

MICHIGAN FARMER

AND LIVE STOCK JOURNAL
PUBLISHED WEEKLY
ESTABLISHED 1843

VOL. CLVI, No. 17
Whole Number 4145

DETROIT, MICH., SATURDAY, APRIL 23, 1921

ONE YEAR \$1.00
FIVE YEARS \$3.00

Plant Trees Around the Home

And In Days Yet to Come the Nation Will Benefit—By E. Ryman-Gaillard



A Beautiful Specimen of the Mountain Ash.

MUCH might be said of organized effort to beautify the world in general by the use of trees, but this article will deal with their use around the home buildings only. Be a house ever so perfect in design, imposing in size, and outfitted with every modern improvement it still lacks something until growing things surround it and soften its outlines.

For such work vines and shrubs give what might be called "first aid," but it is the tree that puts the appearance of permanency and homelikeness over the entire place, if rightly used. In selecting trees for use near the house many things must be taken into consideration and a long look ahead taken to get a mental picture of what the full-grown tree will be like in size, form, and habit of growth—root and branch.

On most farms there is desirable space at a distance from the house for fruit and nut-bearing trees, but it must not be forgotten that even among the so-called ornamental trees there are some that have undesirable features.

As the desirable features are seen at once, it may be more helpful to mention a few of the undesirable characteristics of the well-known trees. Take the horse chestnut as an example. Admitting its beauty when it unfolds its large palmate leaves; when it is

loaded with upstanding panicles of bloom, and when it shows the bursting shells with the glossy brown nuts just ready to fall we will add to that list of desirable features the fact that no tree gives more perfect shade or a larger circle of it, yet with all these desirable features there are some very undesirable ones to offset them. The fact that the foliage starts very early in the spring has the counterbalancing fault that it falls very early and compels early raking of leaves; the falling nuts and their shells are hard to rake out of the grass, but most annoying of all are the stems that fall later and, being large and very tough, make trouble with the lawn-mower in the spring. There are other of the ornamental trees of which one might list similar faults.

Maples and elms, though of slower growth, make stately trees of symmetrical form very desirable as single specimens and their only litter is the falling leaves. Mention of stately trees brings thoughts of the oak but a memory of the sodden mass of leaves to be disposed of in the spring, because their persistent habit holds them on the tree until after snow comes, and the rain gutters on the house filled with acorns and twigs prevents mention of it as desirable near the house.

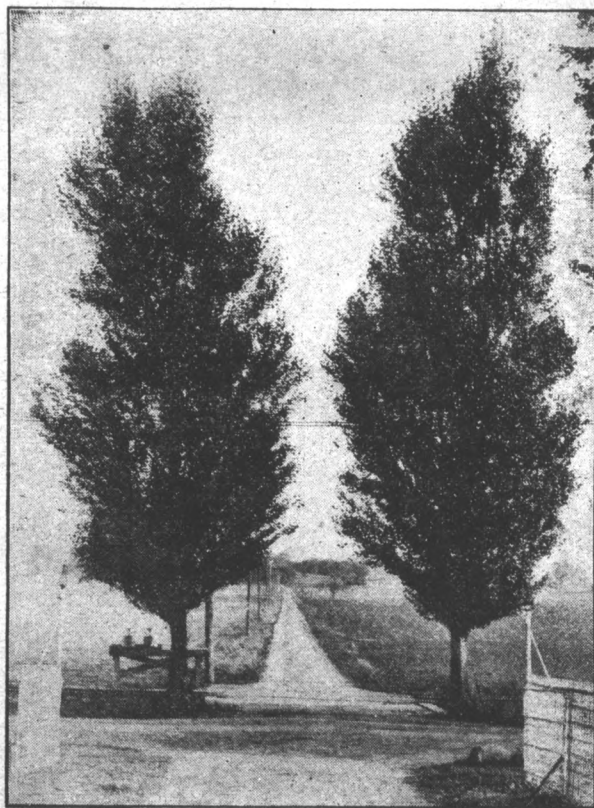
Plant trees around the home, by all means, but be sure that you know their undesirable features as well as their desirable ones, and to do this you must know their habits of root-growth as well as what is above ground. The stately, upright form of the Carolina poplars, coupled with their rapid growth, and the beauty of their ever-rustling foliage tempts one to plant them when quick results are desired, but before planting one must remember the fact that any tree making rapid growth is getting enormous supplies of water from some source. The branches of the tree grow almost straight upward but the roots spread far out in their search for

water and many a well, spring, and sewer has been filled with them, causing damage and expense.

Weeping trees, so-called because of their drooping habit of growth, are desirable in many places and may be used with striking effect when taller trees or those with open space below the branches are not suitable and most of them grow to a size that makes them very ornamental as single specimens on the lawn or as centers to some scheme of massed planting.

In decorative planting color effects must be taken into consideration and in this respect we find the greatest use for evergreens for, aside from their effectiveness in other ways, their sombre blackness contrasted with the snows of winter is very striking and during the spring and summer flowering trees and shrubs seem doubly beautiful when silhouetted against their darker color. Trees having silvery bark, or those having silver-backed, red, or purple foliage are most striking when so placed that their coloring is intensified by the green of others back

(Continued on page 536).



Two Trim Carolina Poplars Mark the Gateway.



Published Weekly Established 1843 Copyright 1921

The Lawrence Publishing Co.

Editors and Proprietors
1632 LaFayette Boulevard Detroit, Michigan
TELEPHONE CHERRY 3384NEW YORK OFFICE-95 Madison Ave.
CHICAGO OFFICE-111 W. Washington St.
CLEVELAND OFFICE-101 E. 1013 Oregon Ave., N.E.
PHILADELPHIA OFFICE-261-263 South Third St.M. J. LAWRENCE President
PAUL LAWRENCE Vice-President
J. F. GUNNINGHAM Treasurer
F. H. NANCE SecretaryI. R. WATERBURY Associate Editors
BURT WERMUTH
ALTA LAWSON LITTELL
FRANK A. WILKEN
I. R. WATERBURY Business Manager

TERMS OF SUBSCRIPTION

One Year, 52 issues	\$1.00
Two Years, 104 issues	\$1.50
Three Years, 156 issues	\$2.00
Five Years, 260 issues	\$3.00

All Sent postpaid
Canadian subscription 50c a year extra for postage

RATES OF ADVERTISING

55 cents per line agate type measurement, or \$7.70 per inch (14 agate lines per inch) per insertion. No advertisement inserted for less than \$1.65 each insertion. No objectionable advertisements inserted at any time.

Member Standard Farm Papers Association and Audit Bureau of Circulation.

Entered as Second Class Matter at the Post Office at Detroit, Michigan, Under the Act of March 3, 1879

VOLUME CLVI. NUMBER SEVENTEEN

DETROIT, APRIL 23, 1921

CURRENT COMMENT

Railroad Rates and Business

THAT transportation charges have been advanced to a point which has reacted seriously on the business of the railroads is an established fact. The tremendous advance in freight rates has made it unprofitable to ship many commodities to distant markets. Michigan hay, for example, does not find a profitable outlet in eastern markets on account of the high transportation charge. Southern fruit and track crops are restricted as to profitable market area by the same cause. And these examples illustrate a very general condition rather than a notable exception. In like manner passenger fares and Pullman charges have been advanced to a point which restricts travel to a marked degree. The truck and the auto have served to relieve the situation for local transportation, while industries which served a distant market have suffered a serious handicap. In the meantime the railroads have continued to show big deficits.

This situation in which the railroads find themselves is undoubtedly due in large measure to the general business depression through which we have been passing in recent months, but it is in part due to excessively high rates, which in many cases are more than the traffic can bear. Representative railroad officials declare the remedy for this situation to be a general reduction in wages, which program is being vigorously resisted by their employees. Before this issue, which is becoming acute, is settled, business is likely to be still further hampered by the interruption of distribution.

The remedy for this situation does not appear to be easily found or simply applied. But it is apparent that it does not lie in any further increases in transportation rates. Present rates are in many cases more than the traffic can bear. A general reduction in rates is desirable both as a means of stimulating business and reducing living costs. We believe the result would prove profitable to railroad employees as well as all other classes, even at the first cost of a considerable cut in wartime wages of this class of workmen. High wages and cheap living costs are incompatible. The farmers of the country have been forced to take a big cut in their labor income. Other workers will have to take a similar cut or pay the penalty in a reaction in the cost of foodstuffs.

The Potato Market

MANY of the potato growers who have been holding their crop for higher prices are becoming discouraged as to the probable future of the market, as they have been disappointed in its trend during recent months. As a result there has been an increasing tendency to move the balance of the crop before the rush of spring work, and a consequent falling of values to a point which nets the grower from eighteen to thirty cents per bushel, depending on his location and shipping cost. At these prices the tubers are bringing their growers less than the value of the seed from which they were grown, at prices which prevailed at planting time last spring.

Of the probable future trend of the market every grower must be his own judge. There are some factors of the situation which should, under normal conditions, make for a better late market for the old crop. The southern crop is not large and it is generally conceded in the trade that these offerings will not be sufficient to supply the full demand for general consumption as early in the season as usual, which will serve to prolong the marketing season for the old crop. Dealers have not carried heavy stocks for speculative purposes as is often the case, but have followed a hand-to-mouth policy in the matter of distribution, owing to the general downward tendency of all markets.

On the other hand, the probable demand is more problematical than is the case under normal conditions. No one can say with any degree of assurance what the outcome will be. Holding for the late market will be something of a gamble, but the stakes are not high. The risk is in proportion to the price at present available.

Playing the Game Square

THE story of how a young farmer of Oakland county recently became discouraged with the pure-bred live stock business through the purchase of inferior breeding stock of an old breeder at long prices reveals a tragedy that is occurring altogether too frequently at a time when every constructive agency is required to place the general business of agriculture on a substantial basis.

Of all classes of farmers the breeder of pure-bred stock can less afford to deal dishonestly, particularly when he is selling to a young breeder. The beginner if he is not discouraged, will forthwith become a regular customer of the breeders of his special line, and the records of breeders show that once a producer of quality stock has gained the confidence of a new recruit for honest dealing the larger portion of later purchases are made from the man who furnished the original stock.

Not only can the established breeder afford to deal honestly with the younger man but he can, to his own interest, go even further and counsel from the experience which he has accumulated through years of work. Perhaps the most assistance that can be rendered is to develop a proper attitude in the mind of the beginner—to aid him in starting with an intelligent viewpoint. The young farmer who is or intends to keep live stock should know that while it requires rare skill, and much study and work to gain a place in the roll of outstanding breeders, every intelligent owner of live stock will greatly enhance his prospects for profits and advancement if he will displace scrub stock with animals having type and good ancestry. Breeders individually and through their associations should use legitimate means of inducing young men to get into the pure-bred game. They should furnish whatever aid can be given to make the undertaking suc-

cessful. This effort can very wisely be extended to boys and girls to the end that an intelligent working knowledge of the fundamental principles of breeding will be had at a time when they are ready to start in the farming business. But here even greater care should be exercised that these young minds retain confidence in the breeding business and in the men who are following it.

COMMISSIONER OF AGRICULTURE.

MR. HERMAN H. HALLIDAY, who was appointed last week by Governor Groesbeck as commissioner of agriculture to carry out the provisions of the administration measure creating a state department of agriculture, realizes that he is taking up an entirely new work and will therefore proceed carefully, studying the problems, which confront the farmers of Michigan, with the view of making his department a constructive factor in their solution.

Mr. Halliday was born on a farm near the village of Clinton, Lenawee county, fifty-two years ago. His father, uncles and brothers were all successful and progressive farmers. He still owns what was his father's farm which is located on the old historic



Herman H. Halliday.

Indian trail between Fort Wayne and Dearborn, fifty miles from Detroit.

He was appointed commissioner of animal industry by Governor Osborne, which office he held through the administration of four successive governors. His first prominent work on the commission came during the foot-and-mouth epidemic in 1914. His efficient administration of, and firm attitude in, this work occasioned much favorable comment and appreciation at the time. Since that time his department has been actively cooperating with other agencies looking toward the eradication of hog cholera and tuberculosis in this state.

Past services would indicate that the farmers of Michigan have a valuable assistant in "Herm," as he is commonly called, in the solution of the agricultural problems of the state.

CLOVERLAND BRANCH OF THE FARM BUREAU.

ASSISTANT State Leader of County Agents Weston in the upper peninsula, has called a meeting of county agents and representatives of County Farm Bureau executive committees, to meet in Marquette, April 26, to consider the location of a branch of the Michigan State Farm Bureau in upper Michigan. It appears that the decision to call this meeting was arrived at in Lansing on March 26. The Marquette meeting will be held in the supervisors' room at the court house at 11:00 a. m. It is desired that one representative of each County Farm Bureau executive committee attend. Voting power will be confined to farm bureau members, if this is thought advisable, says Mr. Weston.—CHASE.

News of the Week

Wednesday, April 13.

PRESIDENT HARDING'S message made a favorable impression upon congress. It urged emergency tariff, elimination of excess profits tax, and a rejection of the League of Nations treaty.—The republic of Panama is concentrating troops along the Porto Rican frontier; military leaders of this country are closely watching this move.—The Canadian bureau of statistics announces Canadian wheat crop to be over 263,000,000 bushels; to move this crop will tax the transportation facilities of Canada.—Chicago police department will use wireless telephone to fight crime. It is proposed ultimately to have every policeman equipped with receiving apparatus.

Thursday, April 14.

BRITISH seamen's and firemen's union opposes strike called by triple alliance, of which it is a member.—The Soviet Russian government refuses to permit deportees from the United States to enter Russia because they are radicals.—A judicial investigation of affairs at Marquette prison is planned. Secretary of Agriculture Wallace says farmers should build up an organization capable of presenting agricultural facts to congress.—Cotton exporters get a loan of \$2,000,000 for financing export cotton to European countries.—A bill is before the house at Lansing proposing a tax of one cent a gallon on gasoline.

Friday, April 15.

BRITISH miners have agreed to meet mine owners in eleventh hour parley to avert strike.—For the first time since 1914, Minneapolis patent flour has sold at the mills for less than eight dollars per barrel.—New York assembly passes literacy test for voters.—Secretary of Treasury Mellon announces that the treasury department soon will offer \$40,000,000 worth of farm loan bonds at five per cent.—Railway labor board ends national agreements defining working conditions for railway employees.—Seventeen years after saving ship, Robert E. Cox receives United States medal for valor.

Saturday, April 16.

STEEL companies announce a reduction in prices; this is expected to renew activity in the steel industry.—By a vote of 269 to 112, the house of representatives passes the emergency tariff bill.—General Pable Gonzales, former provisional president of Mexico has gone into Mexico to start a revolt against the government.—President Harding intends to place envoy in allied councils to help fix German debt.—The electric trades union and the railway clerks' association called off "sympathy" strike in Great Britain.—A bill to abolish fraternities and secret societies in public schools was defeated in the house in Lansing.

Sunday, April 17.

SNOWSTORM interferes with telegraph and interurban service in the southern part of state.—Tornado in the south does much property damage and kills about seventy-five people.—Naval experts urge Dutch Harbor, Alaska, for northern Pacific naval base.—President Harding starts "conscience fund" with one dollar received from a man who robbed him twenty years ago.—Poland ratifies the peace treaty between Soviet Russia and Ukraine.—Five thousand Chicago public school boys will camp at Camp Roosevelt, Muskegon, this summer.—Michigan industries recover forty-seven per cent in activity from the low ebb of industrial depression.

Monday, April 18.

ALLIES sanction the taking of the Ruhr basin, Germany, and the working of its mines and factories by the French unless Germany agrees to allied settlement.—Secretary of State Hughes says the United States will shun all dealings with Russian Soviet government.—Following reductions in price by the U. S. Steel Corporation, John Deere & Company announces a ten per cent reduction in the price of farm implements.—Ex-Kaiser Wilhelm returns to exile after following the body of his wife to the German border.—United States public health service says seventy-five per cent of Michigan population is served with municipal water supply.—A record snow storm does damage in fruit sections of the state.

Tuesday, April 19.

RURAL prohibitionists swamp liberals of cities and towns in liquor vote in the Province of Ontario, Canada.—The United States and Japan are both firm in their attitudes regarding the Island of Yap.—Dr. Sun Yat Sen, "President of the Chinese Republic," decides to quit.

Cheap Grain and Pasture for Hogs

By A. L. Bibbins, Extension Specialist, M. A. C.

THIS spring finds a great many Michigan farmers with a surplus of grain which, if sold as "cash grain" must go at considerable sacrifice. It behooves us to seriously consider methods of marketing this grain in the most economical manner possible. Quite a few farmers have been interviewed who feel that one may wisely consider hogs as a means of bringing in revenue from such grain.

Experience has shown that the feeding of grain to hogs in the dry lot is rather an expensive and unsatisfactory method of producing pork. In the first place such a procedure requires more labor and causes a loss of valuable manure. The general vigor and health of the hogs must be taken into consideration. We must admit that the pig pen is not usually the most sanitary place on the farm and that hogs do not do as well when confined therein as when given a clean field in which to feed and roam.

The Illinois Experiment Station states as follows:

"Since hogs on forage are more healthy and vigorous they have greater appetites and consequently will consume greater amounts of feed than those in dry lots or small pens. 'The full feeding of hogs on pasture will fit animals for market at a younger age than will almost any other system of feeding.'"

The breeding herd receives great benefit from a good pasture. Being large and having a greater capacity they can handle a larger amount of coarse food than can the shotes. The sows maintain a rugged and healthy constitution and consequently are more efficient in the breeding herd than if closely confined.

There are quite a few forage crops available for hog pasture. No one can be termed the best for all farms, but the number and variety of crops available allows one to study his own conditions and select that one deemed the best for his purposes.

Alfalfa.

Alfalfa may be managed to provide pasturage for about one hundred and thirty days, carrying ten to twenty shotes to the acre, depending upon the size and the grain ration used. It comes on early in the spring and lasts throughout the summer, producing a large amount of feed to the acre that is very well liked by hogs.

It is hardly possible to pasture the alfalfa evenly because in the spring the alfalfa makes such a rapid growth and the pigs being small are unable to keep it down. Careful management can take care of this problem. The first growth can be cut for hay and then the pigs having a greater capacity may keep it down if there be a balancing of the number of hogs and the size of the field.

The large pigs should be ringed to prevent them rooting out the plants which they might otherwise do, especially if the pasture should become a little short during the dry weather, as then the hogs are likely to dig out and eat the roots.

A few farmers have successfully managed their alfalfa fields in such a way as to efficiently produce pork and at the same time obtain two good cuttings of hay.

By placing colony houses, watering

litters and also for fall pasture as it furnishes forage at a time when succulent feeds are generally lacking. Missouri Experiment Station demonstrated that with hogs bringing eight cents than the rape, with the result that an acre produced on an average of about \$26 worth of pork. The disadvantage of relying upon blue-grass pasture is that during the hot and dry period of July and August there is quite likely to be a shortage of vegetation. This may be taken care of by having peas and oats, rape, or some similar crop ready to turn the hogs in on during such a time and thus give the blue-grass pasture a rest. During its growing season blue-grass will carry about as many pigs as alfalfa, clover, or rape, but does not produce as many pounds of pork and requires more grain.

Dwarf Essex Rape.

Rape is probably the greatest general utility forage for hogs. It is an



troughs and self-feeders in the field the hogs will pasture in the near radius of these. When they have quite well covered the area the equipment may be moved on to a new area and so on across the field. The area pastured makes additional growth and later may be cut for hay. After allowing for another growth to be produced the hogs and equipment are moved back, and so on throughout the season.

Red Clover.

Red or June clover is widely used for hog pasture and although it does not afford a permanent pasture, it furnishes an abundance of palatable feed for one season. Usually the first growth is cut for hay and the second used for the hogs—an acre carrying ten to sixteen shotes. This does not furnish as late a fall pasture as alfalfa nor as much succulence during the dry season.

Blue-grass.

This is one of the best and earliest forage crops and furnishes feed for a long time. It is excellent for the spring

excellent emergency crop which can be sown real early in the spring or at any time up to August.

Drilled or broadcasted in the early spring at the rate of five to eight pounds to the acre, and if properly managed will provide pasture until late in the fall, carrying fifteen to eighteen shotes for one hundred days, feeding about two pounds of barley per hundredweight per day. Some growers start in the spring and make seedings of rape at intervals of three weeks and thus have a good growth of succulent forage throughout the season. In the corn belt it is often the practice to put in rape at the last cultivation of corn with the aim in view of having a green forage crop to balance the ration when the corn is hogged off. The success of this venture quite largely depends upon the July and August rainfall for there must be enough moisture to germinate the seed and give the young rape seedlings a good start.

Many prefer seeding oats and rape

together, using one bushel of oats with five pounds of rape.

The advantage of this practice is that the oats make a quicker growth than the rape, with the result that pasture is available a week to ten days earlier than when the rape is put in alone.

Experiments conducted by several stations indicate that rape seeded alone is of equal feeding value to the mixture.

The Pennsylvania Experiment Station obtained cheaper and more rapid gains from the rape alone than from the mixture.

Not a few corn belt farmers put in two to three pounds of rape in the oats to provide a pasture after the oats are removed for grain. This works quite satisfactorily unless the ground is so rich as to cause lodging of the oats.

In wet and hot weather, such as heavy morning dews followed by a hot sun, hogs may sun-scaud and be irritated by the rough edges of the rape leaves. This is apparently more likely to occur with white pigs or those having white spots.

Barley.

Two bushels per acre gives a good pasture in a short time. Some object to barley pasture because it grows so fast in a short time that it becomes woody and hogs don't eat it. It should carry fourteen shotes for sixty to seventy days.

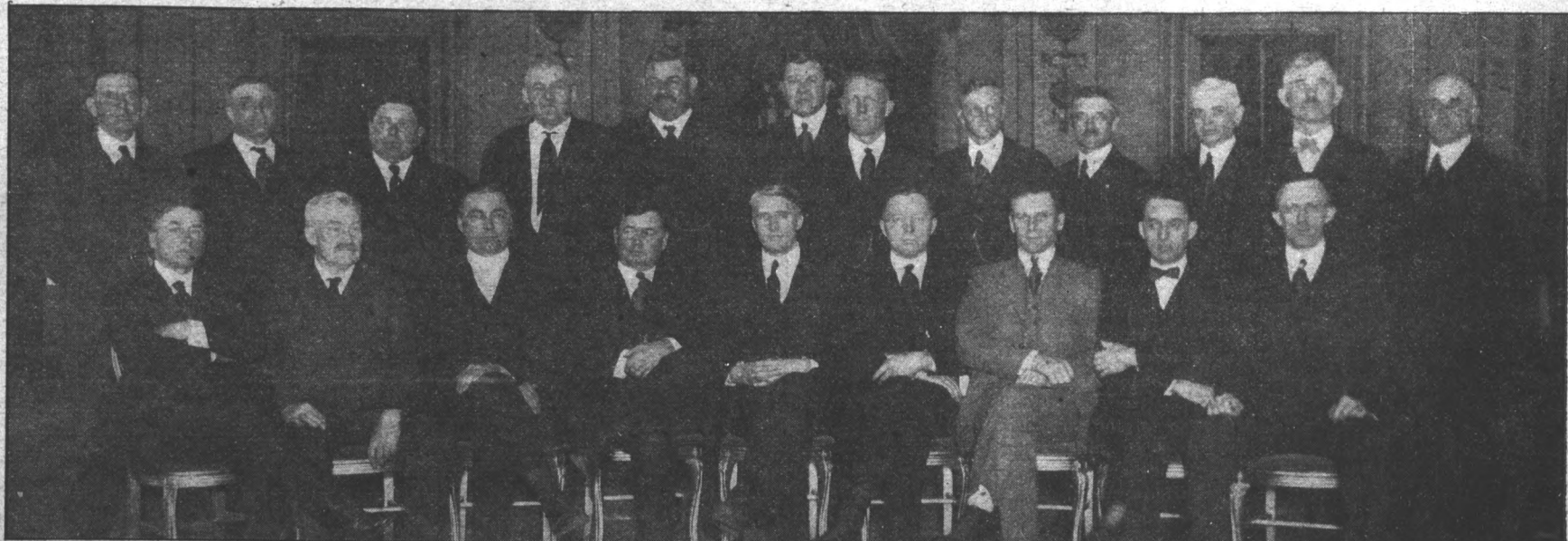
Oats.

Oats seeded at the rate of two and one-half to three bushels per acre gives a good pasture up to the time that oats start heading out and then they are woody. One may make three different seedings at intervals of about three weeks apart and thus provide suitable pasture for the entire summer. An acre should carry twelve to fourteen hogs about seventy-five days, feeding about two pounds of barley per hog per day.

Canada Field Peas.

One and one-half bushels of oats plus one and one-half bushels of peas are sown with grain drill. Turn hogs in during August and early September, and it will carry them up to the time that corn is available for fattening purposes. It is possible to pasture fifty to sixty days after seeding and depend upon good pasture for the next thirty days. In such a case one should have another pasture, such as rape, ready

Newly Elected Directors of the U. S. Grain Growers, Incorporated



Front Row, Left to Right:—H. W. Avery, Kansas; James Nicol, Michigan; W. J. Eckhart, Illinois; P. E. Donnell, Missouri; J. R. Howard, President of the American Farm Bureau Federation, Iowa; C. H. Gustafson, Lincoln, Nebraska; A. L. Middleton, Iowa; F. M. Myers, Iowa; J. M. Anderson, St. Paul, Minn. Back Row, Left to Right:—J. D. Pancake, Colorado; F. W. Schilling, Minn.; J. K. Mason, Indiana; U. L. Burdick, North Dakota; H. W. Coit, Texas; Geo. C. Jewett, Washington; R. M. Clark, Illinois; V. H. Smith, Oregon; R. C. O'Brecht, Kansas; W. W. Robinson, Ohio; J. T. Belk, South Dakota; Fred A. Mudge, Illinois.

OHIO RAKE FARM IMPLEMENTS

Sure Drop Corn Planter



A GREATER CORN YIELD

THE loss of one ear from every second hill is a loss of 15½ bushels to the acre—one ear from every third hill is a loss of 10½ bushels per acre. What you want then is a corn planter that will not miss—it must plant the desired number of grains each time without scattering or breaking them. A cracked or broken kernel will not grow.

You can't see the grains when planted, therefore, you want a planter which you know has proven its success. You don't want to experiment.

The Sure-Drop corn planter has been a favorite with farmers throughout the United States for the past twenty years (it was formerly made by The Gale Manufacturing Company of Albion, Michigan.)

An old worn out corn planter—or a new planter of questionable merit—may cost you many times more in loss of yield than the cost of a new Sure-Drop planter.

The Ohio Rake Sure-Drop Corn Planter positively insures your seed getting into the ground right. It yields a profit the first year in giving a better and larger stand of corn.

Absolutely Accurate:

It plants just the number of grains you want

THE OHIO RAKE CO.
DAYTON, OHIO
ESTABLISHED 1884

in row or hill at exactly the spacing you want and will not scatter nor break the corn. You never have to thin out after planting with a Sure-Drop.

It is light, yet strong and durable, and carries the Ohio Rake guarantee of reliability. Some of its many advantages are: Large hinged hoppers, making seed plate changes possible without removing seed—combined foot and hand lever for raising runners—equipped with automatic reel and marker—is adjustable to width of rows from 28 to 42 inches—will plant any variety of corn or beans.

There's a Dealer Near You

There are 210 Ohio Rake Dealers in Michigan who carry the Sure-Drop Corn Planter and other Ohio Rake implements in stock. Send us your name and we will give you the name of our dealer nearest to you and descriptive circulars of any of our implements.

WE MAKE
Transplanters
Potato Planters
Spike-Tooth Harrows
Spring-Tooth Harrows
Disc Harrows
Corn Planters
Corn Shellers
Hay Rakes
Hay Loaders
Hay Tedders

BERRY BASKETS



Special offer. To points within 150 miles of Lansing, we make the following postpaid price on our berry baskets.

200 A-grade wood baskets postpaid \$2.50
200 Waxlined paper baskets \$1.95

Our A-grade baskets are the best wood qt. basket made. If your market demands a wood basket, you will like these.

The waxlined paper basket holds a standard quart, is neat and clean, and fine for the home market. Order early.

By express f. o. b. Lansing, we quote as follows:

1,000 A-grade baskets \$10.50
1,000 Waxlined baskets 7.25
16 qt. Crates in flat, 10 for 2.80

Send for price list. Rates given for larger quantities.

M. H. Hunt & Son, Box 525, Lansing, Mich.

THE AUTO-OILED AERMOTOR

A Real Self-Oiling Windmill

Oil an Aermotor once a year and it is always oiled. Every moving part is completely and fully oiled. A constant stream of oil flows on every bearing. The shafts run in oil. The double gears run in oil in a tightly enclosed gear case. Friction and wear are practically eliminated.

Any windmill which does not have the gears running in oil is only half oiled. A modern windmill, like a modern automobile, must have its gears enclosed and run in oil. Dry gears, exposed to dust, wear rapidly. Dry bearings and dry gears cause friction and loss of power. The Aermotor pumps in the lightest breeze because it is correctly designed and well oiled. To get everlasting windmill satisfaction, buy the Aermotor.

Write today for Circular.

AERMOTOR CO. Chicago Des Moines
Kansas City Minneapolis Oakland



MR. FARMER
Leather is High in Price. Hides are Cheap
BEAT THE PROFITEER.

Get your Cow, Steer and Calf hides tanned into
HARNESS LEATHER
We can SAVE you big MONEY. Write us for information and
prices on doing this class of work. We also tan and make Fur
Coats and Bobs for \$15.00, where you furnish the hide.

THE BLISSFIELD TANNERY
W. G. White Co., Inc., Blissfield, Michigan

When You Write to Advertisers Please Mention This Paper

for the hogs when they come off the oats and peas.

Soy-beans are used in many sections of the corn belt. Probably the greatest feeding value from this crop is to be had when it is put in with corn to be hogged down.

The Montana Experiment Station has conducted extensive investigations in pasturing hogs, using two pounds of barley per hundred live weight per day. They report that rape and oats require 3.14 pounds of grain for each pound of gain, while rape alone requires 2.43 pounds, medium clover 2.64, and alfalfa 2.1 pounds. The combined cost of grain and pasture for one hundred pounds of gain was highest in the case of barley pasture, the cost of which was \$13.60; clover, \$10.80; rape, \$9.93, and alfalfa, \$8.00. After deducting the cost of the grain eaten the alfalfa gave a return of \$92.87 per acre, clover \$50.36, and rape \$39.95.

