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More Attention to Farm Forestry

WERE all the fields of wheat, corn, barley, rye, oats and other cereals of the country placed together they would still be smaller than the area occupied by forests. And of this vast area farmers own more than do all of the lumbermen and private holders together. Here is an interest therefore, of the greatest moment to the tiller of the soil, yet to which comparatively little consideration has been given.

Aside from the income resulting from the sale of timber, the area devoted to the farm woodlot makes a substantial contribution to the success of the farm. It provides fuel, fence posts, materials for construction and repair, products of the sugar bush, and protection to crops, stock and buildings against weather extremes. The forest holds back flood waters, improves and builds up the soil and adds greatly to the attractiveness of rural scenery. The total value of the products taken from farm woodlands of the country during 1919 is estimated at nearly a half billion dollars.

The rapidly increasing attention that is now being given to this department of the farm is due very largely to the much higher prices recently paid for forest products. Timber is a national necessity. The country was suddenly awakened during the war to its defenseless position, should our wood supply be exhausted. The increased demand occasioned by the gradual growth of peaceful pursuits as well as by military needs and the gradual reduction of available stocks have been responsible for the flight in lumber quotations. That values will be maintained on a correspondingly higher level in years to come than during the past can hardly be questioned, owing to this relation of supply and demand.

The farmer should make his woodlot permanently profitable. When the lesson that all departments of the farm should contribute a reasonable share to the op-

erator's income is generally understood and practiced, the farmer will see to it that land unsuited for cultivated crops will be devoted to the growing of timber. Through the production of a greater abundance of trees of superior quality by protecting them from fire, thinning where too crowded and planting where too thin, the farmer's income will be enhanced. The farm management problem will be partly solved in that he will be better able to employ his men and teams during the cold months. The attempt to combine stock raising and forestry will be

abandoned by the thoughtful farmer, who will rather strive to keep the floor of his woodlot free from grass through encouraging the growth of a dense forest roof. He will come to realize that the quantity of products taken from this department of the farm will be doubled and tripled if he gives it the same consideration accorded other crops.

Perhaps no state in the Union offers more promising opportunities for the adoption of modern woodlot practices than does Michigan. The growth of her unsurpassed virgin forests proves the adaptability of her soils and climate. The wide variety of these soils provides for the production of wood to meet every human need. Here may be found extensive areas not well suited to the culture of other crops, that may well be devoted to forestry work. The best markets in the world are available and transportation lines and woodworking factories were built for marketing this particular class of products. Since general farming predominates, the labor situation in rural districts could be generally improved by furnishing productive employment throughout the year. These and other inducements urge Michigan farmers to a more careful study of modern methods of producing and marketing their woodland products.

The tendency in the past has been to develop woodworking industries as only temporary institutions. The old system of importing labor and exploiting the forest resources of one district and then move on and repeat in another district, has had a blighting effect upon the community life of sections of the state. The educational work being done by the Agricultural College and the University, and the commercial service undertaken by the State Farm Bureau with the sympathetic cooperation of woodlot owners should make the production of wood a permanent source of income to the farmer.



Hon. George B. Horton Has One of the Finest Farm Forests in the State.



A Special Study of Mr. Horton's Methods will be Made by Michigan Farmer Tourists Next August, (See Page 127).

The Michigan Farmer

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DETROIT, JANUARY 29, 1921

CURRENT COMMENT

Forward to the Farm

WHILE there is a tendency on the part of many farmers to become more or less discouraged at the general decline in the prices of farm products there is another more pleasant phase of the present farming situation here in Michigan. Many men with moderate means have become disgusted with the present business and living conditions in large cities and are taking advantage of the present tendency on the part of farmers to dispose of their land and are investing their savings in farms. All of which goes to show that farmers as a class have suffered no greater financial reverses during the past few months than those engaged in other lines of business. Many of these men who are now investing their savings in farm lands are going to find it far more difficult to plant their feet safely on the land than those who are thoroughly familiar with conditions in the country but have drifted away from its influence.

Young men who have been born and reared among the fields and have a full understanding of the problems of farm life hold the key to success as farmers. They possess knowledge that books do not tell; the way of nature has given them an instinct more valuable than the teachings of science; the work on the farm and association with rural people has endowed them with a sturdy character and seasoned judgment so indispensable in farm affairs. Men who have been away from farm life for many years as well as those who have never lived on a farm have a poor temperamental foundation for a successful farm career.

Those who own good farms here in Michigan do not begin to realize new opportunities and development in agriculture that await their efforts. The increase and concentration of population in cities that has taken place within the past decade is creating conditions which appeal strongly to conservative farmers with limited means. Considering the unequalled market advantages, the relatively low prices of land; the established public institutions which contribute to a broad, satisfying country life, the dependable and regular harvests, Michigan offers outstanding inducements to people who want to buy good farms for permanent homes. Some of the cheaper lands in the good farming communities are more or less worn, but they are far from unproductive. Moreover, most of these farms are capable of prompt restoration at small cost to a high state of productivity. In some of our good

agricultural counties land can be bought for less than one hundred dollars an acre which is a good investment as it stands, and at an expense of about one-half more it could be made as productive as some of the western real estate selling for double and treble that price. Many of these old farms could be renewed and made beautiful and profitable in less time and at less expense than would be required in establishing a home worthy of the name in any of our important industrial centers. And when a man has a good home all paid for in the country he does not need to worry about business depressions and the laying off of labor in the cities. He is always sure of an abundance of the good things of life and somehow or other the profits made during the good years manage to more than make good the losses of the poor years. Country life may have its discouraging features for the women and children, but married men owe their families a larger consideration these days than can be found in a large city with but one wage-earner to support the family. Even young couples, with no children, are finding life in industrial centers far from what they had pictured it during the period of labor scarcity and high wages. And thousands of them would return to the country if they had a place to return to.

Let the immigrants continue to flock to our industrial centers and huddle in

ty Agricultura Agents' Conference. These conferences and the general program will hold much of interest and direct value to every farmer who can arrange to attend them. In addition such attendance will give an opportunity to look over the college, to study the work which it is doing and to gain a first-hand knowledge of its equipment needs to better care for the regular student body, the short-course students and the special meetings of farmers, of which Farmers' Week affords an important example. Every Michigan farmer who can arrange to attend these meetings will be repaid out of all proportion to the cost and effort expended.

Forecasting the Future

FROM out the slough of readjustment one may hear prophesies regarding the future trend of business prosperity, as varied as the individual viewpoints and temperaments of those who express them. Prophesies, at best, are always uncertain of fulfillment, but there is probably no better guide to a sound opinion regarding the future progress of a people than their collective morale or habit of thought. If this be taken as the present guide, the future progress and prosperity of the American people is well assured, since in the heart of every American is an abiding faith in the ability and

Low Rates for Farmers' Week

THE traffic department of the Michigan State Farm Bureau has made arrangements whereby those attending Farmers' Week and the annual meeting of the Michigan State Farm Bureau may secure fare and one-half rates for the round trip. It will be necessary for those who wish to take advantage of this low transportation rate to secure identification cards. These cards will be mailed to the county agents the last of this week and will be in the hands of the managers of cooperative organizations by Monday. Those wishing to secure the identification cards should therefore request same from either their county agent or cooperative manager.

the slums, but let our farmer boys and the older and wiser heads stay in the country and build up a more profitable and satisfying rural life. Into the sluggish veins of country life let the combined forces of environment and educational agencies inject a magic elixir, instead of acknowledging our inability to solve our rural problems, and awakening some fine morning to find our best farm lands occupied by foreigners, who understand and appreciate far better than many of us what it means to own a good home in the country. Our agricultural problems will never be solved until we become a nation of home-builders rather than squatters.

