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A Group of Rural Leaders (See legend on page 952)



Will Farming As a Business Come Back?

IN these days when the exodus of farmers from the country to the city is at its very height, and good prices for farm products practically assured through improved and more direct systems of marketing, young men can well afford to investigate the field of agriculture and its possibilities. Reports from all parts of the country show a shrinkage in the acreage of farm crops and in some sections entire farms are abandoned. There are three main reasons for this constant drain upon the rural communities.

The first is the multiplicity of industrial opportunities for young men. High wages and short hours have a captivating influence. Movies and other artificial allurements make a temporary appeal. In a majority of cases the money comes easy and goes easy and not much thought is given to the future. They are living in the present, but the fact remains that they have left the farm and have been swallowed up by lives of activity that are less stable and wholesome than agriculture. The

backbone of the nation has been, and must continue to be the farmer. Farming is the basic industry upon which all are dependent.

The second reason for this exodus is the shortage of farm labor. The farmer is forced to bid against big business interests for farm help. The business corporations can fix the price of their finished product and make that price cover the cost of production and guarantee a profit, while the farmer cannot under normal conditions. The manufacturer knows approximately what his output will be, but the farmer does not, as he is dependent upon weather and climatic conditions over which he has no control.

The third is the fact that farmers are moving to the city to educate their children. The rural school, under our present system, fails to meet the needs and the high school training cannot be obtained unless the children are taken or sent to the city for it. To avoid the necessity of (Continued on page 958).

The Michigan Farmer

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DETROIT, JUNE 26, 1920

CURRENT COMMENT

County Farm Bureau Work

REPORTS of County Farm Bureau activities which have appeared in these columns in recent weeks reveal the fact that business organization has progressed along somewhat different lines in the different counties. This is undoubtedly due in part to the different conditions which must be met and the varying problems to be worked out. But it is, in some degree at least, due to the viewpoint of the leaders in the various counties as to the methods of organization and conduct of community business which will prove of the greatest value to the people of the community in the long run.

In view of the efforts which have been made to standardize this work through the medium of the county agricultural agents this apparent diversity of methods has been a surprise to members of the Michigan Farmer staff, as it undoubtedly has to our readers. This series of articles on the activities of the County Farm Bureaus was undertaken to better acquaint the farmers of the state with the work being undertaken and the results being accomplished by different methods of organization and work in the counties of the state which have made the greatest progress along organization lines. It now appears that the variation in the methods adopted in the different counties is so great as to be well worthy of personal investigation by the directors of County Farm Bureau activities in every county. The executive committee, if not the entire directorate, of any County Farm Bureau would find a trip of investigation to other counties where the work is well under way, productive of profitable suggestion for the direction of their own work.

Such trips would also make it possible for the leaders of different counties to exchange ideas as to how the state organization can best function to aid them in their business undertakings. This would undoubtedly prove beneficial to the value and permanency of the Farm Bureau movement. While the initial organization work, from a membership standpoint, has of necessity been conducted by the state organization, the maximum of benefit to the members cannot be derived from the state organization alone. Its largest field of opportunity will be to aid the county organizations in a business way, rather than to conduct their business for them. The state organization can aid the county organizations, in much the same way as the county organizations can aid the individual members, but it is up to the Farm Bureau members in every county to

work out their own local business problems and to take a hand in the direction of the policy and activities of the state organization if this organization movement is to result in the greatest good to the greatest number of Michigan farmers.

The County Farm Bureau organization in every county has a big job to do in this connection. Every member should aid in the accomplishment of this job, and those in direct charge of the job should keep in the closest possible touch with similar lines of work being conducted in other counties. They should also aid in the direction of the work of the state organization along lines which will be of the greatest permanent benefit to the industry. Those who have been placed in charge of the state work have a still bigger and more difficult job ahead of them and they should not be called upon to aid the county organizations in the accomplishment of things which the county organizations can do for themselves. The ultimate strength and value of the state organization will depend very largely on the strength and value of the county organizations which are its local units.

Order Supplies Early

THE American people are not accustomed to the consideration of transportation difficulties in the purchase of needed goods or supplies. This necessity was forced on them during the war, but there was a very general feeling that it was a temporary condition which would pass as soon as the war was over. But experience has demonstrated that transportation has its reconstruction problem, which is even more difficult of solution than the war transportation problem. Shortage of equipment, shortage of coal, and labor difficulties have conspired to aggravate this problem, until the movement of anything but necessities which have priority, has become an uncertain proposition.

This applies to certain farm supplies which are badly needed in many sections, notably, lime and fertilizer. Goods of this kind intended for fall use should be ordered at the earliest possible date to insure a seasonal delivery, lest their lack prove a further handicap in the season's difficult production plans.

Financing Wool Growers

RECENT developments in the wool market situation indicate that the woolen mill interests are going to make a determined effort to get this year's wool clip at around fifty per cent of last year's values. An alleged falling off in purchases by the public as a protest against the high cost of clothing is cited by the trade as the immediate cause for the big drop in wool prices and the cancellation of orders for raw material by the manufacturers of woolen goods. The circulation of this propaganda, together with the inactivity of the wool market even at present nominal quotations, undoubtedly means that wool growers must hold their wool until the market is re-established on a legitimate merchandising basis if they would avoid being "fleeced."

This means that a large proportion of growers who were depending on the receipts from their wool clip to meet current expenses must finance their operations in some other way, which many of them will find it difficult to do without some special provision to that end. In the case of Michigan growers who are in the State Farm Bureau wool pool, such provision has already been made, through loans which are available on their warehouse receipts. Organized wool growers of other states are taking ac-

tive steps to provide a plan for financing wool growers on a large scale to enable them to await a re-establishment of the market before disposing of their clip.

Last week a conference of western wool growers and bankers was held in Chicago to consider the establishment of a fund of \$100,000,000 to extend needed financial aid to western wool growers. Reports indicate that Chicago bankers were inclined to view the proposition favorably if western bankers would give it general support. The fact that the adoption of such a plan would make Chicago a wool center which would rival or exceed Boston in importance augurs well for its adoption.

Early this week representatives of several wool growers' and dealers' associations urged the necessity of immediate relief for the wool producing industry, before the Federal Reserve Board at Washington, on account of the present demoralized condition of the market. A credit plan which would enable banks to assist wool producers by making loans on their product was advocated. The adoption of such a plan through the aid of the Federal Reserve Banks would go far toward saving the situation and this may be accomplished.

A meeting of wool growers of Missouri, Arkansas, Kentucky and Indiana was held at St. Louis this week, at which growers were advised to hold their product until the market is re-established on a more satisfactory merchandising basis. It will thus be seen that the wool growers of the country are alive to the situation and are taking active steps to protect their interests, as the merits of the case well warrant. This year's wool clip cost the growers more to produce than any clip ever shorn. If it has to be sold on the basis of present nominal quotations it will be a blow to the industry which will result in an immediate shrinkage of flocks and a consequent shortening of the future supply of domestic wools which would be a detriment to the consuming public in no way compensated for by the possible cheapening of woolen goods by the present shrinkage in wool values, which are a minor factor in the present price of woolen clothing. Wool growers are entitled to the general support of bankers and of the government through the federal reserve banks in the present emergency.

A Record Volume

THIS is the last issue of the largest volume of the Michigan Farmer ever published in the more than three-quarters of a century during which it has been a factor in Michigan agriculture. In the issues from January 1 to June 30 there were 980 pages devoted to the various interests of the farmers of the state. In reviewing this volume to secure the material for the index which appears on other pages of this number, it was found that approximately eight hundred and fifty-seven subjects had been treated, besides the liberal space devoted to agricultural news, pictures, and market comment, which topics were either not counted, or indexed.

During the period covered the farmers of the state have been peculiarly interested in organization work. These activities are faithfully reflected in this volume since farm organizations have been treated under over one hundred different titles. The County Farm Bureau work, the state organization and the activities of the Farm Bureau in sister states have been given the space they merit under forty headings. While old established farm organizations have had less room devoted to them than was allowed the Farm Bureau because of the formative period through which the latter has just been passing, they have not been neglected, as a review of the index will show.

In all, it is apparent that while this journal has in a general way covered the field of current thought and work in Michigan agriculture quite completely, it has given special emphasis to those phases of agricultural work in which the progressive farmers of the state have been most keenly interested at this particular period. In this connection the editors wish to confess that it would have been impossible to give this service had it not been for the generous support and cooperation of the thousands of loyal Michigan Farmer readers for which they wish here to express their very sincere appreciation.

News of the Week

Tuesday, June 15.

IN an attack designed to aid Russian Soviet forces to cross the Dnieper, Polish troops are again victorious.—New York is now actively opposing the international deep waterway and power project on the St. Lawrence river.—The center party of Germany is called upon to form a new ministry.—Great Britain is sending additional troops into Ireland.—The Supreme Court of Michigan decides that a city can establish practically any condition it may desire relative to streets, sidewalks, drains and sewers in a plat before the same becomes a part of the city.

Wednesday, June 16.

THE Washington authorities are considering the establishment of an embargo on the exportation of coal.—The Louisiana house of representatives defeats a resolution providing for the ratification of the suffrage amendment to the constitution.—More than three thousand people witness the big outdoor spectacle successfully presented by five hundred Michigan Agricultural students.—Chicago electric lines are asking for an eight-cent fare.—The American Federation of Labor in session at Montreal opposes resolutions designed to aid Soviet Russia.

Thursday, June 17.

THE Norwegian cabinet resigns as a result of dissatisfaction over government expenditures.—A terrific storm breaks over Cleveland, during which one man is killed and several injured and much property damaged.—Italian warships bombard Trionaro on the Albanian coast.—One person is killed and three seriously hurt when the auto in which the victims were riding was struck by an Ann Arbor passenger car near Cadillac.—Arabs attack British ships on the Tigris river in Mesopotamia and kill the crews.

Friday, June 18.

THE American Federation of Labor endorses government ownership of railroads by a very decisive vote.—United States Attorney-general starts suits against profiteers in bituminous coal.—Major-General Gorgas, former surgeon-general of the United States army is dangerously ill in London.—The Mexican government is now arranging for the transfer of the Mexican railway to British owners.—President Wilson in a special interview declares that the democratic convention at San Francisco will welcome the League of Nations issue in the coming campaign.—Great Britain is willing to make important modifications in the treaty with Turkey in order to stabilize conditions in the east.

Saturday, June 19.

THE United States Shipping Board will allocate 600,000 tons of shipping in order to carry coal from Norfolk to New England ports.—American firms purchase 14,000 tons of sugar in Argentina.—The Borden Farm Products Company announce an advance in the price of milk for July.—Manufacturing concerns are anxious about the supply of industrial alcohol needed to carry on their operations.—The census bureau announces that the population of Detroit is 993,739, which places the city in fourth place among the cities of the country.

Sunday, June 20.

POLISH troops suffer heavy reverses to the southeast of Vinnitza, to the east of Warsaw, which information however, is declared untrue by dispatches from the latter point.—Senator Harding announces his readiness to accept the League of Nations as the important issue in the coming presidential campaign.—Lloyd-George of England declares that it is altogether impractical to abolish war, especially with the United States not a member of the League of Nations.—Democratic delegations from the eastern states (Continued on page 976).

The Problem of Farm Sewage Disposal

By Professor L. J. Smith, author of "Sewage Disposal for the Country Home"

AT the close of each winter, with aside to be taken up at some future
its cold raw winds and snow and indefinite time.

slippery paths, many a farmer vows that the family shall not pass another cold season in the country without having the modern conveniences in the home. And why not? One passes this way but once. All honor to those

How Not to Dispose of Farm Sewage.
The old primitive method followed was to dig a deep hole in the ground, at some distance from the house, box up the hole loosely, and run the sewage into this hole, which was called a cess pool. The liquids of the sewage

How Not to Dispose of Farm Sewage.

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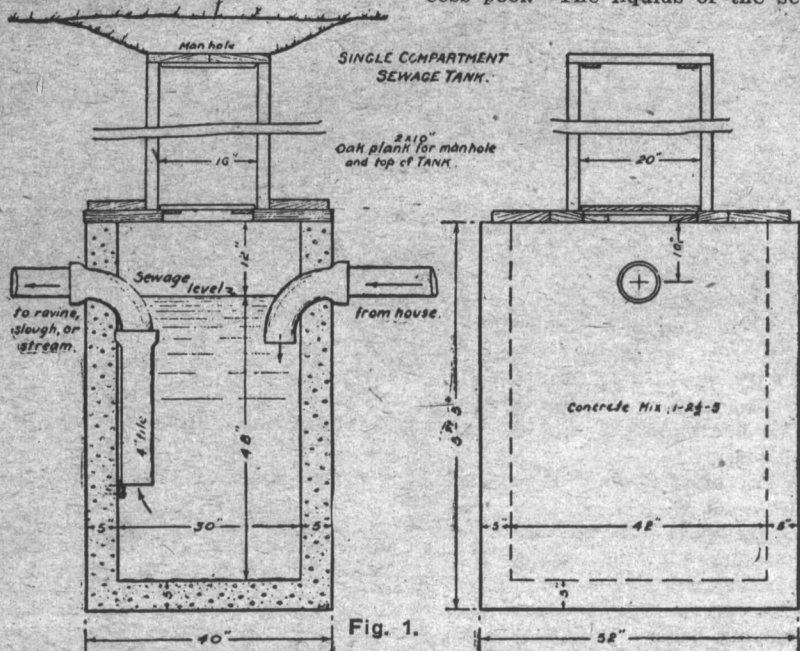


Fig. 1.

who have pioneered on the new farms, but the time has come for those in the country to enjoy some of the results of their labors.

To equip the farm home with all the modern conveniences does not mean money thrown away for a passing fancy. Not only are these advantages enjoyed from day to day; but they constitute a permanent investment which adds to the value of the farm.

Obstacles in the Way.

Some hesitate in regard to installing a plumbing system in the farm house, not being sure of the best and safest methods of disposing of the sewage. It may be that our bulletins have laid

passed through the cess pool, seeping into the surrounding soil. The solids collected in the bottom, and there putrified, contaminating the comparatively harmless liquids which constitute the larger proportion of the sewage which comes from the sink, wash bowl and bathtub. At least two hundred tons of water pass through the average farm plumbing system annually. Since the cess pool contaminates all this liquid, and it all passes down into the underground waters which supply the farm well, this method of sewage disposal is obviously unsafe.

Safe Methods of Sewage Disposal.

While it is essential to avoid the contamination of our sources of water supply, yet it is not always essential to provide an elaborate purification system for the farm sewage. In a great many cases, all that is necessary is to dispose of the sewage at some

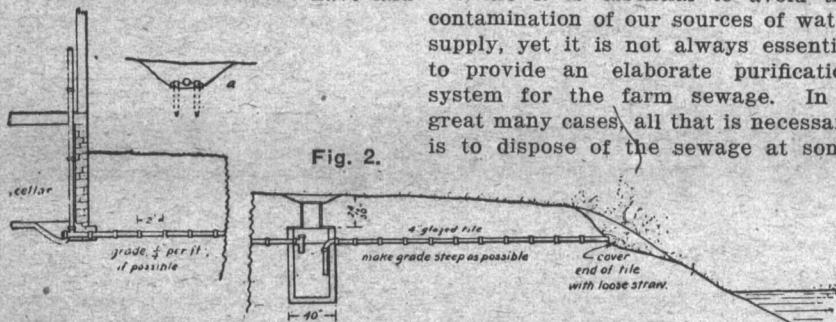


Fig. 2.

too much emphasis in regard to the dangers of sewage disposal and the necessity for purifying the large quantities of water that are dumped into the plumbing fixtures. Much of our literature on this subject has laid down one hard and fast rule for this important problem—one type of tank and one method of handling the sewage after it leaves the tank, and the farmer reads and, not seeing its application to his problem, lays the whole matter

point at a safe distance from the farm well and where the drainage is from the well towards the sewer outlet.

The Single Compartment Sewage Tank.

In cases where the house is within a hundred yards of a ravine or steep bank falling away to a low spot or stream or lake; and where the soil is not exceptionally heavy, a single compartment tank constitutes the easiest and cheapest method of handling the sewage disposal problem. Fig. 1 shows a sectional view and an end view of such a tank for the ordinary sized farm house. It is five feet deep inside and three and a half feet wide and

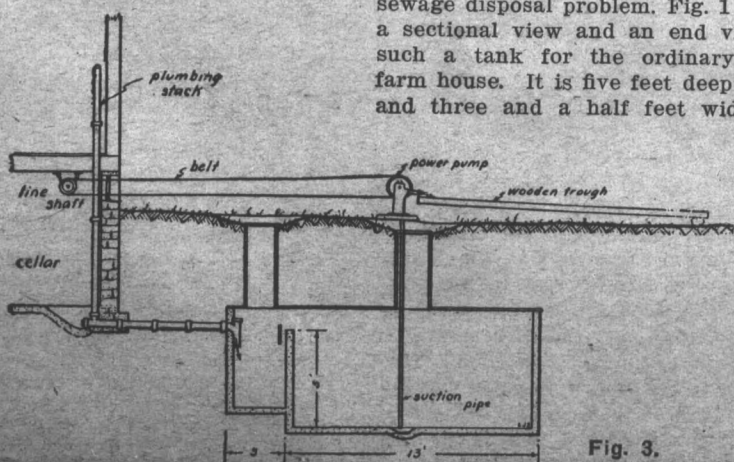


Fig. 3.

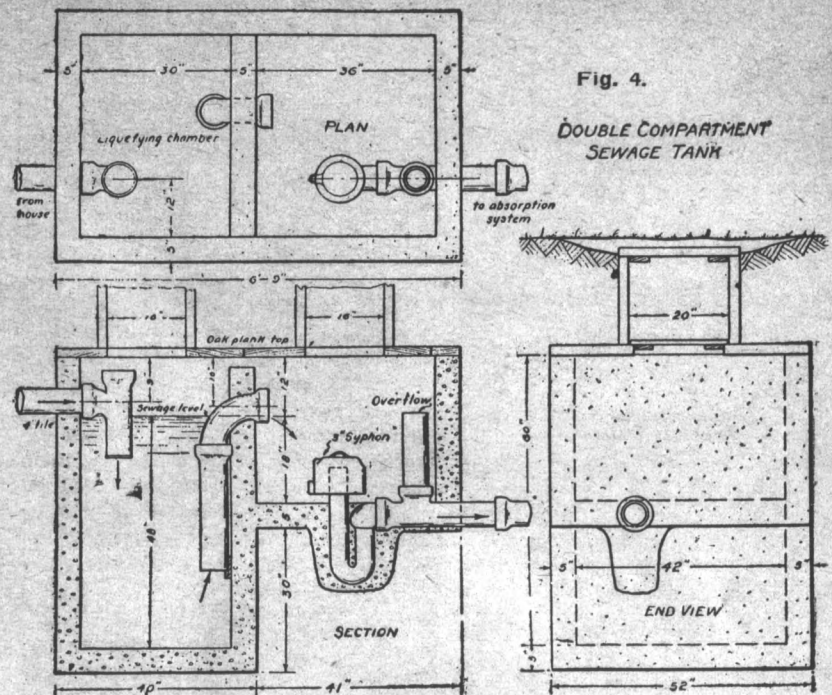


Fig. 4.

two and a half feet long. It is not necessary to use a concrete top. Oak plank will last indefinitely and is easier to use than putting in a concrete top with the required form work and reinforcing. Then, too, the oak top can easily be removed, should it become necessary to open up the tank at any time. This tank only requires seven bags of cement and one and a quarter cubic yards of gravel for building material, using a 1-2½-5 mix.

The raw sewage enters the tank by means of an elbow, or better still, a

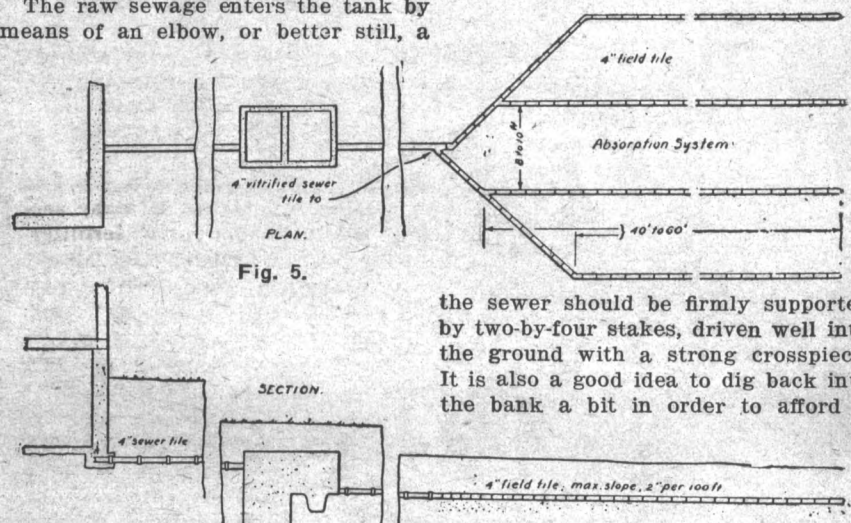


Fig. 5.

the sewer should be firmly supported by two-by-four stakes, driven well into the ground with a strong crosspiece. It is also a good idea to dig back into the bank a bit in order to afford a

Tee, the object of which is to admit the liquid without disturbing the surface of the accumulated sewage. The sewage stands at a constant level, about an inch below the bottom of the tile through which the sewage enters. As soon as the tank is filled with sewage a bacterial action sets up which reduces all the solid organic matter to a liquid state. This takes possibly a month to fully develop. The tank does not purify the sewage, it simply liquifies the solids. In order not to retard this action, disinfectants, such as carbolic acid, chloride of lime, etc., should not be thrown into the sink or other fixtures in any quantity. The idea is to liquify the solids as rapidly as possible and run them through from the tank before any dangerous germs in the liquids have a chance to multiply. As often as a quantity of sewage enters the tank from the house, an equal quantity at once leaves the outflow pipe, passing down to the ravine or stream.

place for protection of the outlet from frost. This is readily done by throwing a couple of boards across this little recess and covering same with a little straw early in the fall. The early snow will lodge on the straw and there will be no danger from frost. Neither will there be any danger from flies in the summer, nor will any bad odors result from such an arrangement. If such a tank is used by a very large farm home, the tank should be made thirty-six inches instead of thirty inches.

(Continued on page 966).

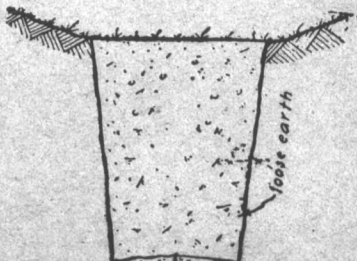


Fig. 2 will give a better idea of the general layout. In this illustration there is no trap at the base of the plumbing stack, in which case a Tee is used where the sewage enters the tank to allow circulation of air from the tank up the plumbing stack and out through the roof. The connection

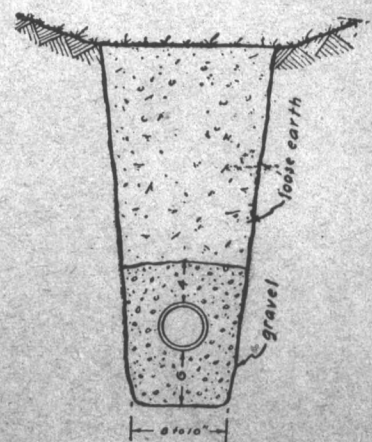


Fig. 8.



The Fine Home of H. F. Probert, Jersey Cattle Breeder.

EMERGING from an atmosphere surcharged with live stock breeders' enthusiasm, the Circuit Rider went from Livingston county to visit County Agent Ballard, of Jackson county, hoping to find something new for the readers of these travels. It needed some sort of a change for his own well-being, as well as for the sake of getting the readers to realize that the moulders of animal form have nothing on the plant breeders in the way of enthusiasm and opportunities. With the new seed department of the Michigan State Farm Bureau to help them over the rough places the plant breeders now have just as effective an organization for promoting their work as the live stock breeders have in their breeders' organizations.

In Jackson county one needs no microphone to catch the cheerful vibration of the grain breeders' enthusiasm. To make the story complete the Circuit Rider bumped into R. V. Tanner and A. L. Bibbins, from East Lansing, who were out looking over fields of pedigreed grain. He caught the idea and cannot help but use it as the key to this story. The vibration began to affect him at Parma and Albion, and now he can see volumes of study in the perfection of small grain plants. This plant breeding business is a great work, and what a wonderful thing it would be if this story could be told in such a way as to make other farmers realize the possibilities in making a better selection of their seed grains. The best he can do, however, is to explain in a sort of uninteresting manner what these plant breeders are doing for the farmers of Michigan and adjoining states.

JACKSON county leads the state in the acreage and value of pedigreed seed grains. The work started in the vicinity of Parma and Albion, and as the farmers saw the more perfect stands and increased yields the idea took root, until today there is a smaller percentage of inferior grain seed planted in Jackson county than in any other county in Michigan.

When J. Vernon Sharp became county agent, a little more than two years ago, he made grain improvement work his trump card. How skillfully he played his hand is revealed by a ride through the county inspecting the work being carried on by progressive farmers. To give the readers a more accurate understanding of the methods practiced by the Jackson county seed growers it may be well to explain why their system of head selection of small grains is much more effective than ordinary seed selection practiced in other localities.

For years farmers have worked under the assumption that if they used the largest and heaviest kernels of grain for seed they would in time have a strain of wheat, rye, oats or barley that would produce large kernels, much

to their benefit. After a few years' work they ran up against this proposition. Large kernels are more frequently produced on shy-bearing plants. If the practice of selecting large kernels is carried too far it develops a strain of grain which will produce large and plump kernels, but not many of them. That is precisely what the farmers of Jackson county, and the leaders at the Michigan Agricultural College have been fighting against. In their field work they have practiced the same methods which have proved so successful in improving the yield and uniformity of our corn crops.

In other words, the system of head selection in small grain improvement,

ance of the seed from the plot is put into Plot G, the seed from Plot D is planted in Plot H, and the seed from Plot E in Plot I. If the yield of the last plot is sufficient to sow the entire field in the fourth year it is used, and the selection continued in the three plots, but if seed for a larger field is required selection may be continued in the fourth year. This is essentially the same system employed by successful corn breeders. When these principles are applied to small grains they will increase the yield in as great a ratio as in the case of corn. This may explain why the farmers of Jackson county have been so far ahead of the farmers of other localities in their work with small grains.

NO community in Michigan is more thoroughly organized cooperatively, or better prepared to join hands with the State Farm Bureau, than the farmers in the vicinity of Parma. And it came about largely through the building of a cooperative creamery, organized, financed and carried on by the farmers themselves. The history of this creamery is a thriller, a sort of to be advertised across the horizon so that all uplifters, whether afoot or astraddle a bucking broncho, may read and absorb. Close students of the cooperative movement had better flock

concern and prices have been so uniformly good that competition has been unable to disrupt the organization. It is largely through the example of this successful creamery that the farmers, business men and bankers of Parma have learned the value of cooperation in threshing out their troubles and making their community one of the best in Michigan.

As neighbors, friends and relatives began to meet and discuss their profits and losses they began to become interested in community problems, and to take a new interest in better dairy cattle, better crops and better methods of farming. Pretty soon they began to breed registered Guernsey cattle and pedigreed seed grains. We have not the space in this story to record all the happy events that have followed in the train of the growth of the community spirit in this pleasant district of Jackson county. That the entire program is working out successfully is plain when one visits the successful breeders of field crops and live stock, and studies at first hand what they are doing to inject better business methods into the curriculum of their farming.