From the above we might conclude that it pays to provide ourselves with good forage crop for hogs, especially where grain is rather abundant and cheap, alfalfa properly managed being the most profitable. However, if such is not available one may outline a plan to utilize clover and rape, peas and oats, singly or in a combination, alternating from one to another and thus lessen the labor cost and apparently increase the production of pork.

DAIRYMEN OPERATING MILK PLANT.

DAIRYMEN in the vicinity of Owosso are trying their hand at operating their own milk plant. With the closing of the Owosso plant of the Detroit Creamery Company, producers of approximately 50,000 pounds of milk in this section were left without a market. The creamery company announced that it could not continue to operate the plant with no outlet for skim-milk. They had on hand a large amount of skim-milk powder for which there was no sale, and the health authorities had refused to let them dump the skim-milk in the river.

Through the efforts of M. F. Crowe, president of the Milk Producers' Association, permission was obtained to empty any surplus skim-milk in the river, and arrangements were made with the manager of the milk plant, whereby the farmers would temporarily operate the plant with the help of the regular force.

At a meeting of producers and haulers held the first of the month, the haulers agreed to return the skim-milk from each farmer's shipment without extra charge. Everything considered, the arrangements are very satisfactory, according to Mr. Crowe who is in close touch with the situation. The amount of milk has increased from less than 20,000 pounds on the first day to over 30,000 pounds; and with this volume of milk the operating cost can be kept low, and the farmers receive as great, if not greater, returns per one hundred pounds than when selling outright. The milk is bought on a butter-fat basis, and the committee in charge is receiving eight cents a pound above local market quotations.—M.

FLINT MUNICIPAL MARKET A BIG SUCCESS.

THE proposition recently made to restrict or regulate sales to consumers at the new Flint Municipal Market, met with the only logical outcome, namely, a victory for the people who brought their opinion to bear with such force that their attitude toward the plan can not be misunderstood. They have indicated beyond doubt their appreciation of the operation of the market thus far; and the farmers have contributed a fair share toward sustaining the enterprise by furnishing the market with fresh products and selling them at prices within the reach of most persons.

Only occasionally has a farmer tried to squeeze a little more than the top-notch price from his customers, a word of caution usually being sufficient to curb such practices. The farmers believe that they have the power to maintain the popularity of this big market, by keeping their ideas of values within reason and giving the people the benefit of low-handling charges. They are also lending a hand to the market master in rounding up and eliminating from the market hucksters and dealers who buy the products they have to sell. The farmers themselves are not permitted to purchase products for resale on the market, and are subject to the same penalties as dealers.

The city ordinance governing the market specifies that fresh meat may be sold between October 15 and April 1. In the absence of facilities for handling meats under warm weather conditions, and very few, if any, farmers have proper means for cooling meat after slaughtering, meat sales ended on the first day of the month. Dressed meat, unless placed under refrigeration immediately, is subject to rapid deterioration and infection by flies and other sources during the summer.—M.

IT PAYS TO RAISE PURE-BRED HOGS.

M. R. C. L. SHAFLEY & SON, of Clinton county, recently delivered a pure-bred Duroc-Jersey to the pens at St. Johns, which at the age of one year and ten months weighed 810 pounds. During the fattening period of forty-seven days a gain of 210 pounds was made, or nearly four and one-half pounds a day. The big fellow represents an absolutely corn-fed animal, no other form of grain being used in his ration. Mr. Shafley is an enthusiast of the Durocs and takes great pride in their growth.—M.

TO CLASSIFY OUR MUCK LANDS.

MUCK lands of Michigan will be classified so as to permit systematic study of methods of reclamation, tillage and the use of lime and fertilizers. A program recently announced by Dr. M. M. McCool, head of the soils department at M. A. C., calls for the investigation of vast areas of muck land in the state. The project is already under way and early reports indicate significant findings.

"The nature of the sub-soil, as well as the kind of surface material, is being considered," says Dr. McCool. This means determining the depth of the sub-soil and whether it is sand, clay or marl. The importance of knowing the nature of the lower layers has long been recognized by practical men. Those carrying a high percentage of lime and the lime content of seepage waters are being determined. The total mineral matter present, as well as the amount of several elements of plant food, is being found, while physical investigations are in progress.

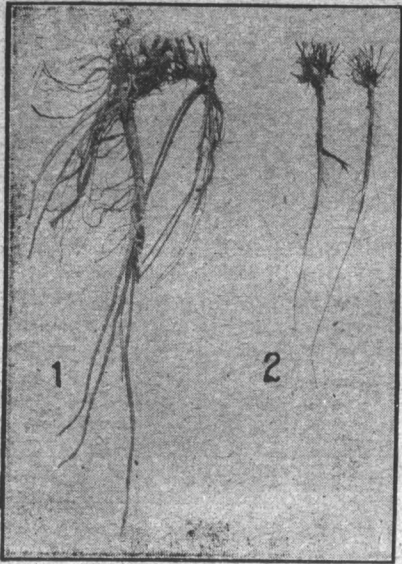
Adequate drainage and proper use of fertilizer on these areas will doubtless increase the valuation of Michigan greatly and open up large sections of good land. Analysis shows that many of these deposits of muck land in Michigan compare favorably with those reported from other stations, as well as from European countries.—H.

TAKES OVER WAREHOUSE.

THE Isabella County Farm Bureau took possession of the E. B. Meulder chicory plant last Monday to use as a warehouse for storage of farmers' supplies and for the storage of wool in connection with the wool department of the State Farm Bureau. Mr. Hazelwood was in Lansing recently where he made arrangements for Mt. Pleasant warehouse to become the wool assembling point for the county.

Better Alfalfa Crops—By W.A. Freehoff

ALFALFA is the standard by system was much larger, deeper, and which all forage crops are being more widely developed. Unfortunately, in many sections of the country, it is hard to get the crop established, or to prevent



Old (1) and Young (2) Alfalfa Roots.

it from winter-killing. So valuable is alfalfa, however, that progressive farmers make every effort to establish it in their cropping system.

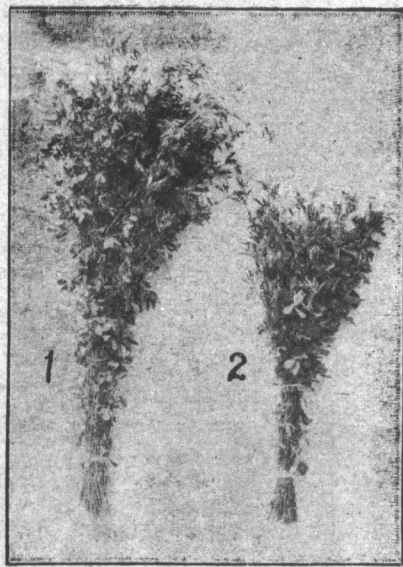
Hardiness is one of the determining factors in the more northerly regions. The Wisconsin Experiment Station has been making some special studies in regard to hardiness, and reports governing a six-year period are now available. For the six years the plots of Grimm alfalfa yielded from 20.8 tons to 22.5 tons per acre, while plots of common or unselected seed yielded only from 13.1 tons to 18.7 tons per acre.

Alfalfa, unlike clover and other legumes, requires a long period of development before it comes into full bearing. It takes time for the root system to grow and become established, and until the root system has reached some degree of maturity, a full crop is not secured.

It is at once apparent, therefore, that alfalfa fits a great deal better into a long crop rotation, rather than a short one. Comparison between a three-year-old plot and a one-year-old plot, for two cuttings, showed that the older field was nine inches taller for both cuttings, and also yielded one and one-half tons more per acre. The root

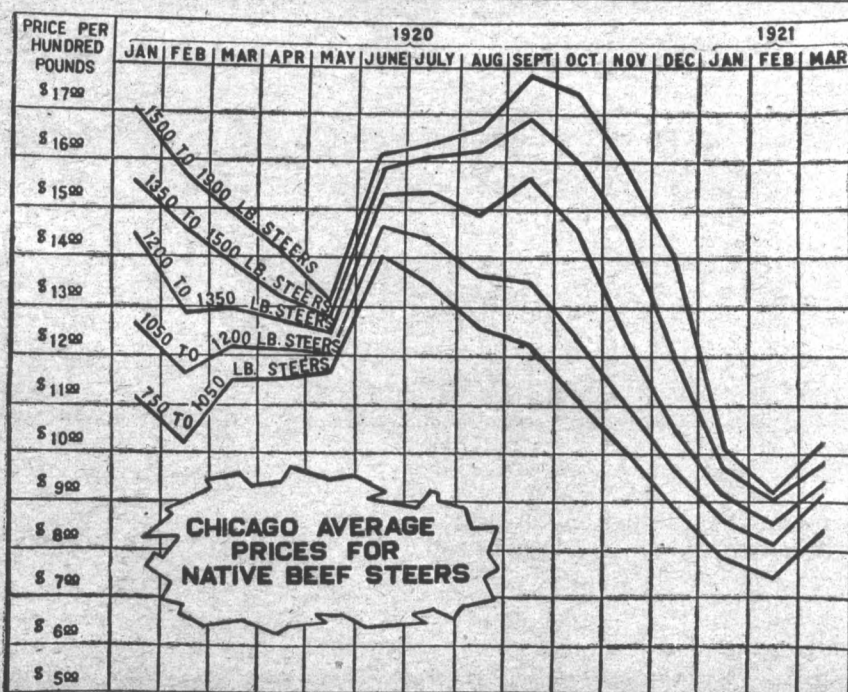
Inasmuch as the hardier varieties are giving a larger yield, the proper selection of seed is of the greatest importance. In Wisconsin about three hundred and sixty plots were sown in 1920, and studies upon these varieties have resulted in the discovery of a method of distinguishing genuine from non-genuine Grimm, Baltic, Cossack varieties the first season alfalfa is grown. Genuine hardy varieties show a dormancy of growth in fall which is strikingly different from the appearance of Montana or Kansas strains of common alfalfa. Dormancy in the hardy varieties sets in at an early date, while the other varieties continue to grow, when rains are frequent.

The growth of weeds where alfalfa has been planted without a nurse crop is a serious menace to the life of the crop the following year. Farmers have been afraid to clip too closely, in fear of winter-killing, but special studies show that close cutting gives better control of weed growth without seriously injuring the alfalfa, than where five inches was left. Close cutting kept practically all the weed growth



Cuttings from Old (1) and Young (2) Plants.

in check. With the customary amount of moisture a new, healthy, vigorous alfalfa growth came on, while in those plots where the alfalfa was clipped long, foxtail grew rapidly and headed out so that the field had to be cut again in August to save the alfalfa.



THIS chart shows how the market's attitude toward weight in fat steers varies at different seasons of the year. Heavy cattle always average higher in price than light weights, principally because they are higher in finish, although the top price on light weights may be as high as, or higher, than for heavy steers. April, May and June are the months when light steers sell to best advantage, while September, October and November are the months when heavy steers bring the biggest premium.



LOOK FOR THIS TRADE MARK WHEN YOU BUY ROOFING

It's a Repeater

A MAN buys MULE-HIDE Roofing the first time because his dealer recommends it, or he likes its looks, or because his neighbor has some.

—But he buys it the second time because through his first purchase he has had a chance to test it out, and he has found that it is the best protection at the least money for each year of service.

MULE-HIDE is an unusual combination of good looks and durability, and its service record

"NOT A KICK IN A MILLION FEET"

is no exaggeration as thousands of users will testify.

Go to your lumber dealer and ask him to show you MULE-HIDE in any of the following styles:

- MULE-HIDE Smooth Finished Roofing.
- MULE-HIDE Slate-Kote Roofing furnished in Green and Red Slate.
- MULE-HIDE Shingle-Craft Roofing furnished in Green and Red Slate.
- MULE-HIDE Individual Asphalt Shingles in Standard and Double-Thick Weights furnished in Green and Red Slate.
- MULE-HIDE Four-Unit Asphalt Shingles furnished in Green and Red Slate.
- SEAL-SKIN and BLACK-BEAR Waterproof Building Papers.

The Lehon Company
MANUFACTURERS
44th to 45th Street on Oakley Avenue
CHICAGO

MULE-HIDE

Ready Roofings and Asphalt Shingles

This Trademark is Your Protection



GRAND RAPIDS, MICHIGAN

Too Costly

The business farmer of today not only believes in adequate fire protection—he *insists* upon it.

Great losses incurred through farm fires in the past have warned the thinking farmer to inventory his house, house-hold goods, barns, and other buildings, enabling him to properly determine values for basing adequate insurance. He knows that thorough protection against fire menace means full fire insurance, because city fire departments avail him nothing.

The Peninsular Way

The Peninsular Fire Insurance Company—Michigan's big fire Underwriter—solves farmer's insurance problems by offering you regular city property protection. Your buildings are appraised according to location, condition and general improvement and Peninsular Policies covering, do not in any way interfere with other fire insurance carried. Many business farmers, from experience, have found under-protection far too costly and today *insist* on full security against fire.

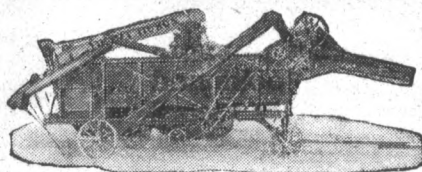
Without obligation on your part, just drop our Farm Department a card and learn about the Peninsular Way, which includes expert advice on CROP protection.

PENINSULAR

Fire Insurance Company
of America

Capital \$1,000,000.00

GRAND RAPIDS, MICHIGAN

COLON C. LILLIE,
President.J. FLOYD IRISH,
Sec'y and Managing Underwriter

Be Your Own Thresherman

THRESH when the grain is ready—when you are ready—when roads are good—when the market is most favorable to you.

Every farmer who has a tractor of 18 H. P. or over can insure himself against loss of much or all of his yearly harvest—from bad weather and inability to get a machine when his grain is ready—by owning one of these little threshers.

PortHuron

The Universal Thresher

Threshes All Kinds of Grains and Seeds.

20x34 and 22x38

Tractor Specials

Also, Four Larger Sizes

The saving on one crop may be enough to pay for the thresher, which, with proper care, will last nearly a lifetime.

Made and guaranteed by a Company that has built grain threshers for 70 consecutive years. For threshing, separating, cleaning and saving the grain it cannot be excelled.

Write for complete description and specifications—sent free upon request.

Port Huron Engine and Thresher Co.,

Port Huron, Mich.

Get Our Special Low Prices And Our Easy Terms

They will open your eyes, make you want to own your own cutter, a Ross, instead of borrowing or paying some neighbor.

Ross cutters are the best made. Proven by 71 years' reputation. Thousands in use back this up. Now we go still farther with lowest prices and easiest terms, in keeping with present low prices of farm crops.

Cheapest to Own Easiest to Operate

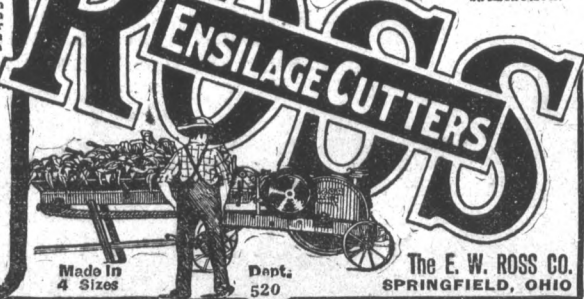
Cheapest because it CUTS ensilage perfectly, puts corn juices into silo, does not shred.

Requires 25 per cent less power, has greater capacity for its size, fewer working parts, which means less upkeep, more improvements, all of which mean a saving of 25 per cent in ownership and operation of Ross cutters.

Write today for full particulars.

Compare This Construction

Ross Cutters have angle steel frame (not cast iron), three adjustable self-conforming habbitt bearings for main shaft, ball-bearing and thrust knife adjustment. Special construction blower fan puts ensilage into silo in steady stream. Perfect knife adjustment, reversible steel cutting bar, with four edges. All these features mean perfect ensilage. Years of service and greatest satisfaction.



Made in 4 Sizes

Dept. 520

The E. W. ROSS CO.
SPRINGFIELD, OHIO

FARM BUREAU NEWS

CHANGE IN FREIGHT RATES TO BENEFIT POTATO MEN.

FREIGHT rate advantages that potato shippers of Wisconsin and Minnesota have enjoyed over Michigan producers, when shipping into territory east of the Mississippi river, will be abolished when the proposed freight rates increase for railroads of the northwest is approved by the interstate commerce commission.

At present Minnesota farmers are able to ship potatoes to the Cincinnati district at from two to six cents a hundredweight less than the rate from Cadillac, the Michigan Potato Growers' Exchange says. Rates from Minnesota to Cincinnati are thirty-four and a half cents, while the rate from Cadillac is forty and one-half cents. The proposed rate increase to growers of that section of the northwest, sought by the carriers and now before the interstate commerce commission, would increase their rate on potatoes from two to four cents above Michigan rates, or forty-four and a half cents to Minnesota points, the Cadillac rates remaining the same, or forty and one-half cents. The discrimination against the growers in Michigan, so long borne by them, would thus be removed.

ELEVATOR EXCHANGE SAVES MONEY.

FARM bureau members selling their wheat and rye through the farm bureau elevator exchange during the month of February received a premium which averaged three and a half cents per bushel throughout the month, says the elevator exchange, which has just made public its actual daily sales figures for that period as against the daily bids of five leading grain jobbers of the country.

The statement, says the elevator exchange, does not mean that every bushel of grain sold through the exchange is going to save that much for the farmer, but it does mean that every bushel sold by the exchange during the month of February brought an average of three and a half cents above competitors' prices.

Seventy-nine elevators are now affiliated with the farm bureau elevator exchange. Evidence of the general attitude of cooperative associations throughout the state is shown by the fact that elevators are joining up every week. The latest to affiliate with the exchange is the Tri-County Marketing Association of Brunswick.

L. E. Osmer, one of the best known grain salesmen of the state, now manager of the elevator exchange, believes that the worst of the heavy decline in grain prices is over and that from now on business can move to better advantage, but that it is impossible to keep from incurring occasional losses.

SUGAR BEET CONTRACTS.

A MARKED preference on the part of Michigan's twelve thousand sugar beet growers for the contract drawn up and presented by the Sugar Beet Growers' Association over the contract offered by the sugar factories of the state is quite evident, says C. E. Ackerman, general manager of the association, in commenting upon the campaign which closed April 16. Quite a deluge of signed contracts was reported at the state office in Durand during the closing days of the campaign. Final figures will probably be released at the close of the State Farm Bureau Beet Growers' Association meeting to be held at Lansing this week. T. C. Price, of Saginaw, an association official, said early in April

that 100,000 acres had been signed up. Eighty per cent of the growers in Allegan county signed growers' contracts, according to Alfred Bentall, county agent.

The Sugar Beet Growers' Association is sorting all contracts on hand, according to the different factories in the state. These contracts will be offered to the factories. In case they are refused as now written and a reasonable offer is made in the way of a change, it will probably be referred back to the individual grower for his acceptance or his rejection. The association officials are urging their growers to stand fast if they are to win. The growers' contract makes the association the growers' representative before the manufacturer.

The association contract is based upon that made by the Utah-Idaho Farm Bureau sugar beet growers with their factories. That contract is said to have made the growers an additional \$2,000,000 return on a crop far less in tonnage and sugar content than the average Michigan crop. It provides \$6.45 per ton for beets when the wholesale price of sugar is \$5.00 a hundred weight. For each \$1.00 increase in the wholesale price of sugar the contract adds \$1.29 per ton. Factories are said to be offering \$7.00 beets on the basis of \$6.00 sugar, with an increase of \$1.00 for each \$1.00 increase in the wholesale price of sugar. The association contract would bring the grower \$7.74 for \$6.00 sugar.

SELLS HIGH-TESTING PHOSPHATES.

BECAUSE of what farmers consider almost prohibitive freight rates, but 50,000 tons of acid phosphate fertilizer of the 125,000 tons said by the United States Department of Agriculture to be the normal spring requirement of Michigan, have been applied to the farms of this state, according to the State Farm Bureau Traffic Department. The department of agriculture states further that the application of acid phosphate is decidedly beneficial and results in increased yields. However, freight rates of \$7.00 to \$8.00 a ton on acid phosphate from Tennessee, the nearest source of supply, has almost stopped shipments into Michigan.

The State Farm Bureau, recognizing the situation, has been assisting its members to solve the problem for some time past. The farm bureau method included the taking over for Michigan the state's allotment of a western-made treble super-phosphate—forty-five and a half per cent available phosphoric acid as against the sixteen per cent available phosphoric acid said to be carried by ordinary phosphate—and disposing of it through its purchasing department at prices the farmers are said to consider right. Freight rates on carlots are prepaid and half the rate on less than carlots is prepaid, through an arrangement with the manufacturer of the phosphate, says the farm bureau.

The farm bureau points out further that with the treble super-phosphate about three times as strong as the ordinary phosphate, the farmer saves two-thirds of the ordinary haulage and labor charges.

Vermont Farm Bureau Federation has enlisted the aid of Clifford Thorne, traffic specialist of the American Farm Bureau Federation, to fight a proposed ten per cent increase in all freight rates by the railroads of New England. At a meeting in Boston, prominent officials of the railroads are credited with saying that in their estimation Mr. Thorne is the ablest railroad attorney in the United States.

World's Largest Makers of Stump Pullers

Get Special Agent's Offer

Only \$10 DOWN A YEAR TO PAY

AND 30 DAYS' FREE TRIAL!

Be one of 500 farmers to get a Kirstin Stump Puller on Spashing Easy Terms this month! Try it at our risk. See how strong, powerful, speedy. How with Kirstin wonderful leverage principle one man alone handles biggest, toughest stumps—quick, cheap, easy. If satisfied, pay a little each month—taking one year to pay. If not, return at our expense. Money refunded! No risk to you. FREE BOOK gives details! Guarantee: Special Agent's Offer. Write today.

A. J. KIRSTIN COMPANY 1765 Lud St., Escanaba, Mich.

Kirstin Stump Puller Book

84-Page Book FREE

They Have Selected Threaded Rubber

Why did the builders of 174 motor cars and trucks select Willard Batteries with Threaded Rubber Insulation as equipment on their product?

First— because many years of actual service on thousands of cars have proved that Threaded Rubber Insulation outlasts the battery plates.

Second—because they know that every piece of Threaded Rubber Insulation is exactly like every other piece.

Third—because they know that rubber is the most satisfactory insulating material, and that Threaded Rubber Insulation is the most practical form of rubber for starting and lighting batteries.

Pick out the dealer nearest you, listed below, and ask him to tell you why a Willard Threaded Rubber Battery on your car will save you money.

MICHIGAN

Adrian.....Union Garage
Albion....Central Sto. Batt. Co.
Alma....Alma Elect. Batt. Co.
Alpena...Alpena Batt. Serv. Corp.
Ann Arbor.....A. P. Sriver
Bad Axe....Huron Sto. Batt. Co.
Battle Creek, Central Sto. Batt. Co.
Bay City.....Thorne Elect. Co.
Benton Harbor, H. L. Draper & Co.
Big Rapids, Automotive Elect. Co.
Blissfield.....H. D. Bailey
Cadillac...Cadillac Sto. Batt. Co.
Calumet, Calumet Sto. Batt. Co.
Cedar Springs.....Floyd Davis
Charlotte, Charlotte Sto. Batt. Co.
Cheboygan.....J. A. Garrow
Coldwater, Coldwater Garage Inc.
Dearborn...Lindsay Batt. Serv.
Detroit...Mrs. M. W. Carpenter
Clements Batt. Service
Duncan Bros.
Fred's Tire & Batt. Service
Gould Bros.
J. Hergenroeder & Sons
Long Batt. Service Co.
Mart. J. Schneider
Western Batt. Service

Dowagiac...Walworth Batt. Ser.
Eaton Rapids, Smith Tire & Batt. Service
Escanaba....Home Electric Co.
Flint.....Flint Sto. Batt. Co.
Fremont...John J. Hansel & Co.
Grand Haven, Kooiman Batt. Serv. Co.
Grand Rapids, Wolverine Sto. Batt. Co.
Greenville.....E. H. Sharpe
Hamtrank.....David Berger
Hastings...Universal Garage Co.
Highland Park, Dewar Sto. Batt. Co.
Hillsdale...Simpson & Simpson
Holland....Lievense Batt. Co.
Houghton, Superior Sto. Batt. Co.
Howell.....Donald Maycock
Hudson....C. E. Dow Batt. Co.
Ionia.....E. W. Thomas
Iron Mountain, Iron Mountain Batt. Co.
Iron River, Iron River Batt. & El. Shop
Ironwood, Julius Bentzen Elect. Co.
Jackson...Jackson Sto. Batt. Co.
Kalamazoo, Thompson's Sto. Batt. Co.
Lansing.....H. F. Heath
Lapeer....Lapeer Sto. Batt. Co.
Ludington...Harry Trepanier



This trade-mark tells you that the plates in your battery are insulated—not merely separated. Willard Threaded Rubber Batteries are selected by the best brains in the automobile business as standard equipment for 174 makes of cars and trucks.

Manistee.....Lloyd & Smith
Manistique, Manistique Batt. Sta.
Marquette...Battery Serv. Sta.
Menominee...Johnson Tire and Repair Works
Midland, Kaufman & Revenaugh
Monroe, Monroe Sto. Batt. Co.
Morenci.....Green & Rorick
Mt. Clemens, Mt. Clemens Sto. Batt. Co.
Muskegon...Electric Serv. Co.
Niles.....Niles Batt. Serv.
Owosso.....Blair & Gaylord
Petoskey, Petoskey Sto. Batt. Co.
Plymouth, Plymouth Sto. Batt. Co.
Pontiac, Storage Batt. Serv. Co.
Port Huron, Storage Batt. Serv. Co.
Saginaw....Trombley Elect. Co.
St. Johns....F. H. McClintock
Sandusky, Sandusky Sto. Batt. Co.
Sault Ste. Marie, Northern El. Co.
Sebewaing.....Howell Bros.
South Haven.....H. A. Parker
Sturgis....Battery & Elect. Co.
Three Rivers...Batt. & El. Co.
Traverse City, Traverse City Batt. Co.
Wyandotte, J. T. McWade Batt. Service
Ypsilanti.....A. P. Sriver

WILLARD STORAGE BATTERY COMPANY
Cleveland, Ohio

Willard

THREADED RUBBER BATTERY

Save Your Grain Profits

IT is the last few bushels you get from an acre that give you a profit. You can easily lose those profit-making bushels by shelling out or sprouting after the grain is ripe.

THE HUBER JUNIOR THRESHER

will protect you. You can thresh when your grain is just right and save and sell all of it. Your tractor supplies the power. Your own help does the work. You need not exchange labor at inconvenient times. Your wife has no big threshing crew to feed.

The grain you save—and the threshing bills—soon pay for your Huber Jr., if you thresh for a few of your neighbors the machine should pay for itself the first year.

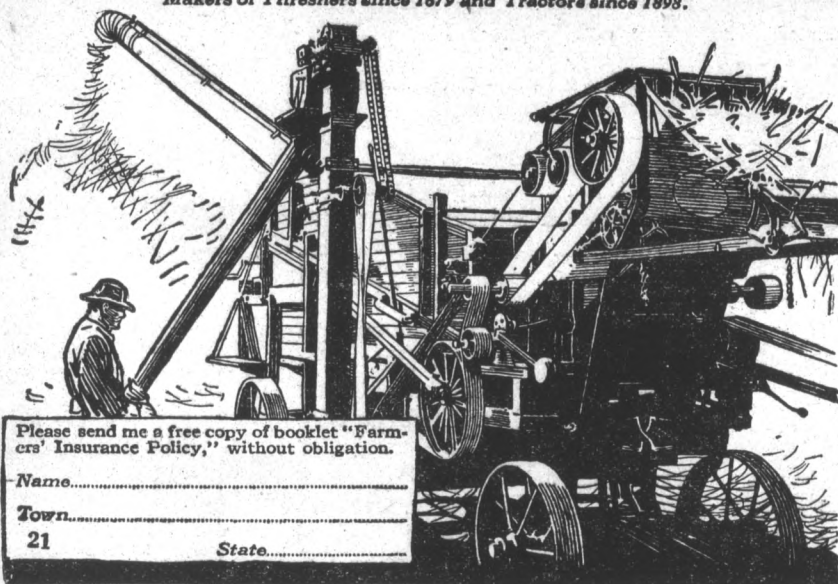
The Prices are attractive. Terms if desired.

This ad may not appear again, so fill out the coupon now!

THE HUBER MFG. CO. 21 Center St. Marion, Ohio

CANADIAN BRANCH: Brandon, Man.

Makers of Threshers since 1879 and Tractors since 1898.



He Turned the Corner—

The man in the fog thought he was lost, but he turned the corner — there was his own home!

To many, troubled with disturbed nerves and digestion due to coffee drinking, help has seemed a long way off, but they found in

POSTUM CEREAL

at the corner grocery
a delicious, satisfying table
drink that makes for
health and comfort.

"There's a Reason"

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



Mention The Michigan Farmer When Writing to Advertisers

News From Cloverland

By L. A. Chase

INSTITUTES IN FULL SWING.

MR. J. W. WESTON, assistant state leader of county agents for the upper peninsula, has his farmers' institutes well under way. It is necessary to arrange the dates of these so as to permit farmers who work in the woods when the snow is on the ground to attend, and yet not too late so as to interfere with spring farm work. Between April 18 and 28, institutes will be held in Baraga county, and will be conducted by Messrs. Putnam, Waldron, Kettunen and Wells. On April 22-23, Mr. Wells will hold institutes in Delta county, on April 30 in Dickinson county. The Marquette county dates extend from April 18 to 27, and the institutes will be conducted by Messrs. Waldron, Kettunen, Putnam, Miller McMillan and Wells.

they are 272.8 and 292. In July, they are 312.4 and 309.9. August had 247.3 and 268.7 hours of sunshine in the northern and southern peninsulas. September had 183.6 and 213 hours, as the days become shorter more definitely in the northern latitudes of the state. October shows 130 and 154.2 hours of sunshine in the two sections, while November's figures are 71.9 and 95.8 respectively. The year closed with December's showing of sunshine in north Michigan at 73.2, while it was 72.2 for the southern part of Michigan. Mr. Schneider points out that there is more sunshine in the upper peninsula in May and July, and somewhat more sunshine in northern Michigan in the four months' period, April to July.