Farmers' Week Program

FARMERS' week, at the Michigan Agricultural College, on February 1-4, inclusive, will this year be a more important agricultural event than ever before. The program, as announced in our last issues, includes a long list of prominent speakers, every one of whom will have a message of economic or educational interest to every farmer in the state. In addition to this general program a dozen state agricultural associations will hold one, two or three-day meetings, including the State Farm Bureau, Michigan Muck Farmers' Association, Michigan Potato Producers' Association, Michigan Crop Improvement Association, Michigan Poultry Association, Michigan Horticultural Society, Agricultural Section Michigan Bankers' Association, Michigan Sugar Beet Growers' Association, Michigan Beef Producers, Boys' and Girls' Club Leaders, Country Life Conference, State Y. M. C. A. Secretaries and Coun-

integrity of American citizenship to successfully cope with any situation which it is called upon to meet. And coupled with that faith is an apparently general optimism that the general business depression incident to readjustment will not be continued to the point of disaster for any branch of our citizenship.

The farmers of the country, who were the first great class of its citizens to feel the full burden of the process of readjustment, are looking into the future with the same desire to forecast it correctly as those engaged in other business enterprises and rightly, we believe, with a promising degree of optimism. There is no possibility of a suddenly large increase in the area devoted to the production of foodstuffs such as occurred in previous reconstruction periods, and our farmers are today better financed and better organized than ever before, and consequently better equipped to meet the emergency, and by a forward looking but reasonably conservative policy these conditions may be steadily improved. And in the meantime the basic industry of food production will continue to be the safest and most stable business in which any citizen can engage, even though it may not be the most profitable.

As ever, the business of agriculture will remain the country's greatest business, and those who pursue it the country's safety from the standpoint of sane and stable citizenship. It has never been a business in the "quick-rich" class, but it has always been a stable business. It is also a business which has reached its highest commercial development in this country, a supremacy which our farmers have the

ability and resourcefulness to maintain. This fact, together with the fact that its demonstrated stability will again attract our capable young men to the soil is an earnest of future prosperity of American agriculture which even the honest pessimist could not disregard. The forward looking farmer is bound to be a winner in the long run.

News of the Week

Wednesday, January 19.

THE Soviet government of Russia notifies the allied council that the territorial limits of Russian waters have been extended from three to twelve miles, and that the Russians are reserving the right to sink armed ships within that limit.—Federal statistics indicate that food prices have been reduced ten per cent in Detroit, and eight per cent in fifty largest cities.—Swiss socialists vote heavily against accepting bolshevik doctrine in a referendum just taken.—Twenty persons were drowned when a dam near Pachuca, Mexico, burst.

Thursday, January 20.

THE lower house of congress votes to retain the present number of members which will secure Michigan two additional seats.—A treaty is agreed upon between Soviet Russia and Persia which, according to information, is detrimental to England.—The house of representatives considers an appropriation of over \$33,000,000 which is thirty-six per cent less than the estimates, for the Department of Agriculture.—A Japanese passenger ship sinks off the coast of the Philippine Islands.

Friday, January 21.

A BILL is introduced in the Michigan legislature to repeal the presidential preference primary.—The senate foreign relations committee will recommend that the President enter into negotiations with Great Britain and Japan for the curtailment of naval building programs.—Tobacco growers are in Washington urging a higher tariff on their product.—The American Atlantic fleet passes through the Panama Canal and joins the Pacific fleet.

Saturday, January 22.

PRESIDENT-ELECT HARDING appeals to the south to cooperate with the other sections of the country in a drive for world trade.—Prices of hard coal make a substantial decline.—Justice Brooke, member of the Michigan Supreme Court for the past twelve years, dies suddenly on an interurban car between Detroit and Mt. Clemens.—According to statistics gathered by the State Labor Department, Detroit's shops contain more men in the automobile manufacturing business than any other city, 150,000 of the 308,000 employes being so engaged.

Sunday, January 23.

GENERAL LUDENDORF views the aggressive military program of the Soviet government with alarm, believing it will crush the Poles and menace eastern Germany.—The Greek government threatens to repudiate all the acts of the Venizelos administration, including the Anglo-French loans, should Great Britain and France refuse to recognize the Constantine government.—An amicable settlement of the anti-alien land legislation question between the United States and Japan is predicted.

Monday, January 24.

RENEWED military occupation of Constantinople by allied armies is imminent.—Turkish troops inflict severe losses on the Greeks in Asia Minor.—President Wilson appoints R. B. Mahany as the American representative on the International Commission of Immigration and Emigration to convene at Geneva, Switzerland.—Race rioting in North Carolina results in two slayings and eight persons being more or less severely wounded.

Tuesday, January 25.

AFTER a bitter fight the bill proposing federal regulation of the meat packers passed the United States Senate by a vote of forty-three to thirty-four.—Five bandits who attempted to rob the bank of Crystal were captured Monday and rushed to Howard City.—An injunction restraining the enforcing of the two-and-a-half-cent a mile flat railway fare authorized in 1919 was issued in federal court by Judge Tuttle on Monday.—President M. L. Burton, of the University of Michigan, has announced that the attendance at the college will not be limited to any fixed number of students.

Harvesting the Farm Ice Supply

A Community Job—By Earle W. Gage

WHEN Jack Frost snaps away in January and February, it's a sign for the farmer to prepare for next summer's heat, and the ice season is at hand. There is no crop that the farmer harvests today that is produced so cheaply and bring higher returns than the ice crop. It takes no fertility from the soil, and instead of depleting the pocketbook, enriches the farmer and his family in making country life more comfortable and the farm products more valuable.

Cooperation in the ice harvest work is more important perhaps, than the common community cooperation at threshing and haying time. It is best that the ice be cut and hauled to the storage house quickly for the two reasons of permitting other ice to form while it is yet cold, and of preventing waste if the freezing weather is passing. Then, too, the work can be done much more efficiently when there are enough men and teams to do all the essential operations at the same time.

To harvest ice most efficiently a few ice tools are needed. A steel scraper is desirable; some types of small road scrapers can be used for this work, or a very good home-made scraper may be fashioned of wood and faced with a strip of steel, such as the back of an old crosscut saw. An ice-plow is almost essential if any great quantity of ice is to be cut. It facilitates the removal of the porous surface ice and greatly simplifies cutting into blocks. Half a dozen ice pike poles, bearing vertical points and horizontal hooks, are necessary in floating the ice to the loading platform. An ice saw may be useful, or an ordinary crosscut saw may be used by removing one handle.

Ice cutting is best conducted with three squads of men, each with a team. The first squad removes the snow or spongy ice from the surface of the field and plows, saws and cuts the ice into blocks of a size most convenient to handle. If the ice is more than twelve inches thick blocks two feet square on the surface would be most convenient to handle; if it is thinner than twelve inches, blocks three feet square can be packed conveniently. The second squad cuts loose the blocks and floats them to the side of the open water, where they are ready to be loaded on the wagons. Here a tramway with a pair of ice hooks attached to a rope will make loading a relatively easy matter. Let the rope extend across the wagon from the tramway; hitch one horse to it and drag the blocks from the water on to the wagon or sleigh. The third gang of men should be at the icehouse to place each load in position and pack sawdust round it as rapidly as possible. Eight men with three teams can work most rapidly in harvesting a crop of ice by this method.

In instances where the ice is not quite thick enough to suit the need, farmers should scrape the snow off the

surface the day before starting cutting, but this method is not so satisfactory, since the hand-plow can not be run in so straight a line without the aid of the straight-edge. After the first line is cut to a sufficient depth it can be used as a guide for the horse marker, if this tool is used.