AT the two-hundred-acre farm of Lester Sedgwick near Parma, we found some of the most interesting field experiments with pedigreed grains being conducted in Michigan. One of these series of experiments in the selection of Rosen Rye began with the first bushel of that variety sent out by the M. A. C., which came to Parma. About two years later Mr. Sedgwick secured a few extra fine selected heads taken from an exceptionally good stand. The heads had hung in the office of the county agent for nearly two years, and had some advantage over later selections, inasmuch as they were more likely to contain no mixtures with other varieties. Mr. Sedgwick's first crop of grain showed six to eight per cent improvement in quality and purity. With this beginning he has been practicing careful head selection and gradually perfecting a strain of Rosen Rye that promises to establish his reputation as a breeder of pedigreed seed grains. He has also been experimenting with oats, his chief efforts being directed toward improving the strength and quality of the straw. At Lansing his exhibit of Rosen Rye won first in the open class last winter. In addition to breeding pedigreed grains Mr. Sedgwick is breeding registered Jersey cattle. He now has about sixteen head of females and his herd sire, Eminent Golden Bob, is

The First Page Illustration

THIS picture shows the progressive agricultural leaders of Jackson county, who represent her seventeen hundred farmers. In the center of the front row is L. Whitney Watkins and second from the left is County Agricultural Agent Ballard. The executive committee of the Jackson County Farm Bureau consists of M. L. Noon, president, Gifford Patch, vice-president, Lyman B. Ray, James C. Thompson, Jr., Walter D. Rowe, Arthur Landon, Ed. Ford, H. F. Probert; the state delegates are J. C. Thompson, Jr., L. E. Landon, George Bretherton, and the county delegates from the several townships are: Blackman, Wm. Ottney; Columbia, C. F. York, Henry Cash; Concord, Marvin Woodruff, Clark Barrell; Grass Lake, H. A. Orvis, N. Smith; Hanover, Ed. Ford, Fred Folks; Henrietta, George Bretherton; Leoni, Frank Smith; Liberty, Gifford Patch, Jas. J. Smith; Napoleon, Clyde Cady, Norman Nichols; Norvell, W. H. Zimmerman, Charles Pittman; Parma, Carlton Horton, Joe Pulling, John Hoag; Pulaski, Glenn Folks, Frank Howard; Rives, Boyd VanHorn, Claire Darling; Sandstone, E. J. Fenn, Homer Hogle; Spring Arbor, W. L. Burruss, Herbert Anderson; Springport, A. L. Landon, John Banister, Lewis Elmer; Tompkins, Jay Town, Ernest Taylor; Summit, H. F. Probert; Waterloo, Walter Vicary.

like ear selection in corn breeding, gives proper consideration to factors other than mere bigness of kernels. Today these progressive plant breeders select their seed from the largest and best filled and most prolific heads, taking care that the plants have stalks and roots and leaf systems large enough to support them. It is impractical for the ordinary grain grower to select his seed by this method, but he may follow a modification of it, which will produce excellent results.

He may select any desired number, say one hundred, of the largest and most prolific heads. These must be selected in the field in order that he may select the earliest heads that ripen. From these heads a selection of, say one hundred, kernels may be made and at the proper season planted in Plot A, and the remainder of the seed planted in Plot B. The following year one hundred of the best kernels from Plot A are planted in Plot C, and the balance of the seed from the plot in Plot D, and the grain from Plot B is planted in Plot E. The third year one hundred of the best kernels from Plot C are planted in Plot F, while the bal-

close to Parma for points—homespun points—on how to organize their communities for business and social betterments.

For twenty years this creamery has sold its entire output of butter to one



King Korndyke Oriskany Pontiac at the Head of the Boardman Herd, has Two Nearest Dams that Averaged 37.78 lbs. Butter in Seven Days.

Bureaus and Their Work

Agent Ballard and Jackson County's Progressive Farmers Crops as Well as Breeders of High Class Stock.

an exceptionally fine individual from the Hood Farm line of breeding.

Only a few rods further along the road we visited Carlton Horton, who has a fine two-hundred-acre farm on which he is growing sixty-two acres of pedigree Rosen Rye, fifteen acres of Wolverine oats, ten acres of Silver King corn, and a small acreage of Petoskey Golden Russet potatoes. Mr. Horton also breeds Ohio Improved Chester White swine. In discussing his methods of plant breeding he said: "In 1912 I secured the first bushel of Rosen Rye that came into Jackson county. From that bushel of seed I secured thirty-five bushels of rye from one acre of ground in 1913. I realized at once that this new variety of rye possessed exceptional merit if it could be maintained pure. By persistent effort I persuaded many farmers to grow this variety so that it could be kept pure in this locality."

As a result of Mr. Horton's efforts the whole countryside around Parma grows no other rye, and scarcely any wheat. Practically all of these grain growers are working in close harmony with the new seed department of the Michigan State Farm Bureau and the Agricultural College at East Lansing. Other farmers who are breeding pedigree grains in the Parma district are W. G. Lines, A. S. Wilkinson, Howard Prine and Fred Sackrider, and their work is conducted along the same general lines.

A few miles from Parma, J. C. Thompson & Son have a fine farm where they are breeding Hereford cattle and Percheron horses. They now have fifty purebred Herefords in their herd. J. C. Thompson, Jr., is a member of the executive committee of the County Farm Bureau, and an active booster for the farmer's interests. He also represents his township on the county board of supervisors.

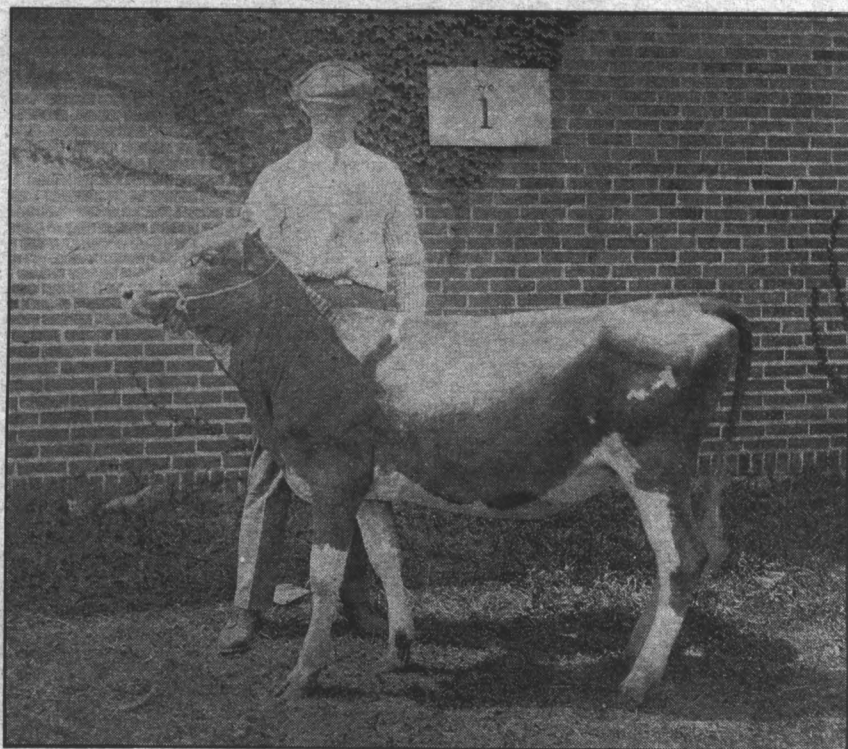
Then there is W. E. Livingston, who has a fine two-hundred-acre farm where he breeds some of the best Poland China swine in the country. Mr. Livingston has the most popular blood lines in his herd and his stock is always kept in thrifty condition.

THE farmers of Parma are well organized for business. The Elevator Association did a business of more than \$400,000 last year. The officers and directors are: Homer Hogle, president; Frank Gilmore, manager; Elmore Howe, H. C. Prine, George Van Marter, Wm. Norton, directors.

After inspecting the fields of pedigree grain and herds of cattle and

swipe around Parma we visited the one-hundred-and-forty-acre farm of G. W. Ray & Son near Albion. Here were found a herd of thirty-five registered Guernseys, headed by the sire, M. A. C. Dauphin, only son of Carrie of Hillhurst, a champion roll-of-honor cow of the breed. Ray & Son have some exceptionally good cows and young things in their herd. They have been in business for years and their blood lines are well established, as is evidenced by the appearance and striking

uniformity of their young stuff. They have one twenty-five-acre field of pedigree Rosen Rye that presents a wonderful uniformity of development of both plants and heads. Three years ago they sold \$1,300 worth of Rosen Rye seed from fourteen acres of rye, of the County Farm Bureau. He is

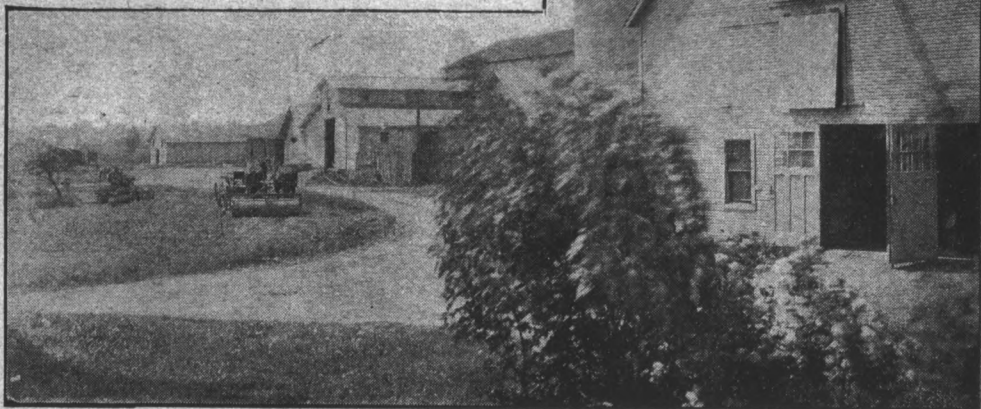


Daisy's Greenwood Joy, from the Guernsey Herd of Hott & Son.

and two years ago twenty-five acres of also supervisor from his township on the same variety brought about \$2,500. the board of supervisors.

Mr. Ray has recently built a splendid house for his son and taken him into partnership in the Guernsey pedigree and breed registered Guernsey cattle. They have purchased choice foundation animals, and have some young

Lyman B. Ray owns and operates an



Stables at the Boardman Farms.

things coming on that would be a credit to any herds in Michigan.

OVER at Grass Lake we visited the experimental farms of the Jerome B. Rice Seed Company, where new varieties of vegetables are developed and tried out before being put out among commercial seed growers to grow seed for the company. George Starr, the plant wizard, conducted us over the farm and explained the methods practiced in testing out the varieties and strains for commercial purposes. Even the radishes on this farm have a pedigree as long as the finest Holstein in the land, and if you want to see what their grandfathers and great grandfathers looked like he can open the Radish family album and show you, and also tell you how much they weighed and if their complexion was fair or muddy. The farm consists of eighteen hundred acres and employs from seventy to one hundred men. In addition to his work managing the farm and conducting a vast amount of experimental work, Mr. Starr finds time to work out a few grain improvements and help his neighbors in their cooperative undertakings.

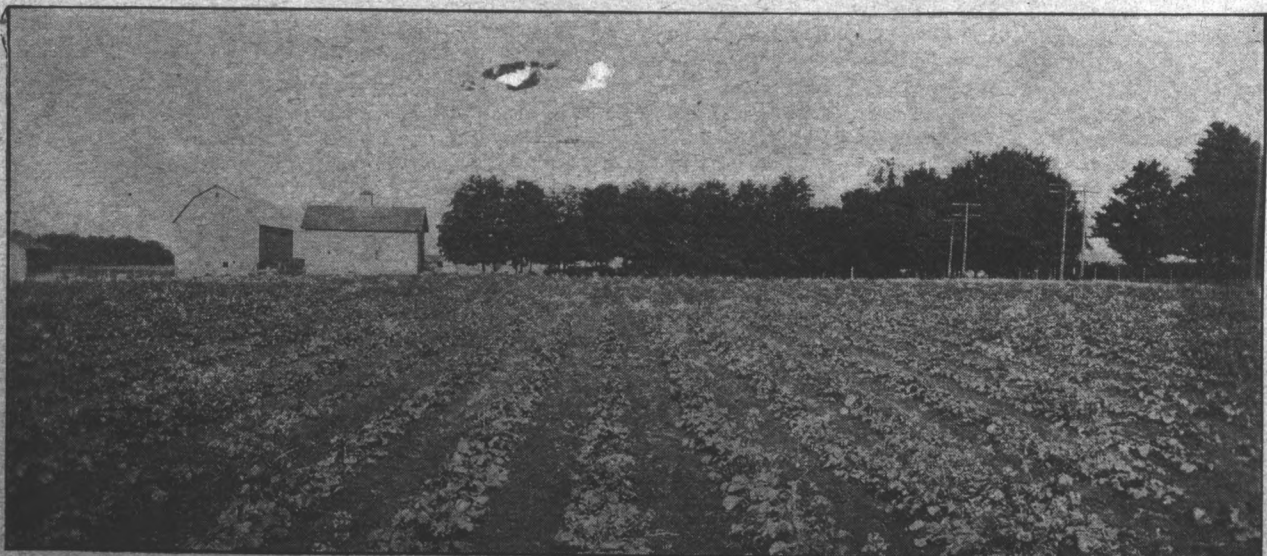
Walter D. Rowe, a member of the executive committee of the County Farm Bureau, maintains a herd of fifty registered Holstein cattle on his two-hundred-acre farm near Grass Lake. Mr. Rowe is a progressive farmer and breeder and has an "ace high" standing in his community. He has a vision of great things as the Farm Bureau develops some of its big projects and is one of the real leaders in the Jackson County Farm Bureau.

W. W. Kennedy, of Grass Lake, has gained a wide reputation as a breeder and exhibitor of Polled cattle and Duroc Jersey swine. For a number of years his Red Polled cattle have been prominent among the winners at the big fairs in Michigan. At present he has about thirty-five head on his one-hundred-and-sixty-acre farm.

The farmers around Grass Lake are pretty well organized for business. The Elevator Association organized last August has done a business of more than \$125,000 since that date. The officers and directors are: George Starr, president; Clarence Woolfinger, manager; John Noon, Norman Davis, William Greenwood, Frank Shelley, A. H. Cain, W. Alber, E. W. Hobart, Irvin Kallenbach, directors.

The Shipping Association has handled about \$125,000 worth of live stock the past year. The officers and directors are: Norman Davis, president; Wm. Greenwood, manager; W. K. Krafts, M. L. Noon George Fry, George Dorr, Henry Mellencamp, directors.

Over near Hanover, William Folks (Continued on page 972).



At the Rice Seed Farms—Jackson County Has Become Famous for the High-grade Seed Produced on Her Farms.

Impressed With Agriculture's Need

National Security and Prosperity Are Dependent Upon the Faithful Recognition of Agriculture's Basic Claims for Class Cooperation

MANY farmers, especially in the middle west, after several years' experience in preparing their income tax returns, have arrived at the conclusion that there is room for improvement in the methods of making the returns. A committee from the Iowa Farm Bureau Federation was in Washington recently conferring with the income tax division of the treasury department of agriculture, with the purpose in view of securing the adoption of a method which will more efficiently meet the special requirements of the farmers.

The principal point at issue is to provide an equitable means of changing the farmer's returns system from what is known as the cash plan to that which is known as the accrual or inventory system. As things stand now the farmer who started making returns on the cash basis cannot change over to the inventory basis without being penalized in the form of greatly increased taxes for the year in which the change is made.

The Iowa Farm Bureau Federation, working in cooperation with the American Farm Bureau Federation, has developed a farmers' account book which it is hoped will meet the approval of the treasury department and be adopted by Farm Bureau members throughout the United States. It is believed that this will be a decided step in advance, and will greatly simplify the matter of making income tax returns on the farms. Objections have been raised by the treasury department officials to some of the changes in the present plan of making returns, proposed by the farmers, but the members of the Iowa committee still hope that a satisfactory solution will be worked out. The Federal Department of Agriculture is fully in accord with the Iowa farmers in their plans for simplifying and making more practicable the income tax returns system.

In a report to N. P. Hull, president of the National Dairy Union, A. M. Loomis, secretary of the union, says: "I have to report the adjournment of congress without action so far as I can discover in any way detrimental to the interests represented by the National Dairy Union. Only two bills have been introduced during this session of congress to permit the coloring of oleomargarine in imitation of butter. These were the Dyer bill and the Sabbath bill. Neither of these bills proceeded beyond a reference to the committee on agriculture." It must be understood, however, Mr. Loomis says, that the adjournment of congress did not kill these bills. They will be before the committee when congress resumes work next December, as will all other bills pending in committee. Mr. Loomis, who was recently appointed secretary of the National Dairy Union, succeeding the late W. T. Creasy, is assistant to T. C. Atkeson, Washington representative of the National Grange. His office is at 303 Seventh street in the National Grange Washington headquarters.

A conference of national organizations has been called on June 25, by Federal Commissioner of Education P. P. Claxton, to follow up the citizens' conference on education recently held in Washington. Facts were presented at the citizens' meeting showing an appalling situation as regards the public schools, especially those in the country, and it is for the purpose of considering the rural school problems

that the second conference has been called.

The Plumb plan propagandists maintain headquarters in Washington, and are making an extensive campaign for the promotion of their scheme of government-labor ownership and operation of railroads. Apparently in close affiliation with them is the Non-partisan League, the National Farmers' Council, and the American Federation of Labor. Recently a meeting of farmers, railroad employees and other elements was held in Baltimore at which a Plumb plan headquarters representatives was the principal speaker.

At this meeting the Non-partisan State League of Maryland was formed. Other meetings will be held at which efforts will be made to organize the farmers and labor organizations under the Non-partisan League standard, with the evident purpose of gaining a foothold for the North Dakota movement in the east, and incidentally promote the Plumb plan scheme. So far I have failed to find any appreci-

able sentiment among Maryland farmers, either for the Non-partisan League or the Plumb plan of government railroad ownership.

CLOSE observers of men and movements here at the capital credit Washington representatives of the national farm organizations with having been in a considerable degree responsible for the quite liberal space given to the farmer's demands in the Chicago platform. They say that this is one of the most important results that have come from locating farm organizations headquarters in the federal capital; that the continuous contact of the farm leaders with representative public men and their appearance at the hearings before congressional committees, at which they have been able to present the farmer's side, has given senators and congressmen a more intelligent view of the agricultural situation, and that this is certain to secure for the farm folks better treatment at the hands of the government.

The fact that a large political party has declared in favor of giving farmers the right of collective marketing, and protection against discrimination, the authorization of associations for the extension of personal credit in favor of putting an end to unnecessary price-fixing are evidences that the

farmers are making progress in the development of effective political influence. Interviews with farm leaders give evidence that they are going to hold the political parties to their promises; that there is to be no crawling with farm legislation when congress meets in December. The Volstead-Capper farmers' collective bargaining bill, packer regulation and farm and personal credits legislation will be the three leading measures upon which the united farmers will demand prompt action.

Gray Silver, Washington representative of the American Farm Bureau Federation who has just returned from the middle west, tells me that the Farm Bureau movement is making a very satisfactory growth in membership, and is extending its cooperative efforts along safe, practical lines. Its plan of pooling wool has saved the sheep raisers any thousands of dollars. In New York and Illinois the pooling of wool under the supervision of the County Farm Bureaus has been car-

Why Not Exterminate the Mad Dog?

RABIES or hydrophobia is a specific, communicable disease affecting all warm-blooded animals, including man. The dog is especially susceptible, and because of his roving habits is the chief disseminator of the disease.

The bite of a rabid animal is not necessarily fatal; the virus is estimated to be transmitted in about thirty per cent of cases. But when the disease is contracted and not treated it is practically always fatal.

The Pasteur treatment prevents many fatalities, but even with this there is much anxiety, suffering, hardship, and expense.

Rabies can be transmitted only by animals that are actually diseased at the time. There is no foundation for the belief that persons bitten by a dog which subsequently becomes rabid may contract the malady.

This terrible disease is all too prevalent in the United States, in spite of the fact that its suppression is comparatively simple. The problem is solved when the rabid dog is eliminated. This is proved by the experience of some other countries, notably Norway, where the disease has been entirely stamped out.

A similar result might be brought about in this country, with the cooperation of the states, by licensing all dogs, by muzzling all dogs not otherwise kept in restraint, and through rigid inspection and quarantine at borders and ports of entry.

ried on successfully for several years, and this year the wool growers of several other states are pooling their wool, having found it to be a satisfactory method of disposing of their wool. The new move of the American Farm Bureau Federation in establishing departments of agricultural economics, transportation and publicity, and to enlarge the work of the Washington office, is looked upon as a decided step forward. The officials are now looking for a competent man to place in charge of the department of economics.

According to a statement prepared by Chairman J. W. Good, of the house appropriations committee, a total of \$4,859,890,327 was appropriated by the sixty-sixth congress during its session ended June 5. Of this amount \$4,373,395,279 is for government expenditures in the fiscal year beginning July 1, and \$486,495,048 is to meet deficiencies for the present year. The army and navy received \$855,956,962 for the next fiscal year, leaving \$977,319,916 to meet all the other civil functions of the government during the same period. Agriculture, America's greatest industry, gets \$31,712,784, while \$10,040,655 was appropriated for the conduct of Indian affairs.

Some of these figures are amazing in their magnitude, and others in their

insignificance. They are most interesting, however, when used as the basis of comparisons. Food and clothing material production may be the most important question before the public, as the economists are saying, but there is no evidence of its importance in the congressional appropriations. In view of the billions of dollars appropriated for other purposes, it is evident that the United States Department of Agriculture is justified in its complaint that it has received parsimonious treatment from congress, when its appropriations were cut \$2,185,000 below the present year's appropriation, and \$6,000,000 less than the department's estimates. The abandonment of hog cholera eradication work, and withdrawal from financial support to cooperative cow-testing associations work in Ohio, Iowa, Indiana, Minnesota, Nebraska, Pennsylvania, West Virginia, Rhode Island, Connecticut and New Jersey, on account of the reduction in appropriations will be severely felt by the dairy interests of these states, according to the department's dairy specialists engaged in this work. Fruit growers are regretting the government's curtailment of its market news service.

A MEMORIAL signed by T. C. Atkeson, of the National Grange, Gray Silver, of the American Federation of Farm Bureaus, and R. F. Bowser, of the Farmers' Union, has been presented to President Wilson, calling his personal attention to "a most critical situation now confronting the people of the nation." "The flow of labor from the farms to the cities," says the statement, "has proceeded to such an alarming extent and has so depleted the man-power of our farms that the resulting decrease in crop production seriously menaces the nation's food supply. Without labor to carry on essential operations the farmer has no alternative but to either cut down his acreage to the amount that he himself can crop by working twelve to fourteen hours a day, or to let his farm lie idle and follow the crowds to the high wages of the city. Hundreds of thousands of farmers in all sections of the country are finding themselves forced to accept one or the other of these alternatives. Thousands of empty farm houses are to be found in every state and literally millions of acres of farm lands are lying idle this season. Unless immediate relief can be effected in the farm labor situation we will soon be beyond remedy, so far as the present season is concerned, and face to face with what leading agricultural economists believe will be the greatest scarcity of foodstuffs ever experienced in America."

"Our appeal for more farm labor looks ahead to the situation which will confront the people of our great centers of population during the long cold months of the coming winter. It is not the farmer who would first feel the pinch of hunger. The people of the farms are amply able to provide food enough for their own needs, but the surplus products that must be produced to feed and clothe the cities' millions can only be provided by an adequate supply of farm labor working early and late throughout the cultivating and harvesting seasons. It is not yet too late to lend material aid, but help must come promptly to be of value."

"The exigency of the situation requires that public attention be directed to this matter at once. Everyone (Continued on page 975).

Pioneer in "Coop" Business

By J. A. Kaiser

AMONG the localities which the cooperative movement has put on the map, Litchfield stands easily in the forefront. The Litchfield creamery is the largest cooperative creamery in Michigan. Its phenomenal success has been set forth in a recent issue of this journal. The Litchfield Cooperative Shipping Association is the oldest organization of its kind in the state. With an annual business in live stock of a quarter of a million dollars, it is demonstrating in its own way the feasibility of the cooperative idea. Other shipping associations like those at Quincy and Coldwater, are now doing a much larger business, but Litchfield was the pioneer, inspiring and leading in the cooperative movement.

Out of these successful cooperative ventures has grown, in recent months, another progressive feature. This is the Litchfield Chamber of Commerce, organized for the purpose of bringing about a better understanding between business men and farmers. In this institution, cooperation is the keynote. Towns in the village rank do not often have chambers of commerce. In this, too, Litchfield is a pioneer. Farmers and business men alike, have entered with enthusiasm, into the new enterprise. Its influence has already made itself felt along progressive lines.

As a result of this chamber of commerce, town folks and farmers are pulling together. The chamber has gone on record as favoring consolidated schools. Litchfield stands a good show of being the first in this section, to establish the consolidated school system. It is the spirit of cooperation that will put across at last, the consolidated school program. In many townships, the small town and the farming districts must unite in this effort to change the school system. Without this cooperation, agitation will be of no avail. In her chamber of commerce, Litchfield has a splendid working organization which will, ultimately, accomplish the desired results.

Not only with the consolidated school problem, but with other innovations as well, the chamber of commerce has exercised a decided influence. The building of a stretch of federal-aid highway has been favored and materialized by the organization. Organized effort for community betterment—this is the keynote of Litchfield's cooperative spirit.

This glimpse of a truly cooperative

community would not be complete without a mention of the Litchfield Farmers' Club. This organization stands for enlightenment and progress; for social advantage; and for community uplift. The club is primarily, for farmers and their wives. The meetings held each month, at the homes of members, combine social enjoyment and the profit that comes from an interchange of ideas. Questions of interest are discussed; entertaining programs are rendered; good dinners and good social times are enjoyed. The club has grown in popularity and in influence.

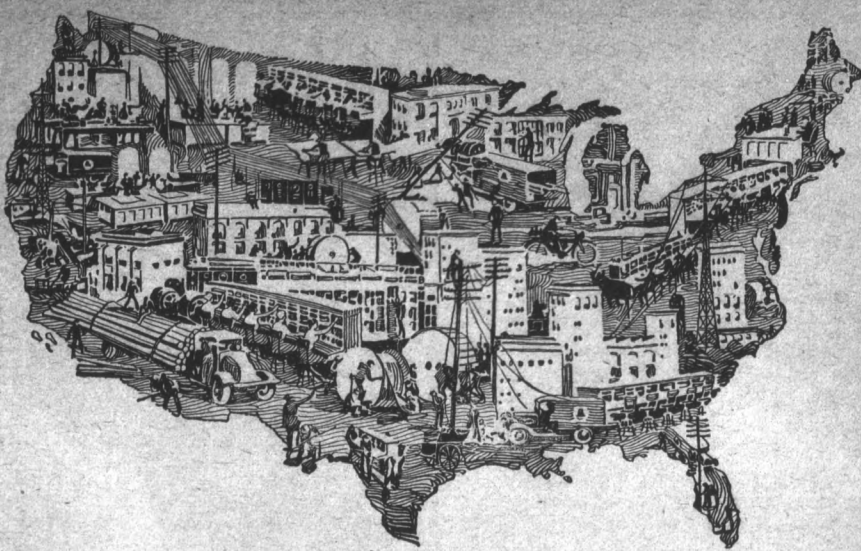
The picture of Litchfield, the home of the cooperative idea, has been thus briefly drawn, that it may furnish inspiration and example for other communities. In these days, organization alone can accomplish things worth while. Cooperation is the solution of many of the perplexing problems that confront the residents of small towns and rural districts. In far too many cases, business men in the villages, and farmers of the locality, are pulling against each other, not together. This means wasted effort, lack of achievement, and finally, retrogression. In many ways, the interests of the farming districts and of the small towns are virtually identical. The elimination of a very small class of local middlemen, by the establishment of cooperative concerns, created at first, a spirit of antagonism in many sections. But for the most part, this feeling is dying out, as the real purpose and real meaning of cooperation become apparent. The small town must readjust its business to meet the new conditions. The wise ones will get in line and cooperate, rather than buck against the inevitable. The doom of the small town is not sealed, as some have predicted. We must have them still, changed, perhaps, in many ways, but abiding features of our farming districts. To what extent the business of these towns, in the future, will become cooperative, is still a question of speculation.

But out of the uncertainty that accomplishes innovation, looms this truth: Cooperation is the better way. Any movement which has for its object the promotion of a better understanding between farmer and business man, is worth while. Litchfield's chamber of commerce is an illustration in point. Get together. Pull together. Do things. Cooperate.

Cheering Up the Community



Here is a Grange sextet that is widely known as the arch enemy of Dull care. Without question the medical profession has lost many calls and the people have avoided a corresponding number of bills just because this little group was able to make them laugh, to jiggle the liver, to tickle the spleen and to get the digestive and nervous systems back to normal.



The laborer is worthy of his hire

All service is worthy of its hire and good service cannot be continuously obtained unless adequately rewarded.

From the beginning of telephone history the American public has received the best telephone service of any country in the world. In proportion to the service rendered the people have paid less for this telephone service than any other country in the world.

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News of the Agricultural World

BELIEVES IN CENTRAL FRUIT EXCHANGE.

A CENTRAL agency for marketing all the fruit raised in Michigan is urged by I. T. Pickford, specialist in horticultural extension at M. A. C., in his latest monthly news letter to orchard owners.