PROGRAM FOR THE CONTROL OF PREDATORY ANIMALS.

THE commissioner of Agriculture of Minnesota, in a letter to the Upper Peninsula Development Bureau, expresses doubt that stock is killed by wolves and coyotes in that state. There are small poultry losses but deer are the chief sufferers, says the commissioner. At a time when Michigan is considering abolishing bounties for the destruction of predatory animals, it is interesting to note that the commissioner of agriculture in Minnesota regards the bounties in that state as too low to get results. The commissioner is certain that Minnesota will readily cooperate with Michigan and Wisconsin to check the increase of predatory animals. During the ensuing two years we are assured that the Minnesota Game and Fish Department will undertake an investigation to determine just what damage is done, after which game laws in that state can, if it appears desirable, be made to conform to such laws in Wisconsin and Michigan looking to the eradication of the pests.

As for bounties in Michigan, Auditor-General O. B. Fuller reports an increase from \$10,160 in 1917, to \$54,713 in 1920, while from July 1, 1920, to March 31, 1921, the amount paid out in animal bounties in this state is \$134,363.78, and what have we got to show for it? We are now holding schools of instruction for special deputies who are to be set definitely to work to exterminate the pests.

TESTS CORN AND SUNFLOWERS.

AGENT GUNDERSON has sent out a questionnaire to ascertain the views of Gogebic farmers in regard to the relative values of several types of corn and of sunflowers for ensilage. Among the corns, Wisconsin No. 8 and No. 25, and Minnesota No. 13, have been tried out extensively and each has its protagonists. It is stated that Wisconsin No. 8 beats No. 25 for foliage, but is slower to mature the ear. Several farmers report adversely as to sunflowers, but Mr. Gunderson advises giving them further trial. He points to the heavy tonnage of sunflowers grown per acre, their frost-resisting qualities, their splendid feeding value, their palatability and their ability to put meat on stock and give them a sleek, shining coat.

STANDARD SCHOOLS IN CLOVERLAND.

THERE are six hundred and sixty-one standard schools in Michigan, reports the Department of Public Instruction, and of these seventy-six are in the upper peninsula. Such schools are constructed in accordance with plans and rules approved by this department.

MUCH LAND CLEARING PLANNED FOR.

AGENT GUNDERSON, of Gogebic county, saved his farmers \$3,450 on TNT for land clearing, last January, he informs us, but can get no more. County Agent Geismar, of Houghton county, has distributed some 30,000 pounds of TNT and has requests for 6,000 pounds in addition, but is having difficulty in getting further supplies of this explosive.

The Menominee County Farm Bureau has also secured a large carload of government TNT, which is being sold to members at about twelve cents per pound. Inasmuch as the prices of farm products and farm wages are down, the bureau considers this a favorable time for land-clearing. It is proposed to carry on a farm-clearing demonstration in this territory later, involving the use of land-clearing machinery and explosives. After July 1, a general land-clearing campaign under expert direction, will be put on in the upper peninsula.

HELPS TO SELL GOOD COWS.

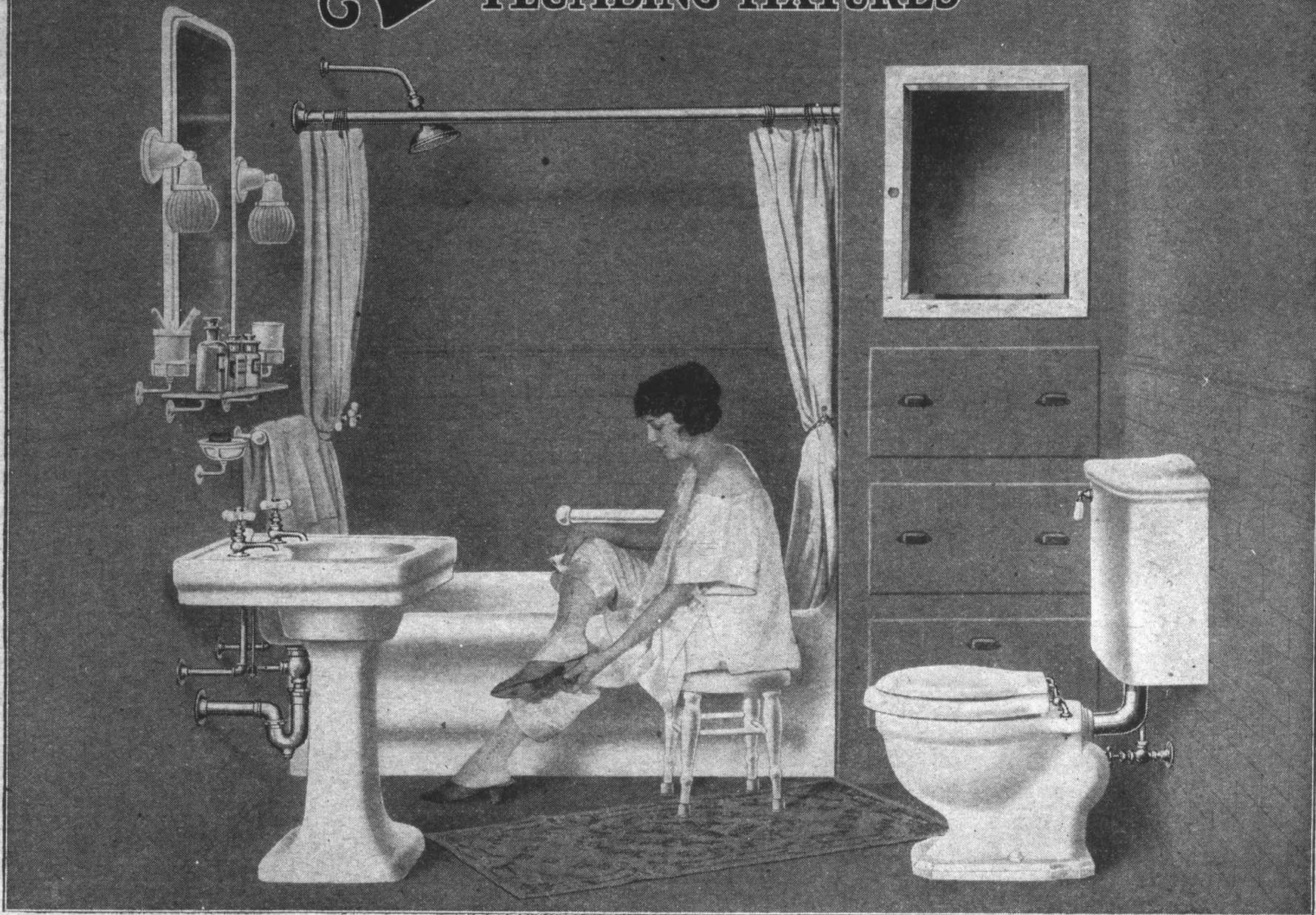
DOES cow-testing pay? is the question asked in the News Letter of Gogebic county. This letter points to a sale of a grade Guernsey cow for \$150 by one of the members of this association, the price being paid on the showing of the cow's record preserved on the books of the Cow-testing association. This is by no means an isolated instance. The records of individual cows belonging in the association shows the prospective purchaser just what he is getting by his purchase so far as production is concerned.

MICHIGAN'S SUNSHINE.

THE upper peninsula is supposed to have less sunshine on the average than the lower peninsula. Mr. C. F. Schneider, Meteorologist of the United States Weather Bureau, Grand Rapids, has prepared a table showing the actual amount of sunshine for stations having sunshine recorders for the past ten years. Grouping these stations separately for the two peninsulas, Mr. Schneider finds the ten-year average for the upper peninsula to be, in January, 88.8 hours, and for the lower peninsula, 86.4 hours. For February the figures are 128.5 and 119.4 hours respectively for the upper and lower peninsulas. In March, the upper peninsula had 195.4, and the lower peninsula 196.3 hours. In April as the days become definitely longer, the upper peninsula had 216.4, while the lower peninsula had 204.6 hours. In May the figures are 264.4 and 263.2. In June,

"Standard"

PLUMBING FIXTURES



The appeal of a modern bathroom is universal. To have one is to possess a constant source of health and comfort—to lack one is to miss more than you realize. It deserves your careful consideration in the improving of your present home or in the building of a new one.

Better bathrooms make healthier homes.

Write for copy of catalogue "Standard" Plumbing Fixtures for the Farm. It is illustrated in colors, shows complete bathrooms and fixtures, as well as model kitchen and laundry.

Standard Sanitary Mfg. Co., Pittsburgh

In addition to the displays of "Standard" Plumbing Fixtures shown by Wholesale Dealers and Contracting Plumbers, there are permanent "Standard" exhibits in the following cities:

NEW YORK..... 35 W. 31ST
NEW YORK (EXPORT DEPARTMENT)..... 50 BROAD
BOSTON..... 186 DEVONSHIRE
PHILADELPHIA..... 1215 WALNUT
WASHINGTON..... SOUTHERN BLDG.
PITTSBURGH..... 445 WATER
PITTSBURGH..... 106 SIXTH
CHICAGO..... 14 N. PEORIA
ST. LOUIS..... 4140 FOREST PARK BLVD.

*EAST ST. LOUIS..... 16 N. MAIN
*CLEVELAND..... 4409 EUCLID
CINCINNATI..... 633 WALNUT
TOLEDO..... 1002-1016 SUMMIT
COLUMBUS..... 1106 SECOND, N. E.
CANTON..... 166 N. THIRD
*YOUNGSTOWN..... 458 W. FEDERAL
*WHEELING..... 46 EIGHTEENTH
HUNTINGTON..... SECOND AVE. AND TENTH
*ERIE..... 130 W. TWELFTH

*ALTOONA..... 918 ELEVENTH
MILWAUKEE..... 428 BROADWAY
*MILWAUKEE..... 311 FIFTH
*LOUISVILLE..... 323 W. MAIN
NASHVILLE..... 915 TENTH AVE., S.
NEW ORLEANS..... 846 BARONNE
COR. PRESTON AVE. AND SMITH
HOUSTON..... 1200 JACKSON
DALLAS..... 212 LOSOYA
SAN ANTONIO..... 828 MONROE
FORT WORTH.....

KANSAS CITY..... 201 RIDGE ARCADE
SAN FRANCISCO..... 149-55 BLUXOME
LOS ANGELES..... 216-224 S. CENTRAL
SYRACUSE OFFICE..... 303 HERALD BLDG.
ATLANTA OFFICE..... 1217 CITIZENS & SOUTHERN BANK BLDG.
DETROIT OFFICE..... 414 HAMMOND BLDG.
CHICAGO OFFICE..... 1010 STANDARD OIL BLDG.
SEATTLE OFFICE..... 1714 L. C. SMITH BLDG.
TORONTO, CAN..... 59 E. RICHMOND
HAMILTON, CAN..... 20 W. JACKSON

FACTORIES: Pittsburgh, Pa.; Louisville, Ky.; New Brighton, Pa.; Toronto, Can. POTTERIES: Kokomo, Ind.; Tiffin, O.

Service at "Standard" Branches

In the cities marked (*) are carried complete lines of Plumbing and Heating Supplies, also Farm Water Supply Systems. Write or call on nearest branch.

Paint Now

BY M. M. WARD.

A FARM building covered with a good coat of paint is worth more than if it was unpainted. It will last longer, it will look better, it will sell for more. Paint, therefore, is an investment, not an expense. Yet twenty-four per cent of us use no paint at all.

Paint is used on farm machinery for two reasons: First, to protect it from rust. Second, it makes it sell better, (because it looks better). These facts are fairly well recognized, as sixty-seven per cent of us paint our farm implements and double their life.

What, then, is the cost of painting? And why is it we do not paint oftener?

We believe that the labor problem is at the bottom of the question: "To paint or not to paint?" A painting job consists of one-third paint and two-thirds labor. But where shall we get the labor?

A gallon of paint will cover two hundred and fifty to three hundred and fifty square feet—two coats. That is, a double coat of paint ten feet wide and twenty-five to thirty-five feet long.

It costs you \$2.25 or less, perhaps. If you have it done by a professional it will cost about \$4.50 for labor.

Half of us have our own painting done. The other half do it in our spare time. Some of us paint in the spring—about twenty-five per cent, another twenty-five per cent in the summer, another twenty-five per cent in the fall. The rest of us paint as we get a chance or not at all.

A Michigan banker says the increase in value on painted buildings is twenty-two per cent. It can also, no doubt, be proven that no part of a building brings a better return for the money invested than does the paint. Some claim, with good reason, that an investment in paint pays four and a half per cent dividend—about the same as a government bond.

Let us use good paint, for the paint is only one-third of the cost. A good paint will last five, seven or even ten or fifteen years, but a poor paint will be gone in three. The better the paint you spread, the farther you spread your labor cost.

There's no place like home to use paint. Paint now—now is always the best time to paint.

PLANT TREES AROUND THE HOME.

(Continued from first page).

of them. When selecting trees for limited space their utility must be considered as well as their beauty and, fortunately, most fruit trees are strikingly beautiful when in bloom; have fine foliage and are not less attractive when laden with fruit, the only objectionable feature about them being the muss made by the fruit that falls.

Every farm should have a variety of nut-bearing trees near enough to the house to have their beauty seem a part of the home place but not so placed that the falling nuts can be a menace to those who might step on the nuts that fall.

The subject is too broad for more than mere suggestions and special problems must be left to be worked out as they affect different locations, but one important thing to be kept in mind is the size to which trees grow. Do not plant a tree where it will obstruct the view and have to be cut down when full-grown.

The merits of spring or fall planting are often argued over but there is little difference in results if the holes are dug large enough to permit spreading of the roots; fine, rich earth filled in; plenty of water given (if the season is dry), and the tops carefully braced against winds that would by swaying the tops keep the roots loose in the soil.

McCormick
Deering
Milwaukee



Now—as to Harvest Time!

THE BINDERS of the nation must come out at harvest time and transform a billowing acreage into a great stubble field ready for the plow. This is a necessity of the near future and every individual farmer must be ready with men and machines to save all the yield of his own fields. Will your present equipment do the right thing for you? We call to your attention the standard binders of the nation.

McCormick · Deering · Milwaukee

are time-tried names, favorably known wherever there is agriculture. Grain binders with these familiar names will demonstrate again that nearly ninety years of harvesting machine development and satisfactory service in the fields of the world stand behind them.

Timely repairs may be your solution for this harvest, but to limp through the season with machines that are truly outworn will prove disastrous. No farmer can afford to run a binder that has served too many years, nor can he practice true economy with a small, inadequate machine if his acreage and power equipment demand an 8-foot binder.

As harvest time approaches, take careful account of your equipment needs, then see the International dealer. He has McCormick, Deering and Milwaukee—the binders that are guarantees of high quality and operating efficiency.

INTERNATIONAL HARVESTER COMPANY

CHICAGO

OF AMERICA
(INCORPORATED)

USA

92 BRANCH HOUSES AND 15,000 DEALERS IN THE UNITED STATES

Try This Mixer—30 Days FREE

RIGHT now is the time to get your KWIK-MIX Concrete Mixer—Special Easy-Payment-Plan and reduced prices for this month only.

Before you buy any concrete mixer or start mixing with a shovel, let me send you the wonderful KWIK-MIX Concrete Mixer on 30 days' free trial.

Post yourself on latest, most up-to-date mixer before you go ahead. Don't take chances spilling a job with hand-mixed concrete. Get a KWIK-MIX and be sure of a perfect mix. Saves time, labor, contractors' profits—pays for itself on first job.

The original reverse-action mixer—loads from one side—close up to pile of material—dumps finished mixture other side into wheel-barrow or directly into forms. This new improvement saves a great amount of time and labor—yet KWIK-MIX costs less than the ordinary mixers.

Steel frame—built for hard use—yet light and easy to move. Capacity, three cubic feet a minute—hand or belt power—fully guaranteed.

BADGER WIRE & IRON WORKS
1008 Cleveland Ave., Milwaukee, Wis.

Kwik-Mix
CONCRETE MIXER

Easy Payment Send no money. Most liberal terms ever offered on a mixer. Pay only \$10 after 30 days' trial, balance \$10 per month for four months. Two per cent discount for cash. Write for full particulars.



\$10
AFTER
30 DAYS
TRIAL

\$54.50 PUTS THIS NEW MILL ON YOUR OLD TOWER

ALBION

Albion steel and wood mills are quiet and powerful. One-third the working parts of any other mill. Only main Pinion bearing subject to wear. This is oilless, and easily replaceable. Governed by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your churning hours now with a good Windmill? This is your chance—an Albion direct from the manufacturer, fully guaranteed. Write today for catalog.

Union Steel Products Co. Ltd.
No. 528 N. Berrien Street,
ALBION, MICHIGAN, U. S. A.

for fruits and vegetables
"even when there is no fungus"

Pyrox

TRADE MARK REGISTERED

Write for the valuable new Pyrox book—Bowker Insecticide Co.—Boston—Baltimore—Chicago

Mention The Michigan Farmer When Writing to Advertisers

BOOK ON DOG DISEASES And How to Feed

Mailed free to any address by the Author

H. CLAY GLOVER CO., Inc.,
118 West 31st Street, New York

LANDOLOGY Special Number just out containing 1931 facts of Clover Land in Marinette County, Wisconsin. If for a 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-RIEHLER LAND COMPANY
381 Skidmore-Riehler Bldg., Marinette, Wisc.

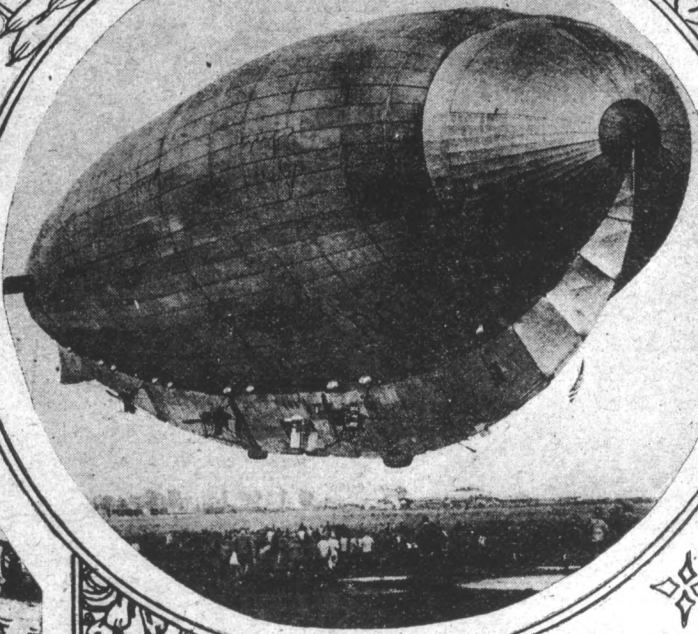
LIGHTNING RODS

Exclusive agency and quick sales to Live Dealers selling "DIDDLE-BLITZEN RODS". Our copper tests 99.96% PURE. Write for agency. Prices are right. L. D. DIDDLE CO., Marshfield, Wis.

WORLD EVENTS IN PICTURES



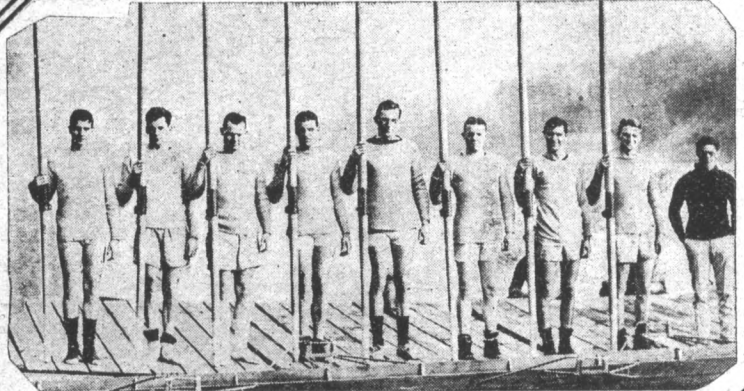
Allies occupying Dusseldorf, leading German industrial city on Rhine. Tanks are going through maneuvers in public square.



A huge dirigible built in Italy for United States government at a cost of \$200,000.



A German crowd at Konigshutte post-office waiting to register for the plebiscite which was to determine whether Poland or Germany should have the upper Silesian territory.



Favorable weather enables Yale University to turn out finest oarsmen in its history.



Buster, a Galapagos land Tortoise giving boy a ride. Buster is believed to be three hundred years old.



Miss Mildred Daly, of San Francisco, takes a daily walk in water, wearing the "Steinmetz Water Walker." This device is made of rubber sheeting, old auto tire and boots. May be used for hunting, fishing or water-walking.



Statue of General Simon Bolivar, "the George Washington of South America," presented to the City of New York by the City of Caracas, Bolivar's birth-place.

THE CLAN CALL

By HAPSBURG LIEBE Copyright 1920, Doubleday, Page & Co.

They brought water and wet the young woman's face, and bathed the red streak across her temples. They did all they knew to do to bring her back to consciousness, but, except for her beating pulse and her breathing, she remained as one dead. Hours passed, leaden hours, and her condition was unchanged.

Dale beckoned to John Moreland, who had just returned from having seen Adam Ball caught, disarmed, and imprisoned in an old tobacco-barn. Moreland hastened to Dale, the new master.

"When does the next south-bound train pass the Halfway Switch?" Dale wanted to know.

"We could make it, all right, but it's a fast train, and it don't never stop at the Switch."

"Then we'll hold it up," declared the new master in a voice of iron. "This is a case for a surgeon. Get a blanket and two poles, and make a litter."

John Moreland hastened away obediently. Dale turned to Ben Littleford, who sat in a motionless heap beside the still figure of his daughter.

"It was only a few hours ago," he said accusingly, "that this poor girl told me she'd be glad to give her life to stop your fighting, and now, perhaps, she's done it! You're a brute, Littleford. I like to fight, myself, but not when it costs women anything."

The conscience-stricken hillman gave no sign that he had heard. There was silence save for the low murmur of the river and the tragic song of a bird somewhere in the branches of the big white sycamore.

CHAPTER VIII. Back Home.

EVERY mother's son of the feudists was numbered in the party that filed across David Moreland's Mountain to intercept the next south-bound train. The old enmity was for the time being forgotten. Members of one clan rubbed elbows with members of the other clan, and thought nothing of it. John Moreland himself carried one end of the crude litter that held the limp form of Babe Littleford; Bill Dale carried the other end.

Close behind the litter walked Babe's father, seeming old and broken with remorse for the thing he had done. The grief of Ben Littleford was touching now, and Dale was a little sorry that he had spoken so bitterly to him.

They reached the Halfway Switch ten minutes before the arrival of the fast mail. A short passenger train was on the long siding, waiting for the south-bound to pass. Dale gave over his end of the litter to Caleb More-

land, and strode up to the locomotive. The engineer sat quietly smoking in his cab.

Dale wanted the fast mail stopped, and he gave his reasons.

The engineer smoked and considered. It was against rules. Dale swore at rules. The engineer said he would see the conductor. He did, and the conductor stepped to the ground and began to consider.

"Better put her on my train," he said finally, "and take her to Barton's Station. There's a good doctor at Barton's—"

"But this is a case for a surgeon!" impatiently interrupted Bill Dale.

They disagreed. The old trainman was a close friend of the doctor at Barton's Station. What was the difference between a doctor and a surgeon anyway?

Dale became angry.

"You'll stop the fast mail for us," he snapped, "or we'll take your red flag and hold her up long enough to put the girl aboard, and you've got only half a second to decide which!"

The conductor was obdurate. The mountain men were too hot-headed to bear with him longer. The positions of a dozen rifles underwent a sudden change. The conductor immediately went pale and mentioned the law—but he agreed to stop the southbound.

As he ordered the flagman up the tracks, the sound of the fast train's whistle came to their ears.

The flier came to a screeching halt with sparks streaming from its wheels. Bill Dale and John Moreland passed the litter and its burden into the baggage-car and followed it hastily, and Ben Littleford climbed in after them. John Moreland leaned out of the doorway and ordered his son, Luke, to pass him his rifle, and Luke obeyed.

There was a shriek from the whistle, and the brakes were released; the train soon began to gather momentum. A baggageman approached John Moreland and asked why the rifle. Moreland half closed one keen grey eye and patted the walnut stock of the repeater.

"Oh, I jest brought it along to see 'at everybody has a straight deal," he drawled—"go on about yore business, Mister."

The baggageman went about his business.

The conductor of the fast train was very unlike the conductor of the north-bound. When he had learned something of the circumstances, he insinuated that Dale had done exactly the right thing. He would see whether there was a doctor aboard.

Within five minutes he returned in

company with an elderly man wearing a pointed beard and noseglasses.

"Doctor McKenzie," he said politely;

"Mr. —"

"Dale."

The two nodded, and the physician knelt beside the litter, which had been placed with its ends on boxes to allow the center to swing free. He made as thorough an examination as was possible under the conditions, then arose and stood looking down upon the young woman with something of admiration in his sober, professional eyes.

"Perfect physique," he said as though to himself. "She will have to undergo an operation," he told Dale. "The bone there is broken in slightly, making a compression; she will doubtless be unconscious until the pressure is relieved. But she has fine chances for a quick and entire recovery, with a good surgeon on the job, so there's not much ground for worry."

Dale was glad. They were all glad. Ben Littleford laughed nervously in his sudden joy. He went down to his knees beside his daughter, took up one of her limp hands and stroked it in a way that was pitiful.

When he arose, he spoke cordially to Moreland. But Moreland didn't reply. He still looked upon his old enemy with contempt.

Doctor McKenzie was leaving the train at the next town of importance, and he would wire Doctor Braemer to meet them with an ambulance, if Dale wished.

"If you please," said Dale.

They reached the city shortly before midnight, and were promptly met by the surgeon, a stocky, bald man with a perpetual smile. Braemer took charge of the patient, put her into his ambulance, and hurried her to his private hospital. Bill Dale and the two clan chiefs followed in an automobile. The hillmen had never seen an automobile; but they asked no questions about it, and the only word of comment was this, from John Moreland: "I don't like the smell."

Everything had been made ready for the operation, and Babe received surgical aid without delay.

The two mountaineers and Dale waited in another room. Dale had induced John Moreland to unload his rifle, both chamber and magazine. Babe's father paced the floor a trifle anxiously now and then. Moreland sat like a stone, with his empty rifle between his knees, and watched his old enemy queerly.

It seemed a long time before Braemer came to them and told them smilingly that it was all over and that the girl was then coming out from under

the effects of the ether. She would be all right soon, he was reasonably certain. No, they'd better not see her just then. But perhaps they could see her at some time during the afternoon of the following day.

Dale escorted his two companions to a modest hotel and then put them in a room that had but one bed; by thus throwing them together in a strange land, he hoped to do something toward making them friends. Then Dale went to another room, undressed and went to bed.

It may be noted parenthetically as it were, that John Moreland and Ben Littleford quickly reached a wordless agreement not to sleep together—they divided the pillows and linen evenly, tore the odd coverlet exactly in half, and slept on the floor.

When Dale went down to the lobby the following morning, an alert-eyed young fellow sprang from a chair and hastened to him.

"By George, Bobby!" Dale exclaimed, as they began to shake hands. "How did you know I was here, anyway? Your boasted nose for news, eh?"

"Guilty," smiled McLaurin. "I got word last night that a mountain girl had been brought to Braemer's, accidentally shot, and I smelled a feud; so I hurried over to get the story. You had just left, and Braemer's didn't know much about it. It was too soon after the operation, they said, for her to see me; then one of the nurses whispered to me that you had brought her, and said that I would find you here. So here I am, Bill, and I want the story. I'll 'phone it in, and then I'll give you some news."

"The story musn't be published, Bobby," Dale replied. "For one reason, there is a feud; and if the law knew, it might take a hand—you see, I think there is a better way to take care of that feud. And I am of the opinion that the girl wouldn't like the publicity. There wouldn't be a great deal in it for you, anyway. Suppose you forget all about it, Bobby."

If McLaurin was disappointed, he kept it well to himself.

"They said she was handsome, a sort of primitive Venus," he winked. "Is there a romance connected, Bill?"

"Not yet," smiled Dale.

"But soon?"

"Who can tell?" Dale shrugged a little.

"Tell me the news."

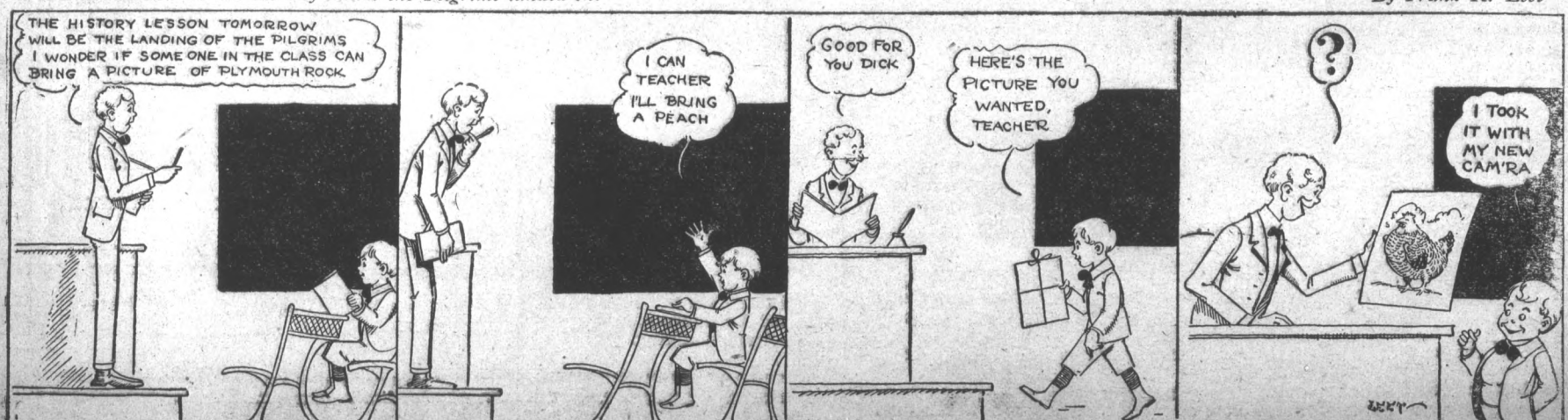
"All right," McLaurin drew his friend toward a pair of empty chairs. "I married Patricia Clavering the day before yesterday. We—"

"Bully! Go on."