On small ponds the snow may be scraped to the shore, but on large fields, especially if the snow is deep, it is impracticable to scrape it entirely off the fields. It becomes necessary, therefore, to pile it in windrows. Windrows of snow, of course, occupy considerable space, so that it is necessary to allow for an increased area of ice.

The distance between the windrows depends upon the depth of the snow. It is best, however, to run them at right angles to the main channel through which the ice is floated. The area between the windrows then, can be cut back any distance from the main channel, whereas if they run parallel to the main channel only that portion of the surface between can be cut before opening another channel. As the weight of the windrows of snow is usually sufficient to make the ice on which it is piled beneath the surface

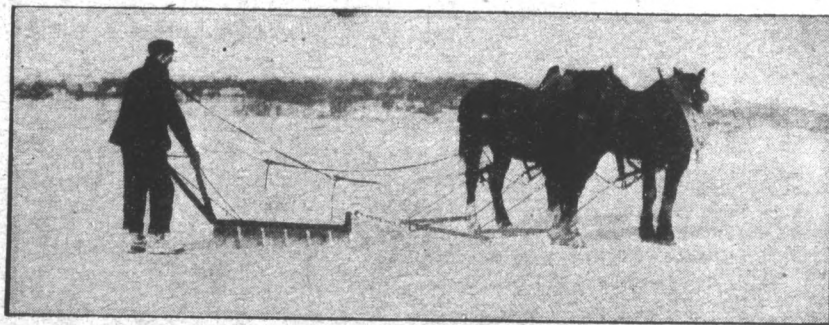
nel, cut at right angles to the main channel, has the advantage of allowing the operator to get closer to the cakes and to handle them more easily. At the end of the narrow channel there should be an inclined track or loading-way in which the cakes are drawn either by hand or by a horse. This track may load directly into the ice house or to a platform from which the cakes are loaded upon a wagon or sleigh.

The cakes should not be cut completely through, but should be grooved two or three inches with the plow, and after being floated up the channel chopped through with a special tool before being put on the loading-way. This practice saves time and labor. With regard to the cost of harvesting ice, the location of the source of supply is, of course, the deciding factor. When the pond, creek, river, lake or other body of water is located near the farm, the cost of gathering should be very small—almost negligible—the cost increasing as the distance grows greater. Investigations of the Department of Agriculture show that ice has been cut at a price as low as one cent for a cake of two hundred and twenty pounds, making the ice cost, exclusive of hauling and packing, nine cents a ton. The usual price, however, was found to average about two cents a cake, or eighteen cents per ton. To find the total cost of storing ice, the charge for hauling and packing must be added; this brought the average to about a dollar a ton.

Loss of ice by melting depends partly upon the manner of packing. The cakes should be placed close together so that the mass will be as tight and solid as possible, thus preventing the cracks and openings that will allow air to circulate. Perfectly cut rectangular cakes can be closely packed, which put home the great need of having the cakes cut in regular size.

In beginning a layer of dry sawdust about a foot thick should be placed in the bottom of the ice house, the depth of the sawdust being a few inches less in the center than at the outer edge, so that the cakes will have a tendency to slide toward the walls. The sides of the mass of packed ice should be smooth. Any projecting pieces should be trimmed off before the mass is covered with insulation. If sawdust or mill shavings are used a space of at least twelve inches must be left between the sides of the ice stack and the walls of the building. This space should be filled with dry sawdust or shavings as the packing in the center proceeds.

In packing small quantities of ice it is a common custom to pour water over the stack or mass of packed ice and allow it to freeze solid before putting the insulation in place. If the weather is severe the mass of ice will freeze into a solid block thus greatly increasing the keeping qualities.



A Good Ice Plow is a Necessary Part of the Equipment

of the water, it is best, in order to prevent the water from overflowing the cutting surface, to cut a deep groove, or to cut through the ice parallel to and on both sides of the windrows.

After the snow is off the ice field, it is ready to be marked for cutting. The marking must be done carefully so that all cakes will be rectangular, which aids in economical handling and packing in the ice house. If the proper start is made in marking off the field, no trouble will be experienced, but if not, subsequent cuttings will be difficult. Success in marking depends largely on getting the first line straight, which may be done by placing a stake at each end of the proposed line to serve as a guide.

A straight-edge, consisting of an ordinary board about fourteen feet long, is then aligned with the two stakes and the cutting tool or hand-plow run along its edge, after which the board is pushed forward and again aligned with the two stakes. This is continued until the entire distance between the stakes has been covered. Another way

is to stretch a line between the stakes and do the marking with a hand-plow,

but in any case it is important to have all the cakes of the same size. In order to simplify the handling and packing, many farmers, especially those who harvest a comparatively small quantity of ice, cut the cakes twenty-two inches square, a size that is easily handled with a limited amount of equipment.

After the field has been marked off, a strip of ice, one block in width and extending from the loading-way to the main channel, is cut through and forced under the surface of the surrounding ice. This strip should be sawed somewhat wedge-shaped, wider at the bottom than at the top, which allows it to be forced down under the field with ease. The operation is known as "sinking the header" and it opens up a small channel the width of the proposed cakes. The channel is widened by cutting another strip to enable the long strips or floats of ice to be floated from the main channel to the bank or loading-way.

The strips of ice are then pushed with an ice hook along the channel to the bank, where they are sawed or chopped into cakes. The narrow chan-



Team at Left Pulls Cut Ice Onto the Loading Platform



A Home-made Scraper Simplifies the Work of Removing Snow

Annual Meeting of The Citizens' Mutual Automobile Insurance Company of Howell, Mich.

The annual meeting of the Citizens' Mutual Automobile Insurance Company was held in their office building on Saturday, January 15th. The following officers were re-elected: Wm. E. Robb, of Howell, Secretary-Treasurer; George J. Burke of the law firm of Cavanaugh & Burke of Ann Arbor, director; Dr. C. E. Skinner of Detroit, director; and H. J. Ellis, director.

Members and agents and attorneys of the Company were present from Kalamazoo, Muskegon, Allegan, Washtenaw, Macomb, Gratiot, and other counties of the state.

Secretary Wm. E. Robb gave a short review of the progress made by the Company since organization:

Assets	
Dec. 31, 1915,.....	Cash.....\$ 4,083.34
Dec. 31, 1916,.....	".....7,740.87
Dec. 31, 1917,.....	".....27,175.45
Dec. 31, 1918,.....	Cash and Capital.....43,035.19
Dec. 31, 1919,.....	".....71,201.69
Dec. 31, 1920,.....	Cash, Capital, Contingent.....104,259.61

Claims Paid	Year	No.	Amount
1915.....	4.....	\$ 564.18	
1916.....	176.....	25,260.42	
1917.....	474.....	58,938.91	
1918.....	731.....	95,128.00	
1919.....	1,387.....	182,492.27	
1920.....	2,232.....	280,901.29	
Total		5,004.....	\$643,285.07

Policies in Force	1915	1,738
	1916	15,337
	1917	27,431
	1918	32,908
	1919	39,742
	1920	45,067

Speeches were made by Hon. Wm. F. Nank of Mt. Clemens, Geo. J. Burke of Ann Arbor, and S. R. Ketchum of Kalamazoo. The fact was pointed out that there are still many automobile owners of the state that are not insured especially in the country districts. About 250 farmer cars were stolen in Michigan last year which were not covered by insurance and about 2000 other theft, fire, and collision losses. The necessity for insurance has been increasing every year and the Company is prepared to continue its growth with an efficient organization and ample surplus.