"A central agency with a kick to it like our own Potato Growers' Organization or the California Fruit Growers' Exchange can do business a single local cannot. It can help stabilize markets by regulating distribution, stimulating demand, standardizing on grading, and labeling. It could become a spoke in the great Farm Bureau wheel so that we fruit men would roll along with the whole agricultural industry, getting mutual benefits.

"I am perfectly aware of the sore spots in the anatomy or maybe the mind of a potential combination. But I am just adventurous enough to believe that there is a treatment strong enough, and yet mild enough to do the trick.

"This office wants to get the names and addresses of all bona fide fruit men and others who believe in working for a good thing, even though every detail of operation cannot be ironed out in advance."—H.

RURAL CONFERENCE AT M. A. C.

TWENTY-THREE men of note in the religious world, a great many of whom are specialists in country problems, will form a galaxy of speakers at the rural conference of pastors and laymen in connection with the

showing that not only the wool growers and consumers, but large industries are going to insist on the passage of a pure fabric law. The inferior quality of goods manufactured at the present time was one of the important subjects discussed at this meeting, and some interesting facts were disclosed in connection with the manufacture of modern fabrics. For instance, tin, brass or other minerals are put into silk fabrics to give them a richer appearance, and corn starch is used to make the table linens heavy. When washed the linens will be like cheese cloth. It was also asserted that jute is put into rugs. The laundrymen who are coping with this situation have a difficult task, for owners of clothing supposedly ruined in the laundrying process will not be convinced that it is because of inferior material and substances which enter into its manufacture. It is more natural to suppose that machinery touches the goods or that acids are used in the cleaning. The convention decided that this problem has grown so large that action on the part of laundrymen has become necessary, and it is believed that with the proper efforts the laundry interests can be lined up with the farm organizations in demanding the enactment of the French bill.

The sheep and wool growers' associations were pioneers in promoting the truth-in-fabric movement. They now have the backing of all the farm organizations, the Cotton States Marketing Board, National Consumers' League, and several retail clothiers' associations. At the hearings on the merchandise disbranding bills before

the annual wool clip of the country, which plan, if successful, would make Chicago the nation's wool center.

Chicago bankers were inclined to view the proposition favorably, it was said, provided they were given the support of the western bankers. Boston has been forced to relinquish its hold on this financing because of the present tight money market, speakers said.

It is reported that Boston banks are also finding themselves unable properly to take care of the leather market.

The American Wool Growers' Association issued the following statement relative to the meeting:

"It is fully expected that the wool market soon will be reopened on a reasonable basis of value. In the meantime, growers will be able to obtain loans on unsold wool from banks that are members of the federal reserve system. Federal reserve banks will not fail to rediscount any paper that is presented in proper form. The whole matter is to be discussed fully with the federal reserve board. There need be no disposition on the part of growers to sacrifice their wools at prices below intrinsic values, or to consign them on low rates in advance."

FRUIT EXPRESS RATES REDUCED.

APPLICATION of the American Railway's Express Company for permission to file a schedule providing for reduced rates and refrigeration charges on berries, fruits, melons and vegetables in carloads from southwestern points to points in Connecticut, Illinois and Massachusetts has been approved by the Interstate Commerce Commission. While the complete new schedule has not yet been filed, it was said at the commission that the reduction would amount in some cases to thirty per cent of existing rates.

PROMISES TO RATION SUGAR.

PROMISES that the Federal Sugar Company would fall in line with the American Sugar Refining Company and see that canners and preservers get their proportionate share of sugar and that housewives will also get their supply, were made recently by Claus Spreckles, president of the company.

PLAN CHAMBER OF AGRICULTURE.

PLANS for the organization of a National Chamber of Agriculture along the lines of the United States Chamber of Commerce were discussed at the recent annual convention of the American Association of Agricultural Editors. Secretary Meredith addressed the fifty or more editors gathered here for the three-day meeting.

TO COOPERATE WITH SUGAR BEET GROWERS.

THE fight of the Sugar Beet Growers' Association to win a new scale this year from the manufacturers by refusal to plant beets is over. The best planting season has ended and the normal beet acreage in the state has been cut this year, practically in half, as a result of these tactics. Michigan State Farm Bureau representatives met with the directors of the Sugar Beet Association this week and announced to them that the Farm Bureau was prepared immediately to commence a campaign for the benefit of the growers in 1921 along lines different from those followed this year by the beet association. The plan includes efforts to establish cooperative sugar beet refineries in the sugar beet territory before the fall of 1921.

National Crop Report

THE estimated total yields of leading crops now growing in the United States, as made by the Bureau of Crop Estimates, are given in the following table with the corresponding yields for 1919 and the average for the years from 1914 to 1918 inclusive:

Crop.	1920. Bushels.	1919, Dec. Bushels.	1914-1918. Bushels.
Winter wheat	504,000,000	732,000,000	563,000,000
Spring wheat	277,000,000	209,000,000	259,000,000
All wheat	781,000,000	941,000,000	822,000,000
Oats	1,315,000,000	1,248,000,000	1,415,000,000
Barley	185,000,000	166,000,000	215,000,000
Rye	80,000,000	88,500,000	59,900,000
Hay, all	112,000,000	109,000,000	99,300,000
Apples, total crop	199,000,000	147,000,000	203,000,000
Peaches	45,000,000	50,400,000	47,500,000

summer school at M. A. C. from July 6 to 16.

The conference will be under the direction of Dr. Warren H. Wilson, of New York City, church and country life director, and its purpose will be to arouse interest in the work of the community. Men who attend the conference will board and room in Wells Hall, college dormitory.—HENSCHAW.

TRUTH-IN-FABRIC BILL BECOMING POPULAR.

CONGRESSMAN Burton L. French tells me that there is a rapidly growing sentiment in favor of his truth-in-fabric bill. The people are beginning to demand the truth in regard to the contents of the clothing they are buying, whether it is made wholly from virgin wool or in large part from shoddy, and they are no longer satisfied with the dealer's statement that the goods are "all wool." The Minnesota and Wyoming republican state conventions have endorsed the French truth-in-fabric bill, and the Boise, Idaho, chamber of commerce recently adopted a resolution in its favor.

The action of the New York State Laundrymen's Association at its recent annual meeting in Rochester presents a new phase to the subject,

the house interstate and foreign commerce committee, last winter, representatives of the farm organizations presented a strong case in favor of the French bill, but it was plainly seen by those who attended the hearings that there was need for education on the part of the public generally in regard to the necessity for legislation compelling the branding of fabrics so as to enable the purchaser to know their true contents. It will be the work of the friends of truth-in-fabric legislation between now and the winter session of congress to discuss the subject as public gatherings and in the papers, to bring it to the attention of their representatives in congress and secure for it the widest possible publicity, with the object in view of developing a strong public sentiment in its favor.
E. E. REYNOLDS.

\$100,000,000 SOUGHT TO FINANCE WESTERN WOOL GROWERS.

THE establishment of a fund of \$100,000,000 to extend financial aid to western wool growers, awaiting the re-establishment of the wool market, was considered at a recent conference of western bankers and sheep ranchers. Chicago bankers were asked to dis-

A Small Farm Home

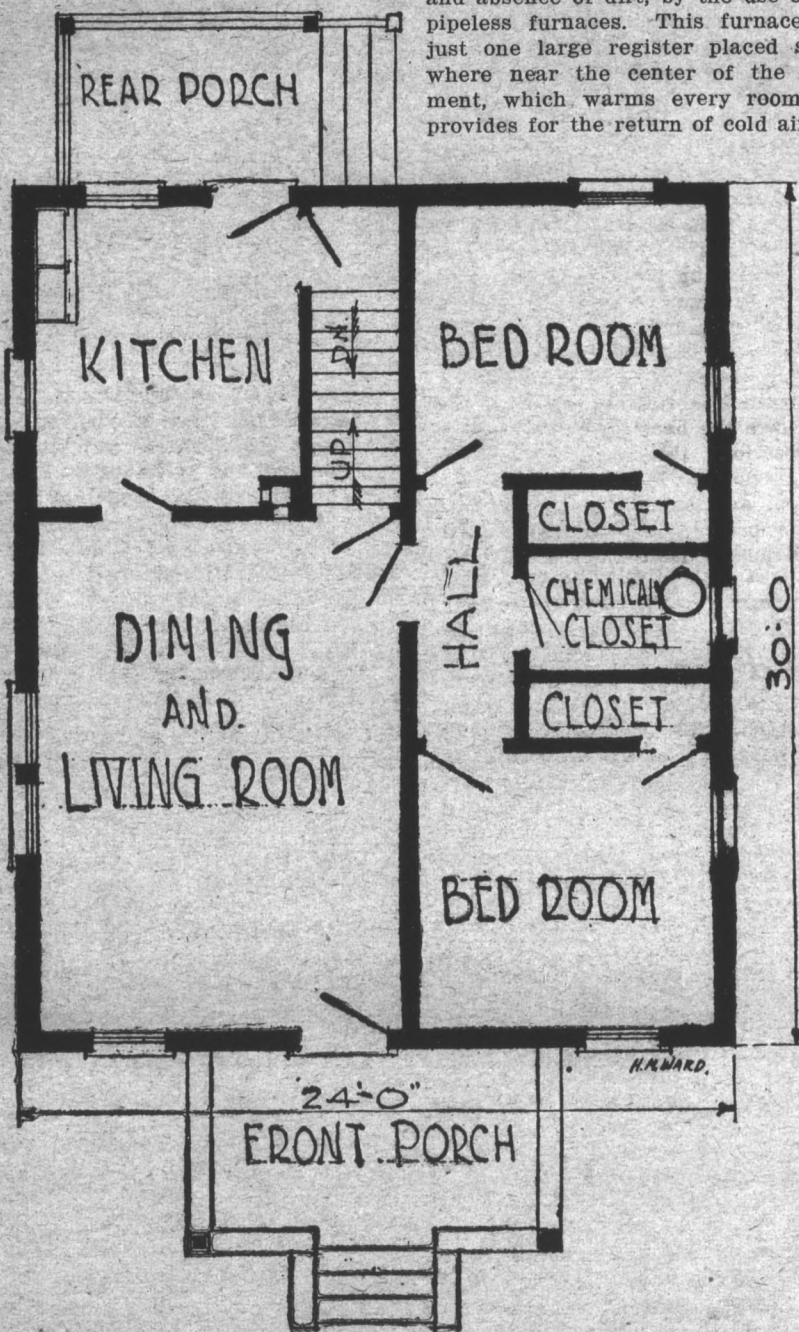
By Harley M. Ward

THIS little four-room bungalow will adorn any farm, as it is suitable where only the farmer's family is to be housed or it will make a very good tenant house. An attractive and comfortable home may not only keep the tenant on the farm, but it will help to make farmers of his children. The tenant's wife often casts the deciding vote as to whether they stay on the farm or not. She is sensitive about her home.

A glance at the floor plan of this little cottage shows a sensible, convenient arrangement. The kitchen is particularly worthy of notice. See what a sunny, pleasant room it is, with its two windows and the glazed rear door

the floor plan. The chemical closet can be installed in any room in the house. It may be curtained off in the bedroom. It may be placed in a clothes closet. It gives to your home the same finishing touch of modern equipment that a water-flush closet does for the city home. The chemical kills germs, making the closet sanitary in every way. The contents are emptied, say once a month, and may be disposed of anywhere as they are harmless.

A warm-air system of heating this house could be installed for about \$150 and would soon pay for itself with the saving of fuel. A small house, cottage or bungalow can be heated very economically in the matter of fuel, labor and absence of dirt, by the use of the pipeless furnaces. This furnace has just one large register placed somewhere near the center of the basement, which warms every room and provides for the return of cold air. As



to give light. The sink can be placed right under a window, where it will be flooded, with sunlight. It has wall space for a large cupboard, with which a pantry is not necessary. Everything is so designed and arranged that the housewife can do her work with the minimum of time and energy expended.

The living and dining-room are combined, giving a spacious, well-proportioned room instead of two cramped ones. Note the convenient arrangement of rooms, which gives a door into this room, yet not a bit of space is wasted.

The bedrooms are of good size. There is a nice, large closet, and two large windows securing cross ventilation. This insures cool sleeping rooms in the summer.

There are a great many little conveniences that should be installed in every house. The chemical closet is gaining new friends every day and we have provided a small room for this in

the pipeless furnace has two jackets outside the firepot, there is absolutely no loss of heat in the cellar or basement.

There are several kinds of materials that this house can be constructed of—wood, concrete blocks, or hollow clay tile. Wood is the most commonly used because of the ease with which it is worked into a finished building. But if a wood building is well constructed the costs would be the same whether constructed of concrete blocks or hollow tile.

The roof in all cases will be of wood and 2x4 No. 1 Y. P. rafters, 16 or 24 inches on center, sheathed with 1x4 roof boards, No. 2 lumber spaced two inches apart if shingles are used. If prepared roofing is used, 1x6 dressed and matched boards will be required. A heavy three-ply prepared roofing covered with crushed slate will give a good roof for twenty to twenty-five years without any attention.



Every farm needs some of these tools

A good, well-balanced Disston Saw that cuts through tough, knotty wood with a clean, straight cut; a hand-fitting screwdriver with a strong, serviceable blade; a trowel—any of the Disston Tools that put the burden of the work where it belongs—on the tools, not on the muscles of the man.

Good dealers everywhere sell Disston Tools. Send for our free booklet, "Disston Saws and Tools for the Farm." Address

HENRY DISSTON & SONS, Inc.

General Offices: Philadelphia, U.S.A.



DISSTON

SAWS AND TOOLS

LOOK ONLY \$2.98

SEND NO MONEY

You will look a long time, men, before you will find a pants bargain like this. Think of it! Only \$2.98 for these well-tailored trousers of fine, durable flannel with neat stripe effect—wide tunnels instead of flimsy belt straps—extra heavy pocketing—hand sewn buttons, reinforced seat seams—all seams serged, no raw edges—bar tacking at crotch and pockets which prevents tearing at seams. Color, gray mixture. Sizes, 30 to 44 waist measure; length, 30 to 36 inches.

This is certainly an extraordinary bargain—our limited supply will be snapped up quick at this remarkable low price. While they last, first come, first served, so act quick—order one or more pairs now. Remember, you take no risk and don't have to pay a cent until delivery.

Just send your name and address, giving waist and length measure, and we will send them to you, all charges prepaid.

Pay Mailman Our Low Introductory Price of Only \$2.98

(6) When Pants are Delivered.

We are making this Special Low Introductory Offer to acquaint men everywhere of the wonderful saving that can be made by purchasing their wearing apparel by mail from The Howard-Lux Co., the house that has established a nationwide reputation for fairness—low prices and extra high quality. Order one or more pairs now. Ask for No. 1261999. Remember, money back if not pleased.

THE HOWARD-LUX COMPANY
Dept. 126, Swetland Bldg. Cleveland, Ohio

Big Four Stock Salt

at our risk. It is a tonic conditioner and worm remover, composed of eleven of the finest medicinal ingredients known to modern veterinary science. It is an aid to digestion and will help your stock put on flesh rapidly at this season of the year. Invaluable at the calving period. Prevents losses of sheep, lambs and pigs caused by worms. Guaranteed to give satisfaction or your money back.

15 pound pails \$1.50, 40 pound pails \$3.00
100 pound kegs \$6.50



We prepay the freight on 100 lb. kegs. The other sizes may be sent by parcel post or express. We are headquarters for salt of all grades for the farm trade and want a dealer or agent in every county.

Eastman Salt Products Co.
Saginaw, Mich.

Milkoline for Hogs

W. H. Graham of Middleton, Mo., says in an actual test that \$30 worth of Milkoline made him an extra profit of \$420. Hundreds of others from coast to coast say the same thing.

Hustles Heavy Hogs to Market

Is the title of a little booklet that tells all about Milkoline (buttermilk made better for feeding) and how when fed according to directions it costs but 2c a gallon. Makes hogs and poultry digest their feed—saves time and money. Ask for free copy of booklet and our thirty day trial offer.

MILKOLINE MFG. CO. 860 Creamery Bldg. Kansas City, Missouri.

DYNAMITE

Blast out those Stumps and Boulders with Dynamite. Magazines in all parts of United States. Write us for prices.

ACME EXPLOSIVES CO.
Terre Haute, Indiana.

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at the World's Original and Greatest School and become independent with no capital invested. Every branch of the business taught. Write today for free catalog. **JONES NAT'L SCHOOL OF AUCTIONEERING** 28 N. Sacramento Blvd., Chicago, Ill. Carey M. Jones, Pres.

Seed Potatoes For Sale Early Rose and late Potatoes \$3.00 per bush. **A. E. CRAMTON,** Vassar, Mich.



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Your Protection

Perhaps You are Worth a Lot More Money Than You Think You Are

Many Michigan Farmers who have taken recent inventory of their buildings and household goods have been astounded to find out how much they were really worth.

These business men realized they were not carrying half the insurance they should have and that in case of fire it would be impossible to replace property with the high cost of material and labor.

Have you taken this same precaution? If you had a total fire loss today, could you rebuild and replace your household goods?

An additional policy with the Peninsular Fire Insurance Company will protect your property on the same basis city property is protected. All protective improvements and building locations are rated accordingly. This will give you the protection you need and will not interfere with the policy you now have.

And remember: the Peninsular Fire Insurance Company is one of the largest insurance companies in Michigan, and backed by men you know.

Write today for rates. Also cover your growing crops against HAIL and WINDSTORM.

Address Farm Dept.

PENINSULAR FIRE INSURANCE CO.,
OF AMERICA

Capital, \$1,000,000.00

GRAND RAPIDS,

MICHIGAN

Property Properly Protected

Cure Your Horse While He Works

Don't let sore shoulders, saddle or collar galls, rope burns, etc., keep your horse from work. Bickmore's Gall Cure will quickly cure your horse—while he works! Your money back if it fails. At all dealers, 50c, 70c, \$1.40. Also ask for Bickmore's Horse Liniment. For yourself, always keep handy Bickmore's XYZ Skin Ointment and Bickmore's XYZ Family Liniment. Ask your dealer for them.

Bickmore's Gall Cure

ABSORBINE STOPS LAMENESS

from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone, or similar troubles and gets horse going sound. It acts mildly but quickly and good results are lasting. Does not blister or remove the hair and horse can be worked. Page 17 in pamphlet with each bottle tells how. \$2.50 a bottle delivered. Horse Book 9 R free.

ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful Swellings, Enlarged Glands, Wens, Bruises, Varicose Veins; heals Sores. Allays Pain. Will tell you more if you write. \$1.25 a bottle at dealers or delivered. Liberal trial bottle for 10c stamps.

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NEWTON'S FOR HORSES, CATTLE, HOGS.

25 YEARS SALE

HEAVES, COUGHS, COLDS, DISTEMPERS, BRUISES, CURS, STAGGERS, etc. Best Conditioner and Worm Expeller. Three large cans guaranteed to cure Heaves or money refunded. 9.05 and \$1.30 per can (includes War Tax). At dealers or mail. Largest packages. Dose is small. Cheapest to use.

THE NEWTON REMEDY COMPANY, Toledo, Ohio

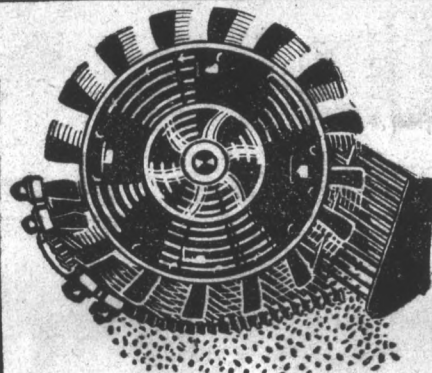
MINERAL HEAVE COMPOUND

CURES HEAVES

Booklet Free

\$3.25. Don't expect to get satisfaction or money back. \$1.50 Refund for ordinary cases. (Includes War Tax.)

MINERAL HEAVE REMEDY CO., 403 Fourth Ave., Pittsburgh, Pa.



Grain Must Come Out

Here is one of the most progressive grain-saving features ever built into a threshing machine. It's the "Man Behind the Gun," the device that helps beat out the grain in the

Red River Special

Most threshers wait for the grain to drop out. Here is the threshing machine that beats it out and saves enough grain that others would lose to pay your threshing bill. The big cylinder throws grain and straw violently against the "Man Behind the Gun" and Beating Shakers keep tossing and beating the straw until the last kernel is saved. Look for the man with the Red River Special in your territory and have him do your threshing this year.

If interested in a threshing machine for individual use, ask about our "Junior" Red River Special.

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NICHOLS & SHEPARD CO.
In Continuous Business Since 1848
Dealers exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam and Oil Gas Traction Engines
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Free Catalog in colors explains how you can save money on Farm Truck or Road Wagon, also steel or wood wheels to fit today.

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

REMODELING POULTRY HOUSE.

I would like your help in planning to remodel our chicken house, which is cold in winter and poorly ventilated. It seems to be well constructed and is lined with tar paper, but water freezes solid in cold weather. The house is 30x14 feet, with a cement floor. There are three windows 27x48 inches on the south, and a door in each end, but no means of ventilation. What kind of roosts and dropping boards are best where the coop cannot be cleaned every day? Is lath and plaster advisable in a chicken coop? Could a portion be partitioned off with wire and a coal heating brooder be installed without danger of fire? I have so much trouble teaching my pullets to roost in the house after they have been raised in a colony house.

G. S.

The house would be more satisfactory if it had some open front which could be protected by curtains in very cold weather. In many good poultry houses the water pails will freeze at night when the temperature is near zero. But this does not indicate that the house is too cold for the health of the birds.

Even if a house cannot be cleaned every day it pays to use a dropping platform at the back of the house. This keeps the floor clean and gives the hens a larger area for scratching than when a pit is used beneath the roosts. Two-by-three pieces make good poultry roosts. They should have the upper edges rounded with a plane. These roosts can be nailed on cross-pieces which are hinged to the back wall of the house. Then they can be raised and hooked to the ceiling when the dropping boards are cleaned. We do not believe that lath and plaster are necessary or advisable in a poultry house.

A portion of a laying-house could be partitioned off with wire and used for a coal-burning brooder stove. Of course, there would be some danger from fire. The stove would have to be operated very carefully and the roof protected where pipe passes through. Much care would be needed when cleaning the stove to avoid dropping hot ashes in the straw litter. It is much more safe and satisfactory to operate the stove brooder in a colony house away from the winter laying-house. This not only reduces fire risk but gives the chicks a range that is less contaminated and they are not bothered by the older birds. Young pullets can easily be taught to roost in their laying-house if they are fastened in the house for about a week until they learn to take to the roosts each night without being placed there. If pullets have to be carried to a new house each night they are very slow in adopting it for a permanent home. But if they go to roost for themselves they learn the use of the new home much quicker.

R. G. K.

HENS WITH TUBERCULOSIS.

My hens are sick only a short time, seem lame for a few days, will not eat, then die. On opening some I found the liver enlarged and covered with white specks. The heart also had hard white lumps on it. The hens were fat. I feed them barley, oats and some parched wheat. What ailed these hens and how can I prevent further losses in the flock?

W. C.

The small white nodules on the liver indicate tuberculosis and there is no cure for a hen with that disease. There might be complications in the nature of digestive disorders due to the feeding of the wheat which has been through fire. Such grain is commonly called salvage wheat and it is all right if some of it has not soured and become spoiled feed. Some poultrymen have suffered severe losses from salvage wheat which has been through fire and damaged by water. Spoiled wheat will throw the best of hens off feed in a short time and will stop egg production for a period, even if some of the birds are not killed.

In this case we should examine the wheat carefully and immediately cull

out and kill all of the hens that become lame or show signs of loss of appetite, and emaciation. If the condition increases rapidly it will be necessary to kill off the entire flock and obtain a new start after a thorough disinfection of the houses and the premises. Let plenty of sunlight into the poultry house as it is the greatest destroyer of the germs of tuberculosis.

More sparrow traps on all farms will be a help in keeping down tuberculosis among poultry. It seems logical to believe that these pests can easily carry the disease from infected to healthy flocks.—R. G. K.

YOUNG TURKEYS DIE.

I had twelve little turkeys, which we kept in a barn for three days after they were hatched. They got in a patch of rye, were not sick, and had no diarrhea, but they all died but two.

St. Clair Co.

W. H.

The most common disease of young turkeys is blackhead, but as you give no symptoms we cannot determine if this is the case. Possibly the turkeys obtained some poisonous feed which caused digestive disorders or a weakness of the breeding stock produced poults which did not have the vitality to live. If the poults had died of blackhead they would have been dull and droopy and had diarrhea. Often the head would turn purplish. The poults may be sick only four or five days and so they might die before the owner realized they were sick, if the birds were on a large range and not visited every day. Arsenical or salt poisoning might cause the death of young turkeys. Investigations by scientists have proven that "twenty-five grains of salt per pound of live weight" is enough to cause death in fowls. When salting stock it might be placed where it would be eaten by turkeys.—R. G. K.

WILL FARMING AS A BUSINESS COME BACK?

(Continued from first page.)

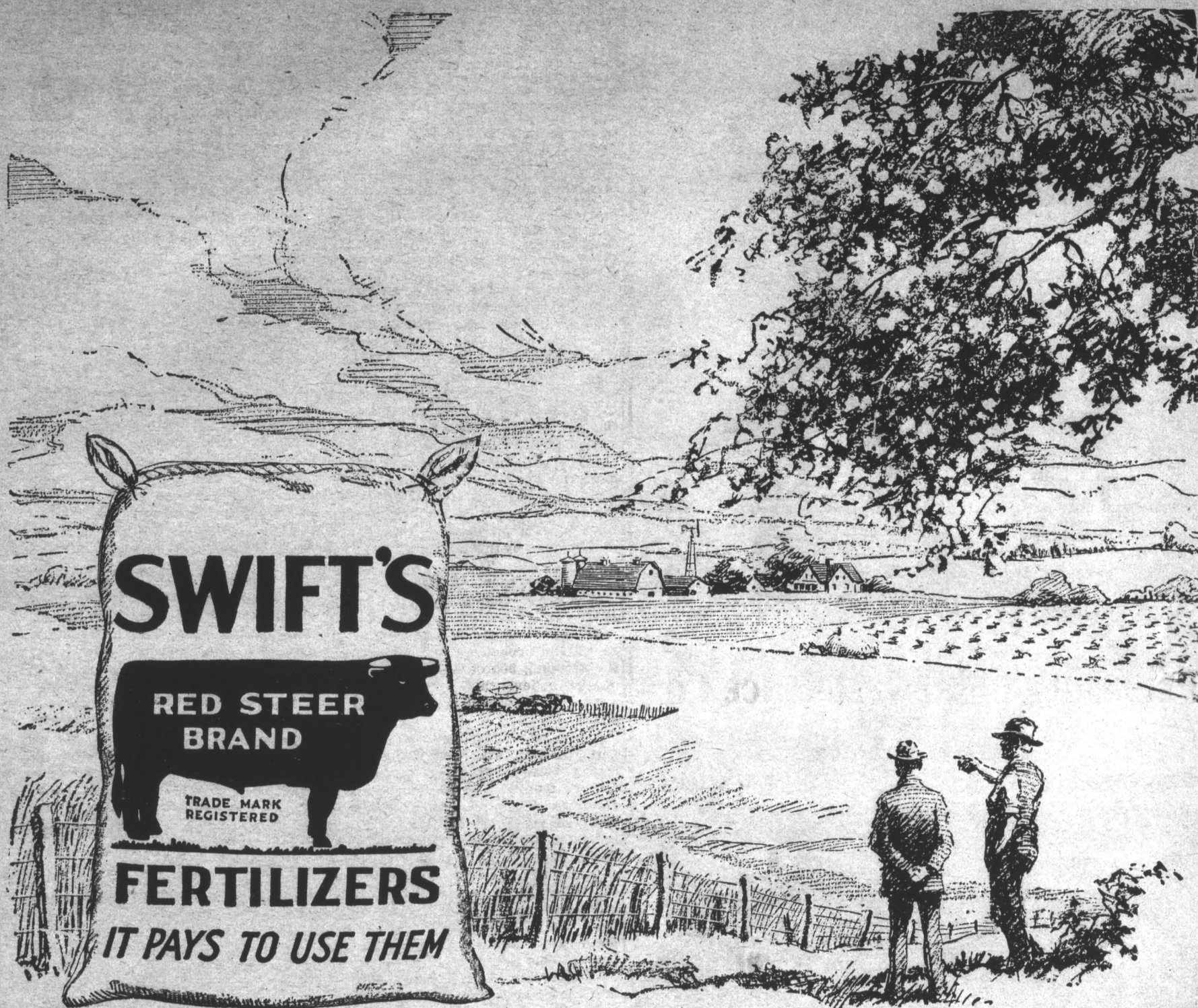
breaking home ties and sending the children out into a strange environment, the parents go with them.