"We were married in an automobile, with her father and 'poor dear Harry'

AL ACRES—What the Boy thinks the Pilgrims landed on.

—By Frank R. Leet



chasing us like wildfire in another car. Yesterday we went to housekeeping in a cute little suburban bungalow, furniture on the installment plan. Her people won't even look at us, Bill! But do we care? Bill Dale, I ask you, old dear, do I seem to be worrying? Honest, I'm so happy I'm afraid something is going to happen to me. I'm to have a lift in salary soon, and we won't be long in paying for the furniture; and when that's done, we'll buy the bungalow.

"And I'm informing you now, old savage," he continued, "that you're having dinner with us this evening. You'll find it pleasant. We do as we please, you see. If you like, you may stir your coffee with your finger, eat with your knife, reach clean across the table, and pick your teeth with your fork. You can eat with your hat on, and you may have your dessert first. You can have an extra chair for your feet, and you can go to sleep at the table. Don't fail us. Pat wants to thank you for 'casting her aside' at the altar."

Dale laughed boyishly. McLaurin went on:

"There's more news. Your father has been trying hard to find you. He sent a man to Atlanta to look for you. He told me he'd give me a house and lot if I'd find you—and if there was a little more of the highway robber in me, I'd call his hand!"

"And mother—have you seen her?" Dale muttered.

"I've seen her twice since the near-wedding."

"Did she have anything to say about me? Tell me the whole truth, Bobby. I can take it, old man. I'm big enough."

McLaurin frowned. "Since you've asked me, Bill, your mother—I overheard her telling your father that she would never forgive you for the 'utterly shameless, disgraceful scene' you made in church. The papers—not mine, though—made the most of it, especially that iconoclastic Herald."

"I see," said Dale. He brightened and went on, "as soon as I can get my two friends down to the dining-room, Bobby, you're going with me to father. We're going to claim that house and lot for you."

"For Patricia's sake, I've a thundering big notion to take you up," laughed McLaurin. "Your dad would never miss it."

"That's it—take me up for Pat's sake," said Dale, rising. "You'd be foolish if you didn't. You should be willing to do anything, almost, for Pat. She's a jewel, Bobby."

Half an hour later they caught a passing car that soon carried them to a palace of granite and stone and cream-colored brick—the home of the old coal king, John K. Dale.

At the wide front gateway young Dale drew back.

"Bring father out here," he said in a low voice. "From what you told me, I guess mother wouldn't want me to come in. But you can find out about that—"

He hoped his mother would want to see him. While she had never seemed to care for him as other mothers cared for their boys; while she hadn't been quite so dear to him as she might have been—

"And if she wants to see me, Bobby, let me know."

McLaurin smiled a somewhat worried smile, and went up to the front door. The old servant, Isham, met him and took his card, and a moment later he was shown in. Yet another moment, and John K. Dale, his florid face beaming with gladness, hastened out to the gateway. Young Dale was instantly touched by his father's new attitude toward him; then he remembered the long night of David Moreland's people, and he stiffened a little and drew back a pace.

"You've come home to stay, haven't

you, Carlyle?" said the older man, and his voice was filled with pleading. "What you did is all right; we'll never mention it again. You'll stay, won't you, Carlyle, my boy?"

"No," answered the son, a trifle coldly in spite of himself. "I've spent all the idle, useless years I'll ever spend. I'm getting ready to develop the coal in David Moreland's Mountain."

"David—Moreland's—Mountain!"

The retired coal magnate breathed the three words in a husky tone. He put forth a hand and rested it against one of the huge stone gateposts, as though to steady himself, and some of the color went from his face.

"You say David Moreland's Mountain, Carlyle?" jerkily.

"Yes."

"And you—you learned about David Moreland?"

"Yes." Bill Dale folded his arms and stood there looking at his father with eyes that accused.

"You know who killed him?" old Dale muttered.

"I do, and it was a shame—a black shame."

"Yes, it was a black shame. Nobody knows that half so well as I know it," said John K. Dale. His mouth quivered. He looked downward, looked up again. "Son, you can never say or think worse things about me than I have said and thought about myself—because of that."

Dale the younger glanced toward the house. Robert McLaurin was coming slowly down the verandah steps. Mrs. Dale was nowhere in sight. She didn't want to see her son; she didn't even want him in the house. Bill Dale read it all in his friend's downcast countenance.

"You'll need money, if you're going to develop that coal property," Dale the elder was saying. "You haven't any money, and those mountaintops haven't any. I'll give you all that's needed. I'll send you mining machinery, and expert mining men; I'll—"

"You needn't," broke in the embittered Bill Dale. "I can get the necessary funds without difficulty. I'll pay the debt myself. You've had a great many years in which to try to make amends, and you haven't done anything. You might have helped the Morelands without their even knowing that it was you, especially as they seem to have known you by another name. Here you have one reason why I cannot accept assistance from you; don't you see, father? The Morelands wouldn't have it, and I couldn't lie to them."

He motioned to McLaurin, who had halted on the lower verandah step in order that he might not overhear, and turned and walked away. McLaurin followed, and soon overtook him.

Bill Dale stopped suddenly and faced back to his father.

"Remember that Bobby gets his house and lot!"

"Yes," replied John K. Dale, "Bobby gets his house and lot."

He went sadly toward the mansion that seemed to him now a good deal like a tomb. Young Dale touched his friend on the arm.

"Tell me, what did mother say? I know it's going to hurt, but—tell it."

"She was sitting beside an open window in the library," said McLaurin. "I told her that you were at the gate, and asked if she would like to see you. At first I was afraid she hadn't heard me. Then she opened a book that she was reading, found her place and marked it with a finger, and looked toward me."

"Who did you say was at the gate, Mr. McLaurin?" she asked.

"Your son, Carlyle," I answered. "Mr. McLaurin," she said to me coldly, 'I want you never to forget this: To me there is no such person on earth as Carlyle Dale.'"

They went downtown in silence.

(Continued next week).



Bring Me A City!

Heeding no barrier of river, mountain, forest or desert; unmindful of distance; the telephone has spread its network of communication to the farthest outposts of our country.

The ranchman, a score of miles from his nearest neighbor, a hundred miles from the nearest town, may sit in the solitude of his prairie home and, at will, order the far-distant city brought to him. And the telephone obeys his command.

Time and space become of small account when, through desire or necessity, you would call across a continent.

This is what the "Long

Distance" service of the Bell telephone has accomplished for you; what science in construction has created; and what efficiency of workers has maintained.

You take the telephone as much for granted as you do the wonder of the changing seasons. You accept as a matter of course the company's ability to keep all the parts of this great nation in constant contact.

By so doing you offer a fine tribute to the Bell organization which has created this "Long Distance" service—a service no other country has attempted to equal.



AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

One Policy One System Universal Service
And all directed toward Better Service



HOOSIER
Water Service

An aid to
the Housewife

as well as
other members
of the household.



OF ALL members of the household the housewife will appreciate most the comforts and conveniences afforded by a Hoosier Water Service installation. It will banish the pumping and carrying of water by hand, and lighten many of the household chores.

Hoosier Water Service may be installed in old homes as well as new. Uses any power and pumps from any well. Economical to install and operate.

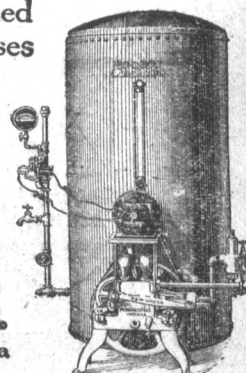
FREE

Catalogue showing Hoosier Installations
will be sent you upon request.
Write today.

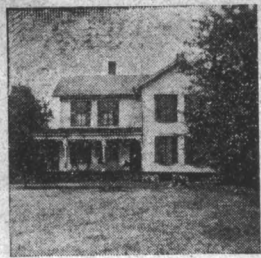
FLINT & WALLING MFG. CO.

Dept. C

Kendallville, Indiana



When Writing to Advertisers Please Mention
The Michigan Farmer



Character is made up of small duties faithfully performed, of self denials, of self sacrifices and kindly acts of love and duty—Selected.

Woman's Interests



A CAREFULLY PLANNED FARM HOME

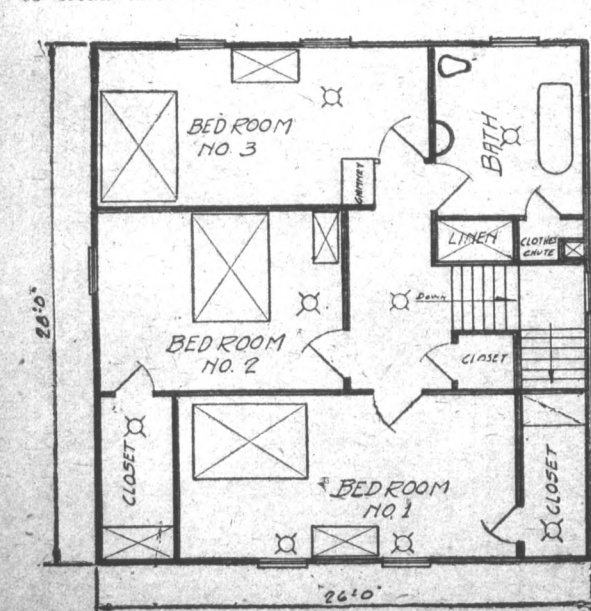
WE moved the old house and built where it stood, as the trees would not be moved—and must not be sacrificed. We live on a slight rise of ground—and deemed it best to build a semi-bungalow, with hip-roof for a better appearance. Every room is used every day—not too big for a small family, yet arranged to accommodate any crowd necessary on a farm for business or pleasure.

The water supply, hot and cold, for bath-room, kitchen and basement, comes from the cistern and is rain-water. As yet we have no well water piped into the house, but hope to have some day. We only use it for cooking and drinking purposes.

We have a hot-air furnace and find it is very satisfactory, have a register in every room of the house but the storeroom at the rear of the first floor. That saves any running up and down the stairs to the cellar in the winter. We use an ice box in the summer. There are more modern lighting plants now than ours, but this has been in use nearly five years, with no trouble at all. It serves the double purpose of lighting house and barn.

The men use the grade door exclusively. They wash in the basement, leave their boots, hats and coats there, and can reach the dining or living-room without going through any part of the work-room of the living-room are short enough of the kitchen. This is a grand thing that a table or couch can be placed on threshing day.

The porch floor is cement. It is easy to clean and will not rot, is entirely that time. The arch between living and dining-rooms was made wide enough for French doors if they were wanted at any time. The colonnade between living-room and den has two book cases, to keep my precious books, yet save floor space. The full-length glass door opens from the living-room rather than the den, as I wanted a place somewhat secluded for my writing, etc., and find we are more apt to use the living-room for family purposes when the door goes directly to the porch.



The Second Floor Has Ample Closet Space.

Mrs. Edith M. Wagar, recently elected to the Executive Committee of the State Farm Bureau, is mistress of a practical, convenient farm home. We have prevailed upon Mrs. Wagar to tell our readers about her home—Eds.

screened, and has porch shades that can be lowered when needed. It is used all the time in summer, for working, sewing, etc., by day and as a sleeping-porch at night. It has wide cement built-up sides that hold all of our

a hurry from outdoors. The sewing-room and cloak closet is ideal. We wanted a cloak closet on the first floor, yet begrudged any of the front of the house for that purpose as it always leaves a dark corner and we wanted all the light and air we could get—so we combined the two. It was necessary to build this room and the store-room next to it as we wanted to cover the cistern and could not have so big a cistern in the basement otherwise.

The cot is in the sewing-room during the winter, and on the porch summers, and can be opened in case of emergency. The mirror door between dining and sewing-rooms was my one extravagance, yet we could not part with it now. For fitting dresses, etc., it is in the ideal place.

The laundry corner of the basement is Heaven for washday. I cannot say too much in favor of three laundry tubs, if there is room at all to have them. And have them placed at the right height for the woman that uses them. Notice the two windows over the tubs on the south side of the basement. This means plenty of light and air when needed. The clothes chute is very conveniently placed on all floors. The basement is eight feet deep—so there is chance for plenty of light, and room for furnace pipes.

And now the kitchen. How we planned and planned. The range and hot water tank just fit in their space—we measured and re-measured to get that chimney in the right place. Across the south side under the two short windows is the sink, at the proper height, and on either side is a cupboard below and a drawer above, with work table at the same height as the sink top above each. The cupboard on the left holds griddle, spiders, toaster, cooky pans, etc., and bread can. The drawer above has mixing spoons, paring knives, forks, etc. The cupboard on the right has two shelves—for all the tinware and kettles. The drawer above holds hammer, cookbooks and all kinds of miscellaneous things needed around the kitchen. The large cupboard on the side, flour bin, and a cupboard with two shelves hold all of our groceries at the bottom, and two drawers above, one for towels and one for aprons and handkerchiefs. Above that is a space of the house, and easy about a foot high that gives ample serving room.

Above that is the cupboard proper, with four shelves—the doors are broken, two above and two below that the entire space is not exposed when a door is opened. We keep our large roaster, extra kettles, etc., on the top shelves. This built-in pantry runs to the ceiling.

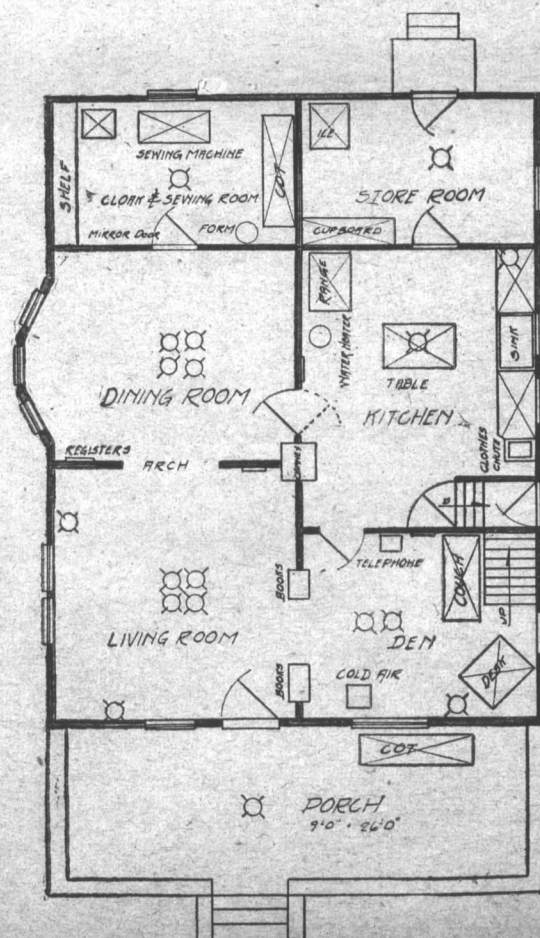
The kitchen floor is covered with linoleum, also the floor of the store-room. Rugs are used on all other floors.

I must speak of the water faucet outside—that saves many a trip after water when doing little jobs outdoors.

The sewage from the bathroom and sink goes into a septic tank near the barn, from which it is connected with a tile drain to the large drain of the farm. This septic tank is in two compartments, made of cement, air-tight, and has been very successful in every way. In fact, it has never been opened since made.

The linen closet in bathroom consists of three large drawers below and three shelves above, with two doors. The closet in bedroom No. 2 has a chest of three large drawers in the rear with shelf above. The small closet from hall has five shelves on one side. The broom closet from bath holds broom, dustless mop, extra toilet paper, stool brush, plunger, etc., also the clothes chute. Each bedroom has two windows, each closet a light. This house has a hip-roof, hence the closets along the sides. A medicine cabinet is over the wash basin.

I do not wish to leave the impression that we have an expensive house with expensive furnishings. We cut (Continued on page 443).



First Floor Twenty-six by Forty-six Feet.

The Revival at Mud Valley

Our Weekly Sermon—By N. A. McCune

(Continued from last week.)

NINETEEN people signed up for Skimp's reading course. A peculiar feature of it, Skimp thought, was the fact that those who needed such reading the most, did not agree to attend the class. The most alert and intelligent seized the opportunity, but the dead-heads, the soft-heads and the sore-heads, showed no interest in the scheme. But Skimp was philosophical about it. Line upon line, he said to himself, line upon line. If nineteen people get the vision, it will create enough dynamite to blow all the mud out of Mud Valley.

"When do we begin?" was asked. "Tonight," said the preacher. "Tonight!" was chorused. "Why, we haven't any books yet." "O yes, we have," said Skimp, with a gleam in his eye. "We have them right here." And he lifted a suit case out from behind the organ, that was heavy with books. "Here are twenty-five copies of a bulletin issued by the experiment station of the University of Wisconsin, entitled, 'The Country Church an Economic and Social Force,' by C. J. Galpin. We will take the first thirteen pages for the class tonight. Brother Ready, I'm going to ask you to report on chapter three, of McKeever's 'Farm Boys and Girls.' And Brother Ruler, you will kindly report on the first two chapters of Wilson's 'The Church at the Center.' Let us meet promptly at seven o'clock tonight." A number of people had remained in the back part of the church to see what the class proposed to do. "Can we come and listen?" some of these asked. "Certainly, certainly, come and listen all you want to, and we hope you'll want to join us."

At seven p. m., the class met in the church. They had to meet in the auditorium, as that was the only room in the church, except the basement. The pastor opened the class with a brief prayer. Then he called the roll. He reviewed Professor Galpin's bulletin, up to the thirteenth page, emphasizing the main points. The bulletin states that there are four types of farmers' churches: The church in the open country, where nearly every member belongs to a farmer's family. Next is the hamlet church, where there are two or three stores, a blacksmith shop, a cheese factory or creamery, a school, a few homes, and—a church. Then, there is the village church, where the church is composed of about half farmers and half villagers. "I guess that's about where we come in," some one piped. The population of a village runs from three hundred to fifteen hundred. And finally there is the small-city church, where the membership is composed of fifteen per cent of farmers. The bulletin goes on to state that the church ought always to be a leader in the social and even the economic life of the community. Agriculture is becoming more specialized and more scientific.

In this upward trend, the church can be a mighty factor of help. The pastor has it in his power to be a most useful man, if he will encourage better methods of tillage, and more healthful ways of living. "I will have to confess, folks," said the pastor, "That I have not been all I should have, to this community. I hope that many of you will get your eyes opened to many things, as we go along. Mine have been opened already." I guess that hits us all, pretty much," said Jim Stride. "Mebbe we can develop some steam that will move the load, yet," said Henry Open. "Notice that first paragraph on page thirteen. 'When, therefore, a country parish has no resident clergyman as pastor or priest, it loses nearly all the possible commu-

nity values of a church leader. No stranger can fill his place." "I'm a more important man than I thought I was," said Skimp, "Only I'm afraid I haven't been doing the business as I should. Next Sunday night we will take over to page thirty, of this bulletin."

MR. RULER, or "Professor," as the people called him, was asked to report his two chapters of Wilson's "The Church at the Center." Mr. Ruler began by telling something about the author of the book. Doctor Wilson, he said, was a Presbyterian clergyman, who had made a striking success of the rural pastorate. He had made an exhaustive study of a Quaker village in New York, and the reasons why it had slowly declined in numbers. He was now the head of the Country Life Commission of his denomination, and was recognized everywhere as an authority on rural problems. He was the author of several books, and was now giving some time as professor in Columbia University.

He began by reading two or three sentences. "The churches have not, on the whole, realized that they have a duty to assume social responsibilities, to know and understand their neighborhoods, their cities, and their special localities, to examine into actual conditions of living men and learn what these are and what may be done to improve them." "If a church has not inspired its members to bold adventure in behalf of the weak and for the sake of the community, it has no right to call itself a church, nor to think that it is listening to the call of its great head." "There never was a time when full, large Christianity was so evidently necessary as now." Mr. Ruler went on to state that the author strongly advocated a community survey. This meant that a map should be drawn, showing every institution and every household. This shows the church what its field is. In addition to that, the survey shows up the industrial life of the people, how they get their living, how many are foreign-born, how many are renters, and how many are owners, how many are church members, how many of the church members are owners, and how many are tenants.

In addition to this, said Mr. Ruler, Wilson's book says that the social and moral life should be included. Where do people meet for conversation? Where do the boys and girls meet? Does the whole community ever get together? How many of the public meeting places are provided by lodges, the Grange, the church? How many of these places are provided without pay? How many pool rooms are there in the village? Movies? How many arrests in the past twelve months? How many illegitimate births? Is the moral tone of the village going upward or downward?

Mr. Ruler said the questions in regard to the church were somewhat embarrassing to him, as a church member. Has the church a good building? Has it parlors, kitchen, horse or auto sheds? Total amount raised for local purposes? Salary paid pastor? Salary paid in full? ("No!" Skimp thought to himself). How is money raised? Membership of church? Is it increasing? What community service does the church perform, aside from its regular meetings? It was enough to make a man gasp, said the principal, but it was all very much to the point. Was the church in Mud Valley really doing business, or was it fiddling?

"Next Sunday night, at seven," said Skimp.

(Continued next week.)



Lowe Brothers



There Is A Gold Mine In Your Garret

Unless your garret is different from most folks, it has a lot of old discarded furniture in it, too shabby to use. Furniture, such that love nor money couldn't buy today. It's altogether too good to have up there. Bring it down and restore its youth with Vernicol Varnish stain. Whether

it's mahogany, oak or walnut, matters not, there is a Vernicol finish for each. No trick to use it. Goes on with a brush just as easy as spreading butter on hot toast. It sure does make things do by doing them over. Sold by the best dealer in each town. Send to this address for Vernicol Circular.

The Lowe Brothers Company
 499 EAST THIRD STREET, DAYTON, OHIO
 Boston New York Jersey City Chicago Atlanta Memphis
 Kansas City Minneapolis Toronto
 Factories: Dayton Toronto

Paints



Reynolds Shingles

Mean
Satisfied Ownership

Ask your dealer. If your neighbor has Reynolds Covered Roofs—ask him. Because we know that properly laid Reynolds Shingles have always given complete satisfaction. A 10-year iron-clad guarantee fully protects you. It means many more years of roofing service.

Your satisfaction is our satisfaction. Insist upon shingles that do not curl, split or crack. Write for name of nearest Reynolds Dealer. He will give you Reynolds Protection.

H. M. REYNOLDS SHINGLE CO.
 "Originators of the Asphalt Shingle"
 GRAND RAPIDS, MICHIGAN
 Reynolds Shingles Grow More Beautiful With Age

KITSELMAN FENCE

Get It From the Factory Direct

Mr. R. D. Dillard, Milton, Okla., writes: "I found all the fence as good or better than I expected. I saved \$26.65 on my \$75.00 order."

You will never know how much you can save through our DIRECT FROM FACTORY TO FARM selling plan until you get our free catalog. Write today.

KITSELMAN BROS. Dept. 278 MUNCIE, IND.

PRICES 'WAY DOWN

We've knocked the bottom out of high cost of fence building. We pay the freight and save you money. Here's a man that

Saved 38 per cent

Cut Cost Ditch, Terrace

Grade roads, build dykes, levees with the *Martin Farm Ditcher and Grader*

Works in any soil. Makes V-shaped ditch or cleans ditches up to four feet deep. Horses or tractor. Get my great labor and cost saving story.

Owensboro Ditcher & Grader Co., Inc.
 Box 315 Owensboro, Ky.

10 Days' FREE Trial

Learn Auto

and TRACTOR BUSINESS
Earn \$150 to \$400 a Month

Thousands have learned here in 6 to 8 weeks and are making big money as repair men, drivers, and superintendents. Many own garages making \$500 per month. **Big Book Free.**

RAHE SCHOOL, Dept. 2595
 Kansas City, Mo. Cincinnati, O.



WITTE

LEVER CONTROLLED
Log Saw \$125 F.O.B. K. C.

Engine, Saw, Etc., all complete. From Pittsburgh add \$6.80. Ask for terms. Folder FREE.

WITTE ENGINE WORKS
 2191 Oakland Avenue Kansas City, Mo. 2191 Empire Building Pittsburgh, Pa.

Barn Paint \$1.35 Per Gallon

Get factory prices on all paints. We guarantee quality. We pay the freight.

FRANKLIN COLOR WORK, Dept. M, Franklin, Ind.

FOR SALE

New SAMPSON TRACTOR, model T, 1020, in fine mechanical condition. Run only 5 weeks, at less than half price.

H. B. Proctor, Grand Haven, Michigan.

BUY FENCE POSTS

direct from forest. Prices delivered your station. M. M. care of Michigan Farmer

BROWN'S BARGAIN FENCE BOOK

WRITE FOR THAT BOOK TODAY

FREE GET MY LOW PRICES BEFORE YOU BUY

Don't neglect to send for my New Bargain Fence and Gate Book and see for yourself how you can SAVE BIG MONEY buying DIRECT FROM FACTORY

Don't buy any fence until you get this book and compare my prices on BROWN'S HEAVY ACID TEST GALVANIZED WIRE FENCE—the fence that resists rust longer—that's stiffer and stronger—that outlasts all others.

FREIGHT PREPAID
 I pay the freight and save you 20% to 40%. Over 150 styles. Also Gates, Barb Wire. Write for Bargain Book today. (5)

The Brown Fence & Wire Co., Dept. 249 Cleveland, O.

BINDER TWINE

Get our low price in quantities to GRANGES and FARMERS' ASSOCIATIONS. Agents wanted. Samples free.

Theo. Burt & SON, Melrose, Ohio



Character is made up of small duties faithfully performed, of self denials, of self sacrifices and kindly acts of love and duty—Selected.

Woman's Interests



A CAREFULLY PLANNED FARM HOME

WE moved the old house and built where it stood, as the trees would not be moved—and must not be sacrificed. We live on a slight rise of ground—and deemed it best to build a semi-bungalow, with hip-roof for a better appearance. Every room is used every day—not too big for a small family, yet arranged to accommodate any crowd necessary on a farm for business or pleasure.

The water supply, hot and cold, for bathroom, kitchen and basement, comes from the cistern and is rain-water. As yet we have no well water piped into the house, but hope to have some day. We only use it for cooking and drinking purposes.

We have a hot-air furnace and find it is very satisfactory, have a register in every room of the house but the storeroom at the rear of the first floor. That saves any running up and down the stairs to the cellar in the winter. We use an ice box in the summer. There are more modern lighting plants now than ours, but this has been in use nearly five years, with no trouble at all. It serves the double purpose of lighting house and barn.

The men use the grade door exclusively. They wash in the basement, leave their boots, hats and coats there, and can reach the dining or living-room without going through any part of the work-room of the living-room are short enough of the kitchen. This is a grand thing that a table or couch can be placed under when necessary, and the two side lights were placed there to use at that time. The arch between living and dining-rooms was made wide enough for French doors if they were wanted at any time. The colonnade between living-room and den has two book cases, to keep my precious books, yet save floor space. The full-length glass door opens from the living-room rather than the den, as I wanted a place somewhat secluded for my writing, etc., and find we are more apt to use the living-room for family purposes when the door goes directly to the porch.

The telephone is easy to reach from any part of the house, and easy for the men to reach in

Mrs. Edith M. Wagar, recently elected to the Executive Committee of the State Farm Bureau, is mistress of a practical, convenient farm home. We have prevailed upon Mrs. Wagar to tell our readers about her home—Eds.

screened, and has porch shades that can be lowered when needed. It is used all the time in summer, for working, sewing, etc., by day and as a sleeping-porch at night. It has wide cement built-up sides that hold all of our

a hurry from outdoors. The sewing-room and cloak closet is ideal. We wanted a cloak closet on the first floor, yet begrudged any of the front of the house for that purpose as it always leaves a dark corner and we wanted all the light and air we could get—so we combined the two. It was necessary to build this room and the store-room next to it as we wanted to cover the cistern and could not have so big a cistern in the basement otherwise.

The cot is in the sewing-room during the winter, and on the porch summers, and can be opened in case of emergency. The mirror door between dining and sewing-rooms was my one extravagance, yet we could not part with it now. For fitting dresses, etc., it is in the ideal place.

The laundry corner of the basement is Heaven for washday. I cannot say too much in favor of three laundry tubs, if there is room at all to have them. And have them placed at the right height for the woman that uses them. Notice the two windows over the tubs on the south side of the basement. This means plenty of light and air when needed. The clothes chute is very conveniently placed on all floors. The basement is eight feet deep—so there is chance for plenty of light, and room for furnace pipes.

And now the kitchen. How we planned and planned. The range and hot water tank just fit in their space—we measured and re-measured to get that chimney in the right place. Across the south side under the two short windows is the sink, at the proper height, and on either side is a cupboard below and a drawer above, with work table at the same height as the sink top above each. The cupboard on the left holds griddle, spiders, toaster, cooky pans, etc., and bread can. The drawer above has mixing spoons, paring knives, forks, etc. The cupboard on the right has two shelves—for all the tinware and kettles. The drawer above holds hammer, cookbooks and all kinds of miscellaneous things needed around the kitchen. The large cupboard on the side, flour bin, and a cupboard with two shelves hold all of our groceries at the bottom, and two drawers above, one for towels and one for aprons and handkerchiefs. Above that is a space about a foot high that gives ample serving room.

Above that is the cupboard proper, with four shelves—the doors are broken, two above and two below that the entire space is not exposed when a door is opened. We keep our large roaster, extra kettles, etc., on the top shelves. This built-in pantry runs to the ceiling.

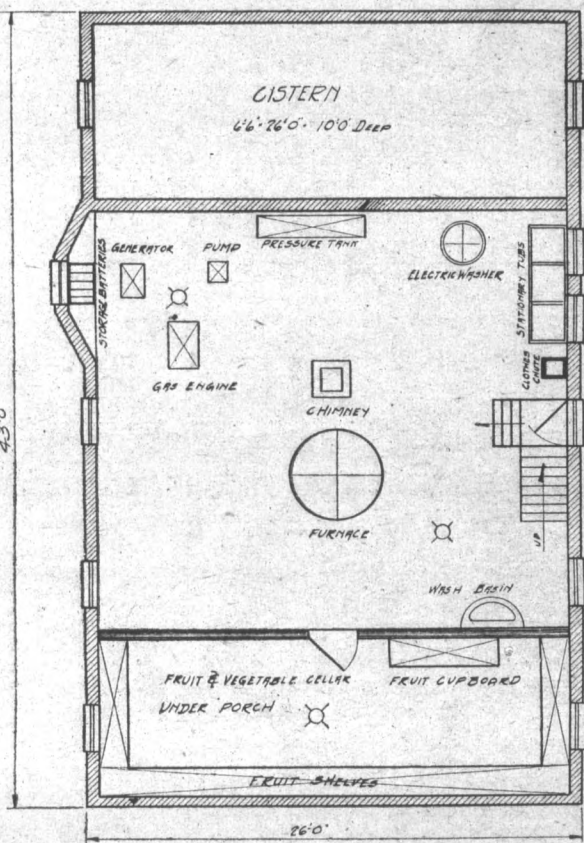
The kitchen floor is covered with linoleum, also the floor of the store-room. Rugs are used on all other floors.