Farm Bureau Notes

FARM bureau members attending for making their woodlots produce a the annual meeting at Lansing in consistent annual return and will provide for their more efficient management and greater productivity.

This concession from the railroads came through the efforts of Mr. F. E. Coombs, State Farm Bureau Traffic Commissioner. Members desiring to take advantage of this privilege will be supplied with identification certificates from their county agents.

The newly inaugurated forestry department is progressing in fine shape. Department reports fuel dealers in lower Michigan are in the market for body beach and maple and are inquiring as to quantity available, kind and price at loading point. Inquiries for several carloads have already been recorded.

Due to the fact that logging operations on farms of the state are already under way on the contract plan, a wood pool will not be organized until next fall.

Future activities of the forestry department embrace a cruising service to farm bureau members. This service will give woodlot and timber owners definite knowledge of the number of board feet of marketable timber and the cords of fuel on their various holdings. The service will also present to them simple and concise working plans

At a meeting of the forestry committee of ten last week it was decided not to take any action this year on the cooperative marketing of maple syrup. There seems to be a lack of confidence and interest in the prospects of the 1921 yield on the part of maple sugar and syrup producers.

Mr. Charles Dean, of Vermontville, and Mr. Hart, of Williamston, were placed on a committee to perfect the arrangements and program for the annual meeting of syrup makers. Their report will probably be announced shortly.

At a meeting of representatives from twenty-one dairy cooperative associations in Grand Rapids on January 20, five men were elected as members of the dairy marketing committee of fifteen. They are: C. W. Pennock, of Nashville; J. S. Kinney, of Montmorency; J. C. Butler, of Portland; B. A. McGill, of Big Rapids, and J. E. Jones, of Grand Rapids. They will attend the dairy marketing conference in Chicago next month and then will work on the committee of fifteen in the planning of a state-wide dairy organization.

Ready for Farmers' Week

PROVIDED the weather man does his part, indications are that next week's farmer round-up at M. A. C. will be one of the most successful from an attendance standpoint since the establishment of the event as an annual custom several years ago.

Plans for housing thousands of visitors expected are virtually complete and most of the exhibits are in readiness. The special fare rate for the week, it has been ruled by railroad officials, will be one and one-half the one-way fare instead of one and one-third as originally planned. This decision came at the eleventh hour after the first arrangement had once been cancelled altogether.

Besides the usual farm crops, horticultural and poultry shows, a military drill, including the artillery and cavalry equipment of the R. O. T. C., will be given on the parade ground every afternoon at 1:30, and an exhibit in wool grades and grading will be staged by the animal husbandry department in cooperation with the Michigan Farm Bureau will be features.

The "hort" show will exhibit apples from twenty-two states, so that connoisseurs in this fruit may compare products of other parts of the country with the Michigan variety. An unusually strong potato exhibit will be another part of the hort show, while the usual fruits, flowers and cafeteria for the serving of pies and light lunches will be in evidence. The hort show will be in the armory.

The other main place of interest, as far as exhibits are concerned, will be the live stock pavilion in the agricultural building where the hays and grains which won much attention and favorable comment at the Chicago Exposition will be shown as a part of the crops exhibit. Many of the individual growers who took prizes at Chicago will have entries in the annual competitive exhibit of the Michigan Crop Improvement Association to be held in connection.

Poultry men will have an opportunity to view their prize birds in the new laboratory and showroom recently completed. Last year the poultry show was held in the college garage, but scarcely enough light was available to show off the entries to good advantage.

Only growers who have taken blue ribbons at county or state fairs are eligible to enter, though they are limited to as many entries as they took first prizes, rather than the individual birds which won honors.

That the cooperative elevator movement in Michigan is progressing successfully, that the number of elevators in the state exchange has grown from twenty-three to forty-five since October and that a further increase up to one hundred may be expected within the next six months was revealed at a meeting of one hundred and fifty representatives of cooperative elevator associations at M. A. C. on January 19. Delegates expressed entire confidence in the cooperative idea in general and the grain exchange in particular. According to a report submitted, elevators at the following points are now members of the exchange:

Albion, Allegan, Atwater, Lincoln, Avoca, Caledonia, Coopersville, Pigeon, Coldwater, Sault Ste. Marie, Decatur, Dowagiac, Decker, Bad Axe, Elkton, Harbor Beach, Flushing, Fowlerville, Marcellus, Grand Blanc, Gladwin, Hastings, Holland, Mason, Kent City, Lamb, Scottville, Marlette, McCords, New Haven, Port Hope, Parma, Romulus, Rockford, Bach, Charlotte, Snover, Sherwood, Montgomery, Trufant, Union City, Woodland, Ypsilanti.

Some parents who come to M. A. C. for Farmers' Week will see their sons in motion pictures. On one evening the film to be shown in the gymnasium from six to seven o'clock will be "The Visit of the Victors," portraying the activities of the Boys' and Girls' Club members who visited the Chicago Exposition. Some twenty-five Michigan lads attended the exposition and some of them are shown in the picture. This film has been assigned to Michigan for a month and will be sent to a number of counties.

Preliminary plans for the fifth annual county normal day, to be held at M. A. C. on May 14, have been completed by R. A. Turner. County normal students, teachers and training classes from the surrounding sections will attend. A speaking program, banquet and trip about the campus will be features of the day.

F. W. HENSHAW.

Coffee at Wholesale

Direct from Roaster to Consumer

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Turn this to your advantage by meeting it with large yield of high quality. You know that under any market condition more and better grain from the same acreage and with the same labor means increased income. Use Four Leaf Phosphate, the finest ground Tennessee Phosphate rock, offering not only early but greatest availability in direct soil application.



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Michigan grown Early Browns direct from grower.

A good early bean of best quality.
\$6.00 per bushel. Bags free.
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\$40 per month and expenses paid good men for PROTECTIVE NURSERIES, Geneva, N. Y.

Hog Industry Approaches Pre-War Position—By Gilbert Gusler

ALTHOUGH the total number of hogs packed during 1920, as well as the volume of pork products exported and the yearly average price were considerably above the level of pre-war times, yet these indicators of the status of the industry show that at the end of the year the pre-war basis had been practically restored.

At the beginning of 1921 nearly all of the increased volume of production brought about during the war, and which meant an excess during normal times, has been discontinued. The surplus from this increased production has been consumed so that the continuance of extraordinary export sales is unnecessary for the maintenance of reasonable prices. Most of the loss to the producer, which was inevitable when prices changed back to the old basis, has been pocketed.

The year has been one severe disappointment after another in the hog market. Compared with costs of production, represented mostly by the price of corn, hog prices were low during the first six months of the year. Supplies were lighter than in the same period of 1919. Prices were about \$2.50 to \$3.00 lower than during the period of government stabilized prices and much below the high level reached in the early summer of 1919. The hope that an upward reaction would come was deferred from week to week, the supply of hogs being sufficient to satisfy the actual domestic and export demand, and gradually to pile up a great surplus of cured hog products. Domestic consumption was hampered to some extent by high prices at retail and export requirements were restricted by low rates of exchange and by the impoverished finances of most European countries.