The first of these reasons would vanish very shortly should the wheels of industry stop or factories close down for a season. This unbalanced industrial prosperity cannot continue indefinitely. The nation must be fed and the primary source of our food supply is the farm. The thinking young man should look into the future. For the new day, farming and scientific agriculture offers one of the most promising fields.

The second, or labor problem, will gradually adjust itself as the expense of living in the city is bound to have its effect. Cheaper rents and cheaper food products with the more wholesome life in the open country will tend to offset wages.

The third reason for the farmer moving to town is being rapidly removed through the establishment of consolidated schools. This will make it possible for the boy and girl on the farm to receive high school training without leaving the farm. This training will be equal to that given in the city and the children can be at home. Courses in agriculture, home economics, and farm carpentry will be included in the course of study and the work in high school will bear a direct relationship to the community life and its activities. It will become the community center and provide suitable recreation and social advantages for all.

In view of present-day tendencies in rural life, the Great Farm Bureau movement, the cooperative marketing of farm products, the construction of good roads, the coming of the consolidated school, the farm tractor, motor truck and other improved machinery, the federated rural church, and social advantages that are the best, life on wheat carefully and immediately cull the farm will become more attractive.



Making fertilizer right is a big job

Brands specially recommended

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

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

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

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

POTASH stiffens the straw and aids in starch formation.

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

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

Swift & Company

To make fertilizer of quality—fertilizer that produces the biggest yields at the lowest cost—requires a great deal more than raw material and manufacturing equipment.

Fertilizer made right is a highly scientific product. It presents many difficult problems in chemistry and agriculture—problems that demand the knowledge and experience of scientifically trained men.

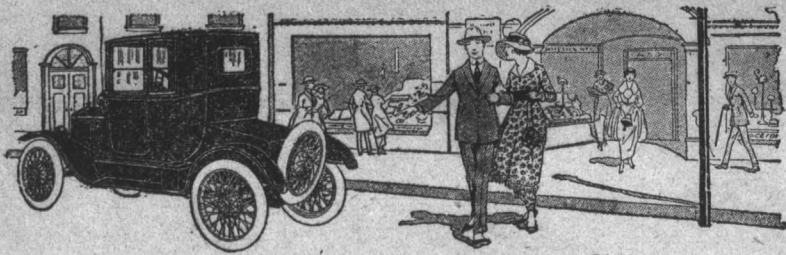
Swift's Red Steer Fertilizers are made "right" and are the best crop producers because Swift & Company has the trained men, the most modern machinery, and uses the right materials.

You can always depend upon a Swift product. For more than 50 years Swift & Company has maintained the reputation of making each Swift product the best of its kind.

Buy Swift's Red Steer Fertilizer containing 14% or more of available plant food and thus get high grade plant food at the lowest cost per pound. Order from our local dealer, or write our nearest sales division.

Swift & Company, Dept. 45
Fertilizer Department
Union Stock Yards, Chicago, Ill.

"IT PAYS TO USE THEM"



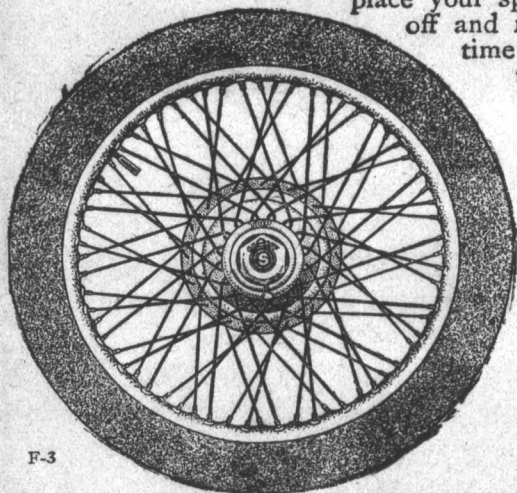
Mr. Brown—"What kind of an auto is that?"
Mrs. Brown—"That's a Ford—didn't you know? Those Simplex Wire Wheels are what makes it look different."
Mr. Brown—"By golly that's what I'm looking for. I want one of those cars, wheels and all."

MANY are saying the same thing as neighbor Brown. These wheels *do* make any Ford look real smart but aside from this, owning a set of

Simplex

WIRE WHEELS

is a great economy. You can "wear your tires down" to the last fraction of a mile. In a jiffy, you can remove a wheel, place your spare wheel on—and be off and make up the 5 minutes time it took you to make the change.



Write for FREE booklet and prices per set of five, and send us your dealer's name.

SIMPLEX WIRE WHEEL CO.
CADILLAC, MICH.

Formerly the Kol-Ben Wheel Co.

Feed Every 3rd Hog FREE

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

Milkoline At 2c a Gallon

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

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

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

Can't Spoil: Milkoline is guaranteed not to rot, sour or mould. It will keep indefinitely in any climate. Flies do not come near it. It is always uniform, and is guaranteed to make you money or it doesn't cost you anything.

—Distributed by—

SCHWARTZ BROS.,

Saginaw, Mich.

PAINT BARN PAINT
\$1.32 PER GALLON

GET FACTORY PRICES ON ALL PAINTS. We guarantee quality. WE PAY THE FREIGHT.
FRANKLIN COLOR WORKS,
Dept. M., FRANKLIN, IND.

Ito San Soy Beans. Michigan grown \$10 per bush. Genuine Grimm and Montana grown Alfalfa. Seed Potatoes. Write today for special seed price list. A. H. FOSTER CO., Allegan, Mich.

Only \$2 DOWN ONE YEAR TO PAY

\$38 Buys the New Butterfly Jr. No. 2½ Light running, easy cleaning, close skimming, durable. **EASY TO CLEAN** Separators are guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 8 shown here; sold on **30 DAYS' FREE TRIAL** and on a plan whereby they earn their own cost and more by what they save. Postal brings Free Catalog Folder. Buy from the manufacturer and save money. (21)
ALBION-DOVER CO., 2165 Marshall St. Chicago

Our Service Department

STUCCO FOR RESIDENCE.

We wish to remodel our house, and would like to know which is the more durable to put on the outside, Kellastone put on with wood lath, or stucco put on with wire netting? Also, is there a difference in the mixing of the cement for the stucco so that some will crack while others will not, and is there a rule to go by in mixing it so it will last?

Calhoun Co.

SUBSCRIBER.

The method of mixing and placing stucco has a great deal to do with its lasting qualities and why some crack and others do not. In the first place, common cement stucco should never be put on common wood lath, but it should always be placed on metal lath weighing not less than four pounds per yard. If wire cloth is used it should not be less than nineteen gauge and two and one-half meshes to the inch. In very damp climates or on the coast, the lath or cloth must be galvanized; elsewhere, it should be painted at the factory.

The stucco is made of one measure of Portland cement, three measures of sand and one-tenth measure of hydrated lime or plasterer's lime-putty well mixed together and about as moist as ordinary mortar. After wetting this, use it immediately; if any has stood longer than half an hour throw this away and mix up a fresh batch. Don't attempt to "temper" or soften it; the strength has gone and it is no good. A little hair is a good thing in the first coat, but not really necessary. Too much hair is worse than none.

No doubt Kellastone would be the most satisfactory and the cheapest in the end. The Kellastone is composed of a chemical which makes a stucco that is water or moisture proof. It can be placed on wood lath without danger of cracking and makes a job that is far superior to common stucco.

H. M. W.

SEEDING VETCH.

I have purchased some winter sand or hairy vetch seed which I intended to sow with oats this spring for hay. Do you think it advisable for me to sow it now, or would you wait and sow it in the fall with rye? The land on which I intended sowing the vetch is light sandy land.

Monroe Co.

W. M.

Hairy vetch, if properly inoculated and sown alone or with rye in August, is practically a sure crop. This combination may be left to mature seed, or it can be cut green for hay. For this purpose it should be cut when the rye is in the milk stage and quite green. The vetch will then be nicely in blossom. On some fairly good sandy soils, with the proper weather conditions, hairy vetch and oats sown in spring will give a good yield of hay. Satisfactory results, however, would not be so certain with spring-sown hairy vetch as when sown with a winter grain in August. Unless hay is needed very badly, I should not risk the spring sowing on your light sandy land. Not but that the vetch will make a start and live, but dry weather may prevent enough growth of both vetch and oats to make a profitable yield of hay. Such was true in many cases last summer in this part of the state.—H. L. B.

SUDAN GRASS.

I have lost my seeding now for two years. Is Sudan grass good to sow with oats, or will it kill the oats? If it is not good, what would you recommend?

Ionia Co.

E. W. H.

The proper way to seed Sudan grass

is alone. Get the ground in good shape and seed without a nurse crop. This grass is such a luxuriant grower, in fact, it is not a grass at all, it belongs to the sorghum family, that I do not believe it would do well with oats. If there was plenty of moisture, you could fit the land that you had harvested for oats and seed to clover alone by using two hundred pounds of fertilizer to give it a good start. The seed should not be sown until there is moisture enough in the soil so that they will readily germinate. C. C. L.

POOR RESULTS FROM FERTILIZER.

I planted twelve acres of sugar beets. I used one ton of fertilizer. The sugar beet seed was not any good. I had to work this field over and put it into beans. I did not get any benefit out of the fertilizer. The company wants me to pay for their fertilizer. Should I pay them or not?

Montcalm Co.

H. S.

I should say that you will certainly have to pay for this fertilizer. Because you cultivated up the beets and planted beans is no sign that you did not get results from the fertilizer. As a matter of fact, if you had a poor crop of beans and they did not consume the fertilizer, the fertilizer is still in the ground and you will get benefit from it this coming year. It is barely possible that if you put this fertilizer all in the row with the beet seed when you planted the seed, that it injured the germination, which would be the cause of your poor stand. I don't think that over one hundred pounds per acre should be used in the row with the seed, then the balance of it should be scattered broadcast.

I cannot understand why the bean crop which followed was not benefited by the fertilizer as after the ground had been prepared for the beans the fertilizer would be well mixed with the soil and in splendid shape for the bean crop. I am sure if you have not already received any benefit from this fertilizer, that you will in future crops.

C. C. L.

DESCENT OF PROPERTY.

A couple start together, neither of them possessing much property. After a term of years they accumulate quite an amount. They never had any children. Now if the wife dies, can her relatives claim any part of the property they make together? If so, what part?—A. B. R.

If a woman dies, leaving a husband and no children, all property owned by her and in her name, and not disposed of by will, is divided after paying her debts, funeral expenses, and costs of administration, one-half to the husband and the other half to her parents or brothers and sisters. This is by the statutes of Michigan.—J. R. R.

LAND CONTRACT.

A buys forty acres on contract. A sells twenty acres to B on contract, in which A agrees to give warranty deed. B pays for land according to contract and demands deed. A does not have land paid for, so cannot give deed, but promises to do so. A dies; his wife has signed contract. Has B any title or claim to land? B has also kept up the taxes.—R. M. S.

The buyer from the original contract purchaser has succeeded to the equitable title of the first as to the part so purchased by the second party. The executor or administrator are given authority by law to make conveyance according to the contract of the deceased.—J. R. R.

DAMPING OFF OF CABBAGE.

I have several thousand cabbage seedlings which have been growing poorly and I notice they are black at the surface of the ground and some of them are as thin as a string near the roots, although the tops are large. What is this and should I use these plants?

Lapeer Co.

G. W. C.

The trouble is damping off, and the plants with the constriction just above the roots are those that have survived in spite of the damping off. The top has grown at the expense of the root system.

This trouble arises from using too rich and heavy a soil for growing the seedlings and from overwatering the little plants. Some plants outgrow the damping off if the weather is favorable but others get such a setback and the girdle so operates to stunt the roots that the plants do poorly.

The seeding cost in setting cabbage is a small item compared with the value of cabbage ground and the cost of labor in setting and care. Only the best and healthiest seedlings should be set. Secure good plants if possible and take no chances.

Next year treat the seed in corrosive sublimate, one part to five hundred, for one-half hour, rinse well, plant in clean sandy soil, not too rich, using flats that have abundant openings for drainage. The best flats I have seen are those which have a net of coarse mesh for a bottom. Ordinary hardware cloth is good. This gives fine chance for drainage. Then keep the plants on the "dry side," stirring the soil frequently to give a good loose mulch at the surface. When watering sub-irrigate or flood the water on, do not sprinkle. Protect outdoor plants from rain if possible. Such precautions will give plants free from the damping off which has cost you money and will ward off blackleg and kindred evils as well.—G. H. C.

VALUE OF SILAGE.

What is good corn silage worth per ton that would husk about eighty bushels to the acre, when hay is worth \$27 per ton?

Gladwin Co.

G. A.

There being no market for corn silage, the only way we can determine its value is by comparing it to some other foodstuff of similar analysis, for which there is a market value. Corn silage is very similar in the proportion of food nutrients to timothy hay, besides experiments show that a ton of timothy hay is practically equal to three tons of corn silage, therefore corn silage would be worth one-third as much as timothy hay. If your timothy hay was worth \$27 per ton, then corn silage would be worth \$9.00. C. C. L.

RYE FIELD FOR ALFALFA.

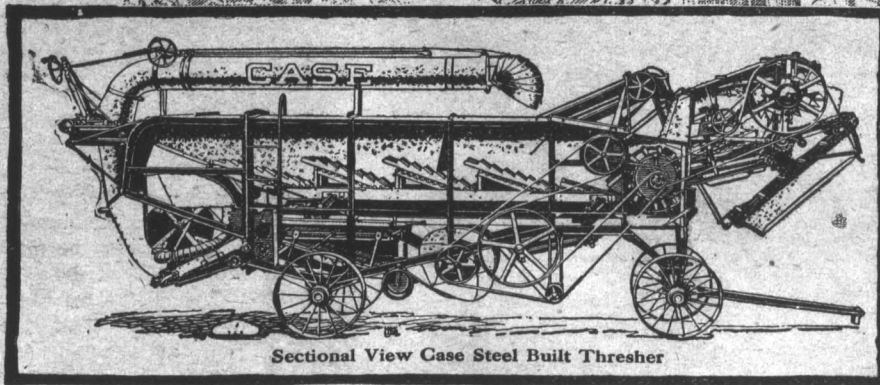
I have two acres of sandy soil that was sown to alfalfa last year and only a small part of it caught. I dragged and sowed it to rye. What should I do to get it seeded? Could I sow it to alfalfa with the rye and cut the rye for hay? F. M.

It is quite late to sow alfalfa seed in rye now and expect a stand. Better plow the rye under for green manure, top-dress with two tons of lime per acre, and at some favorable time before the first of August sow inoculated alfalfa seed with two hundred pounds per acre of the best commercial fertilizer you can buy.—H. L. B.

IMPASSABLE HIGHWAYS.

Is there any law to compel a man to move his fence, I mean road fence, because the snow drifts in the road and has to be shoveled out? The fence in question is a slat and wire fence.—W. F.

Not without condemnation. But at the same time, when a road becomes impassable the public is not liable to the adjoining owner for going on the adjoining land to get around the obstruction.—J. R. R.



Sectional View Case Steel Built Thresher



Look for the
EAGLE
Our Trade Mark

Case Threshers Save Your Crop

GOOD threshing is the climax of good farming. It's what you have been working for ever since you began preparing ground for seeding. It's just as important as fertile soil, summer showers and harvest sunshine,—and it's up to you. If you do not own a Case Thresher, the next best thing is to employ one.

The Case Steel Built Thresher, in any of the six sizes we manufacture, is the machine of *clean threshing, thorough separation, perfect cleaning and unequalled saving.*

You owe it to yourself to save all you harvest. You can do it with a Case Machine. It successfully handles Rice, Flax, Peanuts, Peas and Beans, Rye, Oats, Barley, Wheat, Clover and Alfalfa, Millet, Buckwheat, Timothy, Orchard Grass, Kaffir Corn, Sorghum, Broom Grass Speltz, Hungarian Grass, Red Top, Blue Grass, Milo Maize, Sudan Grass and Feterita.

After passing the cylinder, where all the grain is threshed and most of it separated, the straw is shaken,—shaken—shaken;—230 shakes a minute. Note the improved straw-rack, the great separating surface and ample space for straw.

Write for catalog of Case Steel Built Threshers showing sizes suitable for the individual farm or for custom threshing on the largest scale.

J. I. CASE THRESHING MACHINE CO., Inc.

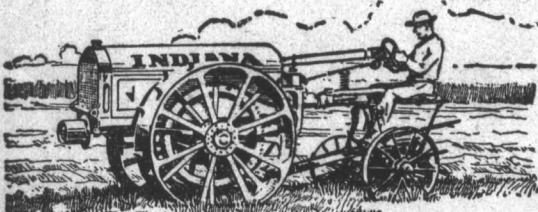
Dept. AG-6, Racine, Wis., U. S. A.

Making Superior Farm Machinery Since 1842

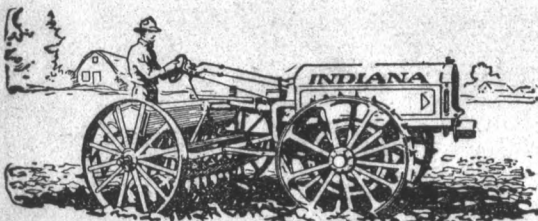
CASE
POWER FARMING
MACHINERY

To avoid confusion, the J. I. CASE THRESHING MACHINE COMPANY desires to have it known that it is not now and never has been interested in, or in any way connected or affiliated with the J. I. Case Plow Works, or the Wallis Tractor Company, or the J. I. Case Plow Works Co.

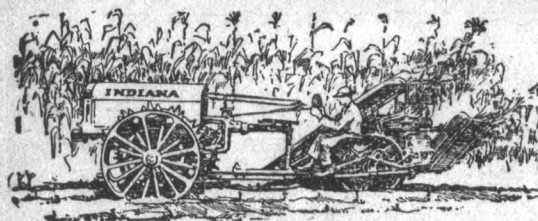
NOTE:
We want the public to know that our plows and harrows are NOT the Case plows and harrows made by the J. I. Case Plow Works Co.



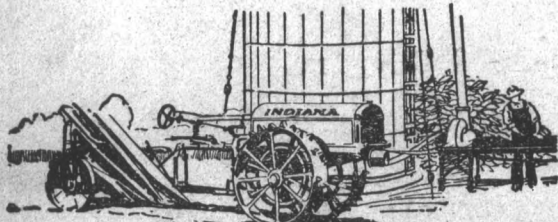
With Sulky Plow



With Grain Drill



With Corn Binder



Cutting Ensilage

INDIANA
ALL-ROUND
TRACTOR
"The World's Tractor"

WHEN you sell two teams and put the money into an Indiana Tractor you cut down the time you have to spend doing chores and raising feed for horses. You quit working a month or two a year for your horses and work all the time for yourself.

Horses in excess of one team for hauling and odd jobs can be used on most farms only 90 to 100 days during the crop season. But the high cost and trouble of keeping them runs on through the winter.

The Indiana Tractor will do the work of four horses and do everything that they do. Plowing is only 15 per cent of what a tractor must do to replace horses. The Indiana plows more than two teams, and is light enough to go on the ground any time horses should.

It attaches to all makes of harrows, discs, planters, one and two row cultivators, mowers, binders, corn binders, rollers, drills, cultipackers, potato diggers, and all orchard and vineyard tools.

The regular implements you already have are the only practical size and type for row cultivation. The Indiana Tractor will use them with inexpensive hitches. In many operations it will replace six or eight horses. The driver rides the implement and has his work in front of him. The Indiana is the all-round, single unit, one-man tractor.

H. P. Purviance of Logan County, Ills., say: "My Indiana Tractor certainly is a success with the grain binder or anything else one can do

with four horses. Used it on double tandem 7 ft. disc, also on double corrugated roller and Nisco manure spreader. I like it better to cut grain than horses, for heat and flies do not bother it and the power is more steady. It stays on top in low spots better than horses."

An Indiana will work every day and the money you can get for four horses and the cost of keeping them a year will more than pay for it. Some owners do not have a horse on their places.

Clayton McFarland, Tippecanoe County, Ind., says: "My corn is equal to any corn in the community and I cultivated it entirely with my tractor. I can plow 20 acres of corn a day with a two row cultivator. I can turn at the ends and break less corn than with a team. I harvested both wheat and oats myself with no trouble from the tractor."

Many owners report cutting grain of all kinds at a fuel and oil cost of 10 to 12 cents an acre.

You can get an Indiana promptly from any of our branches, get rid of four horses, and do two men's work yourself. In the last four years this tractor has made hundreds of enthusiastic farmer friends, who help us sell more Indianas.

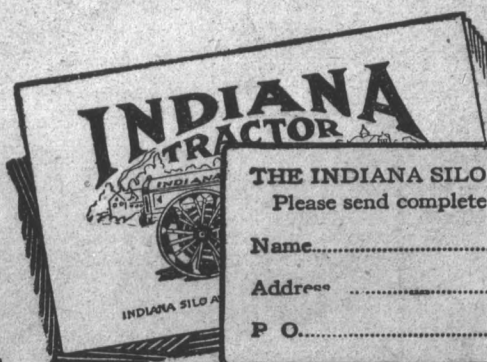
For 20 years the Indiana Silo and Tractor Company has been known for high quality products and fair dealing. Ask any of the 75,000 owners of the Indiana Silo.

Mail coupon for book of pictures showing the Indiana doing all the work horses do, and book of letters from users. If you need a silo, we have one for you. We are the largest silo manufacturers in the world.

DEALERS: This tractor can be used more on more farms than any other. It's the biggest dealer proposition in the field.

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47 Live Stock Exchange Building.....Indiana Silo Company
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THE INDIANA SILO & TRACTOR CO.

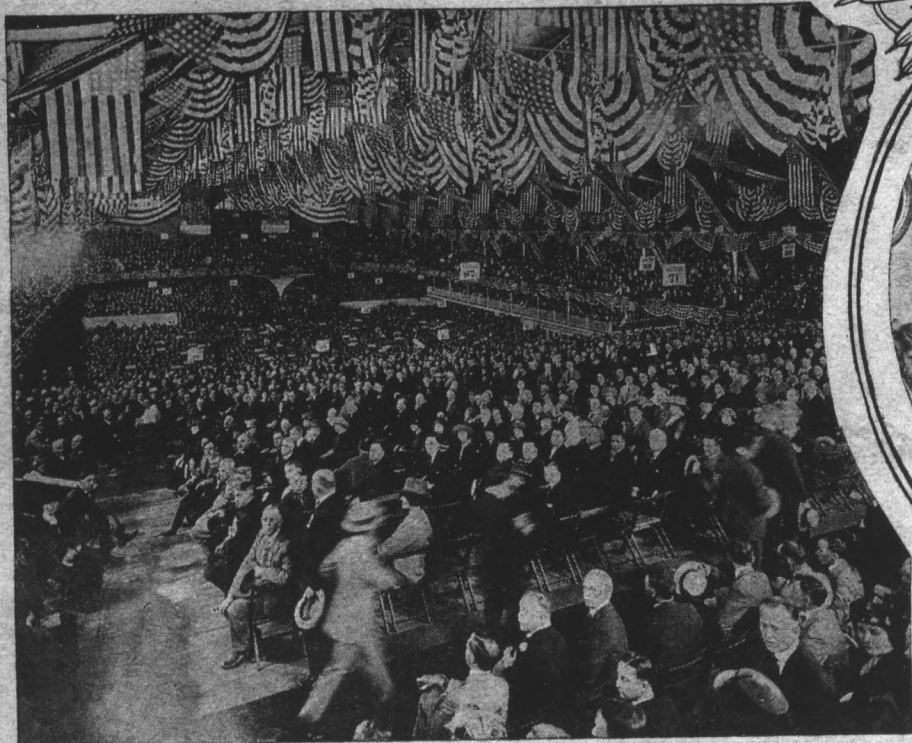
Please send complete descriptive matter on the Indiana Tractor, and letters from users.

Name.....

Address.....

P. O.State.....

WORLD EVENTS IN PICTURES



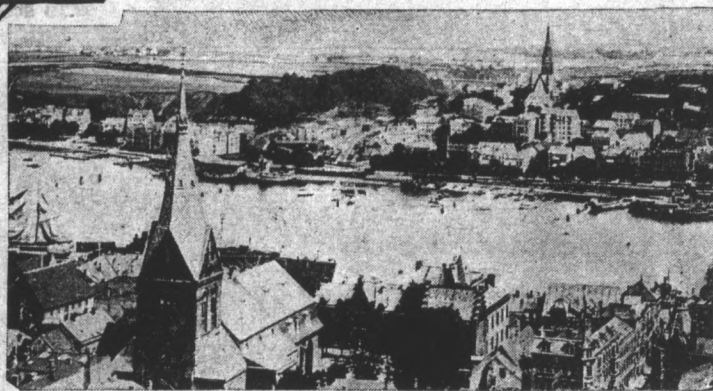
General view of the great crowd at the opening of the republican national convention in the Coliseum at Chicago.



A typical group of immigrant children who arrived on the liner Rotterdam at New York last week.



Isaac Montgomery, Jefferson Davis' servant, and former U. S. Senator Gale, of Mississippi, delegates to the republican convention, are examining a medal of the Old Guard, who voted for General Grant at Chicago in 1880.



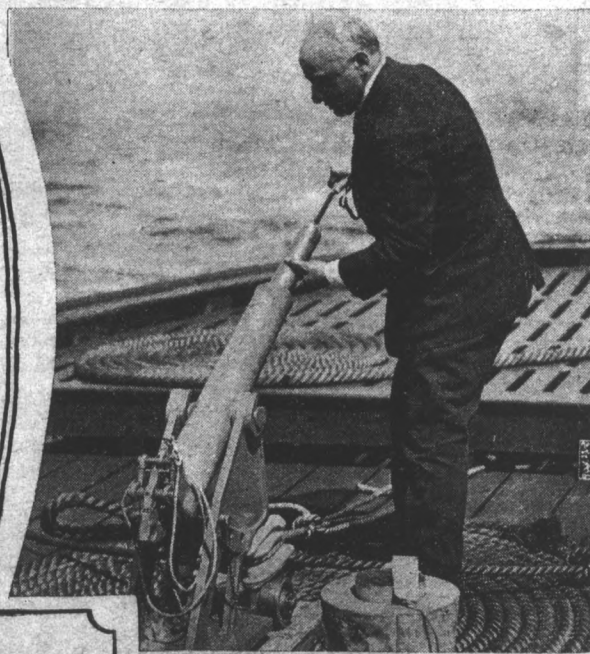
Schleswig-Holstein remain German or go back to Denmark when her people vote at plebiscite.



Latest photo of Huerta, who has just taken the oath as president of the united states of Mexico to direct affairs until an election is held.



Clearing the bar in the women's horse jumping class at the nation's most famous annual horse show, held at Chestnut Hill, Mass.



A recently invented life-line hurling gun which will shoot a line accurately for fourteen hundred feet, and is highly commended by the United States Steamboat Inspection Board.

THE VALLEY OF THE GIANTS

A ROMANCE OF THE REDWOODS

By Peter B. Kyne

"There aren't any eligible young fellows hereabouts, Mr. Bryce. And I've lived in these woods all my life."

"That's why you haven't been discovered."

"And I don't intend to marry a lumberjack and continue to live in these woods," she went on earnestly, as if she found pleasure in this opportunity to announce her rebellion. Despite her defiance, however, there was a note of sad resignation in her voice.

"You don't know a thing about it, Moira. Some bright day your Prince Charming will come by, riding the log-train, and after that it will always be autumn in the woods for you. Everything will just naturally turn to crimson and gold."

"How do you know, Mr. Bryce?"

He laughed. "I read about it in a book."

"I prefer spring in the woods, I think. It seems—it's so foolish of me, I know; I ought to be contented, but it's hard to be contented when it is always winter in one's heart. That frieze of timber on the skyline limits my world, Mr. Bryce. Hills and timber, timber and hills, and the thunder of falling redwoods. And when the trees have been logged off so we can see the world, we move back into green timber again." She sighed.

"Are you lonely, Moira?"

She nodded.

"Poor Moira!" he murmured absently.

The thought that he so readily understood touched her; a glint of tears was in her sad eyes. He saw them and placed his arm fraternally around her shoulders. "Tut-tut, Moira! Don't cry," he soothed her. "I understand perfectly, and of course we'll have to do something about it. You're too fine for this." With a sweep of his hand he indicated the camp. He had led her to the low stoop in front of the shanty. "Sit down on the steps, Moira, and we'll talk it over. I really called to see your father, but I guess I don't want to see him after all—if he's sick."

She looked at him bravely. "I didn't know you at first, Mr. Bryce. I fibbed. Father isn't sick. He's drunk."