I must speak of the water faucet outside—that saves many a trip after water when doing little jobs outdoors.

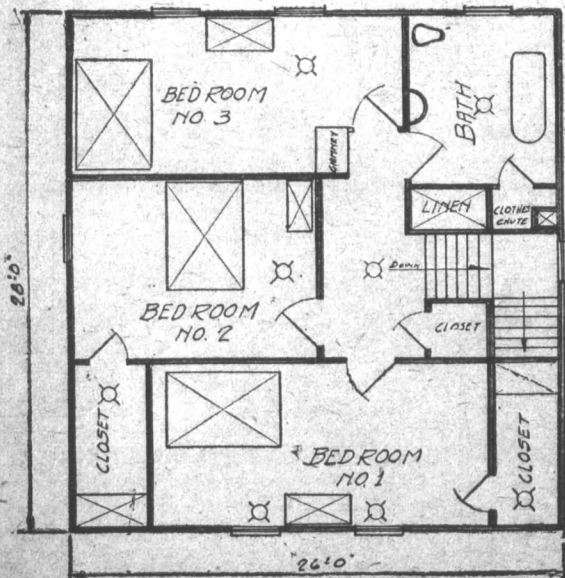
The sewage from the bathroom and sink goes into a septic tank near the barn, from which it is connected with a tile drain to the large drain of the farm. This septic tank is in two compartments, made of cement, air-tight, and has been very successful in every way. In fact, it has never been opened since made.

The linen closet in bathroom consists of three large drawers below and three shelves above, with two doors. The closet in bedroom No. 2 has a chest of three large drawers in the rear with shelf above. The small closet from hall has five shelves on one side. The broom closet from bath holds broom, dustless mop, extra toilet paper, stool brush, plunger, etc., also the clothes chute. Each bedroom has two windows, each closet a light. This house has a hip-roof, hence the closets along the sides. A medicine cabinet is over the wash basin.

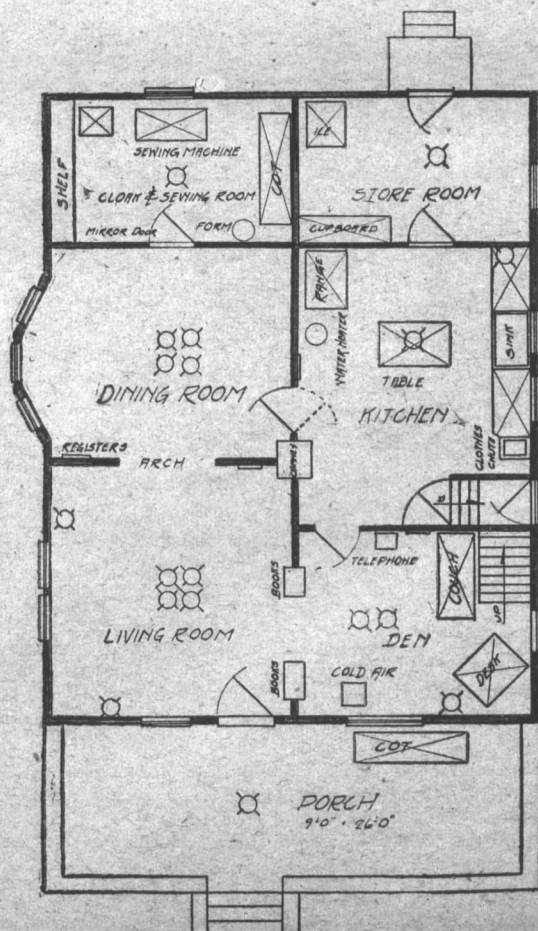
I do not wish to leave the impression that we have an expensive house with expensive furnishings. We cut (Continued on page 443).



Eight-foot Basement Extends Under Whole House.



The Second Floor Has Ample Closet Space.



First Floor Twenty-six by Forty-six Feet.

The Revival at Mud Valley

Our Weekly Sermon—By N. A. McCune

(Continued from last week.)

NINETEEN people signed up for Skimp's reading course. A peculiar feature of it, Skimp thought, was the fact that those who needed such reading the most, did not agree to attend the class. The most alert and intelligent seized the opportunity, but the dead-heads, the soft-heads and the sore-heads, showed no interest in the scheme. But Skimp was philosophical about it. Line upon line, he said to himself, line upon line. If nineteen people get the vision, it will create enough dynamite to blow all the mud out of Mud Valley.

"When do we begin?" was asked. "Tonight," said the preacher. "Tonight!" was chorused. "Why, we haven't any books yet." "O yes, we have," said Skimp, with a gleam in his eye. "We have them right here." And he lifted a suit case out from behind the organ, that was heavy with books. "Here are twenty-five copies of a bulletin issued by the experiment station of the University of Wisconsin, entitled, 'The Country Church an Economic and Social Force,' by C. J. Galpin. We will take the first thirteen pages for the class tonight. Brother Ready, I'm going to ask you to report on chapter three, of McKeever's 'Farm Boys and Girls.' And Brother Ruler, you will kindly report on the first two chapters of Wilson's 'The Church at the Center.' Let us meet promptly at seven o'clock tonight." A number of people had remained in the back part of the church to see what the class proposed to do. "Can we come and listen?" some of these asked. "Certainly, certainly, come and listen all you want to, and we hope you'll want to join us."

AT seven p. m., the class met in the church. They had to meet in the auditorium, as that was the only room in the church, except the basement. The pastor opened the class with a brief prayer. Then he called the roll. He reviewed Professor Galpin's bulletin, up to the thirteenth page, emphasizing the main points. The bulletin states that there are four types of farmers' churches: The church in the open country, where nearly every member belongs to a farmer's family. Next is the hamlet church, where there are two or three stores, a blacksmith shop, a cheese factory or creamery, a school, a few homes, and—a church. Then, there is the village church, where the church is composed of about half farmers and half villagers. "I guess that's about where we come in," some one piped. The population of a village runs from three hundred to fifteen hundred. And finally, there is the small-city church, where the membership is composed of fifteen per cent of farmers. The bulletin goes on to state that the church ought always to be a leader in the social and even the economic life of the community. Agriculture is becoming more specialized and more scientific.

In this upward trend, the church can be a mighty factor of help. The pastor has it in his power to be a most useful man, if he will encourage better methods of tillage, and more healthful ways of living. "I will have to confess, folks," said the pastor, "That I have not been all I should have, to this community. I hope that many of you will get your eyes opened to many things, as we go along. Mine have been opened already." I guess that hits us all, pretty much," said Jim Stride. "Mebbe we can develop some steam that will move the load, yet," said Henry Open. "Notice that first paragraph on page thirteen. 'When, therefore, a country parish has no resident clergyman as pastor or priest, it loses nearly all the possible commu-

nity values of a church leader. No stranger can fill his place." "I'm a more important man than I thought I was," said Skimp. "Only I'm afraid I haven't been doing the business as I should. Next Sunday night we will take over to page thirty, of this bulletin."

MR. RULER, or "Professor," as the people called him, was asked to report his two chapters of Wilson's "The Church at the Center." Mr. Ruler began by telling something about the author of the book. Doctor Wilson, he said, was a Presbyterian clergyman, who had made a striking success of the rural pastorate. He had made an exhaustive study of a Quaker village in New York, and the reasons why it had slowly declined in numbers. He was now the head of the Country Life Commission of his denomination, and was recognized everywhere as an authority on rural problems. He was the author of several books, and was now giving some time as professor in Columbia University.

He began by reading two or three sentences. "The churches have not, on the whole, realized that they have a duty to assume social responsibilities, to know and understand their neighborhoods, their cities, and their special localities, to examine into actual conditions of living men and learn what these are and what may be done to improve them." "If a church has not inspired its members to bold adventure in behalf of the weak and for the sake of the community, it has no right to call itself a church, nor to think that it is listening to the call of its great head." "There never was a time when full, large Christianity was so evidently necessary as now." Mr. Ruler went on to state that the author strongly advocated a community survey. This meant that a map should be drawn, showing every institution and every household. This shows the church what its field is. In addition to that, the survey shows up the industrial life of the people, how they get their living, how many are foreign-born, how many are renters, and how many are owners, how many are church members, how many of the church members are owners, and how many are tenants.

In addition to this, said Mr. Ruler, Wilson's book says that the social and moral life should be included. Where do people meet for conversation? Where do the boys and girls meet? Does the whole community ever get together? How many of the public meeting places are provided by lodges, the Grange, the church? How many of these places are provided without pay? How many pool rooms are there in the village? Movies? How many arrests in the past twelve months? How many illegitimate births? Is the moral tone of the village going upward or downward?

Mr. Ruler said the questions in regard to the church were somewhat embarrassing to him, as a church member. Has the church a good building? Has it parlors, kitchen, horse or auto sheds? Total amount raised for local purposes? Salary paid pastor? Salary paid in full? ("No!" Skimp thought to himself). How is money raised? Membership of church? Is it increasing? What community service does the church perform, aside from its regular meetings? It was enough to make a man gasp, said the principal, but it was all very much to the point. Was the church in Mud Valley really doing business, or was it fiddling?

"Next Sunday night, at seven," said Skimp.

(Continued next week.)



Lowe Brothers



There Is A Gold Mine In Your Garret

Unless your garret is different from most folks, it has a lot of old discarded furniture in it, too shabby to use. Furniture, such that love nor money couldn't buy today. It's altogether too good to have up there. Bring it down and restore its youth with Vernicol Varnish stain. Whether

it's mahogany, oak or walnut, matters not, there is a Vernicol finish for each. No trick to use it. Goes on with a brush just as easy as spreading butter on hot toast. It sure does make things do by doing them over. Sold by the best dealer in each town. Send to this address for Vernicol Circular.

The Lowe Brothers Company
 499 EAST THIRD STREET, DAYTON, OHIO
 Boston New York Jersey City Chicago Atlanta Memphis
 Kansas City Minneapolis Toronto
 Factories: Dayton Toronto

Paints



Reynolds Shingles

Mean
Satisfied Ownership

Ask your dealer. If your neighbor has Reynolds Covered Roofs—ask him. Because we know that properly laid Reynolds Shingles have always given complete satisfaction. A 10-year iron-clad guarantee fully protects you. It means many more years of roofing service.

Your satisfaction is our satisfaction. Insist upon shingles that do not curl, split or crack. Write for name of nearest Reynolds Dealer. He will give you Reynolds Protection.

H. M. REYNOLDS SHINGLE CO.
"Originators of the Asphalt Shingle"
 GRAND RAPIDS, MICHIGAN
 Reynolds Shingles Grow More Beautiful With Age

KITSELMAN FENCE

Got It From the Factory Direct

PRICES 'WAY DOWN
 We've knocked the bottom out of high cost of fence building. We pay the freight and save you money. Here's a man that **Saved 38 per cent**

Mr. R. D. Dillard, Milton, Okla., writes: "I found all the Fence as good or better than I expected. I saved \$26.65 on my \$75.00 order."

You will never know how much you can save through our **DIRECT FROM FACTORY TO FARM** selling plan until you get our free catalog. Write today **KITSELMAN BROS. Dept. 278 MUNCIE, IND.**

Cut Cost Ditch, Terrace

Grade roads, build dykes, levees with the *Martin* Farm Ditcher and Grader

Works in any soil. Makes V-shaped ditch or cleans ditches up to four feet deep. Horses or tractor. Get my great labor and cost saving story. **Owensboro Ditcher & Grader Co., Inc.** Box 315 Owensboro, Ky.

Learn Auto

and **TRACTOR BUSINESS**
 Earn \$150 to \$400 a Month
 Thousands have learned here in 6 to 8 weeks and are making big money as repair men, drivers, and superintendents. Many own garages making \$500 per month. **Big Book Free.**

RAHE SCHOOL, Dept. 2595
 Kansas City, Mo. Cincinnati, O.

WITTE

LEVER CONTROLLED
Log Saw \$125 F.O.B. K. C.

Engine, Saw, Etc., all complete. From Pittsburgh add \$5.00. Ask for terms. Folder FREE.

WITTE ENGINE WORKS
 2191 Oakland Avenue Kansas City, Mo. 2191 Empire Building Pittsburgh, Pa.

Barn Paint \$1.35 Per Gallon

Get factory prices on all paints. We guarantee quality. We pay the freight.

FRANKLIN COLOR WORK, Dept. M, Franklin, Ind.

FOR SALE

New **SAMPSON TRACTOR**, model T, 1020, in fine mechanical condition. Run only 5 weeks, at less than half price. **H. B. Proctor, Grand Haven, Michigan.**

BUY FENCE POSTS

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

BROWN'S BARGAIN FENCE BOOK

WRITE FOR THAT **BOOK TODAY**

FREE GET MY LOW PRICES BEFORE YOU BUY

Don't neglect to send for my New Bargain Fence and Gate Book and see for yourself how you can **SAVE BIG MONEY** buying **DIRECT FROM FACTORY**

Don't buy any fence until you get this book and compare my prices on **BROWN'S HEAVY ACID TEST GALVANIZED WIRE FENCE**—the fence that **resists rust longer**—that's stiffer and stronger—than catches all others.

FREIGHT PREPAID
 I pay the freight and save you 20% to 40%. Over 150 styles. Also Gates, Barb Wire. Write for Bargain Book today. (8)

The Brown Fence & Wire Co., Dept. 249 Cleveland, O.

BINDER TWINE

Get our low price in quantities to **GRANGES** and **FARMERS' ASSOCIATIONS**. Agents wanted. Samples free.

Theo. Burt & SON, Melrose, Ohio

POULTRY

For your best quality of CHICKS

Send Your Order to the

City Limits Hatchery,

Rt. 5, Box 11, Holland, Mich.

Our chicks are of the highest quality and our prices are within reach of everybody. We have S. C. W. Leghorns, S. C. Anconas, English White Leghorns, S. C. B. Leghorns, and Barred Rocks.

DAY-OLD CHICKS

HOMESTEAD FARMS



If you are a farmer poultryman you will be interested in the Michigan bred Pure Breed Practical Poultry

A stock of demonstrated value for practical poultry people; stock bred under the plan of the Michigan Agricultural College and distributed at fair prices.

2,000 Eight Weeks Pullets Leghorns, Anconas, and 16 other send you our 64-page descriptive Catalog. Chicks delivered parcel post prepaid.

STATE FARMS ASSOCIATION, Dept. 1, Kalamazoo, Michigan



BABY CHICKS

We furnish pure bred chicks of the finest quality from high egg producing stock. Flocks built directly from laying contest winners. We have seventeen breeds. Write for our free illustrated catalogue and price list.

J. W. OSSEGE HATCHERY, Glandorf, Ohio.

Anconas Bred-to-Lay and Exhibit, baby chicks and hatching eggs. Send for mailing list. Manning's Ancona Farm, Coldwater, Mich.

B-A-B-Y-C-H-I-X

Crescent Strain S. C. White Leghorns

Black Leghorns, Brown Leghorns, Buff Leghorns, Black Minorcas, Rhode Island Reds, Barred Plymouth Rocks, (also White), Wyandottes, (Silver laced and White) and Mottled Anconas. WE HATCH eggs from flocks on range on separate farms. Send for booklet, containing much of value to poultry raisers.

CRESCENT EGG COMPANY, Allegan, Mich.

Baby Chicks from fine stock, to produce eggs, at utility prices. Catalogue FREE. Lee's Poultry Farm & Hatchery, Edison, O.



OVIE'S BABY CHICKS

High Quality--Moderate Prices

You can pay more and get less in quality but you can't get a bigger value for the same money. That's why once a customer always a customer.

25,000 Husky Chix Weekly

from free range, carefully selected stock, hatched by experts in a real up-to-date hatchery. We specialize in 14 leading breeds. Safe delivery guaranteed by P.P. prepaid. Write for catalog.

OVIE'S POULTRY FARM & HATCHERY

34 State Street Marion, Ind.

Reap Real POULTRY PROFITS



with Mid-West "Better Baby Chicks," Reds, Rocks, Wyandottes, Leghorns, Anconas, Minorcas, Orpingtons. Live arrival guaranteed anywhere East of the Rockies. Write for illustrated catalog, Frank B. White, Pres.

MID-WEST HATCHERIES

Head Office: 655 Ft. Dearborn Bank Bldg., Chicago, Ill.

CHICKS English Strain White Leghorns the heavy laying strain at only \$15 per 100; prepaid by mail safe arrival guaranteed send cash with order special rates on 500 or more. JAMESTOWN HATCHERY, Jamestown, Mich.

Baby Chicks Good big, healthy chicks of show room quality at utility prices. Catalogue free. Sycamore Hatchery, Sycamore, Ohio

BARRED Plymouth Rock cockerels for sale, some Bred to lay from prize-winning stock \$4 and \$5. George H. Campbell, R. 5, Box 70, Ypsilanti, Mich.

BABY CHICKS

Hatched from free range stock. Quality and live delivery guaranteed. Write for catalogue. STILLWATER HATCHERY, Covington, Ohio.

BABY CHICKS High Quality, Heavy Laying Strains. Vigorous Chicks from Hardy Stock. Prize winners at N. Y. & O. State Fairs. 35 best breeds—low prices. Safe arrival guaranteed. Cir. free. CRYSTAL POULTRY FARMS, Shepard Strong, 7901 Franklin Ave., Cleveland, Ohio

Baby Chicks and Eggs for Hatching Barron's White Leghorns, Barred Rocks and R. I. Reds. Big sturdy chicks from free range stock with high egg records. Interesting catalogue free. BRUMMERS POULTRY FARM, Holland, Mich.

CHICKS English Strain White Leghorn. Bred to lay Brown Leghorn and Anconas. Bargain prices for our quality stock kept on free range. Order now for early deliveries. Hillside Grove Hatchery Farm, R. 1, Holland, Mich.



Buff, Barred, Columbian

Partridge, Silver Pencilled, White Rocks, Anconas, White Wyandottes, Rouen Ducks, \$2 setting. Catalog 2c. SHERIDAN POULTRY FARMS, R. F. D. 5, Sheridan, Mich.

DAY-OLD CHICKS

\$16.00 per 100 and up. Hatching eggs, \$2.00 to \$15.00 per setting and \$9.00 to \$15.00 per 100, from 25 varieties of pure bred, farm raised fowls; Chickens, Geese, Ducks, Turkeys and Guinea. Price list and circular free. Plenty of nice breeding stock. Book now for early spring delivery. WILMINGTON HATCHERY & POULTRY CO., Wilmington, Ohio.

Fowler's Buff Rocks: Eggs for hatching. Also a few choice cockerels left. Write for prices. R. B. FOWLER, Hartford, Mich.

Don't Buy Baby Chicks

Until you get our catalog and prices. Pure bred, heavy laying White and Brown Leghorns, Anconas, Rhode Island Reds, etc. Write today. Monarch Hatchery, Zeeland, Mich.

LOOK [Best Graded] CHICKS

Our Hi-Grade profit paying Bred-to-Lay, M. A. C. tested and exhibition chicks, at reasonable prices. Hatching eggs, 3 varieties, Circular FREE. Lawrence Poultry Farm, R. 7, Grand Rapids, Mich.

SELECTED WINTER LAYERS

S. C. WHITE LEGHORN EGGS FOR HATCHING, laid by hens that averaged over two hundred eggs each last season. 15 Eggs \$3.00; 30 \$5.50; 100 \$15.00. BABY CHICKS each week beginning March 1st, 15 \$7.50; 25 \$10.50; 50 \$20.50; 100 \$40.00. Valuable catalogue, Dunningville Poultry Farm, Dunningville, Mich.

Snowy White Rocks Fishel strain, dandy layers Eggs \$1.50-15; \$4.50-15. All prepaid. Mrs. Earl Dehnhoff, Vanburen, Ohio

S. C. WHITE LEGHORN CHICKS

Send for Catalog SNOWFLAKE POULTRY FARM, Route 1, Grand Rapids, Michigan

BABY CHICKS

25 for \$5.50 50 for \$10 and 100 for \$18.00. Prepaid, safe delivery guaranteed. Single Comb White Leghorns; White, Buff and Barred Plymouth Rocks; S. C. R. I. Reds and Anconas. Fenton Chicken Hatchery, Box 244, Fenton, Mich.

Barred Rocks from Rocky Ridge Hatching eggs to lay birds \$2.00 per 15. Prepaid by Parcel Post. W. T. RICHARDSON, Hanover, Mich.

Barred Rocks egg contest winners, eggs from strain Rock quality chicks that please, guaranteed full count and to arrive to you "all ready made" in first class condition by parcel post paid. Leghorns \$15 per 100, Rocks \$18 per 100. Special prices on 500 to 1000. Circular. Sunnybrook Poultry Farm, Hillsdale, Mich.

CHICKS. Bred-to-lay S. C. W. Leghorn and Barred Rock quality chicks that please, guaranteed full count and to arrive to you "all ready made" in first class condition by parcel post paid. Leghorns \$15 per 100, Rocks \$18 per 100. Special prices on 500 to 1000. Circular. Sunnybrook Poultry Farm, Hillsdale, Mich.

Choice Baby Chicks English and American White Leghorns and Anconas. Catalog free. M. D. Wyngarden, R. 4, Zeeland, Mich.

CHICKS Pure-bred White and Brown Leghorns from free range heavy laying stock that is of large size with large egg capacity. Sent postpaid. Prices reasonable. Safe arrival guaranteed. Catalog free. Royal Hatchery, R. 2, Zeeland, Mich.

Eggs from pure Toulouse geese. Ten for five dollars. Parcel post paid. Mrs. Amy Southworth, Allen, Mich

John's Big Beautiful Barred Rocks are hen hatched, develop quick, good layers, fine show quality. 30 eggs \$5.00. Postage paid, Photos, circulars. JOHN NORTON, Clare, Mich.

BABY CHICKS Single Comb White Leghorn (Tom Barron Strain), Barred Plymouth Rock, S. C. R. I. Red, Anconas, White Wyandottes and Brown Leghorns 25 for \$5.50, 50 for \$10.00, 100 for \$18.00, 1000 \$170.00. Ross Wade, Meadow Brook Hatchery, Mt. Morris, Mich.

Chicks Chicks

15,000 weekly at bargain prices. Pure bred English and American S. C. White Leghorns and S. C. Anconas. Our free range flocks, the finest and best in this section, the result of 12 years constant improvement along with Mich. Agri. College flock records up. Full count, strong lively husky chicks on arrival by mail. Satisfaction and reliable dealings guaranteed. Quality stock at prices to suit your purse. Valuable feeding instructions with each chick order. Now booking orders for May delivery. Catalog and revised price list free.

W. Van Appledorn,

R. 7, Holland, Mich.

R. C. Rhode Island Reds

Choice Rose Comb cockerels—hen-hatched, farm raised, big thrifty, prize winning strains. \$5.00, \$7.50 and \$10.00. We raise only R. C. Reds. No eggs or chicks.

BIDWELL STOCK FARM

Box D, Tecumseh, Michigan

Rhode Island Reds R. C. Large fancy cockerels at \$3-each. Address BURT SISSON, Imlay City, Mich.

Baby Chicks Anconas, White Leghorns, Brown Leghorns, B. B. Reds all have single combs, at greatly reduced prices \$11. per 100 and up parcel post paid, safe delivery guaranteed, catalog free. Knolls Hatchery, R. 3, Holland, Mich.

Barred Plymouth Rock eggs for hatching. \$2.00 per 13 postpaid. Fullblood stock. Prize winning strain. J. A. BARNUM, Union City, Mich.

S. C. B. Minorcas. Pen No. 1 headed by a son of our \$50. 12 lb. cock, mated with 8 of our best hens, \$3.00 per 15. No. 2 pen headed by a cockerel of Pape strain, Eggs \$2.50 per 15. Incubator, eggs \$8.00 per 100. R. W. MILLS, Saline, Mich.

R.C. Br. Leghorn Eggs \$1.50 for 15. Pekin duck, \$1.50 for 8. W. Chinese Goose eggs, 40c each. MRS. CLAUDIA BETTS, Hillsdale, Mich.

BABY CHICKS of Superior Quality

Hot from the Hatchery, right to your door safely, by prepaid parcel post. BIG Strong, fluffy fellows hatched from eggs of selected flocks, and under our own supervision. ROCKS, LEGHORNS, ANCONAS, REDS and MINORCAS, Chicks that live and grow into money. Bred for EGG PRODUCTION and the SHOW ROOM. Save money by sending for our catalogue NOW. THE SUPERIOR CHICK HATCHERY, Lock Box 197, Prairie Depot, Ohio.

White Wyandottes Am offering some sturdy, strong in prepotency, good breeding Cockerels at \$6.00; \$5.50 and \$10.00, bred from Chicago Cockerel winners of Best Display and Hogan tested layers. Eggs \$5.00; \$5.00 and \$10.00 per 15. Catalog free. H. J. RILEY, Box M, Hillsdale, Mich.

100,000 CHIX 14c UP.

Best selected utility farm-raised exhibition stock ever produced. Always 2,000 chix on hand 5 to 15 days old. 18 varieties. Hatching eggs. Hens, ducks. Early bookings, avoids disappointment. Catalog. Beckman Hatchery, 26 E. Lyon, Grand Rapids, Mich.

Useful Anconas Are you interested in results? Hogan tested, layers of large white eggs winter and summer, beauty and utility combined hatching eggs of real quality at prices that will surprise you. Specialty breeder of S. C. Mottled Anconas Write for booklet. Useful facts about Useful Anconas is free. College View Farm, Hillsdale, Mich.

Hill's Barred Rocks hatching eggs from heavy-laying, Hogan tested, well barred flock, 15-\$2.50; 50-\$6.00; 100-\$10. Circular free. Lucian Hill, Tokonsha, Mich.

Additional Poultry Ads. on Pages 543 and 544

Our Boys' and Girls' Page

My Corn Club Story

By Forest Bedell, Champion Corn Grower

ABOUT five years ago I became interested in club work. We did not have a local club leader then but I wrote to the state club leader and got some information from him. I raised corn every year and last year the county club leader helped me. I like to raise corn and think there is money in it. I have kept a careful account of all my expenses and think it is a good plan because you know what there is money in, and what there is no money in.

If I had not joined the club I would not have been so interested in keeping track of my expenses and profits. I think the club work is just the thing for boys and girls to get into because they will get a lot of experience in it. I had never planted pure-bred corn until last spring, when I bought eight quarts from the Michigan Agricultural College. I also had two quarts which

girls will take as much interest in club work as I do.

Comments on Forest Bedell's Work.

This last Farmers' Week another corn exhibit was held at Michigan Agricultural College. Instead of winning two quarts of corn, Forest's exhibit won first place in the Pickett's Yellow Dent ten-ear exhibit. He also has been awarded the state championship in the Boys' and Girls' Corn Club Contest.

Genesee county is very proud of the work Forest has done. He is now nineteen years old and his last year's work was crowned with success.

There is a lesson to be learned from Forest's story. The motto for Genesee County Boys' and Girls' Clubs was before Forest all through his season's work. It is, "What we Start we Finish." It took four years of faithful work before Forest made even a small prize. But the last year was the crown-



Forest Bedell and His Prize Corn Crop.

I won at Farmers' Week last winter at Lansing.

I did not get my seed in time to test it because it was the twenty-seventh of May when it got here. I had my ground all plowed and ready to plant and I planted it the twenty-eighth of May and it came up in a few days and I had a good stand. I planted it twenty-eight inches between the rows and two feet in the row and thinned it out down to two kernels in a hill. I then cultivated it five times. I cultivated it about four inches deep at first, and on the last about two inches next to the hill and a little deeper in the middle. I was careful not to destroy the roots. I hoed it twice and kept all of the weeds out and this gave it a better chance. The only thing I was bothered with was smut and I went through and pulled the stalks out. Next year I am going to treat my corn before I plant it.

I cut it the first and fifth of October before the frost cut it, and I husked it the fifteenth, and on the eighteenth and nineteenth of October I weighed it and found I had one hundred and ninety-five bushels to the acre. I am going to store it on the scaffold this winter. I sorted it and had one hundred and five bushels of shelled corn. I am going to feed my stalks to the cattle and the cull corn to my poultry. I will sell the shelled corn. I am going to raise pure-bred corn every year if possible. My profit was \$317.30 and my expenses \$37.30.

My corn was not ready for the county fair but I took it to the Flushing Fair and got first prize. I sent an exhibit to the Interstate Corn Contest held in Louisiana, and got first prize of \$15 and a blue ribbon.

I like club work and will help it all I can. I hope other country boys and

ing year of them all. Can you tell why?

I can tell you why. First, because Mr. and Mrs. Bedell encouraged their boy to aim high; the state championship was his goal. To produce real results in Boys' and Girls' Club work the cooperation of the parents is absolutely necessary. Second, there was some one who represented a county and state organization interested enough and able to advise and encourage him to make his crop and exhibits a success. Third, because he had the best material he could get to work with—pure-bred seed adapted to his locality.

FARMER SHOULD SPEND TIME WITH SON.

THE best crop any man can raise on a farm is a crop of just plain kids. What would be the use of working hard to develop a fine farm unless there were some good dependable boys to leave it to in the end? But boys and girls are more difficult to raise than record-breaking cows or fine horses.

A farmer who is developing a fine farm that he hopes to turn over to his boy some day should devote as much time to the boy as to the farm. He should make him proud of his business. He should develop in him an early interest in agricultural matters. The farmer should give the boy his ideals and be sure that he brings the lad up an honest, dependable man. He should look after his health to be sure that the boys are strong and vigorous. And by constant effort on his part he should develop in the young man habits of thrift and industry that will insure his success. It takes time and trouble to raise a good crop of children but it's worth it.

