rise of \$1.50@1.75 on lambs, slightly less on yearlings, and about fifty cents on matured sheep from the low point has been recorded. The dressed market took a decided turn for the better, Philadelphia advancing \$3 @5 per hundred pounds. There is a belief that the wool market may rally soon and it is now claimed that the imported frozen lamb is not selling well, compelling packers to drop their activities in that field. Should these rumors prove true a more vigorous tone in the sheep market is certain.

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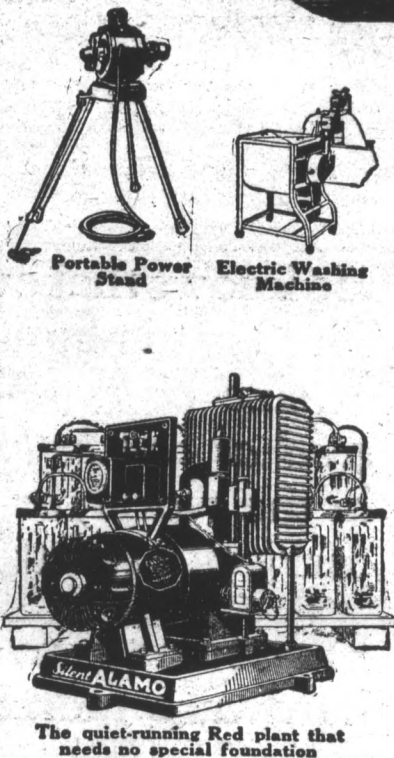
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DETROIT

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Continued from Page 266

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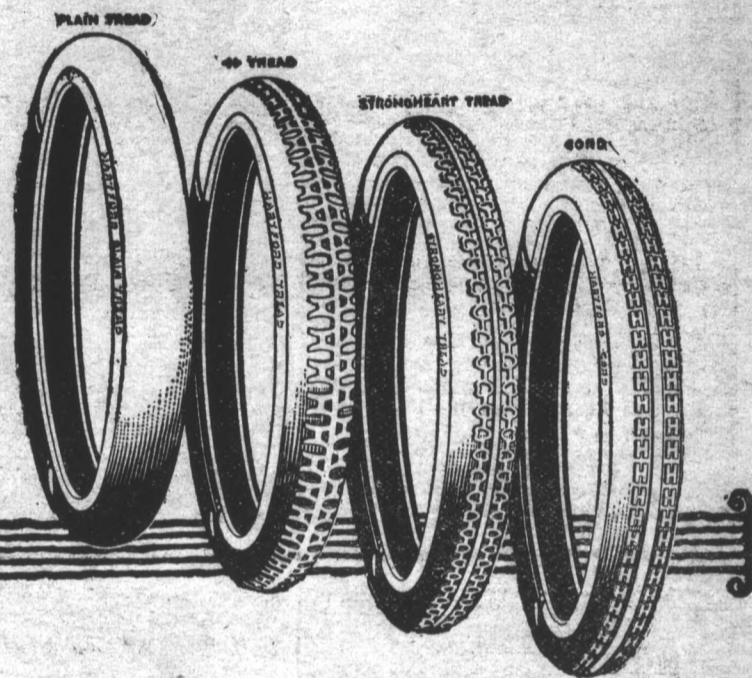
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