Although the price could in no wise be considered to show stabilization, sudden changes of \$1.00 per hundred pounds or more being the rule, yet the market did not get far up or down until the sharp rise of September. This advance was due to seasonal shortage

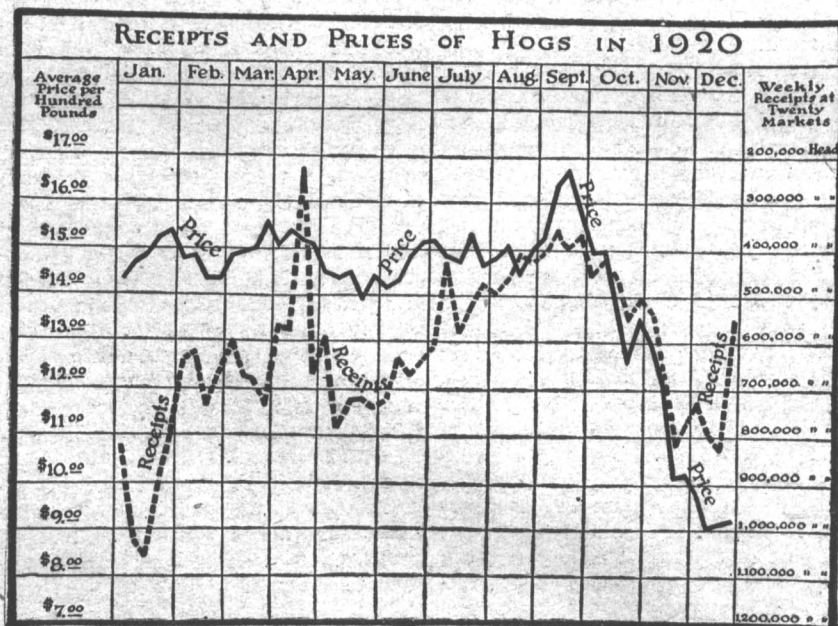
in the supply and to the oft alleged desire of the larger packers to create a higher value upon which to merchandise the big stocks of lard and meats accumulated during preceding months.

Beginning with early October the toboggan slide started. After the preceding behavior of the market, a decline to a \$12 average was not surprising, but depressing economic conditions everywhere sent the price down an additional \$3.00. On the low day at Chicago the top stood at \$9.15 and the average at \$8.97 compared with a top of \$18.25 and an average of \$17.15 on September 20.

Feed costs declined during the last half of the year. Corn began its precipitate descent early in July and for a few weeks in August and September the hog-corn price ratio showed a big profit in fattening, although this was largely if not entirely nullified by high costs earlier in the year. Partly because of increased freight costs the price of corn to the farmer has returned farther toward pre-war levels than have hog prices. Although hogs were thirty-five to forty per cent cheaper at the end of the year than at the beginning, the lower price basis actually showed a more profitable feeding ratio. The fact that most of the corn was produced at a loss is a separate matter.

Export trade was a source of disappointment most of the year. Early expectations were optimistic on the score that there was a huge deficit to be filled abroad. The results of the readjustment from the export of 2,700,000,000 pounds of hog meats and lard in 1919, to 2,600,000,000 pounds in 1919 down to around 1,425,000,000 pounds in 1920 could not be other than painful. The total is still about twenty per cent above the pre-war average so that a slight further loss in demand from this source will not be surprising.

The rate of slaughter with reduced export buying allowed hog products especially lard, to pile up gradually during the first seven months



THE prices shown are weekly averages on hogs of all weights at Chicago. Receipts represent combined totals of twenty leading markets. The line for receipts is shown inverted from the usual order so that the high prices and light receipts are the high points of their respective lines, while the low points of each represent low prices and heavy receipts. Prices held within a comparatively narrow range during the first half of the year. There was a spring bulge such as usually appears, and during September the late summer advance arrived. Since that time prices declined about fifty per cent, almost without interruption, the weekly average for September 25 being \$16.67 while for the week ending December 18 the price was \$9.12. Part of this decline was due to the increase in the run, but half of it may be fairly ascribed to the depressing economic conditions in this country and abroad. Receipts, as usual, were much more irregular than prices. The largest volume was reached during last January. The small supply during the week ending April 24, was due to the switchmen's strike and railroad embargoes. Supplies were light during September, but the fall run started with a rush in the last half of October, after which the movement showed steady expansion until the last half of December, when the decline in prices checked the movement.

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The famous "See-Thru" Teat Cup makes this United the most practical, up-to-date milker on the market. You can see at a glance how each teat is milking. It is strictly sanitary—easy to keep clean—safe and lasting. Pump-pulsator type gives the smooth, natural action—sucks like a calf.



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160 to 900 lbs. capacity—backed with a guarantee of satisfaction. It is easy running, close skimming and absolutely sanitary—substantially built to give years of service. Get the best—the United.

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With the famous full-swing Dolly—hand or power type—the washer that washes clothes cleaner, quicker and safer. Fitted with steel stand and swinging wringer, if desired. See one work—then buy it and save!

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Isbell's Gardens Pay—for the same reason that pure-bred cattle produce thoroughbred offspring. Every ounce of Isbell Seed is tested. Isbell Seeds are produced in the North where earliness, hardiness and sterling qualities are bred into them. Isbell's 1921 book on seeds and gardening tells what and how to plant and what to expect from the crop. It's one of the most authoritative catalogs in America. Ask for your copy. Mail coupon.

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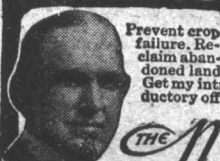
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Certified Petosky Seed Potatoes

Grown in Presque Isle County For list of growers write E. S. Brewer, County Agr'l Agent, Onaway, Mich.



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The Reasons

To begin with, a Peninsular Policy protects you on the same basis the city policy holder is insured, rates being based on building conditions and improvements, as well as locations; such protection in no way interfering with any policies now carried.

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Because such men as Colon C. Lillie, President, and J. Floyd Irish, Secretary and Managing Underwriter, manage and personally direct the business. Their experience and integrity, alone, offer fundamental reasons for complete confidence in the Peninsular Way.

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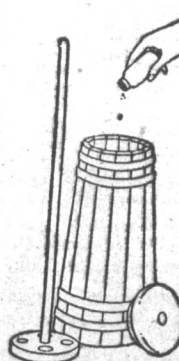
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GUARANTEED
33 years reputation for square dealing. Kelly's trees (all varieties) are sturdy and well-rooted, perfect specimens and guaranteed to satisfy. You take no risk! The prices are reasonable. Send for 1921 Free Catalog. Kelly Bros., 1100 Main St., Danville, N. Y.

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All stores sell 35-cent bottles, each sufficient to keep that rich, "Golden Shade" in your butter all

the year round. Standard Butter Color for fifty years. Purely vegetable. Meets all food laws, State and National. Used by all large creameries. Will not color the buttermilk. Tasteless.
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New York Fruit Men Meet

Production and Marketing Problems Discussed

NOTWITHSTANDING the unfavorable situation of the fruit industry, the annual meeting of the New York State Horticultural Society at Rochester, January 11-14, was attended by a large number of representative fruit growers from all parts of the state. If there is any lack of faith in the future of apple growing in the state, it was not in evidence at this meeting. The fruit exhibit was not as extensive as in former years. The fine exhibit of the Geneva Experiment Station made from its own orchards, was worthy of special mention.

In his annual address President Harry E. Wellman, of Kendall, said that there had been circulated the idea that no members in the employ of the state or federal government should serve on committees or be elected to an executive office; that only growers should have such responsibility. He believed that this policy for a state horticultural society was wrong. Much of the success of the society is due to the efforts of the men from Cornell and Geneva.

Taking 1920 by itself President Wellman said he believed the average grower in New York state has not paid his expense of growing the crop if he honestly counted the cost. The quantity of fruit produced in 1920 reached the peak of production for the state, and the quality was above the average. The total production of apples was nine and one-quarter million barrels; and the peaches two and one-quarter million bushels. There was a tremendous waste of fruit due to the labor situation and the car shortage. It was suggested that there be formed at once a combination of all the producing and shipping organizations for the purpose of compelling the railroads to furnish the required cars for all fruits. The car situation is a handicap to the grower and also affects the price to the consumer.