**PRICES
SLASHED
WE PAY
POSTAGE**

**SILK POPLIN
SKIRT BARGAIN**

**SAVE
BY MAIL**

We are making this introductory skirt offer to acquaint women with our fair price methods, our quality and service. We will send you this splendid stylish skirt, subject to your approval and satisfaction. Just send your name and address—giving the size and color wanted, and we will send skirt—all charges prepaid.

PAY MAILMAN \$2.98

When Skirt is Delivered

If not perfectly satisfactory—

return at our expense and get

your money back. **Guaranteed Bargain.** This beautiful skirt is the very latest style. Attractive fancy pocket. Wide heavy inside girdle. Skirt is shirred all around falling in graceful folds; cut full and roomy with extra wide sweep.

Colors—Navy Blue, Black, or Grey. Sizes 24 to 40 waist.

Order by Number 126 C25

HOWARD LUX CO., DEPT. 126 CLEVELAND, O.

SAVE 2/3

**Sew at Home, the
"HOMEWOOL"
WAY**

It is the way by which thousands of women have dressed better, at 2/3 the price of ready-made. Write for free samples of famous "Homewool" Cloth—all Virgin Wool; handsome, durable, variety of colors. Sold direct from mill to you. **Estab. 1876.**

HOME WOOLEN MILLS
204 Main St., Eaton Rapids, Mich.

KEEPS EGGS FRESH

Remarkable Discovery Keeps Eggs Fresh For One Year

C. G. Knight, a prominent druggist of Chicago, has discovered a wonderful new preparation that is guaranteed to preserve all fresh eggs perfectly for one year. He calls it the K. & G. Egg Preservative. It is not liquid glass, but comes in powder form. One package mixed with three gallons clean water will preserve 25 dozen eggs. Makes a safe solution to put eggs in for winter. No change whatever takes place. No odor, no taste. Eggs can be used for all purposes: poaching, boiling, pastries. The yolks do not break down. Eggs always fresh.

Mrs. A. Kisselbach, E. St. Louis, says: "Can honestly say I have had great success with K. & G. Preservative." Mrs. J. M. Liljedahl, Essex, Iowa: "I have found your egg preservative entirely satisfactory." Mrs. S. R. Shinkel, Mitchell, S. D.: "My eggs kept just fine. Shall use your preparation next year sure." Mrs. E. S. Summerliak, 4635 Calumet Ave., Chicago: "I have used your preservative two years. Have used many egg solutions but find K. & G. more satisfactory."

Now is the time to begin preserving eggs. April eggs will be worth twice as much to you next winter. Begin right now and let K. & G. Egg Preservative make money for you. Write today to the K. & G. Laboratories Co., Dept. F., 338 E. 51st St., Chicago, Ill. Send 50c and get big package prepaid. Enough to preserve 25 dozen eggs. Write today—Now.

Agents Wanted in Every County

H. Eikenhout & Sons

**Berry Boxes
Baskets
Fruit Packages**

**ONE
or
CAR
LOAD**

**Grand Rapids,
Mich.**

Coffee at Wholesale

Repeat orders and many kind words of Comment indicate to us that Old Colony Blend is what the people of Michigan want.

We guarantee our goods to be satisfactory or money refunded.

Let us parcel post you prepaid.

3 lbs. \$1.00 or 10 lbs. \$3.20.

State if you want it ground.

5 lbs. choice Black, Green or Mixed Tea \$2.50.

John E. King Coffee Co.

160 Jefferson Ave. East, Detroit, Mich.

POULTRY

April Chicks Buy 'em Home

April 25th, 37th May 2nd and 4. Barred Rocks, R.I. Reds \$16 per 100. White Rocks, Orpingtons, Wyandottes, \$18. Brown Leghorns, \$15. Add 50c for half and quarter hundreds. Please name second choice. Prepaid and guaranteed live delivery.

Washtenaw Hatchery, Ann Arbor, Mich.

Poultry Lessons

By R. G. Kirby

Lesson VIII.—Artificial Hatching and Brooding Pointers.

IN all artificial hatching operations it pays to follow the directions furnished with the machine. Second-hand outfits are not a safe investment unless their condition can be guaranteed by some friend. The loss of one lot of eggs might make a cheap incubator more expensive than a good new one.

If possible locate the incubator in a dry cellar. The next best place is a vacant room where the temperature can be controlled. Always remember that the outside air is constantly flowing into the machine and the colder the room the greater the amount of heat that will be needed to incubate the eggs.

Eggs that are constantly jarred in the machine will be apt to hatch poorly. Have the family cooperate by walking quietly when near the machine. Never slam doors near an incubator or the jar will cause the eggs to vibrate. Always level the machine before starting it. If one end is higher than the other the greatest amount of heat will naturally be at the highest point.

Many losses in incubators are blamed on the machine when the eggs have caused the trouble. The older the eggs when placed in the machine the less the chances of a good hatch. So use eggs as fresh as possible. Never use chilled eggs. This means that they must be gathered frequently in cold weather. Do not let the eggs become heated later in the season or the germ will start to grow. Then if the egg cools the germ will die and, of course, such an egg will not develop into a chick after being placed in the incubator.

Artificial brooding requires some of the manufactured equipment which is not too expensive, but very satisfactory. We do not advise the building of brooders at home unless the maker has had some experience in such work. There is always more or less fire risk in a home-made brooder.

When chicks are to be artificially brooded it pays to heat up the brooder a day in advance and have everything ready for the comfort of the chicks. A small colony house is fine for the brooder at all seasons. The lamp-heated brooders can be moved out on the lawn when the weather is good and then the chicks can run right out on the green grass and forage. The coal-burning colony hovers are used to protect flocks of two hundred chicks or more and they are located in a colony house all through the period of brooding. They are useful for the boy or girl who owns a large incubator and will have several hundred chicks to brood at one time.

In all kinds of artificial brooding no lax attention is possible if good results are expected. It is harder work than brooding with hens and the boy or girl who raises healthy flocks of chicks with artificial heat must personally act as a sort of substitute for the old hens and give those chicks the best possible care. Sanitary brooders are very necessary. Both over-heating or chilling will severely injure the chicks.

CAREFULLY PLANNED FARM HOME.

(Continued from page 540).

corners in every way we could. As yet, after four years we have not decorated any of the walls. The plaster was clean, and not ugly to look on, so what it would cost to decorate we put into some permanent feature of usefulness. We chose fixtures with an eye to substantial worth, rather than to appearance alone.

Let Discomfort Be Only a Memory



Sectional View
Mueller Convective

Note triple casing and corrugated air-spaced inner hood of heavy galvanized iron that prevent heat waste and keep the cellar cool.

INSTEAD of messy stoves and a half-heated house next winter—why not have real heating comfort in every room in your home?

It's cheaper to be comfortable. Thousands of owners will tell you that the Convective takes much less fuel and is more easily operated than stoves. It's healthful, too, because its heat is moist.

MUELLER "Big 3" CONVECTOR (Pipeless Heating System)

Is the pipeless heating system that makes air cut your fuel bills 1/3 to 1/2. There is a size for any house of four to eighteen rooms, and it can be easily and cheaply installed in any cellar, no matter how small.

The Convective's good reputation and positive guarantee to heat every room in the house with any fuel have induced thousands to install this modern system. Let us send you the Mueller Book so you can read their letters—letters that tell of their satisfaction and prove it's cheaper to be comfortable. **FREE** heating advice from engineers. Write today.

L. J. Mueller Furnace Co.

195 Reed Street Est. 1887 Milwaukee, Wis.

Makers of Warm Air—Steam—Vapor—Vacuum and Hot Water Heating Systems

L. J. Mueller Furnace Co.,
426 Jefferson Ave. E. Detroit, Mich.
The Merrell Co., Toledo, Ohio

25 other distributing points. Immediate shipment to any part of the country.

Factory Prices Save You Money



We offer you sure saving, guarantee everything we sell and guarantee that you must be satisfied that you have made a saving by buying **Direct-From-Kalamazoo**—or we will return your money. Ranges, Pipeless Furnaces, Combination Coal and Gas Ranges, Kitchen Cabinets, Paints, Roofing, Cream Separators—all at prices lower than you expect.

Cash or Easy Payments—Take 10 Months or 1 Year to Pay

Just send name and address on a post card and we will show you prices on guaranteed house and farm necessities that will surprise you.

Ask for Catalog No. 113
KALAMAZOO STOVE CO., Mfrs.
Kalamazoo, Mich.

"A Kalamazoo"
Trade Mark
Registered
Direct to You

BARRED Rocks 15 eggs, \$1.50; 100 for \$7; by prepaid mail. Flock average 133 eggs. 38 hens laid 5072 eggs last year.
LEWIS B. AVERY, Clinton, Mich.

Baby Chicks Rose and Single Comb Reds. May, June at \$18 per 100. Order now.
GORET BROS., Route 1, Coruna, Mich.

Barred Rock Chicks 100% safe delivery. Reduced prices. Write for circular.
H. H. PIERCE, Jerome, Mich.

BEST Breeds, Chickens, Ducks, Geese, Turkeys, Guinea Hens, Hares, Dogs, Stock and eggs. Write your wants. Catalog free.
H. A. Souder, Box 94, Sellersville, Pa.

Chicks, for May and later delivery. Leghorns 13% S. O. Reds 15 dollars lun. Circular.
FREEMPORT HATCHERY, Box 12, Freemport, Mich.

CHICKS FULL O'PEP

Prices Reduced. Here is your chance to get chicks that live, grow and pay. Trapped, bred-to-lay and exhibition chicks. Broilers 13c, Leghorns 15c, Rocks, Reds, Anconas, Minorcas, Wyandottes 18c, Orpingtons 20c. Safe arrival and full count. Prepaid. Free catalog.
Holgate Chick Hatchery, Holgate, Ohio.

DAY-OLD-CHICKS

Heavy laying strain W. Leghorns \$7.25 per 50, 13.00 per 100. Anconas \$8.50 per 50, \$16.00 per 100 prepaid. Order today. Send for Home made brooder circular.
Roy L. Drukker, R. 6, Grand Rapids, Mich.

Officially Certified Pedigreed

S. C. Buff Leghorns chix and eggs from 213 to 231 record stock. Money makers right.
HENRY DePREE, R. 8, Box 137, Holland, Mich.

C-H-I-C-K-S 11 varieties, 13c up. Pure bred stock. Send postal for prices. Save money.
O. K. CHICK CO., Box H, Nappanee, Ind.



Baby Chicks \$11 a 100 and up.
Postage PAID. 95% live arrival guaranteed. FREE feed with each order. 40 breeds chicks, 4 breeds ducklings. Select and exhibition grades. A hatch every week all year. Catalogue free. Stamps appreciated.
NABOB HATCHERIES, Gambier, Ohio.

Rose Comb R.I. Red eggs for hatching. Orders book. Red now for Cockerels and pullets for fall delivery.
MRS. ALBERT HARWOOD, R. 4, Charlevoix, Mich.

S. C. Brown Leghorns Barron S. C. White Leghorns 232-278 strain. Eggs 15-15.50; \$3.00; 50-54; 100-57, prepaid. Miss V. Fulton, Gallipolis, O.

RHODE ISLAND WHITES

win over all breeds at the egg laying contest. 30 eggs \$5; 50 \$8; 100 \$15 order from this ad. Some chicks.
H. H. JUMP, R. 5, Jackson, Mich.

S. C. Black inorea cockerels exhibition and utility. Single settings or quantity C. J. Deedrick, Vassar, Mich.

S. C. W. Leghorn Eggs Barron Strain stock from Lady Victory 304 egg hen \$2.00 per 15. \$3.00 for 20.
V. O. YORK, Box 405, East Lansing, Mich.

Whittaker's R. I. Red Eggs. Both Combs. Michigan's Color and Egg strain. Prepaid and safe delivery guaranteed. Send for free catalog.
INTERLAKEN FARM, Box 38, Lawrence, Mich.

White Wyandottes: 207 egg average. Hatching eggs, \$2.00 per 15. Baby chicks 28 cents each. Cockerels, hens and pullets.
FRANK DeLONG, R. 3, Three Rivers, Mich.

Chicks S. C. W. English Leghorns; \$12 a 100. price on 1000 lots by parcel post delivered.
HENRY WATERWAY, R. 4, Holland, Mich.

W. F. B. Spanish Hatching eggs. Heavy layers. Prize winners \$3 per 15 eggs.

S. C. M. Anconas Lawrence Lahale, Cheboygan, Mich.

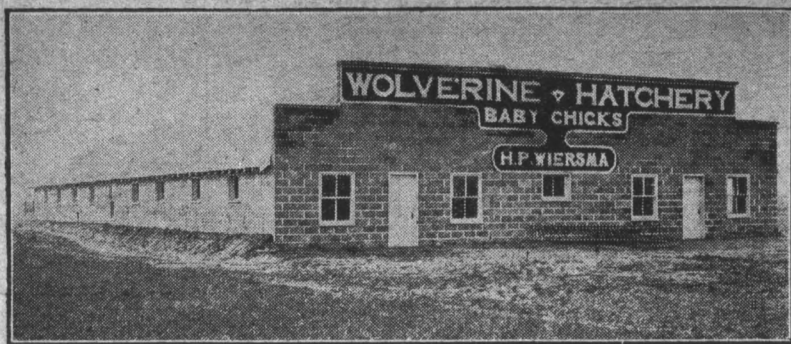
60 BREEDS chickens, ducks, geese, turkeys, guinea pigs, hares, dogs. Fine illus. and desc. catalog only 10c.
Edwin A. Souder, Sellersville, Pa.

Wyandottes Official records, five hens 1074 eggs. Eggs for hatching at reduced prices. Catalog free.
G. W. SCHOTTMANN, Montrose, Ill.

White Wyandottes BARRED ROCKS bred-to-lay eggs \$2.50 per 15; \$4.50, 30. Baby Chicks.
HOWARD GRANT, Marshall, Mich.

Mammoth Bronze Turkeys, Toulouse Geese and Pekin ducks. Either sex and eggs!
CHASE STOCK FARM, Marietta, Mich.

Additional Farm Ads. on Page 544



CHICKS Established 1911 CHICKS

Improved White and Brown Leghorns. Selected and bred for egg production and are some of the best today. Get some of these good Leghorns for the price is right. Write for catalogue with price list. Safe arrival guaranteed.

Wolverine Hatchery, R. 2, Zeeland, Mich.
H. Wiersma, Owner and Mgr.

Baby Chicks Pure Bred 800,000 in 1921

To your door Prepaid by us. Guaranteed live delivery. All our stock is of the Standard and free range and of heavy egg production at the price to meet times. And they are all No. 1 only



S. C. White Leg. }
S. C. Brown Leg. } 12c each
S. C. Buff Leg. }
Broilers }
Barred Rocks }
White Rocks }
S. C. & R. C. Reds } 15c each
White Wyandottes }
Anconas }
B. Orpingtons }
W. Orpingtons } 20c each

Give us a trial order and you will always come back for more of our chicks get our big offer on chicks and brooders. Order direct from this ad and save delay. Circular Free.

WOLF HATCHING & BREEDING CO., Dept. M, Gibsonburg, Ohio.

CHICKS At Reduced Prices CHICKS

20,000 large, strong, well hatched chicks every Tuesday hatched from eggs laid by selected hens on free range insuring healthy, vigorous chicks that will live and grow into money for you.



Barron S. C. White Leghorn heavy weight and heavy layers American S. C. White Leghorns heavy laying strains S. C. Brown Leghorn the most beautiful Leghorn and a good layer. S. C. Anconas great layers.

We Ship By Parcels Post and Pay the Postage to Your Door.

We guarantee the chicks to reach you in good condition. Catalogue free.

WYNGARDEN HATCHERY, Box M, Zeeland, Mich.

Huber's Reliable Chicks--700,000 for 1921

By Parcel Post Prepaid. Guarantee Live Delivery.



This is our 12th season in hatching Baby Chicks of quality, bred for exhibition and high egg production. Prices after Apr. 1st. S. C. White and Brown Leghorns, 13 and 15 cts. Barred Rocks, R. C. and S. C. Reds, 15 and 17 cts; S. C. Anconas 14 and 16 cts; S. C. Black Minorcas 22 cts; S. C. Buff Orpingtons, 21 cts; White Wyandottes 25 cts. Odds and Ends 13 cts. Our chicks are hatched right and full of pep. All we ask is one trial and we know you will come again the same of thousands of others. Combination offer on chicks and Brooder stoves.

HUBER'S RELIABLE HATCHERY,
East High St., Fostoria, Ohio

SUPERIOR BABY CHICKS

At reduced prices, from our Farm raised, free range, heavy laying, purebred stock. Order direct from this ad and save time. Hatch every week. Prices are prepaid to your door and we guarantee 100% live arrival

	25	50	100	500	1000
Pure bred S. C. Amer. White Leghorns	\$3.75	\$7.00	\$13.00	\$62.00	\$125.00
Purebred S. C. English White Leghorns	\$4.00	\$8.00	\$15.00	\$72.00	\$140.00
Purebred S. C. Brown Leghorns	\$4.00	\$8.00	\$15.00	\$72.00	\$140.00
Purebred S. C. Mottled Anconas	\$4.50	\$8.50	\$16.00	\$78.00	\$150.00

Broiler chicks 10 cents each.

Superior Poultry Farms and Hatchery, Box 203, Zeeland, Mich.

Quality Baby Chicks

and 8 weeks old pullets
AT REDUCED PRICES

American-English Strain S. C. W. Leghorns our specialty. Produced from the choice of 2000 hens on free range. We are not running a hatchery but produce all the eggs that go into our incubators from high quality selected stock. Only the best are used for hatching. This stock is worth more to you than those bought from the regular hatchery though our prices are practically the same. We are now booking orders for latter part of April, May and June delivery. Our supply is limited so place your orders early.

Macatawa White Leghorn Co.
R. 1, Holland, Mich.

DAY-OLD CHICKS

Strong, vigorous fellows, the kind that live and grow. Carefully selected, open range, purebred utility stock. Price reasonable. Circular free. SUNBEAM HATCHERY, 2433 S. Main St., Findlay, Ohio.

Baby Chicks

FREE delivery. Superlative quality from select high-producing stock. All popular varieties. Reasonable prices. Write for catalog at once.

AERDALE POULTRY FARM, Springfield, Ohio.



BABY CHICKS R. I. Red, Barred Rocks, White Wyandottes, White Leghorns. Selected healthy chicks. Order early, have winter layers. First hatch Feb. 28th. Write for price list and circular. DEER & ADAMS, Litchfield, Mich.

DAY OLD CHICKS S. C. White Leg-trap-nested stock where every hen must produce 60 eggs in four winter months. One hundred big thrifty chicks for \$25.00. MACALWHITE POULTRY YARDS, Alex. MacVittie, Proprietor, Caro, Mich.

BABY CHICKS Eight imitations at lowest possible prices. A trial order will convince you of their superior quality. Catalogue free. Ohio Poultry Yards and Hatchery, Marion, Ohio.

BABY CHICKS Hatching eggs, Barred Rocks, Norman strain, trap-nested, bred-to-lay, expertly tested for many generations, large illustrated catalogue 25c, stamps for circular. Norman Poultry Plant, Chatsworth, Ill.

Barred Rocks Hatching eggs from Parks 200-egg strain. Rich in the blood of Parks best pedigree pens. \$2 per 15, \$6 per 50, \$12 per 100. Prepaid by parcel post in nonbreakable containers. R. G. KIRBY, Route 1, East Lansing, Mich.

Broad View Farm Big Type S. C. White Leghorns big long bodied birds. Heavy layers of big white eggs. Exhibition type eggs \$2.50, 100 \$25. Post paid. E. B. McKEROHER, Hillsdale, Mich.

Eggs M. A. O. culled White Leghorns and Rhode Island Whites, dandy layers. \$1.50 per setting. Mrs. Earl DeLane, R. 1, Oxford, Mich.

Barred Rock Hatching eggs, M. A. C. Laying strain. 15 eggs \$2; 50 eggs \$4.50. Postpaid. Mrs. J. T. Ball, R. 9, Charlotte, Mich.

Barred Rock Eggs for hatching, selected quality. \$2.00 for 15, \$6.00 for 50; \$12.00 for 100. Prepaid Parcel Post. MR. H. HUNT, R. 1, Dearborn, Mich.

Additional Poultry Ads. on Page 547

Farm Poultry

The Farm Goose Business

By R. G. Kirby

A SMALL flock of geese on the farm can be made a profit-maker if there is plenty of range and some member of the family is sufficiently interested in the birds to help the goslings to make a good start. Farmers that wish to enlarge their business in geese beyond the stage of the "small flock" should be very careful not to attempt too much and become overstocked. The ganders are apt to fight if they are near together on a small range and if the range is overcrowded it will not be good for any of the birds.

Geese require attention in the spring and they should not be allowed to steal their nests. The first eggs produced can be hatched under hens and when the goose comes to the end of her laying period she can be given some eggs and allowed to set. The goslings are tender at first and should be confined on a limited range where they can be fed and protected when serious storms arrive. Sufficient green food must be included in the ration at that time. Most of the pests, such as weasels and skunks, that trouble chickens will also cut down the profits from geese. It pays to fasten

up the goslings at night in a rat and weasel-proof colony house. Hawks will occasionally kill the awkward young goslings.

The general farmer will find the goose business the most profitable if the flock is limited and quality is emphasized. Then there will be chances to sell both hatching eggs and breeding stock and the maximum profit per bird will be made.

The stock should be pure-bred and unrelated. The Embden geese are very beautiful because of the white plumage and the feathers bring the best price. The Toulouse goose fattens easily and the dark plumage always looks clean. They are a very substantial appearing bird and appeal to many farmers as the most practical. The Brown China and the White China are two varieties of geese which are quite popular but not so generally seen on farms as the Toulouse. They have considerable practical value but are often classed as ornamental fowls. When obtaining a start with geese it is a good investment to buy a trio of the best breeders obtainable and then increase the stock only as the profits appear and the experience becomes broader.

Broody Hens Cut Egg Production

ONE cause for low egg production in the average flock during the summer months is the fact that the broody hen is not quickly "broken up" or gotten back to laying.

Careful records have shown that the average broody hen, if placed in a broody coop the first day she goes broody, will lay again in ten days.

If she is allowed to stay broody ten days and then put in a broody coop, it will be twenty-five days before she will commence laying. If allowed to stay broody twenty-one days, it will be thirty-five days before she will lay.

It is therefore essential to "break up" the broody hen the first day she shows symptoms of broodiness.

The most efficient way to "break up"

broodiness is to put the hens in a good broody coop. A broody coop is nothing but a slat-like coop made out of lath in such a way that a space equal to the width of a lath is left between the laths on the four sides and bottom.

This coop should be raised several feet from the ground and placed in a shady place where the broody hens can see the rest of the flock.

Feed and water the broody hens and after four days release them. Generally this treatment is sufficient. If, however, any hen wants to set again, put her back in the coop for two more days.

This treatment will not retard the formation of eggs and everywhere has proved most satisfactory.

Turkey and Chick Management

Will you tell me how to care for chicks and little turkeys?
St. Clair Co.

W. H.

Little turkeys can be raised on much the same rations as used for chicks. They like cracked corn, wheat and rolled oats. Milk is fine in the turkey's diet and should be supplied abundantly to obtain the best results. The poults should be fed sparingly so they will always be active and hungry. They need exercise and plenty of range as they are insect and seed-eating birds and thrive best when they can gather the bulk of the ration for themselves. For feeding turkeys after the first week the Rhode Island Experiment Station recommends the following mash: Cornmeal, six parts; wheat bran, four parts; middlings, two parts; granulated milk, two parts; linseed meal, one part. The best turkey raiser we ever knew did not use any mash and we do not believe it is necessary.

Young turkeys should not be fed until about fifty hours old. Then they can have plenty of milk and the bits of green feed they will pick up. But brooder house. Feeding methods vary but every breeder works out methods save money and turkeys to use the grain ration very sparingly. Poults

need some form of protection so they can escape soaking showers. Many are lost every year by being dragged through the wet grass by the mother bird during rain storms. It is even best to keep them in an enclosure in the morning until the fields are dry.

Little chicks need not be fed until they are fifty or sixty hours old. Then the first meal should be fine grit, followed by a drink of sour milk. Keep the milk always before them. We use dry rolled oats for the first week and do not use a wet mash. Bran is fed in hoppers. A hopper of charcoal will help to keep down digestive disorders. Green feed should be available for the chicks at all times but they will gather it themselves during the summer. When they are about a week old fine commercial chick feed can be given five times a day in small quantities. Start feeding larger grains, like wheat and cracked corn as soon as the chicks are partially feathered out. Summer chicks are raised somewhat easier than the early spring birds which are in the brooder house. Feeding methods vary but every breeder works out methods that he likes best after a few years' experience.

Dairy Farming

Cooperative Dairying

The Hope of the Future

ONE of the most popular pastimes of any group of farmers at the present time is the discussion of cooperative enterprises. For a gathering of dairymen the topic usually resolves itself into cooperative marketing, or some phase of marketing, such as cooperative creameries, cheese factories, milk plants, or milk producers' associations. Occasionally one finds a group of dairymen discussing cooperative production. This last phase of dairy cooperation, though still in its infancy, is bound to take its place of equal importance along with the more popular forms of cooperation at the present time.

The dairy cow is the real pioneer animal. It was the animal chosen by the early pioneers to carry them and their belongings to the new countries for the reason that besides being a beast of burden it was able to supply daily a liberal supply of milk, and at the same time furnish a resource for fresh meat and a desirable skin for leather. At this time a specialized animal was not desired, so the breed did not make much difference as long as the animal could work and freshened regularly.

As the land was gradually cleared and farms established, the cows were selected for milkers and other animals were used to do the work. When any community became so thickly settled that there was a sale for the products of the cow, more cows were added to the herd. When finally permanent markets were established, farmers who took most naturally to dairying devoted their entire attention to producing milk. This called for a specialized animal for a specialized purpose.

Michigan, being relatively a new country, was rather late in reaching this last-named stage in dairy progress so that when she was ready for a specialized animal for producing milk there were already several standard breeds of dairy animals to select from. Pioneers in dairying selected in many ways. Some merely worked with and occasionally improved the native stock. Others bought breeds recommended by friends or relatives, and even some selected merely to be unlike their neighbor. New families entering the communities usually brought with them or adopted the breed of the country from which they came. Thus it is that Michigan, which may be classed as a dairy state, finds itself today with practically no prospective system in regard to dairy production. One can not help but feel, however, that this condition is about at an end. Dairy farmers are beginning to realize that it is to their advantage to use specialized animals if they expect to specialize in milk production.

It is quite evident that a jeweler does not use a sledge hammer or stillson wrench to repair watches. Likewise it is quite as apparent to the successful dairyman that beef cattle and

scrubs were not developed as milk-producing animals for economic beef production. Scrubs are suitable only for pioneering. Grades are an improvement on scrubs, due to the use of a specialized pure-bred, while the pure-bred is a highly specialized animal to meet a certain requirement. In dairy cattle this requirement is milk production. For the dairyman there are no substitutes for pure-bred cattle, as there are no substitutes for dairy products.

This fact dairymen are waking up to, and are establishing pure-bred herds. Here is where the cooperative side of it comes in. Dairymen starting into the pure-bred business, select their breed of cattle usually on recommendation, and often on the recommendation of a breeder who has cattle to sell, regardless of the adaptability

of the breed to his particular market or location. Because of this many communities may be considered pure-bred communities, but with no particular breed as dominant. These localities are losing a wonderful opportunity. Buyers looking for a place to buy cattle usually pick those localities where they have the greatest choice of the kind of animals they want. Thus the localities of many breeds are generally overlooked, while the localities of one breed find ready sale for their cattle. In these localities of one breed of cattle the pure-bred business is the biggest and most paying part of the dairy game. While localities where many

breeds are kept, milk production must be the main source of income. Thus it is that dairymen are throwing away an opportunity for a paying industry by failing to cooperate on breed of cattle.

A splendid example of breed cooperation in Michigan is found in Livingston county. Practically the entire county have adopted but one breed of cattle and buyers from all over the world visit there yearly and take away many carloads of cattle because they are assured of a large number of the breed they are looking for, to select from.

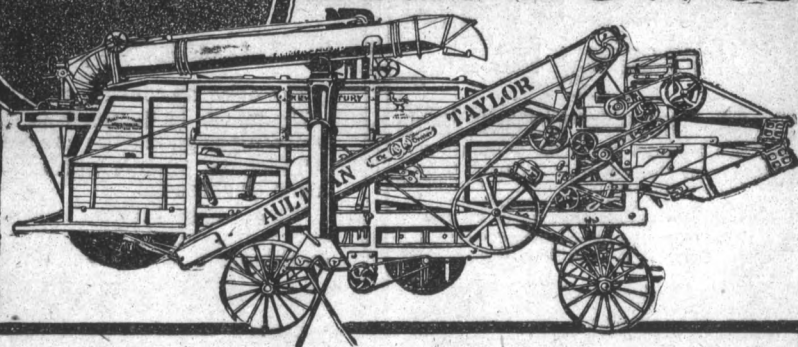
Some localities just starting into pure-bred stock are taking advantage of the experience of others and are selecting the breed best adapted to their market and locality and are cooperating by all adopting the same breed. However, in a few localities dairymen have gone one step farther than this and are not only adopting one breed for the community, but are selecting a particular and desirable family of that breed and all breed along the same line. Thus, advantage gained by any one particular member of that group of breeders is reflected on all the herds of that community and they all benefit by increased value of their animals. A great deal is being done along this line at the present time by Mr. H. W. Norton, Jr., State

(Continued on page 547).

A Suggestion

HAS the idea presented in this article been considered by the farmers and breeders in your community? If not, why not get together and talk the question over? If your district is as yet little developed in the production of pure-bred stock, then there is all the more reason why the question should be discussed seriously right now. Take the precaution, however, to secure men of experience and good judgment to advise how to proceed with a program of this character.

Better Threshing With New Century Thresher Less Power



THINK of a thresher that is *practically vibrationless*—that is *so perfectly balanced that an 8-penny nail will stand on any level part of it while in operation!* That is the Aultman-Taylor New Century.

You can spin the cylinder shaft of the New Century with your thumb and first finger. Hyatt Roller bearings used on the cylinder, in combination with many other advanced constructional features, make the New Century the easiest, smoothest running thresher on the market—and mean a saving of several horse power in operation.