"I thought so when I saw the loading-crew taking it easy at the logging-landing. I'm terribly sorry."

"I loathe it—and I cannot leave it," she burst out vehemently. "I'm chained to my degradation. I dream dreams, and they'll never come true. I—I—oh, Mr. Bryce, Mr. Bryce, I'm so unhappy."

"So am I," he retorted. "We all get our dose of it, you know, and just at present I'm having an extra helping."

it seems. You're cursed with too much imagination, Moira. I'm sorry about your father. He's been with us a long time, and my father has borne a lot from him for old sake's sake; he told me the other night that he has discharged Mac fourteen times during the past ten years, but to date he hasn't been able to make it stick. For all his sixty years, Moira, your confounded parent can still manhandle any man on the pay-roll, and as fast as Dad put in a new woods-boss old Mac drove him off the job. He simply declines to be fired, and Dad's worn out and too tired to bother about his old woods-boss any more. He's been waiting until I should get back."

"I know," said Moira wearily. "Nobody wants to be Cardigan's woods-boss and have to fight my father to hold his job. I realize what a nuisance he has become."

Bryce chuckled. "I asked Father why he didn't stand pat and let Mac work for nothing; having discharged him, my father was under no obligation to give him his salary just because he insisted on being woods-boss. Dad might have starved your father out of these woods, but the trouble was that old Mac would always come and promise reform and end up by borrowing a couple of hundred dollars, and then Dad had to hire him again to get it back! Of course, the matter simmers down to this: Dad is so fond of your father that he just hasn't got the moral courage to work him over—and now that job is up to me, Moira. I'm not going to beat about the bush with you. They tell me your father is a hopeless inebriate."

"I'm afraid he is, Mr. Bryce."

"How long has he been drinking to excess?"

"About ten years, I think. Of course, he would always take a few drinks with the men around pay-day, but after mother died, he began taking his drinks between pay-days. Then he took to going down to Sequoia on Saturday nights and coming back on the mad-train, the maddest of the lot. I suppose he was lonely, too. He didn't get real bad, however, till about two years ago."

"Just about the time my father's eyes began to fail and he ceased coming up into the woods to jack Mac up. So he let the brakes go and started to

coast, and now he's reached the bottom! I couldn't get him on the telephone today or yesterday. I suppose he was down in Arcata, liquoring up."

She nodded miserably.

"Well, we have to get logs to the mill, and we can't get them with old John Barleycorn for a woods-boss, Moira. So we're going to change woods-bosses, and the new woods-boss will not be driven off the job, because I'm going to stay up here a couple of weeks and break him in myself. By the way, is Mac ugly in his cups?"

"Thank God, no," she answered fervently. "Drunk or sober, he has never said an unkind word to me."

"But how do you manage to get money to clothe yourself? Sinclair tells me Mac needs every cent of his two hundred and fifty dollars a month to enjoy himself."

"I used to steal from him," the girl admitted. "Then I grew ashamed of that, and for the past six months I've been earning my own living. Mr. Sinclair was very kind. He gave me a job waiting on table in the camp dining-room. You see, I had to have something here. I couldn't leave my father. He had to have somebody to take care of him. Don't you see, Mr. Bryce?"

"Sinclair is a fuzzy old fool," Bryce declared with emphasis. "The idea of our woods-boss's daughter slinging hash to lumberjacks. Poor Moira!"

He took one of her hands in his, noting the callous spots on the plump palm, the thick finger-joints that hinted of so much toil, the nails that had never been manicured save by Moira herself. "Do you remember when I was a boy, Moira, how I used to come up to the logging-camps to hunt and fish? I always lived with the McTavishes then. And in September, when the huckleberries were ripe, we used to go out and pick them together. Poor Moira! Why, we're old pals, and I'll be shot if I'm going to see you suffer."

She glanced at him shyly, with beam- ing eyes. "You haven't changed a bit, Mr. Bryce. Not one little bit!"

"Let's talk about you, Moira. You went to school in Sequoia, didn't you?"

"Yes, I was graduated from the high school there. I used to ride the log-trains into town and back again."

"Good news! Listen, Moira. I'm

going to fire your father, as I've said, because he's working for old J. B. now, not the Cardigan Redwood Lumber Company. I really ought to pension him after his long years in the Cardigan service, but I'll be hanged if we can afford pensions any more—particularly to keep a man in booze; so the best our old woods-boss gets from me is this shanty, or another like it when we move to new cuttings, and a perpetual meal-ticket for our camp dining-room while the Cardigans remain in business. I'd finance him for a trip to some state institution where they sometimes reclaim such wreckage, if I didn't think he's too old a dog to be taught new tricks."

"Perhaps," she suggested sadly, "you had better talk the matter over with him."

"No, I'd rather not. I'm fond of your father, Moira. He was a man when I saw him last—such a man as these woods will never see again—and I don't want to see him again until he's cold sober. I'll write him a letter."

As for you, Moira, you're fired, too. I'll not have you waiting on table in my logging-camp—not by a jugful! You're to come down to Sequoia and go to work in our office. We can use you on the books, helping Sinclair, and relieve him of the task of billing, checking tallies, and looking after the pay-roll. I'll pay you a hundred dollars a month, Moira. Can you get along on that?"

Her hard hand closed over his tightly, but she did not speak.

"All right, Moira. It's a go, then. Hills and timber—timber and hills—and I'm going to set you free. Perhaps in Sequoia you'll find your Prince Charming. There, there, girl, don't cry. We Cardigans had twenty-five years of faithful service from Donald McTavish before he commenced slipping; after all, we owe him something, I think."

She drew his hand suddenly to her lips and kissed it; her hot tears of joy fell on it, but her heart was too full for mere words.

"Fiddle-de-dee, Moira! Buck up," he protested, hugely pleased, but embarrassed withal. "The way you take this, one would think you had expected me to go back on an old pal and had been pleasantly surprised when I didn't. Cheer up Moira! Cherries are ripe, or at any rate they soon will be; and if you'll just cease shedding the scalding and listen to me, I'll tell you what I'll do. I'll advance you two months' salary for—well, you'll need a lot of clothes and things in Sequoia that you

AL ACRES—Al's City Cousin Finds Unusual Movie Material Where He Least Expected It.

—By Frank R. Leet



don't need here. And I'm glad I've managed to settle the McTavish hash without kicking up a row and hurting your feelings. Poor old Mac! I'm sorry I can't bear with him, but we simply have to have the logs, you know."

He rose, stooped, and pinched her ear; for had he not known her since childhood, and had they not gathered huckleberries together in the long ago? She was sister to him—just another one of his problems—and nothing more. "Report on the job as soon as possible, Moira," he called to her from the gate. Then the gate banged behind him, and with a smile and a debonair wave of his hand, he was striding down the little camp street where the dogs and the children played in the dust.

After a while Moira walked to the gate and leaning upon it, looked down the street toward the log-landing where Bryce was ragging the laggard crew into something like their old-time speed. Presently the locomotive backed in and coupled to the log train, and when she saw Bryce leap aboard and seat himself on a top log in such a position that he could not fail to see her at the gate, she waved to him. He threw her a careless kiss, and the train pulled out.

Presently when Moira lifted her Madonna glance to the frieze of timber on the skyline, there was a new glory in her eyes; and lo, it was autumn in the woods, for over that hill Prince Charming had come to her, and life was all crimson and gold.

When the train loaded with Cardigan logs crawled in on the main track and stopped at the log-landing in Pennington's camp, the locomotive uncoupled and backed in on the siding for the purpose of kicking the caboose, in which Shirley and Colonel Pennington had ridden to the woods, out onto the main line again—where, owing to a slight downhill grade, the caboose, controlled by the brakeman, could coast gently forward and be hooked on to the end of the log-train for the return journey to Sequoia.

Throughout the afternoon Shirley, following the battle royal between Bryce and the Pennington retainers, had sat dismally in the caboose. She was prey to many conflicting emotions; but having had what her sex term "a good cry," she had to a great extent recovered her customary poise—and was busily speculating on the rapidity with which she could leave Sequoia and forget she had ever met Bryce Cardigan—when the log-train rumbled into the landing and the last of the long string of trucks came to a stop directly opposite the caboose.

Shirley happened to be looking through the grimy caboose window at that moment. On the top log of the load the object of her unhappy speculations was seated, apparently quite oblivious of the fact that he was back once more in the haunt of his enemies, although knowledge that the double-bitted axe he had so unceremoniously borrowed of Colonel Pennington was driven deep into the log beside him, with the haft convenient to his hand, probably had much to do with Bryce's air of detached indifference. He was sitting with his elbows on his knees, his chin in his cupped hands, and a pipe thrust aggressively out the corner of his mouth, the while he stared moodily at his feet.

Shirley suspected she knew what he was thinking of; he was less than six feet from her, and a morbid fascination moved her to remain at the window and watch the play of emotions over his strong, stern face. She told herself that should he move, should he show the slightest disposition to raise his head and bring his eyes on a level with hers, she would dodge away from the window in time to escape his scrutiny.

(Continued next week.)

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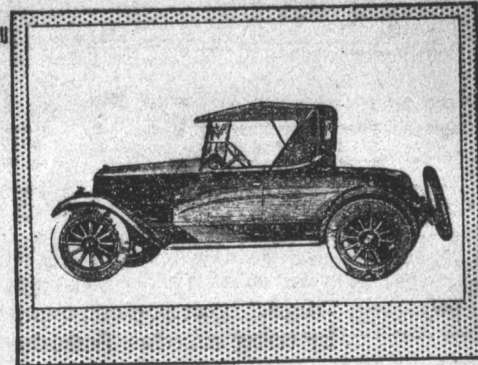
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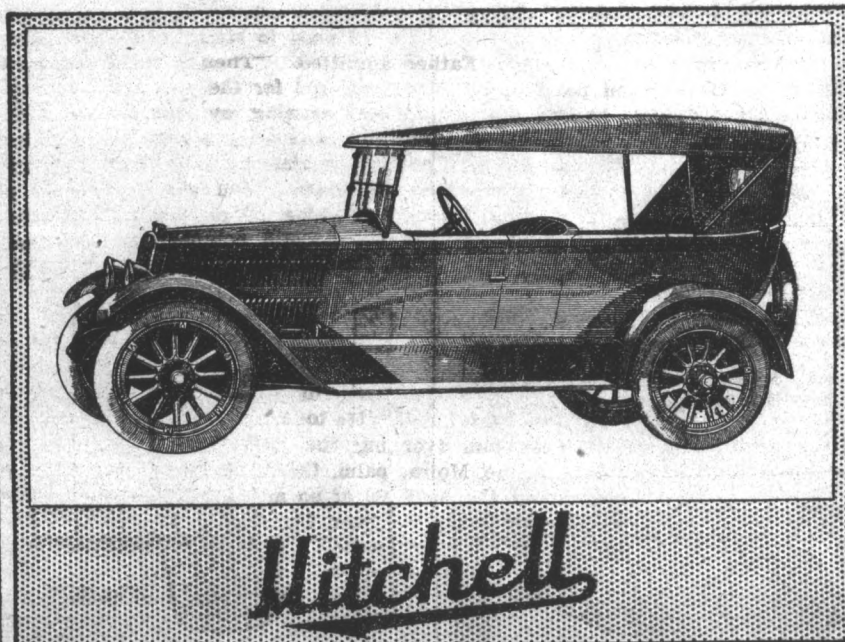
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80 ACRES

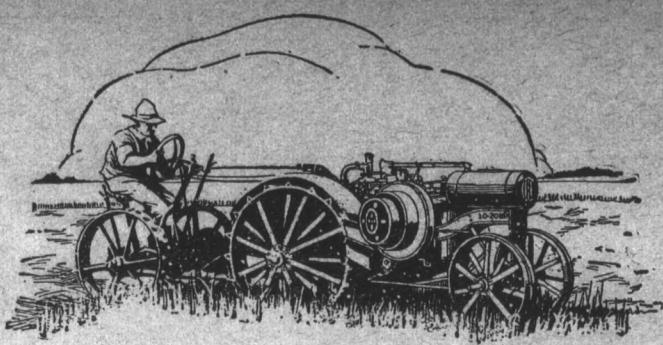
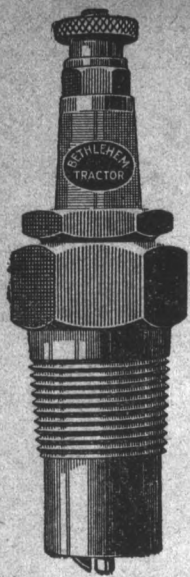
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America's Pioneer Dog Medicines

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

Farm Sewage Disposal

(Continued from page 951). made by ripping one-by-twelve-inch boards into one-by-five and a half and one-by-six-and-a-quarter-inch lengths. The pumping is usually done in the evening and the sewage soaks away rapidly without objectionable odors or trouble with flies. In the cold months the sewage is simply pumped out on the snow, and it either soaks away

into the ground or is carried away by the spring thaws. The tank shown is four feet wide inside and requires thirty bags of cement and about six cubic yards of gravel to build.

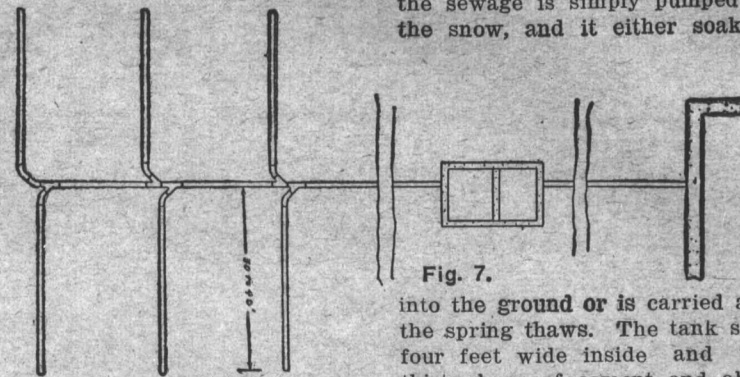


Fig. 7.

extant, especially in the summer, in the ground about the outlet if the soil is not unusually heavy.

A Tank for Flat Heavy Land.

The problem of sewage disposal in flat and badly drained localities, and where the sub-soil is very heavy, is more difficult and entails a greater expense than in well-drained and rolling land. Nevertheless, some of our best land is the bottom lands. Where the land has very little natural drainage and where the sub-soil is heavy clay or gumbo, a double compartment tank, as illustrated in Fig. 3, is the only satisfactory solution to the problem. The sewage flows into a small concrete compartment about the same size as the tank in Fig. 1, from whence it overflows into a large storage or collection chamber, which is built sufficiently large to hold the accumulation of two or more weeks sewage. As often as the second compartment becomes full, the sewage is pumped out on the

into the ground or is carried away by the spring thaws. The tank shown is four feet wide inside and requires thirty bags of cement and about six cubic yards of gravel to build.

The Tank for Rolling, Well-drained Country.

On the majority of farms, the land near the home has a good slope in some direction from the house and the sub-soil is fairly porous. Under such

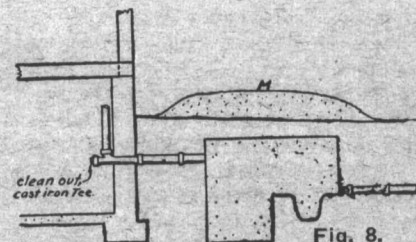


Fig. 8.

conditions it is possible to not only dispose of the sewage without pumping, but to largely purify the liquids after they leave the sewage tank. The sewage is first run into a two-compartment tank of the type shown in Fig. 4. These tanks are often made unnecessarily large. The first compartment of the tank is identical to that shown in Fig. 1. Here the sewage is liquified, after which it overflows into a smaller compartment, where it accumulates to

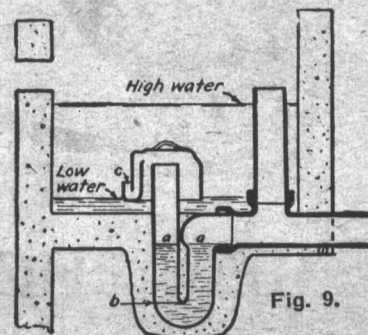
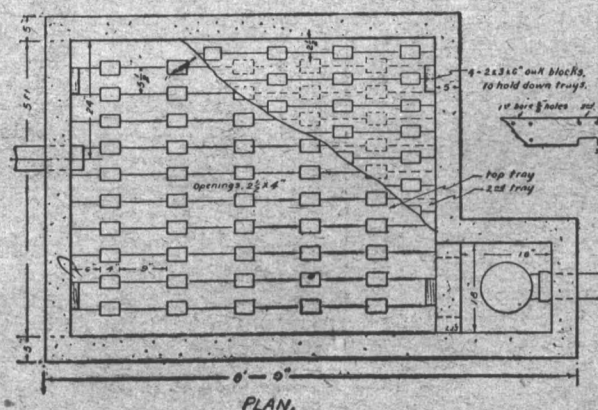


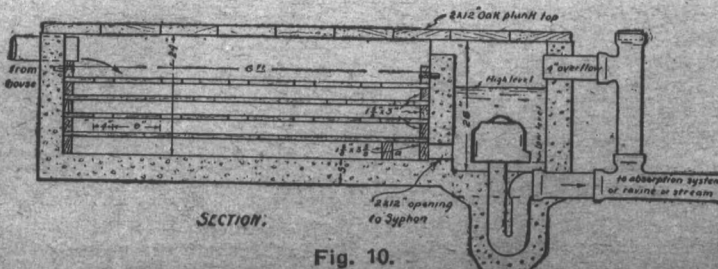
Fig. 9.

land by hand, windmill, gas engine or any other power. The tank is located fairly close to the house and often the sewage rapidly away into what is com-

power can be gotten by belt from a monkey known as the "Absorption System" in the basement which could also be used for running a churn, separator, attack and purify the liquids. The washing machine, etc. The sewage is absorption system consists in two hundred spread over quite an area by means of several lengths of wooden troughs, ordinary four-inch field drainage tile,



PLAN.



SECTION.

Fig. 10.

laid with open joints to a very gentle slope, not over two inches per hundred feet. Fig. 5. The syphon automatically flushes the sewage into the absorption system at a very rapid rate so as to distribute the sewage uniformly throughout all the tile. This action will occur once every eighteen to twenty-four hours. The field tile should be from fourteen to eighteen inches below the surface. If any part of the land above the tile is swept bare by the winter winds, it is wise to lay down a narrow strip of straw horse manure to catch the snow and hold back the frost.

In case the ground about the tile is rather heavy and the water does not seep away readily, the tile ditch should be dug an extra six inches deep and filled with a half-foot of gravel before laying the tile, (Fig. 6). Gravel should also be used to cover the tile to a depth of about four inches. Often the land above the absorption tile slopes so rapidly that the tile could not be laid as shown in Fig. 5 and keep the desired slope; in which case the branches may be run at right angles to the main tile line, as is shown in Fig. 7.

Sometimes the ground is high and well-drained, but rather flat, and the tile would have to be run a considerable distance in order to have the absorption system within eighteen to twenty-four inches of the surface of the ground. In such cases if there are to be no plumbing fixtures in the basement, the tank may be put nearer the level of the ground, as illustrated in Fig. 8, and if desired a mound "M" of the excavated dirt could be placed over the tank to give it added protection from frost.

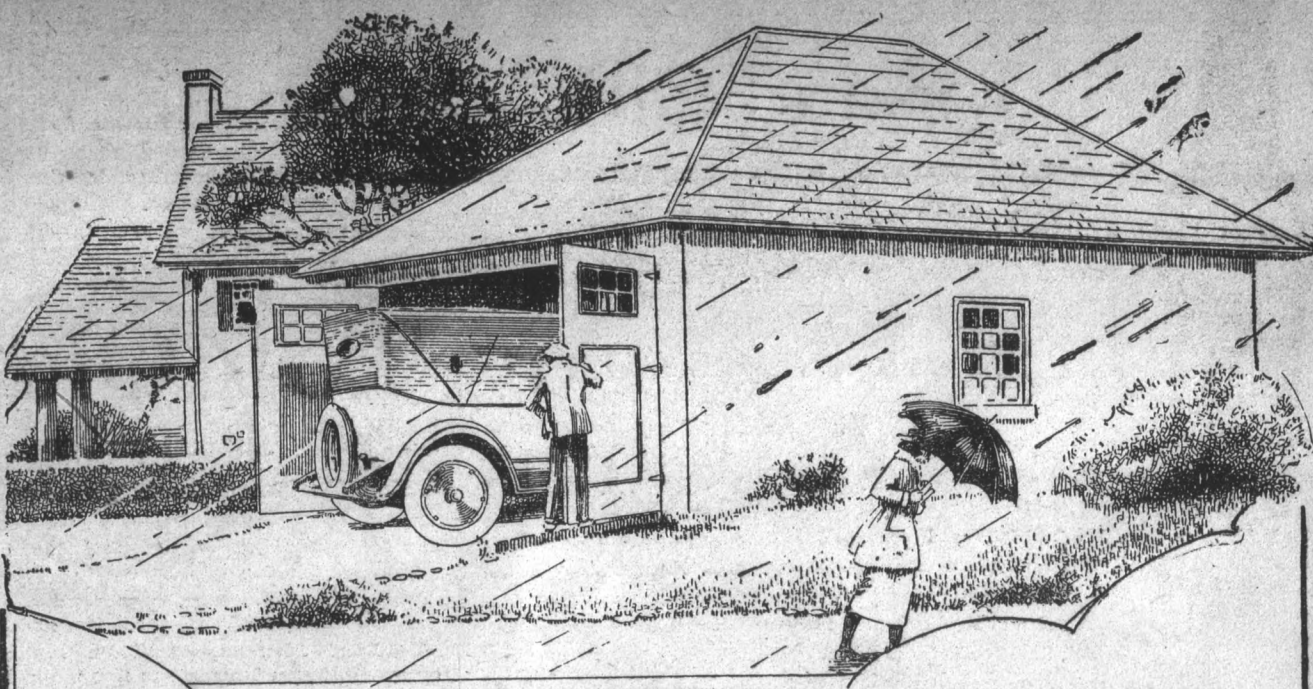
The Why of the Automatic Syphon.

Since it is well to have an intelligent understanding of all the parts of the sewage disposal system, a brief space should be given to the principle upon which the syphon works. It consists of two pieces, a cast iron U tube, usually for farm tanks three inches inside diameter; and a cast iron cap which rests upon the U tube, (Fig. 9). The cap can easily be lifted in case the syphon clogs. Before the cap is set in place, the trap in the U tube is filled with water to the overflow at "aa." Then, as the sewage overflows from the first compartment into the second, the liquid rises about the cap and also underneath same, compressing the air imprisoned under the cap, and lowering the level at "a" in the left leg of the U tube. As the water level rises this air pressure increases, until it forces the water in the trap down to "b," when the compressed air escapes, and the sewage following the air fills the cap almost instantaneously, and the syphoning action starts and continues until the sewage is down to the bottom of the cap. The second chamber is provided with an overflow, which will allow the sewage to dribble away to the absorption system in case the syphon becomes clogged. The overflow also allows a circulation of air through the absorption tile—an important point.

The New Aerobic Tank.

A later type of sewage tank has been developed in recent years. It has given good results in western Canada and should therefore be satisfactory in our milder winter conditions. Fig. 10 shows a top view and a side section of the tank. It is only two feet in depth inside and the main compartment is five feet by six feet. This larger compartment contains four wooden trays, built up of one-by-six rough boards. (Do not use smooth lumber). These trays have two and a half-by-four-inch openings. The entering sewage spreads over the surface of the top tray and dribbles down through the openings, over the lower trays, the solid matter clinging to the surface of the upper trays.

(Continued on page 969).



Safe and Dry Under MULE-HIDE

Ask your lumber dealer. If he doesn't handle MULE-HIDE a letter will bring him samples.



RAIN may be allright for your crops but it certainly is hard on your car. No automobile will give maximum service if its only shelter is a frail, leaky garage.

But a *weather-proof* garage—that's different. It means longer life to your car, and very often saves the annoyance and expense of frequent repairs.

You can have a weather-proof garage if you see that it has a good, tight roof of MULE-HIDE—the Roofing with that remarkable service record:

"Not a Kick in a Million Feet"

MULE-HIDE is durable and weather-resisting. It is also fire safe, each roll bearing the Underwriter's red label of inspection and approval.

If you prefer a roof that is more attractive still, one that has the same extra strength and quality as MULE-HIDE Smooth Finish Roofing, ask your dealer for MULE-HIDE Slate-Kote or MULE-HIDE Shingles. They are surfaced with red or grey-green crushed slate in its natural, unfading tints.

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Br. Leg. \$14 " "
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All our chicks are from selected breeders, kept on free range. Get your order in for some of these high grade chicks and be a successful poultry breeder. Special price on 1000 lots
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HILLPOT QUALITY CHICKS Order Now at Low June Prices
Prepaid to your door. Safe Delivery guaranteed. Terms cash with order. Can not send C. O. D.
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POULTRY

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Baby Chicks S. C. White Leghorns, bred to lay. After Apr. 1 will sell chicks and eggs from my exhibition pens, write for prices.
HILLSIDE POULTRY FARM, Hillsdale, Mich.

BARRED ROCKS. Eggs from vigorous from heavy laying strain. \$2 per 15, \$5 per 45. Prepaid by parcel post. R. G. Kirby, Route 1, East Lansing, Mich.

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White and Brown Leghorn and White Rock Pullets 8 weeks and 13 weeks old ready for immediate delivery.

We will sell one, two and four weeks old Chicks to be shipped not more than 100 miles. Let us give you a description of this stock.

All of these Pullets and Chicks are fine birds of excellent growth. American and extra high class English White Leghorns.

STATE FARMS ASSOCIATION

Desk 1, Kalamazoo, Michigan

Big Sturdy Baby Chicks and eggs for hatching. White Leghorns, Barred Rocks, R. I. Reds. Breeder and importer of Barron Strain White Leghorns the best layers obtainable. Safe delivery guaranteed. Catalogue free. **Brammers Poultry Farm, Holland, Mich.**

Baby Chix Whites and Brown Leghorns, B. F. Rocks, Baby and Anconas at reduced prices for June and July. Catalog free. **Knoll's Hatchery, R. 3, Holland, Mich.**

Baby Chix at special low summer prices, for free catalog and price list. Write for. **OLDS POULTRY & HATCHERIES, Marion O.**

EGGS from trapnested S. C. White Leghorns, Barron strain, also White Wyandottes that lay, at \$10.00 per hundred or \$2.00 per setting of 15 eggs. **MACALWHITE POULTRY YARDS, Caro, Michigan**

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Orescent White Leghorns; also Anconas, Brown and Buff Leghorns, Black & Inocenas, Reds, Rocks (Barred and White), and Wyandottes (Silver-laced and White). WE HATCH the eggs of Hoganized chicks on range on separate farms. **Orescent Egg Company, Allegan, Mich.**

Buy Your June Chicks near home. White Leghorns \$15 per 100; 50, \$7.75; 25, \$4.00. Delivered parcels post paid. Send for price list of other varieties. **WASHTENA W HATCHERY, Ann Arbor, Mich.**

CHICKS CHICKS

12,000 chicks a week after Mar. 20. Grand laying strains utility S. C. White Leghorns and Mottled Anconas. Strong, sturdy chicks shipped everywhere parcel post guaranteed safe arrival in lots 25-50, 100 or more. 12th season, order now. Fine free catalogue.
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Chicks Reduced Prices Bred-to-lay and exhibition S. C. W. Leghorns, stock that produced the winners in the state demonstration farm work. Winners at Detroit, Toledo and Oil City, Pa. **SUNNYBROOK POULTRY FARM, Hillsdale, Mich.**

BABY CHICKS of superior quality, from record laying purebred stock. White Leghorns, Brown Leghorns, \$18 per 100; Anconas, \$20. Postpaid. Live arrival guaranteed. Why buy cheap stock when you get quality at low prices? Catalog free. **SUPERIOR QUALITY HATCHERY, Clinton, Mo.**

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

Additional Poultry Ads on Page 969

Our Boys' and Girls' Department



Why Is Your Mother Respected and Honored? Where Did America's Ideals of Liberty Come From? What Is the Biggest, Most Powerful Business in the World? Bruce Barton Answers These Questions in This Article, and Also the Question—

When Is A Boy Too Old To Go To Church?

—By Bruce Barton
(Through Courtesy of American Boy)

I HAVE a friend of nineteen who quit going to church last year; and when I asked him why he had quit, he answered that a church was doubtless a good thing in its way—a nice place for women and children to meet on Sunday mornings, but no real place for a man, or a boy who was almost a man.