RECENT results with fertilizers for apples in New York state were discussed by Prof. U. P. Hedrick, of the Geneva Experiment Station. Of these experiments one ran for twelve years and was discontinued; another has been running for twenty years, and two have been carried on for eight years, and a fifth one for seven years. The twenty-year experiment was in an orchard on heavy clay loam. The trees were Ben Davis top-worked with Rome Beauty buds. The orchard was laid off in twelve plats of five trees each. Two plats were fertilized with stable manure; two with acid phosphate; two with acid phosphate and muriate of potash; two with a complete fertilizer of acid phosphate, muriate of potash, dried blood and nitrate of soda. The four remaining plats were checks. The orchard was tilled each year and a non-leguminous cover crop plowed under. At the time the fertilizer had been applied for twenty consecutive years, with cost of treatment considered, the unfertilized plats were the most profitable.

An interesting result of the application of nitrogen was very apparent in this orchard the past season. The crop was by far the largest ever harvested. The total yields in the different plats was the same, but on those to which nitrogen was applied the number of apples was greater, the size smaller. Nitrogen seemed to have caused the selling of more apples, but did not stimulate the trees sufficiently to give proper size to apples. The other experiments at the Geneva Station gave practically the same results, showing the lack of a need for fertilizer in orchards on clay soils.

The station having received protests

that orchard conditions at Geneva were not typical of the whole state, in 1911 started a series of tests in other localities where fruits are very largely grown, but where soils are different. The results of these experiments showed that fertilization has not produced increased yields that would justify the necessary outlay for fertilizers and the labor invested in their application. There has been no improvement in color or size of fruit and growth increases of trees have been small.

The facts of all these experiments leads the station to conclude that average orchards in New York state cared for in the same way will not respond to fertilizers. Orchards, on poor sandy, gravelly soil, in all sodded orchards and on soils too wet or too dry for the proper sustenance of soil bacteria, these may need fertilizers. Orchards that have not had generous treatment in tillage and cover crop may be benefited by fertilizers. But even if the trees are not in the healthy condition desired, it is not certain that they need fertilizers. It is more likely that the land needs drainage.

Professor S. W. Fletcher, of State College, Pennsylvania, speaking of recent developments in Pennsylvania apple growing, said that in fifteen years Pennsylvania will be producing all the apples required by the state markets. Fully half of the trees in commercial orchards are not in bearing. Adams county has 3,000 acres bearing, and 4,000 acres not bearing. In 1900 there were 2,400 acres of apple orchards. There have been 16,000 acres planted since that date. The keynote of Pennsylvania apple growing is the number of local markets.

THE development of the central packing associations in New York state was the subject of a talk by Professor R. W. Rees, of the State College of Agriculture. This movement began in Niagara county and now includes several Lake Ontario counties. There are now twenty-two local associations organized in a central association and it is planned to develop a central sales agency. The central association helps the locals to secure trained packers and foremen, distributes market information and looks after matters of transportation.

A note of warning on the subject of cooperation was sounded by Sherman J. Lowell, master of the National Beauty buds. The orchard was laid off in twelve plats of five trees each. Two plats were fertilized with stable manure; two with acid phosphate; two with acid phosphate and muriate of potash; two with a complete fertilizer of acid phosphate, muriate of potash, dried blood and nitrate of soda. The four remaining plats were checks. The orchard was tilled each year and a non-leguminous cover crop plowed under. At the time the fertilizer had been applied for twenty consecutive years, with cost of treatment considered, the unfertilized plats were the most profitable.

A TALK on cooperative marketing was given by Moulton B. Goff, general manager of the Sturgeon Bay, Wisconsin Cooperative Association. Mr. Goff's organization handles the product of 3,800 acres of sour cherries. Last season it canned 2,100 tons and shipped 500 tons of sour cherries. You must realize," he said, "if canned goods are to give confidence to the public you must guarantee the product. The National Cannery Association is cooperating with its member canner-

(Continued on page 120).

SOLVAY

PULVERIZED LIMESTONE



This illustration drawn from an actual photograph secured through the courtesy of the Michigan Agricultural College and Indiana Experiment Station, shows the effects of limestone on clover yield. The pile on the left is the result of manure application only, showing the yield from one-twentieth of an acre, the clover running 3560 pounds per acre.

The pile on the right shows the result of an application of manure and limestone. It shows the yield from one-twentieth of an acre, the crop running 5520 pounds per acre—almost double the yield of the same area and of the same land without limestone.

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Every farmer knows in a general way that wonderful results are being achieved by treating soil with pulverized limestone.

Probably you have read of instances where a single application has doubled the hay or alfalfa yield—you have heard your County Agent strongly urge the use of limestone—you have seen your Agricultural College reports emphasizing the necessity of limestone treatment particularly on Michigan soils, because so large a percentage is sour.

But there has been a reasonable doubt in your mind as to what limestone would actually do on *your own* land. Conditions on your farm are different. Of course, they are.

And now we have recognized this fact. So we have written a book which will enable you to accurately analyze the conditions as they actually exist on your farm and tell definitely what limestone will do for you.

We have not merely stated our ideas and opinions as to what limestone will do, but have made this book a concise digest of the opinion of the greatest agricultural authorities in the country on limestone, the results of tests that have been carried out in various agricultural experimental stations and the results obtained in actual use on farms under every variety of condition.

A glance at a few of the chapter heads will give you an idea of how thoroughly this subject is covered.

Origin, Value and Use of Limestone
Functions of Limestone
Causes of Soil Acidity
Determining the Need of Limestone
Crops Benefitted by Limestone
Limestone and Alfalfa
Limestone and Clover

Limestone and Non-Legumes
Sandy Soils Need Limestone
Results from the Use of Limestone
Application of Limestone

The most profitable thing a farmer can do is to learn the need, the uses, and the results of limestone.

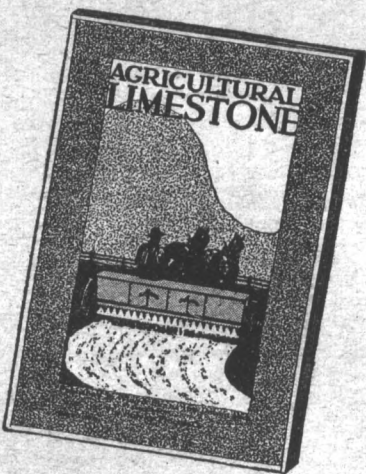
We honestly believe that this one subject more largely affects his yields and his profits than any other feature of his work.

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The book will require not over a half hour's time to read and will give you an accurate knowledge of this vital subject, which will put you in position to obtain greater yields and greater profits for the rest of your life.

It would be a great thing for Michigan agriculture if this book was placed in the library of every Michigan farmer and carefully read. We are doing our part to accomplish this by going to the expense of publishing and distributing this book absolutely free.

All we ask is that you do your share by sending for it now while you think of it.



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The Melotte Separator, H. B. Babson, U.S. Mgr. Dept. 3102, 2843 W. 19th Street, Chicago, Ill.