Saves All The Grain

The Universal Rotary Straw Rack and Inclined Traveling Web used in the New Century *absolutely prevent clogging, double the separating capacity and insure perfect separation.* The rotary motion of the Universal Rack, moving parallel to the frame saves power, eliminates all wear, tear and vibration. The Sharpe Grain Saving Device prevents wastage of grain when thresher is not properly operated.

Aultman-Taylor New Century threshers are made in four sizes, all absolutely standard in design and construction.

See your dealer today. Or write in for our catalog and for complete information today.



The Aultman & Taylor Machinery Company
Mansfield, Ohio



Hyatt Roller Cylinder Bearings
Hyatt Roller Cylinder bearings effect a saving of several horse power in operation of the machine and avoid any possibility of heated bearings.



Universal Rotary Straw Rack
This rack gives double the separation of the ordinary rack. It agitates the straw twice to each revolution of the crank shaft. This prevents bunching, helps eliminate vibration—saves power.

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.
404 SOUTH WATER STREET
WEST BEND, WIS.

Hoosier
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.

WOOD SILO

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-99 Albany, Ind.

"BVT" Silo

Will last forever. You will never have to rebuild it! Neither will your grandchildren. Built from the famous BRAZIL VITRIFIED FIRE CLAY. The "B-V-T" has been on the market ten years without a failure.

Send for Catalog D

Brazil Hollow Brick and Tile Company
BRAZIL, INDIANA

FOR SALE 20 complete cow stalls with 19 water bowls. Decided on no change at present. B. B. SMITH, Howell, Mich.

\$24.95 *American*
Upward **CREAM**
SEPARATOR

On Trial. Easy running, easily cleaned. Skims warm or cold milk. Whether dairy is large or small, get handsome catalogue and easy monthly payment offer. Address

AMERICAN SEPARATOR CO., Box 5061 Bainbridge, N.Y.

MINERAL HEAVE COMPOUND

FOR 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.

Bog Spavin

Fleming's Spavin Liquid overcomes lameness or money back. Leaves no scar. \$2.00 a bottle postpaid. Send for FREE Vest Pocket Veterinary Adviser. Describes Spavins and 200 other Horse and Cattle Ailments.

FLEMING BROTHERS, 252 Union Stock Yards, Chicago

Mention The Michigan Farmer When Writing Advertisers

BREEDERS' DIRECTORY

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

THE HOME OF

Imp. Edgar of Dalmeny

Probably

The World's Greatest
Breeding Bull

Blue Bell, Supreme Champion at the Smith-
field Show 1919, and the Birmingham Show
1920, is a daughter of Edgar of Dalmeny.

The Junior Champion Bull, Junior Cham-
pion Female, Champion Calf Herd and First
Prize Junior Heifer Calf, Michigan State Fair,
1920, were also the get of Edgar of Dalmeny.

A very choice lot of young bulls—sired by
Edgar of Dalmeny are, at this time, offered
for sale.

Send for Illustrated Catalogue.

WILDWOOD FARMS
ORION, MICHIGAN

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

For Sale

Woodcote Trojan-Ericas

We are offering ten cows bred to either
IMP. ELCHO OF HARVESTOWN, or
IMP. EDGAR OF DALMENY.

Write for our 1921 BULL SALE LIST

Woodcote Stock Farm, Ionia, Mich.

REGISTERED Aberdeen-Angus. Ten heifers, six
bulls from eight to fourteen months. Best of
breeding, the growthy kind that make good. Reason-
able. Inquire F. J. WILBER, Ohio, Mich.

CLOVERLY ANGUS

Cows and Heifers Bred to
Blackcap Brandon of Woodcote 2nd
For Sale
GEO. HATHAWAY & SON, Ovid, Mich.

Reg. Aberdeen Angus bulls and heifers from 6 to
18 mos. old of the very best
of breeding, also Berkshire Swine, boars ready for
service and pigs both sex singles, pairs or trios,
will accept Liberty Bonds.
RUSSELL BROTHERS, Merrill, Mich.

GUERNSEYS

Bull calves for sale. Sired by Anton's May King that
sold for \$7,000. Farmers prices and guaranteed to
please. GILMORE BROTHERS, Camden, Mich.

Registered Guernseys A Three yr. old
heifer, her heifer
calf born Feb. 1, for \$350. An 8 mo. old bull calf
no relation to above for \$100. The three for \$400.
J. M. WILLIAMS, North Adams, Mich.

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

Guernsey Bulls of May Rose Breeding
Their dams have records
420 to 650 lbs. fat also a few cows and heifers are
offered. H. W. Wigman, Lansing, Mich.

FEDERAL Inspected Guernsey Bulls. Priced to sell.
Nine sold in 10 mos. A fine Masher Sequel 3 yrs.
old, sure, sound and right \$175.00. Four grandsons
of Ex-Champion A. A. cow, under 8 mos. old from cows
on test. G. W. & H. G. RAY, Albion, Mich.

For Sale Six registered Guernsey bulls May
Rose breeding ready for service. Cheap
if taken soon. John Ebels, R. 2, Holland, Mich.

Reg. Guernsey bulls for sale cheap. State T.B. test.
Red and from good producing and A. R. cows. Age 1
to 12 mo. C. E. Lambert & Sons, Linwood, Mich.

FOR SALE Guernsey bulls, old enough
for light service.
L. J. BYERS, Coldwater, Michigan

For Sale Two young Reg. Guernsey Cows
also bull calves.
Geo. N. Crawford, R. 2, Holton, Mich.

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

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

Reg. Holstein Bull Calf \$60 Reg. and Del.
Born in Dec.
J. R. HICKS, St. Johns, Mich.

NOTICE

The Winwood Herd

on Nov. 1st will move their Herd of
Pure Blood Holsteins to their new
home, 1½ miles south of Rochester, Mich.
and for the next 30 days we will sell
what bull calves we have cheap as we
will be unable to get our buildings com-
plete before winter. So get busy if you
want a son of Flint Maplecrest Boy
at your own price.

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

Blythefield Farms

Settle your Herd Sire problem now by getting a
thirty pound record pure bred Holstein bull calf
from Blythefield Farms. Address
JOSEPH H. BREWER, Grand Rapids, Mich.

Holstein or Guernsey calves, practically pure,
7 weeks old, \$25.00 each, crated for ship-
ment anywhere. Satisfaction guaranteed. Bonds
Accepted. Edgewood Farms, Whitewater, Wis.

7 Bulls 15 Females

Southern Michigan Polled Shorthorn Breeder's Ass'n.

will hold

A PUBLIC SALE

of Polled Shorthorns at the Branch County Farm,

Coldwater, Mich., May 5, 1921

The offering consists of 22 head of show and breeding cattle.

No factor is destined to play such an important part in constructive
breeding as good animals backed with choice breeding.

Those in pursuit will find animals that will make good in any herd at
home or abroad.

We cordially invite all interested to attend this sale as it will be a grand
opportunity to get foundation stock as well as to build up and strength-
en the blood lines of the older herds.

Write for illustrated Catalogue.

County Agriculturist, C. L. Nash, Sec. Coldwater, Mich.

Geo. Burdick, Pres., Coldwater, Mich.



HOLSTEIN CATTLE

J. Diedrich, Sumner, Iowa, writes:

After doing official testing for 16 months I concluded
that the Holstein cattle were the most profitable. As
compared with other breeds over the route, the Holsteins
were the only cows that made the farmer clear profits
after feed and other expenses were charged against them.

Several cows cleared over \$100 a year. Write for free booklets.

The Holstein-Friesian Association of America
164 American Bldg., Brattleboro, Vermont

THE
PONTIAC
HERD"Where the Cham-
pions Come From"

Offer special prices for
60 days to Michigan
dairymen on bull calves
from tested dams, sired
by Sir Clothilde Concor-
dia or Flint Hengerveld
Lad. Send for extended
pedigrees and prices.

Pontiac State Hospital
Pontiac, Mich.

Livingston County
Holstein Association
Quality Sale

At
Howell, Mich.May 18, 1921
90 HEAD

Jay B. Tooley, President J. G. Hays, Secretary

Four Handsome Daughters

of the 34 lb. show bull "Judge
Joh. Lyons" and out of A. R.
O. cows all for \$1200.

Also bull calves from the same
sire from \$50 up.

Bulls ready for service from
\$100 up.

SINDLINGER BROTHERS

Lake Odessa, Mich.

For Sale. Three reg. Holstein bulls, ready for ser-
vice, well bred and good color. Prices in
reach. WM. BRINKMAN, Fairgrove, Mich.

Yearling Holstein bulls 2 light colored and large 30lb.
breeding on both sides, from 20 lb.
heifers \$150 each. Dewey C. Pierson, Metamora, Mich.

USE PURE-BRED SIRES!

Estimates furnished by the Dairy Division of the
United States Department of Agriculture show
that the dairy cows of the country average only
4,500 lbs. of milk per year.

A good Holstein bull will increase the production
of the ordinary herd 0 per cent in the first gen-
eration.

Let us help you find a good one to use on your
herd. You cannot make a better investment.

The Michigan Holstein-Friesian
Association

H. W. NORTON, Jr., Field Secretary,
Old State Block, Lansing, Michigan

33.60 lbs. butter average of gddams of 8 mo. old
bull. Can have him for present
cost of service. Liberty Bond or note.
M. L. McLAULIN, Redford, Mich.

FOR SALE 15 head selected
high grade Hol-
stein young cows, 9 fresh, balance soon due. Heavy
milkers \$1100. A great bargain. Selling to make room
for registered stock. J. E. Gamble, Hart, Mich.

Reg. Holstein Friesian cows will sell one or more.
Segis and Pontiac breeding bred right and priced
right from two to six yrs. old come and see them or
write. HENRY S. ROHLFS, R. 1, Akron, Mich.

"Top Notch" Holsteins

Buy a "milk" Bull of Quality from the Breeders
of the world's only cow to produce 800 lbs. milk in 7
days, having a 300 lb. daughter.
Our herd is rich in the blood of Colantha, 4th Jo-
hanna, the only cow that ever held all world's records
in every division from one day to one year at the same
time. She produced 651.70 lbs. milk in 7 days. We are
offering for sale a bull, whose dam exceeds this record
by over 7½ lbs. in 7 days.

His dam's records are:
Milk 1 Day 100.1 lbs.
Milk 7 Days 659.3 lbs.
Butter 7 Days 26.31 lbs.

His name is KING VALE CORNUCOPIA WAYNE, No. 312599

Born February 6, 1920

His dam and sire's two nearest dams average

Butter 7 Days 33.02 lbs.

Milk 7 Days 607.3 lbs.

Handsomely marked about one third white.
\$250.00 f. o. b. Howell.

McPHERSON FARMS CO., Howell, Mich.

All herds under U. S. Supervision.

Cluny Stock Farm

Offers

Cluny Konigen Colantha Silver 326205

Born May 29, 1920

A white bull with a few black spots.

His sire a 30 lb. son of King Segis Pontiac Konigen.

Sire's 7 nearest dams average 32.301 lbs. butter 624.1

lbs. milk in 7 days.

His dam has a Jr. 3 year old record of 17.683 lbs.

butter from 418.7 lb. milk and is a granddaughter of Colan-
tha Johanna Lad.

2nd dam—a 21 lb. cow that our barn records show milk-
over 145,000 lbs. in 14 milking periods producing 15

calves.

Pedigree on application.
Price \$250.00. Federal Accredited Herd.

R. Bruce McPherson, Howell, 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.

For Sale Reg. Holstein Cow 4 yrs. old, fresh, price
\$100. Also reg. bull
calf, three-quarters white, four weeks old \$35.
Arthur O. Moore, R. 1, Lawrence, Mich.

Registered Holsteins—bulls, heifers or cows always
for sale. Priced reasonable. Satisfaction guaran-
teed. Write or come, B. B. Reavey, Akron, Mich.

HEREFORDS

Cows with calves at side, open or bred
heifers of popular breeding for sale. Also
bulls not related.

Allen Bros. Paw Paw, Mich.

616 So. Westnadge Ave., Kalamazoo, Michigan

HEREFORDS

Two high class, registered bulls, nearly a
year old, for sale. One double standard,
and one with horns, good size, color, and
markings. Both the making of show bulls.

COLE & GARDNER,
HUDSON, MICH.

Again the Jersey Cow
Proves Her Superiority
as an Economical Pro-
ducer of Butter

In a five year survey just completed at the
Nebraska Agr'l College the Jersey produces
a pound of butter cheaper than any of the
other dairy breeds. Five breeds were repre-
sented; thirty Jerseys, twenty Holsteins, six
Guernseys, seven Ayrshires, five Shorthorns.

The Jerseys required 9.91 lbs. hay, 16.16
lbs. silage, 8.69 lbs. concentrates for each
pound of butter produced. Her nearest com-
petitor required 13.86 lbs. hay 19.16 lbs. sil-
age, 10.09 lbs. concentrates, for each lb. of
butter. Nearly 4 lbs. more hay, 3 lbs. more
silage, 1.4 lbs. more concentrates for each
pound of butter than the Jersey required.

At present prices of feeds in Mich. Jerseys
produced a pound of butter 6.5 cents a pound
cheaper than nearest competitor, 7.7 cents
cheaper than second nearest, 9 cents cheaper
than third nearest and 20 cents cheaper than
fourth nearest competitor.

Jerseys produced one pound of butter for
29.7 cents cost of feeds based on present Mich.
prices. Think, Act.

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

The Wildwood Farm

Jersey Cattle, Majesty strain, Herd on State accred-
ited list, R. of M. testing constantly done. Bulls for
sale. ALVIN BALDEN, Phone 143-5, Capac, Mich.

JERSEY BULLS Ready for Service.
R. A. Leigh—Oxford
and—Majesty breeding. Meadowland Farm, Water-
man & Waterman, Packard Rd., Ann Arbor, Mich.

Lillie Farmstead Jerseys Bull calves from
R. of M. cows.
COLON C. LILLIE, Coopersville, Mich.

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

Meridale Interested Owl No. 111311 heads my herd
M bull calves from this great sire and out of R. of M.
dams for sale. Leon E. Laws, R. 6, Allegan, Mich.

Registered Jersey Bulls ready for service from
high producing dams.
R. B. FOWLER, Hartford, Mich.

Registered Shorthorns, Bulls and heifers.
prices within reach of all.
G. R. DeSHETLER, R. 4, Tecumseh, Mich.

BIDWELL SHORTHORNS

BUY A BULL

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

BIDWELL STOCK FARM;
Box D, Tecumseh, Michigan

Milking Shorthorns, bulls and heifers 5 mo. to 1
year old for sale at reduced prices to make room
for younger stock. E. H. KURTZ, Mason, Mich.

Stop! Look! Listen!

Have you a catalog of the Shorthorn
Sale to be held at M. A. C. Feb. 25th at
1 P. M. We are listing four valuable
females and two show bulls.

Richland Farms,
C. H. Prescott & Sons, Tawas City, Mich.

The Maple's Shorthorns

Kirklevington Lad, by Imp. Hartford
Welfare, in service. Stock for sale.

J. V. WISE, Gobleville, Mich.

BUY SHORTHORNS of Central Mich-
igan Shorthorn
Breeders' Association at farmers' prices. Write for
sale list to M. E. Miller, Sec'y, Greenville, Mich.

One Yearling Shorthorn Bull calf
registered,
for \$125. M. G. MOSHER & SONS, Osseo, Mich.



Whistling for "more grain" at threshing time always means plenty of power—power that's waiting for its load—full of pep—ready to keep the wheels turning and grain moving hour after hour until the job is finished. That's the kind of power your thresherman brings in his outfit hooked up to a

Nichols-Shepard Steam Engine

It is built by an organization with 73 years' experience—and specialists in building grain-saving threshing outfits.

Always on the job with steady, dependable power. Carries a high power reserve for the "peak load" caused by fast feeding or wet grain. If it has troubles they are easily remedied. Almost anyone can run it. No big fuel bills to pay. It delivers full power on almost anything that burns.

Hire a Nichols-Shepard owner to do your threshing. He'll save your time and grain.

Write for Circulars.

Nichols & Shepard Co.
(In Continuous Business Since 1848)
Builders Exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines:
Battle Creek, Michigan

U. S. Army Munson Shoe

Guaranteed 6 months.
Made of pliable
Chrome Leather
Broad Solid Oak
Leather Heels. Double
Thick Soles. Dirt
and Water Proof. Bol-
lows Tongue. Sizes
5½ to 12.

\$4.45
Guarantee

You must be en-
tirely satis-
fied or we will
refund your
money.



Pay Postman

Send no mon-
ey. Just send
your name, ad-
dress and size.

Your shoes will be sent by
return mail. (Pay Post-
man \$4.45 and postage on arrival.)

Civilian Army & Navy Shoe Company
Dept. 73, 45 W. 34th St., New York

the one best spray
for fruits and vegetables
PyroX
TRADE MARK REGISTERED

Write for the new Pyrox book—Bouker Insecticide
Co.—Boston—Baltimore—Chicago.

CATTLE

Branch County Farm
Breeder of

Polled Shorthorn Cattle

Young Bulls For Sale

Several well bred herd bull prospects.
GEO. E. BURDICK, Mgr., Coldwater, Mich.

We now have

FIVE BRED HEIFERS

that we will sell cheap if taken at once. Inquire
about them or better come and see them.
CARR BROS. & CO., Bad Axe, Mich.

Reg. Red Polled cattle choice young bulls from 6 to 18
mo. old for sale.
FRANK KEHLER, R. 1, Grand Ledge, Mich.

Shorthorns. Bull calves for sale from the
best milking blood obtainable.
ROSEMARY FARMS, Williamston, Mich.

Two Scotch-topped Shorthorn bulls
for sale.
W. E. MORRIS, R. 5, Flint, Mich.

Reg. Red Polled bull calves, from 3 mos. to 1 year
old, sired by Famous Chatter, 75% same blood as
Chatter 1919 International Grand Champion. Our herd
State and Federal tested. Westbrook Bros., Ionia, Mich.

Brown Swiss Two registered bull
calves for sale.
E. R. Sherwood, R. 4, Saranac, Mich.

HOGS

Berkshire Bred Sows and Gilts \$50 and up, for April,
May and June farrow. Have
a few good fall pigs at reasonable prices for sale.
M. G. MOSHER & SONS, Oshtemo, Mich.

TO INCORPORATE SALES ASSOCIATION.

THE leading breeders of Holstein cattle from the district surrounding Rochester, Michigan, met with their families in that city last week to enjoy a banquet and to take the first step in the organization of a sales company for the disposal of surplus stock and for the general promotion of the breed throughout the district. Breeders were present from Oakland, Macomb and Wayne counties. The vote was unanimous for the establishing of such a company and temporary officers were elected as follows: W. E. Wood, president; C. W. Melick, secretary; Fred M. Shinnick, treasurer; E. A. Hardy, John Rinke, W. E. Wood, F. M. Shinnick, Harry Maddelein, E. M. Bayne and E. H. Langworthy, directors.

Among the several inspirational talks given was an excellent address by Hon. D. D. Aitken, president of the Holstein-Friesian Association of America. He urged the necessity for organization; for the continuous improvement of breeding stock; for the production of better products from the dairy; for a more generous producer-support of a sane advertising campaign to care for surplus milk and to create a demand for quantities in excess of present per capita consumption; for individuals to forget petty differences and get together; for an aggressive championship of the boys' and girls' club work; for giving worthwhile assistance to the young breeder and for making the fullest possible use of the outstanding sires of the district.

COOPERATIVE DAIRYING.

(Continued from page 545).

Holstein-Friesian Secretary, in his work to make Michigan a "Holstein-Friesian State." The same idea is being worked out by the extension department of the college through the boys' and girls' calf clubs and the establishment of pure-bred bull associations.—S. J. B.

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

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

Impotent Bull.—I have a bull two years old that will seemingly serve a cow as well as any bull, but he fails to get any of them with calf. He served ten cows all summer, none of them Market him for beef.

Incurable Lameness.—Chronic Indigestion.—Have a nine-year-old horse that has been lame for several years. Have blistered hock, stifle and hip many times, but treatment fails to help him. Stands with foot well under him. Following castration, hard bunch seemed to grow on end of cord and remain there. Do you believe this bunch pains him, causing soreness and lameness? Also have nine-year-old horse that has been out of condition for the past six months. All the work he does is to help haul one load of manure out into lot daily. C. H. F., Marion, Mich.—The teeth of the nine-year-old horse may need floating. Give him thirty grains of ground nux vomica and half ounce of powdered gentian in ground feed three times a day. The small tumor on end of cord of other horse should be cut out and cord released, but this will not cure his chronic lameness.

Stringhalt.—About six weeks ago I purchased a five-year-old gelding which occasionally jerks up one hind foot. We believe he has stringhalt. J. W. F., Newport, Mich.—Medical treatment in his case will not help him and the operation, Peroneal Tenotomy, for stringhalt is not necessary, unless the warm weather fails to palliate his ailment, then have him operated on next fall.

DISPERSION SALE

THIRTY REGISTERED HOLSTEINS

From cows with records up to 28 lbs. butter in seven days. Bred to a son of CARNATION KING SYLVIA from a three-fourths sister to SEGIS PIETERTJE PROSPECT World's Champion milk cow. Or to a son of Sir Prilly Segis from ORMSBY KORNDYKE ARMY one of the best daughters of ORMSBY KORNDYKE LAD. Sold with a sixty to ninety day retest privilege. Six months time on bankable paper. Bring bank reference.

For catalog address

Albert E. Jenkins, Sale Mgr.
Eagle, Mich.

E. P. Kinney, Owner
East Lansing, Mich.

O. I. C. HOGS

all ages sired by Callaway Edd 1918 world's grand champ. boar and C. C. Schoolmaster 1919 world's grand champion also Wonder Big Type and Giant Buster. Write your wants, all stock shipped on approval.
CRANDELL'S PRIZE HOGS, Cass City, Mich.

Buy Pigs Now

Registered Duroc pigs crated and delivered to express station for \$20 each. Either sex or can furnish them unrelated to each other. These are late fall pigs sired by State Fair winners and weighing over 100 lbs. Write for particulars. Michigan Farm Ltd., Pavilion, Mich.

Brookwater Duroc Jerseys

FALL BOARS OPEN GILTS

All of the right type and the best of breeding.

Prices reasonable.

Mail orders a Specialty. Satisfaction guaranteed.

BROOKWATER FARM, Ann Arbor, Mich.
H. W. Mumford, Owner J. B. Andrews, Mgr.

DUROC PIGS

either sex, ready to ship May 1st. Extra quality and breeding. The best purchases for Boys' and Girls' Pig Clubs of Washtenaw Co. in 1919 were from my herd. One boy refused \$125 for a male pig a few weeks after purchase. Price \$15 to \$20 reg. and transferred. Satisfaction guaranteed.
B. E. KIES, R. 5, Hillsdale, Mich.

DUROC JERSEYS

Bred gilts, service boars and fall boar pigs at bargain prices. Your correspondence or personal inspection is cordially invited.
RUSH BROS., Oakwood Farm, Romeo, Mich.

Duroc Boars at bargain prices large growthy hogs 15 months old at \$50. Will send C. O. D. and register in the buyers name. Orders booked for Apr. pigs to deliver June 1st. **W. E. Bartley, Aina, 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, Darand, Mich.

DUROC Jerseys. Boars for spring service, heavy boned type, from the most popular blood lines at reasonable prices. Partridge Rock eggs from best laying strain \$2 per lb. Drott & Berns, Monroe, Mich.



Spring pigs by Walt's

Orion, First St. Yearling

Phillips Bros, Riga, Mich.

DUROC SOWS and gilts bred to

Orion King No. 16929 Son of the \$10,000 boar owned by Longview Farm, Le Summit, Mo. also young boars ready for service out of good sows. Apply
THE JENNINGS FARM, Bailey, Mich.

Duroc Jersey Sows and Gilts bred for March, April, May farrow. Also a few spring boars. Best of blood lines and splendid individuals. Satisfaction guaranteed. Write for pedigree and prices, or better come and see, visitors welcome. **Thos. Underhill & Son, Salem, Mich.**

A FEW CHOICE Bred gilts for sale.
Carey U. Edmonds, Hastings, Mich.

DUROCS Bred sows all sold. A few choice fall boars for sale.
W. C. TAYLOR, Milan, Mich.

Duroc Jerseys Am booking orders for spring pigs. Few fall gilts.
E. D. HEYDENBERG, Wayland, Mich.

O. I. C. Swine Strictly Big Type with quality. A few gilts bred for last of April, and May farrow. A few Sept. and Oct. fall pigs either sex. Extra good ones. Of our State Fair prize winning blood lines. Will ship C. O. D. and record them free. **NEWMAN'S STOCK FARM, R. 1, Marlette, Mich.**

O. I. C. Gilts bred for April and May farrow. Shipped C. O. D.
H. W. MANN, Dansville, Mich.

O. I. C's Choice gilts for April and May farrow, also fall pigs. Booking orders for spring pigs.
A. J. BARKER & SON, Belmont, Mich.

O. I. C's 8 last spring gilts due to farrow in Mar. and Apr. some tried sows service boars and last fall pigs, not akin, big growthy stock. Registered free. City Phone 124, Otto B. Schulze, Nashville, 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.

MICHIGAN LIVE STOCK INSURANCE COMPANY

INDEMNIFIES Owners of Live Stock—Horses, Cattle, Sheep and Hogs

Against Death by Accident or Disease

308 Davidson Building,

Bay City, Michigan

O. I. C's. 2 sows for May farrow. Orders booked for March pigs.
C. J. THOMPSON, Rockford, Mich.

O. I. C. Big type serviceable boars, weigh from 150 to 250 lbs. Gilts bred for May and June farrow. Write for prices.
G. P. Andrews, Mason, Mich.

Saginaw Valley Herd. Prize winning O. I. C's. Jan-able. J. Gibson, Fosters, Mich.

O. I. C's choice boars and spring pigs at farmers prices.
OLOVER LEAF STOCK FARM, Monroe, Mich.



I HAVE started thousands of breeders on the road to success. I can help you. I want to place one hog from my great herd in every community where I am not already represented by these fine early developers—ready for market at six months old. Write for my plan. "More Money from Hogs."
S. S. BENJAMIN, R. F. D. 10, Portland, Michigan.

SPOTTED POLAND CHINAS

Our herd boars Rio Grand Giant, a litter mate to the \$2100 Marshall Giant boar, his dam Arb-Osa, the largest sow of the Spotted breed. King Onward known as one of the greatest back and color breeders. English Back Builder, a wonderful breeder. 50 last spring gilts bred for July and August farrow. \$50 per head while they last. Fall pigs either sex, \$35. Will take orders for spring pigs for June shipment, either sex, \$25. Cholera immunized. Satisfaction guaranteed.
SAMUEL GERBER, R. 4, Bluffton, Ind.

Big Type Polands. Some very choice fall boars, ready for spring service for sale. They are sired by The Clansman: dam, the \$1025 Miss Columbia, a littermate to the \$40,000 The Yankee. Also a few choice boars by The Clansboy, son of The Clansman.
WESLEY HILE, Ionia, Mich.

L. T. P. C.

Spring boar pigs \$15 to \$25. Fall gilts sired by Harts Black Price. \$30 to \$50. Also have two gilts which are granddaughters of the Yankee and were bred to Harts Black Price March 24th. They will go quick at \$50. **HART, FULCHER & OLIVE, address F. T. HART, St. Louis, Mich.**

Big Type Polands. Bred sows all sold, but have some good herd boar prospects, fall boars weighing 175 lbs. Sired by the Arctic. Call or write
PORUS HOVER, Akron, Mich.

P. C. Bred sows. Fall pigs singly or in pairs. Also S. P. C. Minorca cockerels all big type of the best of breeding. Satisfaction guar. **R. W. Mills, Saline, Mich.**

Francisco Farm Poland Chinas

Offering a dozen choice gilts and a few tried sows bred to such boars as Michigan Mastodon and Michigan Clansman.

P. P. POPE, Mt. Pleasant, Mich.

L. S. P. C. a few choice boars bred gilts all sold. Also a grandson of The Clansman and Harrison Big Bob.
H. O. SWARTZ, Schoolcraft, Mich.

Big Type P. C. some very choice boars double immune, out 1100 lb. sire and mammoth sows from Iowa's greatest herds. **E. J. Mathews, Burr Oak, Mich.**

Bg Type Poland Chinas at lowest prices. Both sows and gilts, all ages, and bred
G. A. BAUMGARDNER, R. 2, Middleville, Mich.

Large Type Poland Chinas. Nothing for sale at present.
A. A. FELDKAMP, R. 2, Manchester, Mich.

L. T. P. C. If you are looking for something good, in bred gilts at a right price. Write
W. J. HAGELSHAW, Augusta, Mich.

POLAND China Bred Sows and Gilts at bargain prices, also spring boars and fall pigs, either sex.
CLYDE FISHER, R. 3, St. Louis, Michigan

Leonard's Big Type P. C. Sows bred to Orange Clansman, Fall boar pigs weigh 175 lbs. Real herd boar prospects. Call or write. **E. R. Leonard, R. 3, St. Louis, Mich.**

PINE GROVE HAMPSHIRE

We are offering a few tried sows bred for March and April farrow. These sows are all closely related to our winning show herd and of popular blood lines, and the price! Way Down!
Geo. Coupar & Sons, Marlette, Mich.

Hampshires Bred gilts all sold. Spring and fall boar pigs at a bargain.
JOHN W. SNYDER, R. 4, St. Johns, Mich.

LATEST MARKET REPORTS

GRAIN QUOTATIONS

Tuesday, April 19.

Wheat.

Detroit.—Cash No. 2 red \$1.32; May \$1.30; No. 2 white and No. 2 mixed \$1.30.

Chicago.—No. 2 hard \$1.34; No. 2 mixed \$1.38.

Corn.

Detroit.—Cash No. 3 yellow 62c; No. 4 yellow 59c.

Chicago.—No. 3 mixed 56½@56¾c; No. 2 yellow 57¼@57½c.

Oats.

Detroit.—Cash No. 2 white 41½c; No. 3 white 40c; No. 4 white 37c.

Chicago.—No. 2 white 37½@37¾c.

Beans.

Detroit.—Immediate and prompt are lower at \$3.10 per cwt.

Chicago.—Market is easy and lower. Hand-picked beans choice to fancy at \$3.60@4.25; red kidney beans \$8.75@9.50 per cwt.

New York.—Market is dull. Choice pea \$4.35@4.40; do medium \$5@5.25; red kidney \$9.50@9.75.