After he left me I got to wondering about what he had said. Is a church merely a place for women and children to go and sit and be preached to, or at? What is the church anyway? And at what age is a boy too old to take any more interest in it?

All of us have the very human habit of judging the big things of the world from a few small facts. We pick up the telephone receiver, and because central does not answer in a jiffy, we say "The telephone system is all gone to pieces." We ship a parcel to Chicago by express, and if it happens to be delayed twenty-four hours we think that the express companies are terribly inefficient. We see a little unpainted church, with a preacher who is struggling to support his family on starvation wages, and we think that the church is losing out.

But if we could see the thousands of miles of wire, the great army of trained employes, and the huge central stations that are the telephone system, we would never make a telephone call without feeling a sense of mystery and awe. Think of the miracle of it—to be able to sit in your own home, and without lifting your voice, have it carried across rivers and mountains for hundreds of miles. If we stopped to remember that it took weeks to carry the news of Cornwallis' surrender from Yorktown to New York, we would have a little better appreciation of the marvelous feat that the express company performs when it carries our parcels from Chicago to New York not in weeks, or in days, but in hours.

IN the same way we would get a very different picture of the church if we could see its world-wide sweep. We would gain a new respect for the little unpainted buildings at the country crossroads, for it is not an isolated unit, alone and unrelated.

It is really a branch office of the greatest business in the world. That business—which is the church—has more paid employes than the greatest corporation; it has headquarters in every country; its total budget amounts to hundreds of millions of dollars. It supports hospitals in every great city; it cares for thousands of babies in orphan's homes; it is curing sick people in India and China with its doctors; and teaching the boys and girls of Turkey and Hindustan in its schools. Don't despise the little white church, then because it is having a hard time.

Remember, first of all, that it is just one part of a great big whole—the local headquarters of a business that is bigger and finer and more inspiring than the business of the biggest trust or corporation that America has ever known.

To run a business of that size is a

job for men—big, red-blooded men; women can help wonderfully, but they cannot do it alone.

But suppose we go a little farther back. Every institution has a right to be judged not by what folks say about it, but by what it really stands for, by the things that it has done. Suppose we judge the church on that basis; and in making our judgment we'll omit every argument that is in any way theoretical. We'll limit ourselves to matters that affect you and me, as young Americans living in 1920.

WHO is the most important member of your household? Who is the one whom all the other members of the family delight to honor? Who is the one to whom your father pays greatest respect? Who has influenced your life the most? Your mother, of course. It is our pride, as Americans, that we honor our mothers above everyone else on earth. Perhaps it never occurred to you that honor to mothers

en to those savage islands, just as Christian missionaries have carried it into every land. Wherever the influence of Christianity spreads, the lives of mothers are made brighter and happier. And any boy who is not too old to feel a love for his own mother, is not too old to support an institution that is making life more worth while for mothers all over the world.

SOME day you will fall in love with a wonderful girl, and have a home of your own, and some boys and girls that will call you "Dad." When that time comes you would be willing to die rather than have any harm come to those babies of yours. But do you know what used to happen to babies in the olden days? Men did not value them highly; often they were regarded as a nuisance. Sometimes they were sacrificed to the heathen gods; in Egypt for instance, the great iron statue of Moloch was heated white hot, and mothers threw their scream-

tively young. The first colleges were started by ministers of the church. Harvard was founded by John Harvard, a Christian minister. William and Mary, the second college, was founded by a Christian minister. Yale was founded by a group of Christian ministers. Amherst, Williams, Dartmouth and scores of others were started by church people and supported for many, many years by contributions from the churches. Today there are said to be about four hundred and fifty thousand students in colleges, universities, and academies in this country. And more than half of them are in institutions supported by the churches. So any boy who expects to go to college ought to be glad to go to church; for if it had not been for the churches we should have had no colleges.

YOU may be sick some day, seriously sick; you may have to go to a hospital and that hospital may perhaps save your life. The chances are it will be a hospital that was made possible by the churches and still depends upon them for most of its support. There are thousands of boys and girls in the land whose parents died in their youth. Things would have gone very hard for them had it not been for the children's homes that the churches built and maintain.

Indeed you can hardly mention a single institution or society which exists for the common good that does not have its roots in the church. And you know enough about trees to understand how short a time a tree can live after you have severed the roots.

WE celebrate next month the Fourth of July, the birthday of our nation. Have you ever stopped to think who it was that gave us the ideals of liberty that have made America? Those ideals came across the ocean in a little boat named the Mayflower. In the cabin of that boat the first constitution was drawn up by a Christian minister and the members of his congregation. The government they established for the state was modeled after the government they had established for their church. They chose their governors in the same way that they had chosen their preachers—each state choosing its own governor without the consent of kings or emperors as each congregation had chosen its own pastor. The very institutions which we are proud to call American are institutions that were developed and tested first by Christian people in the organization and government of the Christian church.

AND the men who have made America great—did they think when they came to manhood that they were too old to go to church? Washington drove to church with his family every Sunday morning.

Daniel Webster was in church the Sunday before he died. His was the greatest brain that America has produced; scientists studied it and weighed it after his death because it was so

The First Lesson



Master Glen E. Miner, of Allegan, and His Purebred Holstein Calf. Who Knows But that Glen is Having His First Experiences in a Long and Successful Career as a Breeder.

is a comparatively new thing in the world. But that is the fact. When Jesus of Nazareth started His preaching, women were hardly better than slaves. It was an unheard of thing which He did—He made them His companions. Of the people closest to Him, whose names we know, more than half were women. He gave mothers a wholly new place in the world; and His church, in all the ages, has been the champion of women and of motherhood.

There are plenty of places under the sun where men still treat women as slaves. In the New Hebrides, for instance, it was the custom, when a man died, for his wife to be strangled to death and buried with him. That custom would still prevail in the New Hebrides, probably, if it had not been for a Christian missionary named John G. Paton who was sent out by the church. He carried reverence for wom-

ing infants into its flaming arms. In Greece babies were left out on the mountains to die; in China they were drowned. The world had a very poor opinion of babies until Jesus of Nazareth came.

He said: "Suffer the little children to come unto me and forbid them not; for of such is the kingdom of Heaven." It is to Him that we owe our reverence for babyhood. His Gospel, wherever it has been carried, has changed the thought of men about children. And any boy who some day expects to have boys and girls of his own, ought to stand up for the church; for the church has been forever, and forever will be, the best friend that boys and girls have.

YOU hope to go to college perhaps. And who was it that started our colleges? The State? No; the state universities are all of them compara-

great; and it was a Christian brain. Abraham Lincoln almost never missed Sunday morning worship. "God bless the churches," he exclaimed, "and blessed be God who, in this our hour of trial, giveth us churches." Nicolay and Hay, his biographers, say that in all the crises through which he was called to pass the churches were always at his back, ready and eager to respond to his call for support.

And Theodore Roosevelt declared: "I think it is the duty of every man to go to church. Frequently I have to listen to sermons that bore me. But the church has contributed so enormously to civilization, its service to society is so great, that irrespective of all other considerations I feel I ought to support it and to attend whenever I can."

LET us put away this idea that the church is merely a place for women and children to go. It is not a place; it is an influence, greater and more powerful than any other in the world. An influence that has made motherhood mean what it means to you and me; an influence that has given childhood a place of reverence in the thoughts of men; an influence that has created our colleges, and our social service institutions, and inspired the men whose names we honor most. Washington did not outgrow it; Lincoln never was too old to worship under its roof; Webster and McKinley and Roosevelt, and all the men whose names we remember on the nation's birthday, were glad to do honor to its name and service.

Surely no boy of your age or mine need be ashamed to follow in the footsteps of men like these!

TEXAS BOYS TO VISIT MICHIGAN.

ONE hundred and fifty Texas farm boys aboard a special train of five Pullman cars and observation coach, will tour Michigan and visit Detroit during August. The Farm Boy Special will be under the direction of the Texas Chamber of Commerce and the Texas A. & M. College, and the boys aboard the train will make the trip as prize awards for winning contests in corn, grain and cotton growing and stock raising. Thousands of Texas farm club boys are competing for places aboard the train; all expenses of each passenger will be paid, and no boy will be allowed to make the trip unless he qualifies as a prize winner.

FARMERS ARE TAKING VACATIONS.

BY ONE OF THEM.

FARMERS are rapidly getting the vacation habit. The urge put upon them by the great demands of a hungry world has so drawn upon their bodily reserve that vacations have been a necessary part of the summer program.

In this respect the well-established rule that it is best to get as far away from the hum-drum conditions of every day life to spend the outing, is especially applicable to the farmer. The man on land should endeavor to spend his holidays on or near the water. We recall a very refreshing lake trip on one of the Detroit & Cleveland Navigation Company steamers. The comforts of the boat, the visiting with people who were thinking along entirely different lines, the scenery, and above all the cool nights, exhilarating air and well-cooked meals, put us in shape to return to our farm duties with double the energy we had when we left.

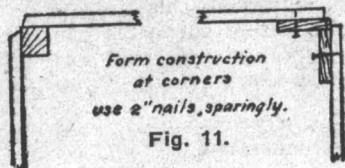
FARM SEWAGE DISPOSAL.

(Continued from page 967).

A small second compartment which is only eighteen-by-eighteen, contains a three-inch syphon, and the sewage is the same level in each compartment,

there being a two-by-twelve-inch opening at the bottom of the partition which separates the tanks. As the sewage level slowly rises in the tank, each tray is covered with the liquid, until, just as the top tray becomes covered, the automatic syphon flushes all the accumulated sewage out of the tank—no, not all, for the solids cling to the surface of the trays, where they are finally reduced to a liquid state. It is claimed that on account of the trays being exposed to the air most of the time, not only does a liquifying action take place in this tank but an aerobic or purifying bacterial action also occurs to a considerable degree.

The trays must not fit too tightly. They are prevented from floating by four blocks, as shown in the sectional view. The lower tray is made in two sections, and the two-by-four under the section nearest the two-by-twelve opening is set in from the partition wall about six inches, at "a," in order to let the sewage get into syphon chamber.



When this type of tank can be located near the surface of the ground, it is a very easy one to build, as one does not have to dig very deeply.

Building the Tanks.

All the tanks shown have been as simply designed as possible. The form work is only straight box construction. If the ground is fairly solid, no outside form is necessary, simply dig the pit carefully to the proper dimension, and at once put in a five-inch bottom of slushy concrete, and after about two hours, lower the inside form to place and put in the side walls. Leave the form in place at least three days, then remove carefully. One should not use too many nails in the form work. The corners should be built up by either method shown in Fig. 11, else it will be very difficult to get the boards out.

In conclusion, do not let any imaginary obstacles stand in the way of securing a modern plumbing system in the home. Most of the seemingly difficult problems will not loom up so large when one starts in to solve them.

Sunshine Hollow Items

By Rube Rubicon

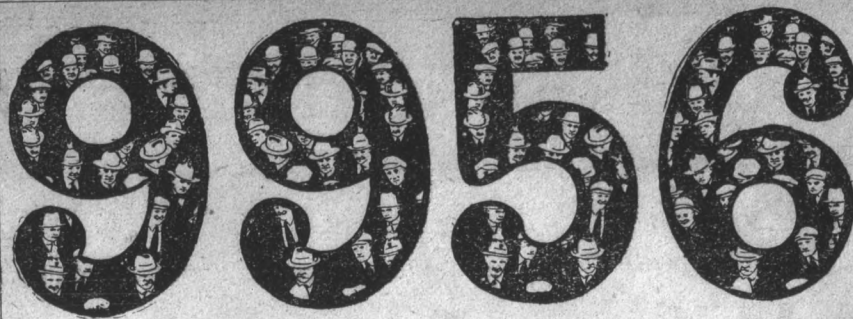
Solomon Cohn says that the mouth should be largely used for eating. In other words, he approves of sawing wood and keeping still. Folks say that Solomon has made lots of money and some don't like him very well, but he is a well established patron of the local bank, came in mighty strong on all the war drives and isn't half as tight as some of the spendthrifts in town like to believe.

Paul Morton found that the rats and mice used his corn crib for a self-feeder. He bought two kinds of poison, a half-dozen traps, and built over the crib. Now he furnishes a self-feeder to his poultry and hogs and finds that it is more profitable than doing the same for the pests.

Lawrence Morgan says this is the best recipe for making fried cakes: First you get a nice lot of holes, then wrap some dough around them and plunge them into the kettle kerplunk. When they bulge, fish 'em out.

Aunt Lucy Boyer always asks the conductor which end of the car to get off of. He always tells her that the car stops at both ends, which seems to ease her mind and make the city travel free from worry.

Uncle Ned Morgan is nearly ninety-two years old. He says he will never get tired of living as every day he learns something new and is always curious to find what in thunder is going to happen next.



Live Dealers Sell Carter White Lead

All over the United States, in every community, are found reliable paint dealers prepared to supply genuine Carter White Lead in reasonable quantities right out of stock, or to fill large orders promptly.

The mere fact that nearly 10,000 well informed paint dealers sell and recommend and probably 100,000 professional painters use Carter White Lead, "The Lead With the Spread," is convincing testimony that it makes good paint.

That Carter White Lead and pure linseed oil at today's prices provides a paint that is most economical in the long run and relatively low in first cost is a fact every buyer of paint should keep in mind. Ask your painter or paint dealer.

Carter White Lead is itself the whitest of white paint; at the same time by the adding of colors, obtainable from any dealer, it can be tinted to any shade desired.

Carter White Lead Co., Chicago, Ill.



POULTRY

Special Prices on Chicks

From June 15th on
20,000 chicks per week.



By parcel post prepaid. Delivered to you. Guaranteed Live delivery. Our chicks are hatched from pure bred farm range stock. Stock of good quality. Bred for heavy egg production. We have Utility and Exhibition Quality. Don't fail to take advantage of the prices below for these chicks will be money makers, for eggs and poultry are going to be higher again. Now understand that these prices will include our number one grade of chicks.

Will ship any number from 25 on up. S. C. White and Brown Leghorns at 13 cts. R. C. and S. C. Reds and Barred Rocks at 16 cts. S. C. Anconas at 15 cts. S. C. Black Minorcas at 18 cts. S. C. Buff Orpingtons at 20 cts. Odds and Ends at 12 cts. Send in your order direct from this ad. Or send for our free circular.

Hubers Reliable Hatchery,
East High St., Fostoria, Ohio.



BABY CHICKS

Direct from the World's Largest Incubator
THREE MILLION FOR 1920.

We have chicks hatching every day in the week and every hour in the day. Immediate delivery on the following breeds.

	100	500	1000
S. C. White Leghorns	17.00	82.50	160.00
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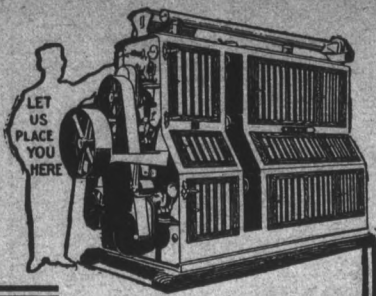
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30 DAYS TRIAL

Woman's Interests

The Sweetening Problem

HOW do you manage about sugar?" is the cry whenever housekeepers meet these days. The problem is a bothersome one, especially in families with growing children, where a certain amount of pure sweets is necessary for proper growth. But as we all got used to substitutes during war times, it shouldn't be so hard for us to think up substitutes now.

To begin with for you bee-keeping farmers, there is honey. Nothing, unless it be maple sugar and syrup, is so satisfactory a substitute for cane sugar as honey, and, if you haven't it yourselves there is usually someone in your neighborhood who does keep bees, so you should be able to get it without freight charges tacked on to the price.

Then there is maple sugar. Time was, not so many years ago, when many farming communities in Michigan had enough "sugar bushes" to supply the neighborhood at a reasonable price—though I believe we did grumble then at having to pay twenty-five cents a quart for maple syrup. Maple syrup isn't so plentiful with us now, but we can still get it in many places, and this furnishes a most satisfactory and appetizing sweet.

Either honey or maple syrup served at meals in limited portions will satisfy the craving for sweets, and help the family to forget they are not getting the cakes and pastries they have been accustomed to having. This method of "sweetening" the family, will also save the cook hours of baking. Then there are the sweet fruits we can buy and serve as desserts—figs, dates, raisins and bananas. The first three fruits may be cooked with rhubarb or other tart fruits and serve as sweeteners for them. Stewed rhubarb, to which has been added a fourth of a teaspoon of soda and a half a cup of raisins or chopped dates or figs will need little more sweetening. If it does require more a little syrup or strained honey will do as well as sugar.

Dates, raisins, prunes and figs added to bread or rice puddings will give enough sweetening without the addition of sugar. Use your own recipe, omitting the sugar and adding a cup of raisins or a scant three-fourth of dates or figs chopped. Although the price of these fruits may sound high, they are all about on a level with sugar now. Strained honey or syrup can also be used to sweeten the breakfast cereal, if the family can't eat it without sweetening. Cereals really need no sweet, however, as the starch and sugar belong to the same class of foods. The addition of rich milk or cream only makes a better balanced food than the usual way of serving with sugar and cream or milk.

The American palate craves cakes, and American cooks try to please. White cake without fine granulated sugar is an impossibility, but there are many dark cakes which can be made with molasses, syrup or honey, and which are really good. Gingerbread, for instance, may be made with molasses, and here is a recipe for the best you ever ate. It may be baked in a loaf or in gem tins, and is light, fluffy and palatable:

Fine Gingerbread.—One-third cup of butter, one cup of molasses, one cup

of boiling water, one egg, three cups of flour, one and one-half teaspoons of soda, one-half teaspoon of salt, one teaspoon of cinnamon, two teaspoons of ginger, a little grated orange peel.

Good, but much different in texture and color are:

Small Spice Cakes.—To one cup of molasses add one teaspoon of soda dissolved in one cup of boiling water, two tablespoons of melted butter, one teaspoon of cinnamon, one-half teaspoon of cloves, mace and salt, and three cups of flour. Beat until smooth and bake in gem tins in a moderate oven.

There are many recipes for cakes made with honey. These nearly all call for some sugar, but the amount is usually small. Of those following the last three are Marion Harland's.

Honey Cake.—One-half cup of butter, one-half cup of granulated sugar, one-half cup of strained honey, two eggs. Beat these until creamy yellow. Add two cups of flour, one rounding teaspoon of baking powder, one-eighth teaspoon of soda—honey always needs a little soda—sifted together, and one teaspoon of caraway seed. Bake as a loaf cake.

Honey Cakes.—Sift two cups of flour and stir into it a cup of sour cream, two tablespoons of strained honey and two of granulated sugar, a fourth teaspoon of cinnamon and a half teaspoon of ginger. Beat all thoroughly and add an even teaspoon of soda dissolved in two tablespoons of hot water. Beat hard again and drop in gem tins. These are especially good eaten hot.

Honey Gingerbread.—Beat two tablespoons of strained honey into a half cup of butter, first warming the butter slightly. Whip to a cream and then beat in a tablespoon each of powdered sugar and ginger. Have ready four eggs, yolks and whites beaten light separately, and add these alternately to other ingredients. Last of all, add three cups of flour sifted with a heaping teaspoonful of baking powder. Beat

vigorously for one minute, then pour into shallow pan or gem tins and bake one-half hour covered. Uncover and brown. Have a steady heat, not too intense.

Dutch Honey Cake.—To one pound of bread dough add one pound strained honey, a quarter-cup of butter, half a teaspoon each of cinnamon, cloves and nutmeg. Work these into the dough and add the grated rind of a lemon, a quarter pound of candied ginger and citron, both shredded, the yolks of four eggs beaten light, and the whites of two, also beaten, a half teaspoon of soda, dissolved in a little hot water, and one cup of flour. Make into a loaf, and bake covered for forty-five minutes. Then uncover and brown.

Cakes to which sauce or jam is added may be made and syrup substituted for the sugar called for. A larger measure of syrup than the sugar called for is needed, as corn syrup is not so sweet as sugar. Usually a little more flour should be added.

Apple Sauce Cake.—One and one-half cups apple sauce, one and one-half cups syrup, one-half cup butter, three and one-half cups of flour sifted with three teaspoons of baking powder, one-half teaspoon of cloves and nutmeg, and one teaspoon of cinnamon. A cup of raisins may be added.

Blackberry Jam Cake.—One-half cup of butter creamed, two eggs well beaten, one and one-fourth cups of syrup, one cup of blackberry jam—or any jam three tablespoons of buttermilk, one teaspoon of soda, two cups of flour sifted with one teaspoon of cinnamon and one-half teaspoon of cloves.

Dried Apple Fruit Cake.—Three cups of dried apples soaked over night in cold water. Chop next morning and stew till nearly soft in three cups of molasses. Add one cup of chopped raisins and stew a few minutes longer. Remove from stove and let stand until cold. Then add three cups of flour, one cup of shortening, three eggs and one

Embroidered Over-Blouse

NO garment in the summer girl's wardrobe will prove more popular than the over-blouse. For ordinary wear there are the plainer ones of linene or percale, while embroidery—simple or elaborate—is found on those of the finer materials. No girl could resist the charms of this blouse of Copenhagen crepe embroidered in white wool, with just enough of the black wool to "set it off." The short kimono cut sleeve means comfort for even the most strenuous out-of-doors activities.



teaspoon of soda. Beat well and bake in a slow oven. This makes two large cakes. The raisins may be omitted. The cake is improved by the addition of spices, though these are not called for in the original recipe.

Molasses Layer Cake.—One egg and the yolk of another broken into a coffee cup. Add five tablespoons of cold water, three of melted butter, and fill cup with molasses. Pour into mixing bowl, and add one and one-half cups of flour sifted with one level teaspoon of soda. Bake in two layers and put together with pie frosting made by beating the white of second egg stiff, and gradually beating in three tablespoons of powdered sugar.

Cocoonut Pudding.—Stir into one pint of milk one-half cup of strained honey or three-fourths cup corn syrup, add the yolks of two eggs beaten, one-teaspoon of vanilla, two tablespoons of grated cocoonut and five-eighths cup of fine cracker crumbs. Bake in buttered pudding dish until it thickens; remove from oven, spread top with beaten egg whites and return to brown.

Duff is always a welcome dessert. There are many recipes for this but here is one proven reliable.

Sailors' Duff.—One egg, two tablespoons of butter, five-eighths cup of molasses, one teaspoon of soda dissolved in one-half cup of boiling water, and one and one-half cups of flour. Steam one hour. Serve this with lemon sauce, fruit sauce or a whipped cream sauce made by beating the yolks of two eggs with a half cup of powdered sugar, and then beating into it one cup of whipped cream.

For a dessert which will make the family forget a sugar shortage and swear off sweets for a week, try plain duff with syrup sauce.

Duff with Syrup.—Mix a dumpling batter with one cup of flour sifted twice, with two level teaspoons of baking powder, one of salt, and enough water to make a stiff dough. Boil one cup of syrup with a lemon sliced very thin, and drop the dumplings into the boiling syrup with a teaspoon. Cover closely and boil ten minutes. Serve with the syrup in which they were cooked as a sauce. This makes an extra sweet dessert. If you use your own home-made maple syrup it may need a little water added to prevent candying before the puddings are done.

A. L. L.

SPECIAL CONFERENCES FOR WOMEN.

Special conferences will be held at M. A. C. during the college summer term, which runs from June 21 to July 30 this year, will include a conference for teachers of Household Art and Domestic Science, June 29 to July 2; a school of instruction for women in political organization, June 29 to July 2; the fifth annual conference for leaders of Boys' and Girls' Clubs, July 6 to 9; and special meetings for science teachers and teachers of agriculture.

TO PAINT NEATLY.

An amateur painter cannot avoid getting some paint on the hardware, such as locks, hinges, handles, pulls, etc. This gives the finished job a blotched appearance and partly spoils the effect of the new coat of paint.

Here is a little trick of the painter's trade that will serve the amateur painter well. Before beginning to paint the woodwork apply a coating of vaseline to the hardware; let the paint dry thoroughly; then wipe the vaseline off the metal parts and the paint will come off with it. This insures a neat, clean job of which the painter may be proud.

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The pioneer men and women whose strength and stamina laid the rock-like foundations of America's greatness were bread eaters. In wholesome bread made from good flour they obtained the nutrition that gave them strength to work and achieve.

For nearly sixty years the particular women of Michigan have used

Lily White

"The Flour the Best Cooks Use"

Look for the
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In this flour they found the means to give their families the food main-stay. Save for milk, bread is the food of greatest nutrition. LILY WHITE is scientifically milled to retain all the nutrition values of the wheat. Only the best wheat obtainable is used. It is cleaned four times, scoured three times and actually washed before going through the processes of breaking and milling. Every atom of dirt and undesirable material are eliminated.

This is why three generations have found bread made from LILY WHITE FLOUR delicious, palatable, wholesome and healthful. Looks good, bakes to a perfection that makes "homey" women proud. The same with biscuits and pastry. LILY WHITE is guaranteed to give perfect satisfaction.

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in dwelling, dairy, etc. Kills mosquitoes, bed bugs, chicken mites and lice, garden pests and many others. Used in the big Ford plant at Detroit and by hospitals, state institutions, etc., etc. Druggists and grocers sell loaded guns at 15 cents. Costs little to refill package Hofstra in 25c, 50c and \$1 sizes. If dealer can't supply you, send 15 cents to us and we'll mail loaded gun. **HOFSTRA MFG. CO., 210 N. Cheyenne, Tulsa, Okla.**



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Michigan Farmer Pattern Service

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Send ten cents in silver or stamps for our up-to-date spring and summer 1920 catalog, containing 550 designs of ladies', misses' and children's patterns, a concise and comprehensive article on dressmaking, also some points for the needle (illustrating thirty of the various, simple stitches) all valuable hints to the home dressmaker.

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No. 2880—Child's Set. Cut in four sizes, 6 mos., 1, 2 and 3 years. Size two will require of 36-inch material, two yards for the dress, ½-yard for the sack, and ¼-yard for the bonnet, with a quarter yard of lining. Price 12 cents.



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No. 3249—Porch or Home Dress. Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches, bust measure. It will require 6½ yards of 36-inch material for a medium size. The width of skirt at its lower edge is two yards. Price 12 cents.



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Our herd is under State and Federal Supervision.

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ORION, MICHIGAN

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

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Facts in BLACK & WHITE

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The class of cows that should be kept for dairy purposes is well illustrated by a farm survey made by P. H. Ross, county agent of Leavenworth County, Kansas, in which he states, "Blood will tell." The greatest producers and the most profitable producing cows always have been and always will be of dairy breeds, bred to produce milk and butter economically. Fifty-nine farms included in this survey were dairy farms, and the comparison with other breeds in producing milk and profits, showed \$38 more return for the Holstein-Friesian per year per cow than the other breeds, and more than three times as great an income per cow as did the dual purpose cows.

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ELI SPRUNGER & SON, Proprietors.

Holsteins of Quality

Fifteen High Grade Holstein Cows For Sale
E. A. HARDY, Rochester, Mich.

Our County Farm Bureaus

Continued from page 953). owns and operates a one-hundred-and-ninety-acre farm where he is devoting special attention to breeding improved seed corn. In 1909 he began his work with some original stock developed on his farm. All these years he has been selecting and breeding corn with the idea of developing a variety that would mature a maximum of sound ears during the normal growing season in Michigan. As a result of his painstaking labors we now have Folk's White-cap Yellow Dent. It's fairly early maturing and is of the dent type, which gives more weight of shelled corn per bushel of ears than most any other of the dent varieties of corn grown in Michigan, makes it especially valuable for Michigan conditions. Yields of one hundred and one hundred and ten bushels per acre are nothing uncommon on Mr. Folk's farm and the crop seldom fails to make full maturity before frost comes in the fall. Folk's reputation as a corn breeder is not confined to his own county and state. In 1916 his corn won the grand sweepstakes at the National Corn Show, and he has won many other state and national championships. His daughter is an enthusiastic corn breeder and exhibitor and has won nearly one thousand dollars worth of prizes at the leading fairs and exhibitions. Mr. Folks breeds small grain seeds as well as corn. He is deserving of the thanks of his fellow farmers for his efforts to improve their crops of corn and small grains.

Ed Ford represents Hanover on the executive committee. He owns and operates a farm and is an active supporter of all movements to make farm life more attractive and the business of farming more profitable. People from his community feel that he will prove an able member of the committee.

The farmers at Hanover have organized a shipping association and have shipped about \$50,000 worth of live stock during the past year. William A. Reed is president; Fred Folks, manager; Harry Estry, Wayne Weeks, John Lowell, Fay Conklin, directors.