Upper Peninsula News

By L. A. Chase

THE Lake Superior Guernsey concentrates will be considered. Other Breeders' Association, with its headquarters at Ironwood, Gogebic county, was organized in 1915 with nineteen members. Three purebred Guernsey sires, Mr. C. E. Gunderson, agricultural agent, informs me, were purchased and placed with members of the association. In 1919 the sires of this association served one hundred and twenty-four animals; in 1920, one hundred and fifty-eight. Since 1919 nine purebred females have been added to the herds of the members. The sires are interchanged in accordance with the rules of the association. Caretakers are at present allowed \$100 a year for keeping the sires, provided the sires earn that amount. Otherwise the caretakers stand the expense, says Mr. Gunderson. The fees charged were \$3.00 for outsiders and \$1.50 for members. In November these fees were raised to \$4.00 for outsiders and \$2.00 for members. Caretakers get twenty-five per cent of any income for services above \$100. Any group of five farmers in any community, by paying \$30 apiece may become members of the association and be provided with a bull in their community by the association. The shares are \$10 each and each member must buy three shares. It is the purpose, when sufficient funds are available, to procure a sire of exceptionally high record, says Mr. Gunderson, for service of the best cows of the association. In the spring of 1920, the Junior Guernsey Breeders' Association was organized, and four purebred Guernsey heifers were placed with its members, states Mr. Gunderson. The boys have been received as associate members of the Lake Superior Guernsey Breeders' Association.

Cow-testing Work.

In June, 1920, there was also organized in Gogebic county a cow-testing association of thirty-three members. In his December letter, Agent Gunderson gives advice to his farmers regarding the practice that should be followed in connection with the operation of this association. He advised a study by the members of the association of the records of each cow for each month. The standard of excellence has been put by the tester at thirty-six pounds of butter-fat. The requirement was formerly thirty pounds. In the monthly list published in Mr. Gunderson's letter, Slade Brothers' "Daisy," tops the cows with 1,017 pounds of milk, running 4.2 per cent butter-fat, and yielding 42.4 pounds of butter-fat for the month. A two-year-old heifer, owned by J. G. Helli, shows the highest production for the month of cows of her age: 1,005 pounds of milk, 36.2 pounds of butter-fat, testing 3.6 per cent.

Encouraging Dairying.

Agricultural Agent Kunze, of Chippewa county, in the columns of the Evening News, of Sault Ste. Marie, announces that special dairying problems will be his main work for the ensuing two months. He invites calls and correspondence from persons who are specially interested in dairying now or prospectively. The agent states his readiness to meet farmers in groups in their own neighborhood. The outline of the work in dairying which Mr. Kunze has set before himself, includes the subjects of marketing milk and cream, the farm milk-house, production of clean milk, testing of milk and cream on the farm, milk records, dairy accounting, proper ventilation of dairy barns, and remodeling of hay-barns for dairying. Special attention, says the agent, will be given to the feeding of cows for milk production. The balance of home-grown feed with other con-

tations for growing feed at home, the proper handling of manure, the use of commercial fertilizers, and handling of soil and meadows, and the sanitation and disease control on the farm. For some time it has been known that the Chippewa agent has sought to direct the agriculture of his county away from a too exclusive interest in hay production which has tended towards the depletion and impoverishment of the one-time rich clays of the region, towards live stock with its resulting benefit to the soil.

Hay growers of Chippewa county are reported by the Evening News of Sault Ste. Marie, of January 13, to have virtually combined to withhold their hay from the market until the price of \$18 per ton f. o. b. shipping point is secured. This season's crop is said to aggregate from 2,000 to 2,500 carloads, and prices recently have been offered as low as \$14 per ton, it is stated. If it should develop that these low prices are due, not to profiteering, but to general market conditions, little good will come from this non-selling agreement.

Much Paid Out in Bounties.

In Ontonagon county, last year, \$17,469 were paid out in bounties. The animals on the list include, crows, woodchucks, weasels, hawks and wolves, according to the Ontonagon Herald. In Chippewa county the bounties paid were much less than the amount reported from Ontonagon. The sum paid under this head was \$2,820, according to the Evening News, weasels taking the largest amount of this—\$1,058. This would indicate the slaughter of 2,806 of these small pests last year. Forty-six foxes also swelled the bounty list. The woodchucks slain here numbered 232. Two lynxes and two wildcats killed required \$5 each in bounty. The crows slain for bounty numbered 2,422 in Chippewa county. In Delta county, according to the Reporter, of Gladstone, \$5,932 were paid out for the destruction of noxious animals. Wolves cost the county \$1,785 in bounties in 1920. Woodchucks added to this expense account by \$1,834, and weasels \$993. More than one thousand hawks and thirty-two owls paid the price. Sixty-six foxes were included in the reckoning.

Locating Farm Bureau Branch.

Where the branch office of the Michigan State Farm Bureau to be established in the upper peninsula will be located was not determined at the meeting of bureau representatives and county agents held at Escanaba, January 8. Marquette and Escanaba are known to be rivals for the branch office, and the whole question will go over until the meeting of county agents to be held in connection with farmers' week at the Michigan Agricultural College, in February. Only four county agents were in actual attendance at the Escanaba meeting and a more general expression of agent opinion must be sought, it is held. Another feature that must be thought of in connection with the location of the branch office is the relation of the local banks to the bureau. The operations of the branch will call for considerable local financial operation and assured banking connections are required. Consideration is already being given to this phase of the subject. Both Escanaba and Marquette are central as between the eastern and western limits of the peninsula, Escanaba being near its southerly limit and Marquette to the northward on the Lake Superior shore. Both are well supplied with rail connections, and both are lake ports.

CHICKS WITH COLDS.

I have some chicks separate from the other ones, that have colds. They have a watery discharge from the nose, look sleepy and keep their eyes closed a great deal. Is there a remedy? A. S.

In separating the chicks with colds from the remainder of the flock you have taken the first step exactly right. Colds are contagious. Place permanganate of potash in the drinking water used by all the birds. See that the water is colored a deep red and the birds have no other source of supply. Rubbing the head of a bird with a cold with camphorated vaseline will often reduce the inflammation. Some poultrymen make a mixture of a tablespoonful each of ginger, flour, mustard and black pepper. Then lard is added until the mixture can be rolled into pills. When a bird shows signs of a cold several of these small pills are given to stop it. Sometimes crushed onion rubbed on the head and fed to the sick fowl seems to control colds and start the bird on the road to health. When rubbing the head with either onion or vaseline be careful to keep it from the eyes.

The best method of treating colds consists in prevention. It often pays to keep the birds locked in the houses on cold windy and rainy days. At such times the exposure frequently brings colds and the birds will be better off in the laying-house scratching in a deep straw litter where the air is still and dry. Feeding a balanced ration seems to keep the birds toned up and resistant to colds. Clean poultry houses free from draughts are also preventive measures that cannot be neglected. An evergreen windbreak on the poultry range will protect the birds from raw fall winds which are a common cause of watery eyes.—K.

CURING BUMBLE-FOOT.

Several of my best laying hens grow dreadfully large corns under their feet. They have soft earth to walk on all the time but they hobble about. Could you advise me what to do for them? Wayne Co. L. B. W.

The swelling on the feet of your hens is called bumble-foot. It is commonly caused by infection from a cut or a stone bruise or by frequently jumping from a high perch to a hard floor.