Rye.

Detroit.—Cash No. 2 rye \$1.35.

Seeds.

Detroit.—Prime red clover, cash at \$12.50; April \$10.50; alsike \$14.25; timothy \$3.10 per bushel.

Hay.

No. 1 timothy \$20@21; standard and light mixed \$19@20; No. 2 timothy \$18@19; No. 1 clover mixed \$17@18; No. 1 clover \$15@16; rye straw \$13@14; wheat and oat straw \$12@13 per ton in carlots at Detroit.

WHEAT

Large primary receipts combined with a reduction in the export demand and the sentimental influence of the British labor dispute caused extreme weakness in this grain. The prospect for the new crop of winter wheat remains favorable, although evidence of damage from the Easter freezes was more prominent. Export buying failed to maintain the volume of the preceding week although our prices were below Argentine wheat much of the time. Reductions in wages continue with rail and steel workers apparently next in line for a cut. Northwestern mills have been buying Canadian wheat.

CORN

Favorable action by congress on the proposed emergency tariff give support to prices on Saturday. Stocks are large but are held by farmers instead of middlemen. Prices declined last week to new low levels but despite this farmers who have held are now selling, although bankers show more leniency toward farmers to whom they have made loans.

OATS

New low prices were recorded last week. Buyers are taking only enough for immediate needs.

SEEDS

Sales by producers to distributing markets are light. Imports of red clover during March were nearly 6,000,000 pounds and of alsike 1,600,000 pounds. Toledo.—Per bushel prime red clover \$13; 1919 prime timothy \$3; 1920 prime timothy \$3.10; prime alsike \$14.15.

FEEDS

By-product feeds from flour mills continued to decline during the last week influenced by lower prices for wheat and coarse grains. Bran was quoted as low as \$15 in northwestern centers of production and standard middlings down to \$14 per ton in carlots. These prices are lower than corn and oats at terminal points but the feed grains are bringing only about half a cent per pound on the farms west of the Mississippi river.

HAY

Hay prices remain firm. Present prices are \$4@6 higher than in 1914 while corn and oats are lower than at that time. High freight rates check the movement of hay from producing sections but prices have shown very little change in the past two weeks. Stocks from the 1920 crop are known to be large. The new crop is expected to be ready earlier than usual if the weather conditions do not change.

POTATOES

Potato markets are slightly firmer although shipments are comparatively

heavy, totaling about 500 cars per day. New stock is now about 20 per cent of the total supply and is becoming a bigger factor each week, otherwise the market is without feature. The middle western consuming markets are quoted at \$1@1.20 per 100 lbs for sacked northern round whites U. S. Grade No. 1.

WOOL

Heavy sales of wool from pools of the 1920 clip were reported during the past week. It is stated that over 600,000 pounds were sold from the Chicago warehouse where the Illinois and Iowa pools are concentrated, 50,000 pounds from the Michigan pool and that the Ohio pool has only 60,000 pounds left. Prices for pooled wool are: Half-blood staple 33c; half-blood clothing 28@29c; three-eighths-blood 26c; quarter-blood 24@25c. Woolen mills have large orders for cloth but are not buying as rapidly as they might, apparently in the belief that the price will not advance materially within the next two months.

BUTTER

The butter markets have been nervous during the past week, both buyers and sellers being anxious to operate only from hand-to-mouth. Actual receipts increased slightly but prices did not change much until toward the close of the week when the New York market declined sharply because of the fresh arrivals of Danish and California butter. Other markets declined in sympathy with the change at New York. Prices for 92-score butter as quoted by the bureau of markets on April 16 were: Chicago 46¼c; New York at 45½c; Boston 47c; Detroit 44½c.

EGGS AND POULTRY

Country egg dealers believe that egg prices are on rock bottom and are putting them into storage while interests in the large cities look for lower levels. As a result country egg prices are as high as in the big cities. The season during which eggs of the best quality for storage are produced is already at hand and further marked recessions do not seem probable. Live poultry

prices remain extremely high measured by the level of prices on other sources of meats. Quotations at Detroit are: Eggs, fresh current receipts 26c. Live Poultry.—Spring chickens 30@32c; heavy hens 33@34c; roosters 18@20c; geese 20c; ducks 35c; turkeys 40c.

APPLES

Apple markets hardened slightly during the past week. Good stock moves fairly well but it is evident that supplies of low grades are still large. Consuming markets are still quoted at \$4.50@6 for Baldwins and Greenings.

CHEESE

Cheese markets changed little after the first session last week, but the undertone is not strong. Country markets again declined and lower quotations are expected again during the present week. Dealers desire to clean up their stocks but price concessions are necessary. Some small export orders, especially for Twins, appeared but were not large enough to turn the tide. Held cheese sold at practically unchanged prices. No. 1 American cheese is quoted by the bureau of markets on April 16 as follows:

Chicago.—Flats 19c; Twins 18@19c; Single Daisies 19¼@20½c; Double Daisies 19@19½c; Young Americas 21c; Longhorns 20@21c; Square Prints 21c per pound.

New York.—Flats 28@29c; Twins 27½@28½c; Single Daisies 27½@28½c; Double Daisies 27½@28½c; Young Americas 27½@28c.

COMING LIVE STOCK SALES.

Holsteins.—East Lansing, E. P. Kinney.
Polled Shorthorns.—May 5, Southern Michigan Polled Shorthorn Breeders' C. L. Nash, Secretary, Coldwater, Michigan.
Guernseys.—May 10, F. E. Fox, Sales Manager, Eau Claire, Mich.
Holsteins.—May 18, F. J. Fishbeck, Howell, Mich.
Holsteins.—May 18, Livingston County Holstein Association, J. G. Hays, Secretary, Howell, Mich.

Live Stock Market Service

Wednesday, April 20.

DETROIT

Cattle.

Heavy cattle 25@35c lower and very dull; others steady.
Best heavy steers \$ 8.25@ 8.35
Best handy wt bu steers 8.00@ 8.50
Mixed steers and heifers 7.00@ 8.00
Butchers 7.00@ 7.50
Best cows 6.50@ 7.50
Butcher cows 4.50@ 6.00
Common cows 3.50@ 4.00
Canners 2.50@ 3.00
Best light weight bulls 6.00@ 7.00
Bologna bulls 5.25@ 5.75
Stock bulls 4.00@ 5.00
Feeders 7.00@ 7.50
Stockers 5.00@ 6.75
Milkers and springers 45@ 95

Veal Calves.

Market steady.
Best \$11.00@12.00
Culls and common 5.00@ 10.00

Hogs.

Market 15@25c lower.
Mixed \$ 8.75@ 8.85
Pigs 9.50
Heavy 7.75@ 8.00

Sheep and Lambs.

Market 25c lower.
Best lambs 9.25
Fair lambs 8.00@ 8.75
Light to common 4.00@ 7.00
Fair to good sheep 4.75@ 5.25
Culls and common 2.00@ 3.00

BUFFALO

Yorkers and pigs steady yorkers \$9.75 @10; pigs \$10.25; other grades of hogs are 25c lower; clipped lambs bring \$10.25; calves \$12.50.

CHICAGO

Hogs.

Estimated receipts today are 21,000; holdover 4,007. Market active and 10 @25c lower; light weights off most.

Bulk of sales \$8.15@9; tops at \$9.20; heavy 250 lbs up medium, good and choice \$8.20@8.55; medium 200 to 250 lbs medium, good and choice at \$8.45@8.85; light 150 to 200 lbs common, medium, good and choice at \$8.70@9.10; light lights 130 to 150 lbs common, medium, good and choice at \$8.75@9.10; heavy packing sows 250 lbs up smooth \$7.10@7.90; packing sows 200 lbs up rough \$6.85@7.10; pigs 130 lbs down medium, good and choice \$8.50@9.

Cattle.

Estimated receipts today are 11,000. Light weights steady to strong; others steady to weak. Beef steers medium and heavy weight 1100 lbs up choice and prime \$8.50@9.50; do medium and good \$7.50@8.50; do common \$7@7.50; light weight 1100 lbs down good and choice at \$8.25@9.40; do common and medium \$6.75@8.25; butcher cattle heifers common, medium, good and choice \$5.50@9; cows common, medium, good and choice \$5@6.50; bulls bologna and beef at \$4@7.25; canners and cutters cows and heifers \$2.25@4.75; do canner steers \$3@4.50; veal calves light and handyweight medium, good and choice \$7@9.50; feeder steers common, medium, good and choice at \$7@8.25; stocker steers common, medium, good and choice \$5.50@8; stocker cows and heifers common, medium, good and choice \$3.50@6.25.

Sheep and Lambs.

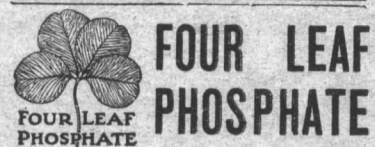
Estimated receipts today are 28,000. Market steady to 25c lower. Lambs \$4 lbs down medium, good, choice and prime \$9.50@11.25; do 85 lbs up medium, good, choice and prime at \$8.50@10.75; do culls and common at \$7.75@9.50; spring lambs medium, good, choice and prime \$8@9.50; ewes, medium, good and choice \$5.50@7.25; ewes cull and common \$2.25@5; yearling wethers medium, good and choice at \$6.75@8.

COMING MEETINGS.

May 3-4.—National Dairy Marketing Conference, Congress Hotel, Chicago, Illinois.

For Good Orchards Use Four Leaf Phosphate

Too often fertilization of orchards is overlooked. Yet fruits take most valuable salts from the soil, particularly needing phosphates for their development and flavor. An orchard can not be better fed than by applications of rock phosphate and sowing of clover with a crop of buckwheat. The roots of buckwheat attack and make the phosphate available to the clover. The clover roots are developed quickly where there is an abundance of phosphorus and carry plant food deep into the sub-soil, storing nitrogen as well as phosphorus. This means food for the tree roots and fruit growth. The buckwheat should be cut for a mulch, and the clover turned under late in the fall when the nutrition has been stored in the roots for the next season's growth. Write us for prices and the name of your nearest dealer in Four Leaf Phosphate.



THOMSON PHOSPHATE COMPANY
721 Fisher Building Chicago, Ill.

Use Dandelion Butter Color

Add a half-teaspoonful to each gallon of winter cream and out of your churn comes butter of golden June shade to bring you top prices. DANDELION Butter Color. All stores sell 35-cent bottles, each sufficient to keep that rich, "Golden Shade" in your butter all the year round. Standard Butter Color for fifty years. Purely vegetable. Meets all food laws, State and National. Used by all large creameries. Will not color the buttermilk. Tasteless. Wells & Richardson Co., Burlington, Vermont.



Write for the new Pyrox book—Bowker Insecticide Co.—Boston—Baltimore—Chicago.

DAHLIAS

12 choice named varieties \$2.00.
The Stock That Wins 1st Prize At The MICHIGAN STATE FAIR EACH YEAR
BAUMAN'S DAHLIA GARDENS,
Birmingham, Mich.
Send For Catalogue

SALESMEN Wanted to sell well-known line of oil, paints and roofing materials direct to farmers. Men average from \$100 to \$200 per week. Commissions paid weekly. Bonuses monthly. Wengard made \$430 in one week. Meyers took 102 orders first month. Fine opportunity for live wire salesmen. Shipping points—Cleveland, Chicago, Kansas City, Minneapolis. For proposition write Central Petroleum Company, Cleveland, Ohio.

HONEY, ROOTS, FURS

Why not increase your profits? A 32-page booklet describing books on Bee Hunting, Medical Root Growing, Fur Farming, Tanning, etc. free. A. R. HARDING, 75 N. Ohio Ave., Columbus, Ohio.

say



Aspirin

Then It's Genuine

Unless you see the name "Bayer" on tablets, you are not getting genuine Aspirin prescribed by physicians for 21 years and proved safe by millions. Always say "Bayer."

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

Put a United To Work For You

THE SIMPLEST MILKER MADE

Furnished in units for herds of five cows or more. Pump-pulsator type. Gives complete vacuum release on teat; safe, smooth natural action. "SEE-THRU" Teat Cup

Patented exclusive feature. See all teats milking. One piece—clear as crystal—as easy to clean as a dish. Most lasting, greatest milk-er improvement invented.

WRITE Get particulars on complete United line Separators Feed Mills Washers Engines Just what you want in America's Greatest Values Ask your dealer

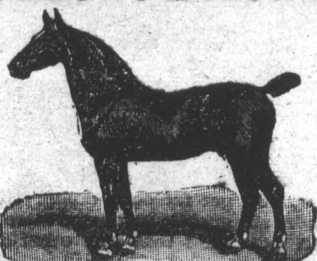
United Engine 1 1/2 to 12 H.P. Gasoline or Kerosene—200,000 in use. Get all facts today.

UNITED ENGINE CO. Dept. 45 Lansing, Mich. (27)

THE GREAT UNITED LINE FARM MACHINES

Warranted to Give Satisfaction

Gombault's Caustic Balsam



Has Imitators But No Competitors

A Safe, Speedy, Positive Remedy for

Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs and Lameness from Spavin, Ringbone and other bony tumors. Cures skin diseases or Parasites, Thrush, Diphtheria. Removes Bunches from Horses or Cattle.

As a Human Liniment and Antiseptic for external use it is invaluable.

Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.75 per bottle. Sold by druggists, or sent by parcel post, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address The Lawrence-Williams Co., Cleveland, O.

Ear Tags FOR STOCK

Tag your stock—best and cheapest means of identification for Hogs, Sheep and Cattle. Name, address and number stamped on tags. Catalog mailed free on request.

F.S. Burch & Co., 145 W. Huron St. Chicago

TO ESTABLISH LIVE STOCK COMMISSION HOUSE IN DETROIT.

At a meeting of the managers of the local associations of the Michigan Live Stock Exchange, held in the city hall, at Lansing, April 7, it was voted to establish a commission house at Detroit. At a meeting of the board following the managers' meeting, Mr. N. W. Stuart was chosen to sell the stock. Mr. Stuart is a very successful local manager at Clarksville, also the treasurer of the State Exchange. Each share of stock is to cost one hundred dollars. The plan as outlined is to have each local association take one or more shares of this stock, thus making them all interested in the proposition.

A RECORD MILK YIELD IN FRANKENMUTH.

The six-year-old Holstein cow, Pieterje Johanna King Hengerveld, owned by Conrad Hecht, produced in seven days recently, 33.99 1/2 pounds of butter from 746.4 pounds of milk, and in thirty days produced 141.51 pounds of butter from 3,010.8 pounds of milk. In one day she gave 113.8 pounds of milk.—M.

HIGHWAY LEGISLATION AT LANSING.

RURAL highways have come in for no small amount of consideration during the past week in the legislature. Among all of these various bills, three are of special interest to those who live along and travel on the country roads. One of them is Representative J. E. Warner's bill to prohibit any truckload of over twelve tons or over the rated capacity of the truck from traveling on the public highways. An exception is made in the case of trucks of two tons or less rated capacity when equipped with pneumatic tires.

A second bill requires all buggies, carriages, or wagons traveling after nightfall on village or city streets or on a trunk line highway to be equipped with lights. Both of these bills have now passed both branches of the legislature and await the governor's signature. A bill which has passed the senate but not the house would prohibit placing advertising signs within the limits of any public highway or on the private property of another without obtaining the consent of the owner.

STATE PAYS FOR BLOWN-UP COW.

A NEW JERSEY farmer will get \$125 from the state for his heifer, which was killed by eating a stick of dynamite left carelessly on the roadside by employees of the state highway department.

WOOL DEALERS MEET.

THE spring meeting of the wool buyers held in Detroit recently was notable for the failure of the usual attendance of eastern buyers or mill representatives. There was no information or advice for guidance from outside, and the buyer was left to his own resources. Some dealers had taken in small lots of wool and some few sales of last year's stocks had been made at very low prices. The consensus of buying views was twelve to thirteen cents for rejects, sixteen to eighteen cents for medium staples, with twenty cents as an outside figure for the delaines.

The general feeling was one of extreme conservatism, if not of apprehension, that conditions might become worse. The benefit of a tariff was discounted by heavy importations already made. The farm bureau wool handling was considered the salvation of the dealer for the 1920 clip because prices slumped before these could have unloaded, and the losses would have been heavy. The margin for safety for the 1921 clip must be sufficiently wide to meet present conditions of the market.—J. N. McBRIDE.



Sturges Refrigerator Can

Keep Cream Cool on Long Shipments

Ship your cream in Sturges Refrigerator Cans—special heat and cold proof insulation between heavy outer and inner walls. No icing needed. Keeps contents safely ten to twenty-four hours even in extreme hot weather. Built to stand abuse. Write for Booklet No. 122

STURGES & BURN MFG. CO.
Makers of Sturges Guaranteed Capacity Milk Cans
Chicago Illinois



The acceptable collar style of 300 years ago as painted by the Master Craftsman—Rembrandt.

Beach—

Made by Troy's Master Craftsmen for the Man of Today.

SLIDEWELL SOFT COLLARS

are dignified, comfortable and give long wear—made for the man who demands standard-value merchandise—attractively priced. Your dealer is showing the latest styles.

HALL, HARTWELL & CO., Makers, Troy, N. Y.

Northeastern Michigan Lands and Farms

No. 91 O.—A farm of 160 acres 1 1/4 miles from Onaway, Michigan. Level, no waste land, 135 acres under cultivation, rest pasture and wood, woven wire fence. Good grain and stock farm. New 9 room house, barn, 2 good wells. Especially adapted for raising potatoes and onions. Large storage cellar 32x150 ft. Small apple orchard, all bearing. Price \$40.00 per acre.

No. 92 H.—800 acres, productive, well located, suitable for live stock. Near school and railroad. Federal highway building.

No. 93 R.—300 acres on main highway, 12 miles from Alpena, also within 2 miles of the D. & M. and B. C. & A. Railroads. 5 room house, basement, barn, 2 good wells. Especially adapted for raising potatoes and onions. Large storage cellar 32x150 ft. Small apple orchard, all bearing. Price \$40.00 per acre.

No. 94 A.—1200 A. Ranch, good water and feed. School house on property. 3 miles woven wire fence. Stock loading pens of M. C. R. R. adjacent to property. \$12.00 per acre for quick sale.

No. 95 B.—Large two story Hotel, good location.

No. 96 D.—880 acres of Sugar Beet Land. Can be subdivided into 40 or 80 acre farms. Situated near Twining, Arenac Co. \$25.00 per acre.

No. 97 E.—120 acres, 50 cleared. Rolling clay loam soil, 4 1/2 miles from Station on proposed stone road. 6 room house, barn, 30x70, large silo, granary, garage, wood shed, orchard. \$35.00 per acre. Terms.

No. 98 A.—58 A. 20 A. improved, balance brush; running stream, flowing well, house, barn, clay loam, near school and church. Telephone, mail route. Price \$1200.00, terms to suit purchaser.

No. 99 S.—Bargain to close an estate. 2360 Acres Farm and Ranch Land on State Trunk Line Gravel Highway. 300 acres cleared, with houses, barns, silo, farm machinery. Bearing orchard.

N. E. Mich. Bureau
Bay City, Michigan

Cheapest Way to Go

to work or school—for fun and recreation is on a **Ranger Bicycle**. Choice of 44 Styles, and sizes. Save \$10 to \$25 on Direct from the Factory shipment. 30 Days Free Trial, shipped on approval. We repair, express charges and also return charges if not accepted.

12 Months to Pay If desired, time and carfare easily made the small payments.

Parts equipment—half usual prices. Send no money. Write for big, illustrated free Ranger Catalog, with prices and payment terms.

Tires Mead Cycle Company Dept. 6-77 Chicago

ENGINES

Two 7 H. P. Gray Stationary Engines for the Farm or shop, used only two months, \$125.00 each. Kurtz Paper Box Co., 219 Larned St. W. Detroit, Mich.

R. K. TIRES are O.K. Tires

Retreaded—double tread—double chain stitched. Stand up to the roughest sort of usage—built for hard work on bad roads, and come up to every demand you make on them. Each one guaranteed—even at these little prices:

Size	Price	Size	Price
30x3	\$ 6.50	33x4	\$10.00
30x3 1/2	7.50	34x4	10.50
32x3 1/2	8.00	34x4 1/2	12.00
31x4	10.00	35x4 1/2	12.00
32x4	10.00	36x4 1/2	13.00

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

R. K. Tire Company
837 No. Broad St., Dept. C, Phila. Pa.

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

Annual White Sweet Clover

Guaranteed Seed of the Hubam or Hughes Variety

Makes growth in one season that ordinary clovers do in two. Yields under cultivation two tons hay or 300 to 800 pounds of seed. Price \$1 for trial package or \$10.00 per pound. A pound will seed an acre. Make a big profit growing seed for yourself and neighbors. Order before small supply is exhausted from The Henry Field Seed Company, Shenandoah, Iowa, or direct from The Grover Who Guarantees. The DeGraff Food Company, DeGraff, Ohio.

Soy Bean Seed,

early brown variety 93 to 100 per cent test. \$5.00 per 100 lbs. ROY FUNK, Bangor, Mich.

HAY Apples, Potatoes Wanted Highest prices paid. E. L. RICHMOND CO., Detroit, Mich.

HAY Ship to The Old Reliable House Daniel McCaffrey's Sons, 623-625 Wabash Bldg., Pittsburgh, Pa.

Certified Russett Rural Seed potatoes for sale \$1.00 per bu. F. O. B. Manton, Mich. J. V. HARRISON, Manton, Mich.

"Tobacco" Kentucky's pride. Rich, mellow chewing, 10 pounds, \$3.50; mild smoking, 10 pounds, \$2.50, prepaid. John Sanderson, Box 72, Mayfield, Ky.

Kentucky Tobacco, NATURAL LEAF; smoking, 10 lbs. \$3; 20 lbs. \$5. R. F. Veal, Sedalia, Ky. Agent

Strawberry Plants Wanted

30,000 or more, mostly Dunlap, of pure strain varieties. No high prices considered. JAMES M. KING, Good Hope, O.

SENATOR DUNLAP Strawberry Plants at \$3.50 per 1,000; \$2.00 for 500; \$1.00 for 250. Guaranteed first class or money refunded. C. H. STANLEY, Flower View Farm, R. 2, Paw Paw, Mich.

Choice Strawberry Plants \$3.75 per 1,000 varieties at \$4. Guaranteed first class or money refunded. Catalog. FILENA WOOLF, Allegan, Mich.

Strawberry Plants Red and Black Raspberry plants write for price list. GEO. B. OWENS, Box 353, Leslie, Mich.

Choice Dahlia Tubers and Gladiolus bulbs for sale. LUCY O. HARROW, Clarksville, Mich.

Farms and Farm Lands

265 Acre Dairy Farm With 4 Horses, 17 Cows and

Heifers, 3 calves, machinery, vehicles, tools, hay loader, dairy utensils, equipment, etc.; convenient advantages; 150 acres tractor-worked, 30-cow spring-watered pasture; 300 cords 4-ft. wood, 350,000 ft. lumber; 12-room house, running spring water, 100-ft. barn, silo; woman owner to sell before planting, \$7000 takes all, about \$2500 down easy terms. For traveling directions see page 27 Plus Spring Catalog 1100 Bargains. FREE. STROUT FARM AGENCY, 814 BO Ford Bldg., Detroit, Mich.

Poultry Yards For Sale

9 pen poultry house and feed barn with pure bred stock with many blue ribbon winners and state champion pen. Living quarters 20x30 with full attic, garage, automobile. Incubators and many articles to numerous to mention. Going south reason for selling. \$5500 half down or \$5,000 cash. E. A. HOFFMAN, Box 515, Halfway, Mich.

FOR SALE—Opening a new tract of fertile farm lands well located in the great potato and dairy district of Wisconsin and Michigan. Secure first choice now. Liberal terms. Write for free booklets, etc. Sanborn Company, No. 29, Sanborn Bldg., Eagle River, Wisconsin.

Farm For Sale 80 acres good clay loam, house, barn and outbuildings. 25 acres meadow, three miles from Wayne, near Cement road, price \$14,000.00 one-half cash. Thomas A. Jamieson, Wayne, Mich.

Homeseekers Chance 40 acres rich farm with \$100 or more down Balance 10 years. Roads, railroads and cities established. See us before buying. Staffed Brothers, 15 Merrill Bldg, W.S. Saginaw, Mich.

FARMS Poultry, truck, stock, and grain farms cheap. FIGGS & NOCK, Salisbury, Md.

Wanted to Hear from owner of land for sale. O. K. HAWLEY, Baldwin, Wisconsin.

DOGS

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

SHEEP.

Wool-Mutton Shropshire Rams. Good strong bred, priced right. A. H. FOSTER, Allegan, Mich.

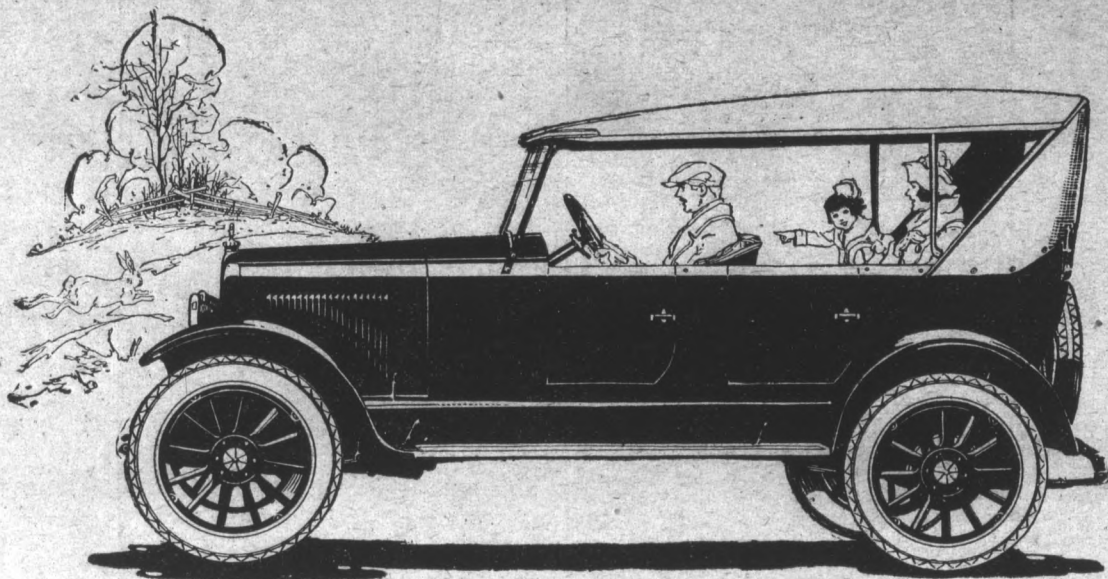
HORSES

Percheron Stallions and mares at reasonable prices; inspection invited. F. L. KING & SON, Charlotte, Mich.

One Two Year Old Mammoth Jack for sale or trade, what have you. E. L. WAFFLE, Tekonsha, Mich.

BRISCOE

The Trustworthy Car



A Direct Statement—and a Challenge

The farmer has grown tired of the one-feature car—the car that plays up one point of satisfaction to the exclusion of all others. It is not safe to judge a motor-car merely by an unusual motor—a freak spring suspension—the winning of

a race—a stunt or an unproved departure from standard design. A car should be good in everything.

Every feature of desirability must be taken into consideration. And that's why we make this positive statement.

The 1921 Briscoe Is the Best Car Built Today *and we will prove it*

What Combined Qualifications Make the Best Car

Let's put them down, and give each one the value to the average purchaser as shown by careful analysis—taking 100 points for all.

1. Reliability

Engineering efficiency	6	
High-grade materials	7	
Accurate workmanship	6	
Balanced design	4	23

2. Power

Ample power in relation to weight for speed, hill and road-ability, without costly excess

15 15

3. Economy of operation

Gasoline and oil consumption	14	
Tire mileage	7	
Low cost of maintenance	6	27

4. Appearance and Convenience

Style	11	
Comfort	11	
Ease of operation	5	27

5. Price

Based, of course, on what you get per dollar	8	8
		100

Now take the 1921 Briscoe and measure it against perfection

1. Reliability

The 1921 Briscoe is a car light in weight, yet possessing the maximum of strength. This has meant the development of special steels; it meant the purchase of hundreds of thousands of dollars worth of machinery—much of it specially designed—so that we could make all the essential parts of the car in our own great plants. And it means now 100 per cent plus in sturdiness, strength and durability.

2. Power

The Briscoe has a remarkable reserve of power that carries it almost without effort wherever wheels will track. Hills that make most cars overheat and drop

back to second speed are taken on high, with never a trace of motor-labor or boiling. Sand and mud have no terrors for the wonderful power-plant. You can readily prove this for yourself in a demonstration spin.

3. Economy of Operation

The Briscoe motor is world-famous for low fuel consumption. Owner's records of 20-25 miles to the gallon are the usual thing. The amount of unsprung weight has been so reduced and the car so perfectly balanced that tires seem almost everlasting. And the chassis is so simple and sturdy that few adjustments are necessary, and those are easily made.

4. Appearance and Convenience

It was Briscoe who originated the idea that beauty is not a matter of dollars and cents. Briscoe, too, first realized that comfort was just as essential in the low-priced car as in its expensive brother. That is why, today, you can ride all day in a Briscoe over country roads without feeling tired. And a child can operate it.

5. Price

That means not alone the actual number of dollars you pay, but what you get for each dollar. Briscoe today gives you more automobile value and more automobile satisfaction per dollar than any other car on the market, bar none.

We Challenge a Comparative Test

To any car, and all cars, we make this definite challenge. Taking the points of motor-car satisfaction indicated above, we will enter the 1921 Briscoe in a series of competitive tests, with the American Automobile Association or any other impartial motoring organization as the judge. The tests are to involve a thorough try-out of every car on every point, and each car is to be given a comparative rating by the judges on each test. Sounds fair, doesn't it?

And to every motor-car buyer we offer the same opportunity for the most thorough test. Go to the nearest Briscoe showroom and study the car; let the dealer demonstrate in any way you wish. Give him a chance to prove our statement—the 1921 Briscoe is the best car built today. And remember that the 1921 Briscoe price for open models is only \$1285, f. o. b. factory. Most car per dollar and most satisfaction per dollar—that's Briscoe. *Free booklet mailed on request.*

BRISCOE MOTOR CORPORATION, JACKSON, MICHIGAN