Gifford Patch, of Clarklake, a member of the executive committee of the County Farm Bureau, owns and operates a splendid one-hundred-acre farm where he grows pedigreed grains. Mr. Patch is recognized as a practical farmer and an active worker for all things that go to build up the business and make the country a better place in which to live. His son, Gifford Patch, Jr., is county agent for Montcalm county.

At Pulaski the newly organized shipping association is ready to begin business. The officers are: Chauncey Allen, president; Henry Sherman, manager; Norman Carr, Luther Watson, Roy Kintigh, Glenn Folks, F. O. Butler, Don Rice, Levi Bates, directors.

In the vicinity of Concord the farmers have made rapid progress with their organization. The Concord Elevator Association during the several months it has been doing business has handled \$80,000 worth of business. The officers and directors are: Earl Wetmore, president; Clyde King, manager; Fred Hadley, John Lipert, Fred Householder, Harry Burke, Marvin Woodruff, Rupert Cox, William Warner, directors.

The Concord Shipping Association has shipped more than \$200,000 worth of live stock in the past eleven months. Its officers are: T. N. Hubbard, president; Clyde King, manager; Marvin Woodruff, Fred Hadley, Walter Dodes, Ed Wilcox, George West and Fred Householder, directors.

At Brooklyn, Mr. Ballard and the Circuit Rider attended an enthusiastic meeting of the Farmers' Cooperative Association. The new by-laws

adopted makes it possible for them to do business through the State Farm Bureau as soon as both organizations are ready to function. It was voted to go ahead and secure new quarters before the shipping season begins. Officers of the Brooklyn Cooperative Association are: Dr. H. F. Palmer, president; Luther Cook, secretary; Henry Cash, E. B. Ambler, Emory D. Neeley, Daniel Fuller, Vern Wheaton, William Randall, E. J. Wilber, directors. Last year the organization did \$100,000 worth of business.

Arthur Landon, an extensive cattle and sheep feeder, of Springport, is a member of the executive committee of the County Farm Bureau. Mr. Landon operates a two-hundred-and-forty-acre farm and is a comparatively young man. His success as a farmer, and keen insight into farmers' problems qualifies him for the new position.

Springport farmers are deeply interested in cooperative work and the shipping association did a business of \$200,000 last year. The officers are: D. W. Peters, president; W. C. Ford, manager; Elmer Losey, Guy Lininger, A. J. Courtright, directors.

M. L. Noon, president of the Jackson County Farm Bureau, owns a fine two-hundred-and-ten-acre farm south-east of Jackson. He is well known to the farmers of the county and state. Mr. Noon breeds registered Holstein cattle and Duroc Jersey swine, and is prominent in breeding and organization work. Always ready to join in any movement for the betterment of the farmer or to build up his community he has made a host of friends among the farmers and the business men of his county and state. Jackson county made a wise choice of leaders when it selected M. L. Noon for president.

L. Whitney Watkins, of Manchester, formerly president of the Jackson County Farm Bureau, is generally recognized as one of the real agricultural leaders of Michigan. On his two thousand-three-hundred-acre farm a few miles from Manchester he breeds Angus cattle, Shropshire sheep and pedigreed grains. Cattle and sheep are fed for market. One of his big projects is commercial orcharding and he owns one of the best young apple orchards in the state. Mr. Watkins has always been active in public affairs and his judgment is sought by many farmers throughout the state. Being a member of the State Board of Agriculture places him in a position to render a fine service to the farmers of his county and state. While his position on the State Board of Agriculture rendered it impossible for him to serve as president of the County Farm Bureau the present organization can always depend upon him for sound advice and vigorous support.

THE present county agent, Mr. C. V. Ballard, is a native of Gratiot county and graduated from M. A. C. in 1912. Mr. Ballard taught school at Hudson, Michigan, and Woodbine, New Jersey, and served five years as county agent in Dickinson county in the upper peninsula. Thoroughly familiar with both the practical and scientific side of farmers' problems he is taking hold of his new work in a manner that is pleasing the farmers of Jackson county. While discussing his new work Mr. Callard said: "I want to push this seed work on a big scale and make it profitable as a business for our farmers. I am confident that it is going to prove a highly profitable business as soon as the growers are in a position to capitalize on their efforts along these lines. We aim to work with the State Farm Bureau in every possible way. Another problem is that of getting our organization work completed so that our seventeen hundred members will be working along the

right lines and getting direct benefits from their county and state organizations. Other projects will be given due attention, but I consider the crop improvement and organization problems the ones which demand immediate attention."

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Silo Prices Smashed

Startling Reductions in Saginaw Redwood Silo Prices Made Possible by Purchase of Redwood from Government—Saves \$100 to \$300 per Silo

This is without question the biggest silo offer we have ever been able to make. This Redwood was purchased by the Government for war purposes. It was not used and due to our big purchasing power we were able to buy the whole lot at an astonishingly low price—much lower than present market prices. We are passing these savings along to you.

75 Ton Silo Only \$377

Think of it, a 73 ton Saginaw Redwood Silo for \$377.00. It is almost unbelievable.

This Offer Appears Only Once

Once this announcement is made, these silos are going like hot cakes and these prices hold good only so long as our supply of this wonderful Redwood lasts. If you are lucky enough to get one of these silos you must act quickly.

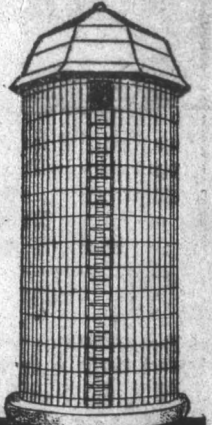
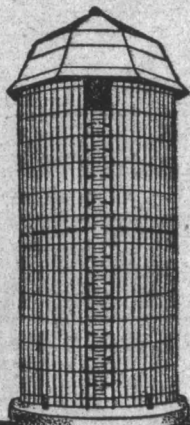
You will never have an opportunity like this again. This offer will be made only once. It's up to you to act immediately.

Write Us Now For Particulars and Complete Price List. Address Department No. 10

Saginaw Mich. **THE McCLURE COMPANY** Cairo, Ill.

No More Than Two Silos to Each Bona-fide User

These silos positively will not be sold to speculators. Not more than two to each purchaser and he must be a bona-fide user.



-WinnWood Herd- Flint Maplecrest Boy no.166974 Has Made Good

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

A Few Females For Sale

—OUR JUNIOR HERD SIRE—

Sir Ormsby Skylark Burke No. 264966

A brother to the world champion cow over all breeds.

DUCHESSE SKYLARK ORMSBY

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

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

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

OUR HERD SIRE

Model King Segis Glista

By a 30 lb. son of Lakeside King Segis Alban De Kol. His dam Glista Fenelle 22.37 lbs. Her dam Glista Ernestine 25.25 lbs. His three nearest dams average over 33 lbs and his forty-six nearest tested relatives average over 30 lbs. of butter in seven days. Write for prices on his sons.

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

Hatch Herd (State and Federal Tested) Ypsilanti, Michigan

Offers young sires, yearlings and younger, out of choice advanced registry dams and King Korndyke Artis Vale: Own dam 34.16 lbs. butter in 7 days; average 2 nearest dams 37.61, 6 nearest 33.93, 20 nearest 27.83

A BULLY GOOD BULL CALF.

Born July 1919. His six nearest dams have good yearly records. Amongst them are three world's records Good individual, nicely marked, and worth in any good herd all he will cost. You can't pay too much for this kind. I have a fine four months bull, not quite so well bred but a nice one.

Fayette, Ohio

LONG DISTANCE

close up dams average above 1200 lbs. butter and 24,000 lbs. milk in 1 yr. His dam untested—\$100. A. Fleming, Lake, Mich.

"TOP NOTCH"

HOLSTEINS

McPHERSON FARMS COMPANY

has raised many great milk cows—

1 Officially Produced

1 " " 3394 lbs. milk in 30 days

1 " " 120 lbs. milk in 1 day

1 " " 811 lbs. milk in 7 days

1 " " over 10000 lbs. milk in 100 days

1 " " 105 lbs. milk in 1 day

1 " " 686 lbs. milk in 7 days

1 " " 2869 lbs. milk in 30 days

1 " " 100 lbs. milk in 1 day

1 " " 20854 lbs. milk in 1 year

1 " " 100 lbs. milk in 1 day

1 " " 639 lbs. milk in 7 days

1 " " 18675 lbs. milk in 1 year

Others under test are making large milk records

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

Our herds are under U. S. supervision.

McPHERSON FARMS CO., Howell, Mich.

May Echo Sylvia Bull calf. 2 crosses to May Echo Sylvia, and 3 crosses to King of the Pontiacs. Dam a 2 yr. old daughter of a 29 lb. cow, 6 of his nearest tested dams average 34 49 lb. of butter and 759 milk.

C. H. GIDDINGS, Gobleville, Mich.

For Sale several good young registered Holstein cows bred for fall and winter, priced \$300 each. Herd under state supervision.

OARL HITCHCOCK, Charlotte, Mich.

Reg Holstein Bull calf born Dec 19, a beauty & white reg. and del. for \$100, would take Liberty Bond.

J. R. HICKS, St. Johns, Mich.

HOLSTEIN

BULL CALVES FOR SALE

From dams with good records.

BULL CALVES Sired by 45 lb. BULL.

BULL CALVES Sired by 34 lb. BULL.

BULL CALVES Sired by 33 lb. BULL.

PRICES VERY REASONABLE.

Privilege of return if not satisfied.

A. W. COPLAND,

Birmingham, Michigan.

Herd under State and Federal Supervision.

CLUNY STOCK FARM

A Semi-Official Bred Bull to Head

Your Head

Maplecrest Application Pontiac No.132652, heads

Our Herd

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

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

For Pedigrees and Prices write to

R. Bruce McPherson, Howell, Mich.

Reg. Holstein Heifers. Will offer some choice ones

at calf club sale here June 25 1920. Write for catalog.

B. B. REAVEY, Akron, Mich.

The Traverse Herd

We have what you want in BULL CALVES—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.

Holsteins For Sale

Ten head of registered heifers

under one year old, eight head of yearlings, four

pick of ten head of cows 4 to 6 yr. old out of a herd of

twenty-four. All due to freshen before Oct. 1st one

two year old bull sired to the Flander's bull who sired

by King of the Pontiac's and out of one of King

Segis Best daughter with an A. R. O. record of 33 lbs.

The dam of this bull has A. R. O. record of 29 37-100.

Here is a perfect bull, on acct of labor condition with

me must sell this stock come and see these cattle in

stead of writing if possible.

H. B. CLARK, Northville, Mich.

25 miles from Detroit, Electric Car every hour.

42.5 lbs. butter 725 lbs. milk in 7 days Idleose

\$150 terms. His dam is daughter of Maplecrest Korn.

Heng. M. L. McLAULIN, Redford, Mich.

Registered Holstein Bull

Born Mar. 3, 1920 Dams record 20.48 lb. butter from

424 lb. milk as a 2 yr. old. He's a good one, I'm proud

of him and he is yours for \$150.

EARL PETERS, North Bradley, Mich.

Herefords. Just purchased 3 new herds, now have

either sex, horned or polled, any age. Priced reason-

able. THE McCARTYS, Bad Axe, Mich.



The Feed That Makes the Milk Yield



Corn Products Refining Co.
New York Chicago

Write to NATIONAL STARCH COMPANY, 606 Ford Bldg., Detroit, Mich.

If you have not made up your mind as to what is the best feed for large milk production, for either summer conditions or heavy feeding in winter, visit the dairy farmers in the eastern states and see what they feed. These farmers are supplying large markets with milk. Their principal production is dairy products.

Ask them what high-protein feed they are using to make up the main strength of their rations. The answer will invariably be that they are feeding Buffalo Corn Gluten Feed, and have fed it for a good many years—and, in a great many cases, their fathers fed it before them.

BREEDERS' DIRECTORY

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

Wildwood Farms Angus

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

Our herd is under State and Federal Supervision.

WILDWOOD FARMS ORION, MICHIGAN

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

WOODCOTE ANGUS

Established in 1900
Trojan-Ericas and Blackbirds.
Write for 1920 Bull sale list.
WOODCOTE STOCK FARM,
Ionia, Mich.

For Sale At reasonable prices. Registered Aberdeen-Angus bulls from ten to twenty-two months of age. LANG BROS., Davison, Mich.

GUERNSEY BULL CALVES whose sire's dam made 19,460.20 milk, 909.05 fat. Their mother's sire's dam made 15,109.10 milk, 778.80 fat.
T. V. HICKS, Battle Creek, Mich.

Registered Guernseys
A fine 2 year old bull right in every way. \$150.00 buys him.
J. M. WILLIAMS, No. Adams, Mich.

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

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

Herd Federal inspected. Bull calf Guernseys, 7 mos. old, sired by a son of Imp. Spotwoods Sequel. Dam, a high class cow of A. R. breeding. \$150 takes him. 5 others 3 to 6 mos. old, priced right. Satisfaction guaranteed. G. W. & H. G. Ray, Albion, Mich.

Guernseys Five pure bred Guernsey Bulls. Write your requirements. WALTER PHIPPS FARM, Geo. E. Currie, Mgr., 80 Alfred St., Detroit.

Facts in BLACK & WHITE

The Wisdom of Keeping Strictly Dairy Cows

The class of cows that should be kept for dairy purposes is well illustrated by a farm survey made by P. H. Ross, county agent of Leavenworth County, Kansas, in which he states; "Blood will tell." The greatest producers and the most profitable producing cows always have been and always will be of dairy breeds, bred to produce milk and butter economically. Fifty-nine farms included in this survey were dairy farms, and the comparison with other breeds in producing milk and profits, showed \$38 more return for the Holstein-Friesian per year per cow than the other breeds, and more than three times as great an income per cow as did the dual purpose cows.

Send for the valuable Holstein booklets. They are sent free.

THE HOLSTEIN-FRIESIAN ASSOCIATION
164 Hudson Street
Brattleboro Vermont.

BUTTER BOY ROSINA PRINCE 25372. Herd sire a 30 lb. cow that made 1945 lbs. in one year, and Dan Butter Boy Rosina 2nd 200540 made 29 lbs., and almost 800 lbs. in ten months, she has a 33 and 34 lb. sister. Have some fine Bulls and Heifers and some heifers bred to him, all from A. R. O. Cows, with records from 22 to 30 lbs. Hampshire Hogs—Fall Boars ready for service, and gilts. Also looking orders for Spring Pigs. Belgium, Percheron Stallions and Mares. Imported and American bred. Write or come and see us.
SAGINAW VALLEY STOCK FARM,
Saginaw, W. S., Michigan
ELI SPRUNGER & SON, Proprietors.

Holsteins of Quality

Fifteen High Grade Holstein Cows For Sale
E. A. HARDY, Rochester, Mich.

Our County Farm Bureaus

Continued from page 953).
owns and operates a one-hundred-and-ninety-acre farm where he is devoting special attention to breeding improved seed corn. In 1909 he began his work with some original stock developed on his farm. All these years he has been selecting and breeding corn with the idea of developing a variety that would mature a maximum of sound ears during the normal growing season in Michigan. As a result of his painstaking labors we now have Folk's White-cap Yellow Dent. It's fairly early maturing and is of the dent type, which gives more weight of shelled corn per bushel of ears than most any other of the dent varieties of corn grown in Michigan, makes it especially valuable for Michigan conditions. Yields of one hundred and one hundred and ten bushels per acre are nothing uncommon on Mr. Folk's farm and the crop seldom fails to make full maturity before frost comes in the fall. Folk's reputation as a corn breeder is not confined to his own county and state. In 1916 his corn won the grand sweepstakes at the National Corn Show, and he has won many other state and national championships. His daughter is an enthusiastic corn breeder and exhibitor and has won nearly one thousand dollars worth of prizes at the leading fairs and exhibitions. Mr. Folks breeds small grain seeds as well as corn. He is deserving of the thanks of his fellow farmers for his efforts to improve their crops of corn and small grains.

Ed Ford represents Hanover on the executive committee. He owns and operates a farm and is an active supporter of all movements to make farm life more attractive and the business of farming more profitable. People from his community feel that he will prove an able member of the committee.

The farmers at Hanover have organized a shipping association and have shipped about \$50,000 worth of live stock during the past year. William A. Reed is president; Fred Folks, manager; Harry Estry, Wayne Weeks, John Lowell, Fay Conklin, directors.

Gifford Patch, of Clarks Lake, a member of the executive committee of the County Farm Bureau, owns and operates a splendid one-hundred-acre farm where he grows pedigreed grains. Mr. Patch is recognized as a practical farmer and an active worker for all things that go to build up the business and make the country a better place in which to live. His son, Gifford Patch, Jr., is county agent for Montcalm county.

At Pulaski the newly organized shipping association is ready to begin business. The officers are: Chauncey Allen, president; Henry Sherman, manager; Norman Carr, Luther Watson, Roy Kintigh, Glenn Folks, F. O. Butler, Don Rice, Levi Bates, directors.

In the vicinity of Concord the farmers have made rapid progress with their organization. The Concord Elevator Association during the several months it has been doing business has handled \$80,000 worth of business. The officers and directors are: Earl Wetmore, president; Clyde King, manager; Fred Hadley, John Lipert, Fred Householder, Harry Burke, Marvin Woodruff, Rupert Cox, William Warner, directors.

The Concord Shipping Association has shipped more than \$200,000 worth of live stock in the past eleven months. Its officers are: T. N. Hubbard, president; Clyde King, manager; Marvin Woodruff, Fred Hadley, Walter Dodes, Ed Wilcox, George West and Fred Householder, directors.

At Brooklyn, Mr. Ballard and the Circuit Rider attended an enthusiastic meeting of the Farmers' Cooperative Association. The new by-laws

adopted makes it possible for them to do business through the State Farm Bureau as soon as both organizations are ready to function. It was voted to go ahead and secure new quarters before the shipping season begins. Officers of the Brooklyn Cooperative Association are: Dr. H. F. Palmer, president; Luther Cook, secretary; Henry Cash, E. B. Ambler, Emory D. Neeley, Daniel Fuller, Vern Wheaton, William Randall, E. J. Wilber, directors. Last year the organization did \$100,000 worth of business.

Arthur Landon, an extensive cattle and sheep feeder, of Springport, is a member of the executive committee of the County Farm Bureau. Mr. Landon operates a two-hundred-and-forty-acre farm and is a comparatively young man. His success as a farmer, and keen insight into farmers' problems qualifies him for the new position.

Springport farmers are deeply interested in cooperative work and the shipping association did a business of \$200,000 last year. The officers are: D. W. Peters, president; W. C. Ford, manager; Elmer Losey, Guy Lininger, A. J. Courtright, directors.

M. L. Noon, president of the Jackson County Farm Bureau, owns a fine two-hundred-and-ten-acre farm south-east of Jackson. He is well known to the farmers of the county and state. Mr. Noon breeds registered Holstein cattle and Duroc Jersey swine, and is prominent in breeding and organization work. Always ready to join in any movement for the betterment of the farmer or to build up his community he has made a host of friends among the farmers and the business men of his county and state. Jackson county made a wise choice of leaders when it selected M. L. Noon for president.

L. Whitney Watkins, of Manchester, formerly president of the Jackson County Farm Bureau, is generally recognized as one of the real agricultural leaders of Michigan. On his two thousand-three-hundred-acre farm a few miles from Manchester he breeds Angus cattle, Shropshire sheep and pedigreed grains. Cattle and sheep are fed for market. One of his big projects is commercial orcharding and he owns one of the best young apple orchards in the state. Mr. Watkins has always been active in public affairs and his judgment is sought by many farmers throughout the state. Being a member of the State Board of Agriculture places him in a position to render a fine service to the farmers of his county and state. While his position on the State Board of Agriculture rendered it impossible for him to serve as president of the County Farm Bureau the present organization can always depend upon him for sound advice and vigorous support.

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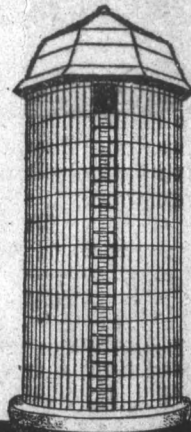
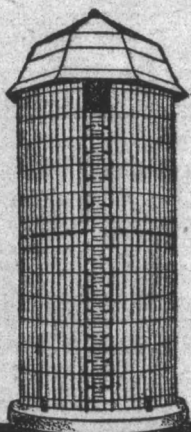
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HOLSTEINS
McPHERSON FARMS COMPANY
has raised many great milk cows—

1 Officially Produced
842 lbs. milk in 7 days
3394 lbs. milk in 30 days
120 lbs. milk in 1 day
811 lbs. milk in 7 days
over 10000 lbs. milk in 100 days

105 lbs. milk in 1 day
699 lbs. milk in 7 days
2869 lbs. milk in 30 days
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For Sale several good young registered Holstein cows bred for fall and winter, priced \$300 each. Herd under state supervision.
OARL HITCHCOCK, Charlotte, Mich.

Reg Holstein Bull calf born Dec 19, a beauty & white reg. and del. for \$100, would take Liberty Bond.
J. R. HICKS, St. Johns, Mich.

HOLSTEIN

BULL CALVES FOR SALE

From dams with good records.
BULL CALVES Sired by 45 lb. BULL.
BULL CALVES Sired by 34 lb. BULL.
BULL CALVES Sired by 33 lb. BULL.
PRICES VERY REASONABLE.

Privilege of return if not satisfied.
A. W. COPLAND,
Birmingham, Michigan.
Herd under State and Federal Supervision.

CLUNY STOCK FARM

A Semi-Official Bred Bull to Head
Your Herd
Maplecrest Application Pontiac No.132652, heads

Our Herd
His dam's record is 1344.3 lbs. butter 23,421.2 lbs. milk in 365 days, and 35.103 lbs. butter and 615.6 lbs. milk in 7 days.

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

For Pedigrees and Prices write to

R. Bruce McPherson, Howell, Mich.

Reg. Holstein Heifers. Will offer some choice ones at calf club sale here June 25 1920. Write for catalog. B. B. REAY, Akron, Mich.

The Traverse Herd

We have what you want in BULL CALVES—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.

Holsteins For Sale

Ten head of registered heifers under one year old, eight head of yearlings, your pick of ten head of cows 4 to 6 yr. old out of a herd of twenty-four. All due to freshen before Oct. 1st one two year old bull sired to the Flander's bull who is sired by King of the Pontiacs and out of one of King Segis Best daughter with an A. R. O. record of 23 lbs. The dam of this bull has A. R. O. record of 29 37-100. Here is a perfect bull, on acct of labor condition with me must sell this stock come and see these cattle instead of writing if possible.

H. B. CLARK, Northville, Mich.

25 miles from Detroit, Electric Car every hour.

42.5 lbs. butter 715 lbs. milk in 7 days Idlease Pontiac Lass you can have herdson for \$150 terms. His dam is daughter of Maplecrest Korn. Heng. M. L. McLAULIN, Bedford, Mich.

Registered Holstein Bull

Born Mar. 3, 1920. Dams record 20.48 lb. butter from 424 lb. milk as a 2 yr. old. He's a good one, I'm proud of him and he is yours for \$150.

EARL PETERS, North Bradley, Mich.

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

GOOD HORSE SENSE.

AN acute shortage of good draft horses now confronts the country. Farmers are realizing more and more that draft horses furnish a most efficient and economical power on the farm. The supply of good draft horses falls far short of the demand. For several years many of our farmers and breeders have neglected breeding their mares. In one township in this state a recent survey of the horse situation shows only two yearling colts and one mare to foal this spring. The young stock coming on for replacement is not here.

Very few farmers own more horses at the present time than are absolutely needed for their work. Horses of the right type for farm work are very scarce. The source of supply of good draft horses is on the average farm. Every farmer throughout the country should breed all his good brood mares this season to the best available stallion, whatever the fee may be. Each farmer who is careful to breed his mares to a sire of the right type insures his own future supply for replacement, and a surplus for market which will bring a good profit for the raising.

Prices on draft animals have made great advances the past six months, and will continue to go up, governed by the law of supply and demand. These high prices should be an inducement to farmers to begin breeding operations at once. The market has never been better, nor the future brighter for draft horses and geldings with size and quality for farm work and city use.

The wide-awake farmers realize the situation in the draft horse world and are getting busy. They will be richly rewarded. Those who fail to see the opportunity will pay dearly for their negligence.

Dr. J. P. HUTTON,
M. A. C., East Lansing, Mich.

VETERINARY.

Round White Worms.—I have young horse that is troubled with stomach worms which are about the size of a lead pencil. J. R. E., Hillsdale, Mich.—Give him two ounces of turpentine in twenty ounces of raw (not boiled) linseed oil every ten days until three doses have been given.

Sore Eyes.—I have a five-year-old gelding that caught cold. Since then his eyes discharge mucus, which is quite thick and a yellow color. E. C., Bellaire, Mich.—Dissolve forty grains of boric acid and forty grains of borate of soda in one-quarter pint of clean water and apply to eyes three times a day. Occasionally blow one part calomel and four parts boric acid into eyes.

Blood-Poison—Weakness.—I recently had a three-year-old stallion castrated, he swelled considerably; now when down is unable to get up. Most of his weakness is in hind quarters. L. V. R., Fennville, Mich.—Give him one dram doses of fluid extract of nux vomica and twenty grains of quinine three times a day. Open wounds and allow pus to escape; swab out cavity with tincture of iodine daily. Feed him plenty of oats and mixed hay.

Sweeny.—I have a nine-year-old mare that was sweened last winter. I blistered her three times, also had our local Vet. look at her. He said nothing could be done for her. He advised me to put her to work, but I find work makes her sore all over. She is stiff in hind quarters and when moving, cripples along. Have been applying sweet oil. W. W. H., Alma, Mich.—Apply equal parts of turpentine, aqua ammonia and raw linseed oil to sweened parts three times a week.

Fistula on Ear.—I have a two-year-old colt that has a hole about the size of a lead pencil on the edge of ear, which runs downward, but it refuses to heal. The discharge is thick, much like the white of an egg. Our local Vet. tells me he has never seen a case like it. What shall I apply? J. W., West Branch, Mich.—Doubtless this is a case which requires proper drainage and if you will rip it open to bottom, or tap it at bottom, might effect a cure. When opened swab out cavity with tincture of iodine occasionally.

62-Reg. Holsteins-62

First Macomb County
Consignment Sale

June 30th, 1920

Sale at 1 P. M.

Fairchild Farms, Chesterfield, Mich.

(25 Miles from Detroit, on Gratiot Ave.)

11:16 A. M. Limited from Port Huron and 12:10 P. M. Limited from Detroit will Stop at the Door.
Also Hourly Local Service Both Ways.

HEREFORDS

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

ALLEN BROS.

PAW PAW, MICHIGAN

The Wildwood Farm

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

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

FOR SALE Jersey Bulls ready for service R. of M. ancestors. Raleigh-St. Lambert breeding. Jerseys stand for economy. Waterman & Waterman, Packard Rd. Ann Arbor, Mich.

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

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

Bulls ready for service from our herd bull Marguerite Premier, grandson of Pogue 99th of Hood Farm, and cows now on test for R. of M. Smith & Parker, Howell, Mich.

For Sale. Jersey bull ready for service sired by Flying Fox's Gay Lad. Dam record 47.5 lbs. butter 86% lbs. milk. Notten Farm, Grass Lake, Mich.

BIDWELL SHORTHORNS
You Can Buy

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

BIDWELL STOCK FARM,
Box D, Tecumseh, Michigan

Royal Bruce 75521 heads our herd. Three half brothers sold for \$55,000.00. One Olney Proud Augusta going to head Wm. Duthies of Collyne's herd at \$21,000.00. One bull and a number of females for sale. OARR BROS. & CO., Bad Axe, Mich. Norman Carr, Secretary.

Richland Stock Farms
Home of the Michigan Champions.
Shorthorn Sires in Service:

IMP. Lorne, IMP. Newton Champion, Sterling Supreme. Why not buy a young bull to head your herd that carries the blood that is making Shorthorn History. Only a few real headers left. Write your wants.

C. H. PRESCOTT & SONS, Tawas City, Mich.

For Sale Shorthorns of Quality Scotch and Scotch Topped descendants of Archers Hope, Avondale, Max walton Sulton and White Hall Sulton. Model Type, by the Oscola Co. Shorthorn Breeders Ass. John Schmidt, Sec. Reed City, Mich.

Central Mich. Shorthorn Breeders Ass. offer 40 bulls, 38 females, write for new list. OSCAR SKINNER, Sec. Gowen, Mich.

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

The Kent Co. Shorthorn Assn. have males and females of quality for sale. A. E. RAAB, Sec. Caledonia, Mich.

Milking SHORTHORNS Olav bred bull calves Shorthorns under Federal Supervision. Davidson & Hall, Beaud and Beaud, Tecumseh, Mich.

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

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

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

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

For Sale One Thoroughbred Brown Swiss Bull. Nine months old. E. H. EISELE, Manchester, Mich.

HOGS

Berkshires also with quality is our specialty. Write your wants to M. G. MOSHER & SONS, Osceola, Mich.

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

O. I. C. SOWS FOR SALE

One of the Best Herds in Michigan

Spring gilts and fall yearlings bred for March, April and May litters. I ship C. O. D., pay express and register in buyer's name. If you want a BIG TYPE sow, guaranteed right in every way, write me.

J. CARL JEWETT,

R. 5, Mason, Michigan.

Large Berkshires. Herd boars, bred gilts, spring pigs. Satisfaction guaranteed. W. H. EVERY, Manchester, Mich.

DUROCS WITH QUALITY
Spring pigs by Walt's Orion, First Sr. Yearling Detroit, Jackson, Gd. Rapids and Saginaw 1919

Phillips Bros, Riga, Mich.
MICHIGANA FARM
sells Durocs Aug. 6th. Write for catalogue. Pavilion, Mich.

O. F. FOSTER, Mgr. Duroc sows and gilts bred to Walte King 29499, who has sired more 1st and 2nd prize pigs at the State Fair in last 2 years than any other Duroc boar. Everyone will be a money maker for the buyer. Cat. and price list. NEWTON BARNHART, St. Johns, Mich.

ROYAL BRED DUCOL GILTS
Dams sired by Michigan Cherry Col. Bred to Jacks Cherry Orion King, No. 18929, Son of the \$10,000 champion, Jacks Orion King 2nd, all high class stock, write for prices. The Jennings Farms, R. 1, Bailey, Mich.

DUROC JERSEYS
Two sows of great breeding and choice individuals weighing about 300 lbs., each due to farrow in June price \$55 each, first checks get them. RUSH BROS., OAKWOOD FARM, Romeo, Mich.

DUROC JERSEYS
E. D. HEYDENBERG, Wayland, Mich.


DUROCS: Bred Sows, fall or spring pigs anything you want. Write FRANK LAMB, Cassopolis, Mich.

Duroc bred sows and gilts sired by Orion Cherry King Col. 2nd, bred to All Col. of Sangamo 2nd. First class lot, reasonable. W. C. Taylor, Milan, Mich.

Duroc Jersey fall and spring pigs for sale. We sell you only the best, ship C. O. D. subject to your approval. Register in buyers name and guarantee satisfaction. W. E. BARTLEY, Alma, Michigan

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

Raise Chester Whites?
Like This
the original big producers



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

The World's Champion

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

Central Mich. O. I. C. Swine Breeders Ass'n.
Hogs of all ages of popular blood lines. Every sale guaranteed by association.

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

O. I. C. & Chester White Swine
Strictly big type with QUALITY. Spring pigs own ready to ship. Never had better ones. Remember I was breeding Big Type 20 years ago. They have a right to be big. Write us for prices. NEWMAN'S STOCK FARM, R. 1, Marlette, Mich.

O. I. C's. One Sept. boar. March farrowed pigs of either sex. C. J. THOMPSON, Rockford, Mich.

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

O. I. C's. Big type serviceable boars. Gilts bred for May and June farrow. G. P. ANDREWS, DAVENPORT, MICHIGAN

O. I. C. Gilts bred for March and April farrow, guaranteed safe with pigs. Fall pigs and a few service boars. Herd improved by D. T. F. C. Burgess, R. 3, Mason, Mich.

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

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

O. I. C's 5 last fall boars and 15 last fall gilts bred for fall farrow. Weight 230 to 325 lbs. extra good stock. Also this spring pigs not akin. 1/2 mile west of depot. Citizens phone 124. Otto B. Schulze, Nashville, Mich.

MILLER Meadows L. T. P. C. boars all sold. Gilts sired by General Jones and bred to our young boar Alaska, address CLYDE WEAVER, Oresco, Mich.

L. S. P. C.

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

Big Type Poland Chinas

Our herd is representative of the best in Big Type. The \$40,000.00 "The Yankee", the \$50,000.00 "The Clansman" and the priceless "Giant Buster" are all represented. We aim to keep up-to-date blood lines and only quality stuff. Come over and see us. PUBLIC SALE OCT. 26th. WESLEY HILE, R. 6, Ionia, Mich.

Bred Sow Sale at Fairgrounds
August 5th. Carey U. Edmonds, Hastings, Mich.

B. T. P. C. Spring pigs of both sex. Sired by Willy's King Rob. none better. JOHN D. WILEY, Schoolcraft, Mich.

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

BOARS! Oh Boys!

Sons and grandsons of the Mighty Giant Buster. The big boned useful kind. Priced for a quick sale. JNO. C. BUTLER, Bell Phone, Portland, Mich.

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

Big Type Poland Chinas with quality, at reasonable prices. Pigs of both sex, and bred sows and gilts. G. A. BAUMGARDNER, R. 2, Middleville, Mich.

Big Type Polands all sold out. Watch this ad for further announcements. Breeding stock for sale in season. L. L. CHAMBERLAIN, Marcellus, Mich.

LEONARD'S B. T. P. C. bred sows all sold. Order booked for boar pigs at weaning time from Mich. Champion Herd. E. R. Leonard, R. 3, St. Louis, Mich.

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

"Lindhurst" Poland Chinas
Mammoth Ben's Chief No. 352167 heads our herd. Sows by Mammoth Ben, Upsome Lad, Joe Mastodon, Gertsdale Jones, and Capt. Price. Pigs by Mammoth Ben's Chief, Mountain Jack, and Orange Model. For sale fall boars and gilts sired by a son of Bower's Mammoth Joe. A few herd sows priced to sell. Get in line for spring boars. WM. H. LIND, Olts. Phone, Alto, Mich.

6th ANNUAL P. C. Bred Sow Sale March 13, 1920. For particulars write W. J. HAGELSHAW, Augusta, Mich.

LARGE TYPE P. C. SWINE One yearling boar, one fall yearling boar, fall pigs, a few more bred sows. R. W. Mills, Saline, Mich.

Poland China Brood Sows June farrow, \$50.00. Maplewood Stock Farm, Allegan, Mich.

IMPRESSED WITH AGRICULTURE'S NEED.

(Continued from page 974).

can help in this crisis by speeding up production and working longer hours. Relatively few city employes are fitted for immediate farm work but each can work a little harder and a little longer at his present job and thereby release others who can help with food production. We feel that if the average factory employe or other workman appreciated the gravity of the situation he would voluntarily increase his day's work from eight to ten hours until the emergency has passed and food production in sufficient quantity is assured.

"Wherever such action will result in increased crop production, all public improvements, federal, state, county and municipal, should be reduced to a minimum or discontinued during the present growing and harvesting season in order that the laborers employed may be released to help produce food for themselves and their neighbors. All the necessary government machinery should be invoked to assemble and allocate such labor as may be available or recruited in advance of the harvesting seasons. Sufficient bank credits should be made available to relieve the present severe strain experienced in financing farm operations and in purchasing machinery, fertilizers and other labor-saving equipment and supplies. All these would tend to relieve the situation temporarily and save us from what now seems inevitable food shortage. The permanent solution must, of course, eventually come through a readjustment of soil fertility policies, food prices and wages, which will enable the farmer to pay a wage that will more nearly compete with scales prevailing in the cities. We, the representatives of organized agriculture, most respectfully urge that you give this entire matter your earnest consideration and speedily apply such remedial measures as this critical situation warrants."

Farmers who come to Washington from all parts of the country are pleased with the decision of the supreme court in favor of constitutional prohibition and the Volstead enforcement act, and removing all uncertainty as regards the legal status of prohibition. There may be some sentiment in opposition to prohibition and its rigid enforcement in the cities, but it is evident from the opinions of farmers who visit the nation's capital that no such sentiment is to be found in the open country.

E. E. REYNOLDS.

MICHIGAN FEEDER BUYS STOCKERS.

CHARLES WOLOHAN, big farmer and feeder in Saginaw county, Michigan, has confidence in the future of the beef market, provided the feeder buys the right kind of cattle and feeds the right kind of feed. The farmer who roughs his cattle through as cheaply as possible and finishes them on silage will make a profit, he believes.

Wolohan has a one-thousand-acre farm, about half of which is pasture land. He expects to run two hundred head of young cattle on this tract this summer, rough them through next winter, turn them on the grass again next summer, and then finish them on silage if corn values are still out of line with the cattle market. His buyer, Ben Hobson, purchased a load of yearling Herefords recently to help eat the pasture on the Wolohan farm. Wolohan believes in feeding light steers.

Unfavorable crop news has bolstered up grain prices and encouraged those having supplies to hold on.

Where Butter Profits are Made or Lost

YOU know better than we can tell you that the bowl of the separator is the place where butter profits are made or lost. Right there you have the big fundamental reason why over a million dollars were spent in bringing the bowl of the EMPIRE-BALTIC to its present state of perfection. Years of constant study and experiment on the part of the world's foremost centrifugal engineers stand back of the EMPIRE-BALTIC—the Separator with the Million Dollar Bowl.

And here's what we have accomplished: A bowl that is absolutely self-centering and self-balancing—a bowl that is free from vibration. We have solved the problem of self-centering and self-balancing by the unique method in which the bowl rests on the flange of the spindle instead of on top of it—it adjusts itself.

Vibration unfailingly shakes the cream back into the milk after it has been separated. Possibly you thought that a bowl free from vibration could not be manufactured. But we have accomplished it, in the EMPIRE-BALTIC—the Separator with the Million Dollar Bowl.

Many other exclusive features make the EMPIRE-BALTIC stand out as an above-the-ordinary separator. For instance, the rope neck-bearing absorbs all shocks and wear and tear—the ratchet coupling avoids the "jerk in turning"—the great simplicity of the driving arrangement means easier turning and smoother running—the oiling system is as simple as it is efficient, and so on.

Your experience enables you to judge separators as accurately as you can judge cows. Knowing this, we ask you to call on the nearest EMPIRE-BALTIC dealer. And get the complete story of the Separator with the Million Dollar Bowl by writing for our literature 105-S

Empire Cream Separator Co., Bloomfield, N.J.
Manufacturers of Empire Milk and Gasoline Engines
Chicago, Syracuse, San Francisco and Toronto, Canada

EMPIRE-BALTIC

The Separator with the MILLION DOLLAR BOWL



More Miles per Dollar
More Smiles per Mile

Hirth-Krause
Shoemakers for three Generations

"Tanners—Shoes—Shoe Manufacturers" Grand Rapids, Michigan

Waxlined Paper Berry Baskets

Neat, clean, and inexpensive. Can make immediate shipment at present time. Prices as follows:—
200 Postpaid \$1.80 By express not prepaid \$1.60
600 " 5.10 " " " 4.50
1000 " 7.75 " " " 6.75
Postpaid rates on Baskets apply to points within 150 miles of Lansing
Send your order in at once.

M. H. HUNT & SON,

Box 525,

LANSING, MICH.

CORN HARVESTER One man, one horse, one year. Self-Gathering. Equal to a Corn Binder. Sold direct to Farmers for 25 yrs. Only \$25 with feeder blades. Free Catalogue showing pictures of PROCESS CORN HARVESTER CO., Selma, Tenn.

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



Shoo Fly THE ANIMALS' FRIEND
For keeping Flies Gnats and many other insects off animals. Used and endorsed since 1885 by leading dairymen. Cows give 25% to 35% more milk during fly season if sprayed with Shoo-Fly.
\$1.50 worth saves \$20
in milk and flesh alone on each cow in a single season. Excellent for galls. Allays itching. Aids in healing cuts and sores. Excellent for lice and mites in poultry houses.
Send \$1.50 for enough Shoo-Fly to protect 10 cows 2 weeks, also our 3-tube gravity sprayer. Money back if not satisfactory. Name Express Office. Booklet FREE
SHOO-FLY MFG. CO., 1334 N. 10th St., Phila.

DICKEY GLAZED TILE SILOS
"The Fruit Jar of the Field"
Insure Your Corn Crop Against Drouths and Frosts with a Dickey Silo.
Send for catalog No. 9.
W. S. DICKEY CLAY MFG. CO.,
MACOMB, ILL.
Kansas City, Mo. Chattanooga, Tenn.

Mr. POULTRY FARMER:
We make a specialty of White Henner Eggs and have created a profitable market for your eggs the year around. We pay the highest premium for your Henner Whites—We remit same day shipments arrive. Ship Often—Ship by Express
GEO. R. ELDRIDGE CO.
494-18th Street, Detroit, Mich.
Remember! We guarantee you satisfaction with every shipment

For Best Net Results
Ship to
CULOTTA & JULL
Detroit, Mich.
"Enough Said!"

Use
Swift-HAY Service
AT CHICAGO
You can BUY all types of FEEDING HAY from and SHIP your surplus to
Swift-HAYnes Co.,
BOARD OF TRADE, CHICAGO

FEED BEANS
Salvage Cull Beans \$40.00 ton.
Regular Cull Beans \$50.00 ton.
Sacks included, delivered Mich., Ohio, Ind., Ill., Pa., Eastern and New England points.
For hogs, sheep, cattle and poultry.
The greatest feed value in U. S. A.
Port Huron Storage & Bean Co.
Port Huron, Mich.

EGGS
We have a good demand for fancy fresh eggs and will pay you liberal premiums above the market for Express shipments fresh laid shipped direct to us by farmers.
Ship to us
AMERICAN BUTTER & CHEESE COMPANY,
Detroit, Mich.

Holmes, Stowe Co., 445 Riopelle St.
Commission Merchants. Dressed Beef, Hogs, calves, Poultry, Live & Dressed, Provisions, etc. Correspondence Solicited. Ref. Wayne County & Home Savings Bank, Bradstreet, Detroit, Mich. Cad. 2878

HAY Ship to The Old Reliable House
Daniel McCaffey's Sons,
623-625 Wabash Bldg., Pittsburg, Pa.

HOGS
Large Type Poland Chinas nothing for sale as present. Spring pigs doing fine.
A. A. FELDKAMP, R. 2, Manchester, Mich.

FOR SALE Registered Big type Poland China gilts bred for Sept. farrow, weighing 225 lbs. for \$60, spring pigs all sold, guarantee satisfaction.
DORUS HOVER, Akron, Mich.

Edgewood Hampshires
All bred gilts sold. Now booking orders for gilts bred for fall farrow, and pigs for pig club work only.
Depew Head, Edgewood Farm, Marion, Ohio.

HAMPSHIRE
Spring boar pigs, sired by Steuben's Perfection and Cherokee Jim, 1st prize Ind. State Fair. Other winners at other fairs. Tried sows bred. Satisfaction guaranteed. Will ship C. O. D. Address,
STEBEN'S HAMPSHIRE FARM
R. R. 3, Angola, Ind.

Hampshire bred gilts now ready to ship and spring and fall pigs from new blood lines.
JOHN W. SNYDER, R. 4, St. Johns, Mich.

SHEEP.

KIDS
I cannot sell you any more ewes until next fall. To some grown up, I can offer 10 very good young Shropshire ewes that will lamb in April for \$400.00. Their lambs contracted to me should not more than purchase price next fall. Also 10 mighty nice ewe lambs for \$350.00. Come and see them.
S. L. WING, KOPE-KON FARMS, Coldwater, Mich.

Idle Wild Stock Farms Shropshire yearling rams from prize winning stock. Make your selection early. **Cliff Middleton, Proprietor,** Clayton, Mich. R. 3.

Want a Sheep? Let American Hampshire Sheep Association send you dandy booklet with list of breeders. Write **COMFORT A. TYLER, 22 Woodland Ave., Detroit, Mich.**

HORSES

Percheron Stallions and mares at reasonable prices; inspection invited.
F. L. KING & SON, Charlotette, Mich.

LATEST MARKET REPORTS

FIRST EDITION.

The market reports in this edition were revised and corrected on Tuesday afternoon, June 22.

WHEAT

New wheat to arrive is being offered freely in Chicago and Minneapolis where a brisk demand is reported. The winter wheat crop shows considerable improvement for the month of May, although the forecast for June 1 is over 50,000,000 short of the five-year average from 1914-1918. The recent cool weather has favored the crop. The visible supply shows a decrease of 3,394,000 bushels during the past week. The flour market is steady and the demand for feed is active. Detroit quotations are as follows:

No. 1 red	\$3.00
No. 1 mixed	2.98
No. 1 white	2.98
No. 2 red	2.97
No. 3 red	2.94

CORN

New high values for the year have been established in Chicago despite aggressive selling. The upturn of values is due chiefly to it appears, to the fact that receipts have fallen far below expectations. The visible supply has changed very little since a week ago. The transportation situation seems to be partly responsible for the low supplies at market centers. No. 2 mixed corn is quoted in Chicago at \$1.89½@1.90½. The Detroit market has not followed the advance in Chicago, and quotations here are as follows:

Cash No. 2	\$1.95
No. 3 yellow	2.00
No. 4 yellow	1.95
No. 5 yellow	1.91
No. 6 yellow	1.88

OATS

This grain rules firm with a good local demand. Favorable crop reports from various sections has somewhat tempered the bullish tone of the trade. Considerable damage, however, has been done in the Ohio valley. While the estimated crop for this year is about 100,000,000 bushels short of the five-year average from 1914-1918, it is considerably larger than last year's small crop. Quotations at Detroit are:

Cash No. 2 white	\$1.26
No. 3 white	1.27
No. 4 white	1.26

RYE

The forecast for this crop places it nearly 10,000,000 bushels less than last year's bumper crop. There is little activity and cash No. 1 is quoted locally at \$2.25 per bushel.

BEANS

A further reduction is noted in local bean values, notwithstanding the fact that elevators throughout Michigan report lower stocks than are usually held in the elevators at this season. A fairly liberal acreage is being planted by Michigan farmers. At Chicago the trade is quiet, with the supply limited. Choice to fancy hand-picked pea beans are quoted there at \$8@8.50, and red kidneys at \$15@15.50. Immediate and prompt shipment are held at \$7.25 at Detroit. In New York domestic white beans are almost at a standstill but holders are not offering concessions in order to influence sales. Choice pea beans are quoted there at \$8@8.25.

FEEDS

Trade is steady to firm, being supported by a good demand. Quotations are: Bran \$58@59; standard middlings \$59@60; fine middlings \$60@62; coarse corn meal \$75@77; cracked corn \$85@86; chopped feed \$76@77 per ton in 100-pound sacks.

SEEDS

Seeds are firm at a slightly higher price, although there is little activity in the market. Local quotations are: Prime red clover, October and alsike \$26; timothy \$5.70.

HAY

This product is not being offered freely enough to care for the strong demand, and prices remain high. Local quotations are: No. 1 timothy at \$37.50@38; standard and light mixed \$36.50@37; No. 2 timothy and No. 1 clover \$35.50@36; wheat, oat and rye straw \$12.50@13.

POTATOES

The shipment of new potatoes from the south is increasing rapidly in volume, and markets are generally a little weaker. At Detroit No. 1 Irish cobbles are sold at \$12 per barrel and No. 2's at \$9. A few old potatoes are still being received in Chicago and are selling at \$5@5.50 per cwt.

BUTTER

With the demand from all classes of the trade for all grades of butter, prices are being maintained on a higher basis this week. In Detroit extra creamery is now ranging from 53@54½c, and creamery prints at 53½@56c. The spread in Chicago is from 43@56c for creamery stock. New York business is firm at 53@59½c, and western creamery extra commands 59c in Philadelphia.

CHEESE

The conditions of this market are little changed. Production is holding up fairly well and the outlet is good. At Chicago Cheddars are quoted at 24¼@25c, and Young Americas at 26@26½c. On the local market Michigan flats bring 25½@26c, and single daisies 26¼c. The New York market is firm with whole milk flats, current make at 25½@26¼c. In Philadelphia prices range from 23@27c.

EGGS

The quality of current receipts is now becoming more irregular and the spread in quotations for the different grades is widening. At Chicago firsts are quoted at 37½@49¼c; ordinary firsts 33@34c; at mark, cases included 35@37c; storage packed extras 41½c. No. 1 fresh is quoted in Detroit at 41½c and storage packed extras at

42c. The New York trade is a little irregular and fresh gathered extra firsts are bringing 45@47½c, and storage packed extras 47@48c. Philadelphia's trade rules firm with western extra firsts at 48c.

POULTRY

More attention is being given to the poultry deal and while receipts are sufficient, they are being tolerably well cleaned up from day to day. Broilers are quoted here at 55@60c; hens 32@33c; small hens 30@31c; roosters 19@21c; geese 20@22c; ducks 32@33c; turkeys 38@40c per pound.

WOOL

It seems now most fortunate that wool producers throughout the central states have generally organized to pool their wool and place it upon the market as the demands of the trade may require. Had individual producers thrown their fleeces upon buyers, with the money situation tightening up as it has and the curtailment of buying by the brokers as a result of this and the traffic situation, the wool would undoubtedly be bringing a very insignificant price, to say the least. Representatives of several wool growers' and dealers' associations are now in Washington urging the Federal Reserve Board to provide immediate relief for the wool-producing industry. It is planned to place the business on the list of essential industries, which would entitle it to the first support of the reserve banks. Wool growers in the central west met at St. Louis and after considering the situation advised their members to hold their offerings until higher prices are quoted. Grease wool, it was pointed out at that meeting, is now quoted at around 35c as compared to 70c a year ago.

GRAND RAPIDS

There was a further decline in the paying price of wheat by millers last week, of five cents per bushel. The price now is \$2.75 for No. 1 red and \$2.73 for No. 1 white. The wholesale market price for dressed cattle, calves and sheep is higher, but hogs are a little lower. Prices are: Cattle \$14@21; calves \$14@18; sheep \$20@22; hogs \$17.50@18. The egg market is a little higher this week at 36@37c bid. Receipts are light. The hot-house lettuce season closed this week. Total crop marketed by the growers' association was one million pounds. The rain-storm Tuesday and Wednesday saved the strawberry crop. Growers state that two more days of weather in 90 degrees and above which had prevailed for a week, would have "cooked" the crop. Price, wholesale, now is \$3.50 per 16-quart crate. A few old potatoes have been marketed this week. Farmers are getting \$5@5.25 per bushel. First picking of green peas sold for \$6 per bushel on Tuesday. Wireworms are working badly in corn in some sections.

NEW YORK PRODUCE MARKET.

Butter.—Receipts of butter during the week have been disappointingly small as compared to those for this time in previous years. Receipts for the same week last year were practically 92,000 packages, while those for this week were fully 25,000 short of that. It is very apparent that production is much lower than in previous years. Speculators are not operating freely because of high prices and also because banks are curtailing their advances on butter in storage. Some butter is arriving from Holland and Denmark but the quantity is not large enough to affect the market in any way. Much of the imported butter is showing mold. There has been a continued upward tendency to the market, prices having advanced three cents since Monday. Established quotations are: Extras 57½@58c; higher scoring than extras 58½@59c; firsts (90-91 score) 55½@56¼c; firsts (88@89 score) 53@55c; seconds 48@52c per pound.

Eggs.—Egg receipts continue to be above normal for the season. The market can not be said to be very satisfactory. There is a great variation in prices paid for eggs according to quality which causes the range of values to appear wide. The following quotations are merely relative: Firsts 42@44c; extra firsts 45@47½c; extras at 48½@49c.

Poultry.—The poultry market has held steady to firm throughout the week. Arrivals have been variable, which has caused some fluctuation in prices. However, there has been no downward tendency to prices at any time. Quotations at the close on Friday were: Fowls 38@39c; broilers 65@68c; old roosters 18@20c; turkeys 35c. Shortage in other grades.

NEWS OF THE WEEK.

(Continued from page 950).

are leaving for the national convention in San Francisco which opens June 28.

Monday, June 21.

BOLSHEVIK troops claim another victory on the Dnieper river.—Russian central committee endorses the action of the present government in seeking to secure terms of peace with enemy countries.—A delegation of forty-five Swiss business men are in Detroit where they will study local business methods.—In a note to China, Japan declares that the Shan-Tung case is now fundamentally one between the two nations.—A powerful British fleet is at Malta and fresh reinforcements are sent to Constantinople as a result of recent serious developments in the situation in Turkey. Greek forces will aid Great Britain and France in their efforts to restore order.

COMING LIVE STOCK SALES.

Holstein—June 30, Macomb County Consignment, Fairchild Farms, Chesterfield, Mich.
Poland-Chinas, Oct. 26, Wesley Hile, Ionia.
Big Type Poland-China Sale Circuit in Central Michigan, October 26-30.

Live Stock Market Service

DETROIT

Cattle.

Receipts 881. Dry-fed strong; grass-ers dull, canners 50c lower. Best heavy steers \$14.50@14.75
Best handy wt bu steers 14.00@14.50
Mixed steers and heifers 11.00@12.00
Handy light butchers 10.00@10.25
Light butchers 9.00@ 9.50
Best cows 8.50@ 9.00
Butcher cows 7.50@ 8.00
Cutters 5.50@ 5.75
Canners 5.00@ 5.25
Best heavy bulls 8.75@ 9.00
Bologna bulls 7.75@ 8.00
Stock bulls 7.00@ 7.50
Feeders 9.00@10.25
Stockers 8.00@ 8.75
Milkers and springers....\$ 85@ 125

Veal Calves.

Receipts 578. Market strong to a dollar higher.
Best \$15.00@15.50
Others 9.00@14.00

Sheep and Lambs.

Receipts 172. Market steady.
Best lambs \$ 17.00
Fair lambs 13.00@14.00
Light to common 10.00@12.00
Yearlings 13.00@14.00
Fair to good sheep 4.00@ 6.00
Culls 2.00@ 3.00

Hogs.

Receipts 1,887. Market active.
Pigs \$ 13.75
Mixed hogs 15.50@15.65

CHICAGO.

Hogs.

Estimated receipts today are 60,000; holdover 14,983. Market active and 10 @25c lower than Saturday. Bulk of sales \$14.30@15.60; tops \$15.70; heavy 250 lbs up medium, good and choice \$14.40@15.50; medium 200 to 250 lbs medium, good and choice at \$15.25@15.70; light 150 to 200 lbs common, medium, good and choice \$15@15.70; light lights 130 to 150 lbs common, medium, good and choice at \$13.80@15.40; heavy packing sows 250 lbs up smooth at \$13.35@14.30; packing sows 200 lbs up rough \$12.75@13.40; pigs 130 lbs down medium, good and choice \$11.75@14.25.

Cattle.

Estimated receipts today are 20,000.

Best steer she stock and bulls steady; other grades and calves 25@40c lower. Beef steers, medium and heavy weight 1100 lbs up choice and prime \$15.75@17; do medium and good at \$12.90@15.75; do common at \$11@12.90; light weight 1100 lbs down, good and choice \$14.75@16.40; do common and medium \$10.85@14.75; butcher cattle, heifers, common, medium, good and choice at \$7@14.25; cows, common, medium, good and choice \$7@12.25; bulls, bologna and beef \$7.25@12.15; canners and cutters, cows and heifers \$4.25@7; do canner steers \$5.75@8; veal calves light and handyweight medium, good and choice \$13@14.75; feeder steers, common, medium, good and choice at \$9.25@12; stocker steers, common, medium, good and choice \$7.50@11.50; stocker cows and heifers common, medium, good and choice at \$6.25@8.50; stocker calves, common, medium, good and choice \$7.50@10.75.

Sheep and Lambs.

Estimated receipts today are 15,000. Market slow and steady. Lambs 84 lbs down, medium, good, choice and prime \$13@17; do culls and common \$10@13; spring lambs, medium, good, choice and prime \$10.50@14.50; ewes, medium, good and choice \$5@7.50; do cull and common \$3@5; yearling wethers, medium, good and choice \$9@14.

BUFFALO

Cattle.

Receipts 4,500; dry-fed 15@25c higher, grass are 25@50c lower; shipping steers \$15.50@17.50; butchers at \$12@15.50; yearlings \$15@17; heifers \$9@14.50; cows \$4@11.50; bulls \$7@11; stockers and feeders at \$6@10; fresh cows and springers \$65@150.

Veal Calves.

Receipts 3,000; \$6@15.50.

Hogs.

Receipts 10,400; strong to 50c higher; heavy \$16.25@16.50; mixed \$16.50; yorkers \$16.50@16.60; light yorkers at \$15.50@16.50; pigs \$15.50; roughs at \$12.75@13; stags \$8@10.

Sheep and Lambs.

Receipts 2,800; slow; 50c@1 lower; lambs \$12@17.50; yearlings \$8@15; wethers \$8.50@9; ewes \$3@8; mixed sheep \$8@8.50.

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