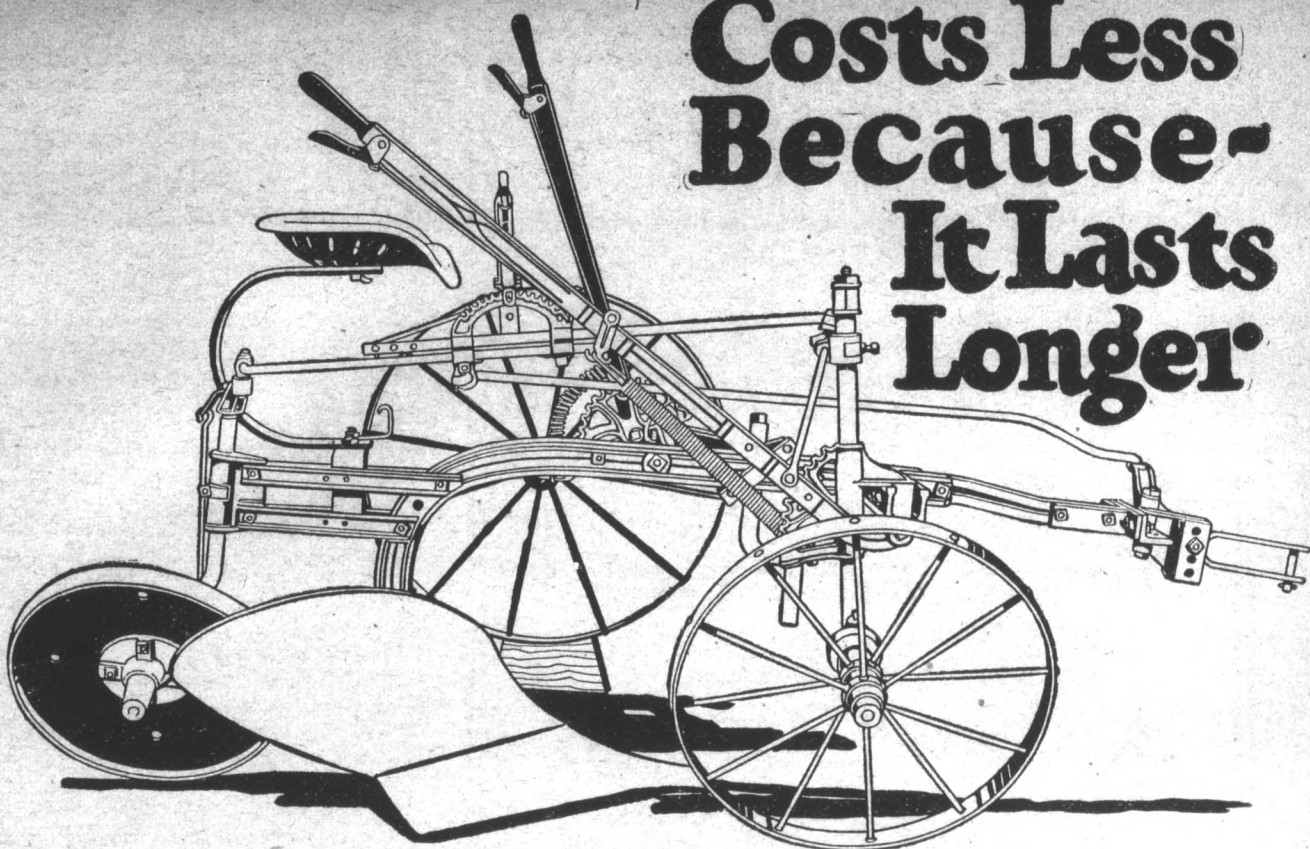
The swelling will be found to contain a cheesy pus and must be opened and scraped out. It will not be of liquid form and so will not drain out from a small incision. A cut must be made and not just a prick in the wound.

Then clean out the wound with a solution of iodine and bandage the foot to keep out infection. Place the afflicted birds where the floor will be as clean as possible. The wound can be washed with a two per cent carbolic acid solution and then greased with vaseline and carefully bandaged. Healing will often take place in a short time and the trouble never occur again if the cause is removed.—K.

MICHIGAN'S 1920 CROPS.

Following is a list of the important crops grown in the state, with the estimated acreage and production for 1920:

Crop.	Acres.	Production.
Winter wheat ...	890,000	13,795,000
Spring wheat ...	48,000	480,000
Corn	1,625,000	65,000,000
Oats	1,425,000	54,430,000
Barley	240,000	6,240,000
Beans	275,000	3,575,000
Rye	660,000	9,702,000
Buckwheat	42,000	609,000
Potatoes	340,000	35,700,000
Tame hay, tons..	2,624,000	3,149,000
Sugar beets, tons	129,000	1,106,000
Clover seed	80,000	120,000
Apples, bushels	16,500,000	
(agricultural).		
Apples, barrels	3,167,000	
(commercial).		
Peaches	1,500,000	
Pears	1,100,000	
Total	8,378,000	



Costs Less Because- It Lasts Longer

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clearance than usual between front wheel and moldboard. You are sure to appreciate this feature in plowing trashy ground.

Pulls Light—all-wheel-carried—no land-side friction or dragging of bottom. Weight properly balanced over all wheels. Permanent alignment and adjustment—no lost motion.

Simple, Easy Control—handy landing lever enables operator to change width of cut instantly—kinks can be taken out of furrow—full width cut can be maintained in plowing around stones—plow can be held to its work on hillsides.

Get fully acquainted with the John Deere Stag before your spring plowing season begins. Your John Deere dealer can show it to you. You will find it an unusually good plow investment.



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NEW YORK FRUIT MEN MEET.

(Continued from page 116).

ies in advertising the merits of standard packed fruit." He deplored the fact that New York state has no safe apple standard, that poor apples are packed in barrels marked "A" grade. As regards cooperative canneries, he said that unless the project is well financed and has contracts with growers covering several years he would not predict success. Unless the cooperative organization can improve the quality of its product it has no excuse for an existence.

How small fruit varieties are being developed by the Bureau of Plant Industry near Washington, was described by George M. Darrow, assistant pomologist. Strawberries from Russia and other parts of Europe are being used in efforts to develop a variety which will meet the requirements for the cannery trade, which will hold their color, shape and flavor when cooked. Dr. Van Fleet has a new raspberry with a distinct flavor, ripening later than Cuthbert and having a vigor and yield that surpasses any other sort. The bureau is working on a plan to make possible identification of raspberry and blackberry varieties as they come from the nursery.

Resolutions were adopted against the daylight saving law, and in favor of a law compelling licensed hunters to get a written permit from the owner before being allowed to hunt or trap on a farm.

Officers of the society for the coming year are: President, T. E. Cross, Lagrangeville; secretary and treasurer, Roy F. McPherson, Le Roy.

E. E. REYNOLDS.

HOME DEMONSTRATION.

THE December reports of the home demonstration agents located in the upper peninsula, just received, contain various items of news of interest showing the scope of the work being carried on by this service. Miss McElhinney, of Houghton county, announces the organization of a girl's club at the school of the Quincy Mine location, and a women's study club at Alston, a rural Finnish community. Eleven meetings with girls' clubs were held during the month. Twenty-one calls on children who were ill, were made. In Dickinson county, Miss Simonson reported the establishment of a hot-lunch club at Twin Falls. In Gogebic county the "H. D. A." and superintendent of schools at Ironwood are cooperating in hot-lunch work. In Chippewa county, Miss Pratt reports the organization of a garment club of fourteen members in the seventh and eighth grades of the Brimley schools. A county organization of women was started at the "Soo" on December 1. Thirty-two pupils at Pickford have organized a hot-lunch club. These reports have much to say about helps in garment-making and millinery, and a multitude of other items, small in themselves, but of consequence in making life more livable in our small villages and rural communities.—CHASE.

OUT OF STATE HOLSTEIN BUYERS.

Mr. James Gibson recently shipped a load of choice young cows to Colorado. Mr. Gibson will be remembered as the man who developed Woodcrest Dora DeKol and her famous family, later brought to Michigan by Mr. Pelletier as the foundation of the Pelletier herd. Mr. Gibson made his selections near Lansing, buying only from herds under supervision, and took some very fine prospects back with him.



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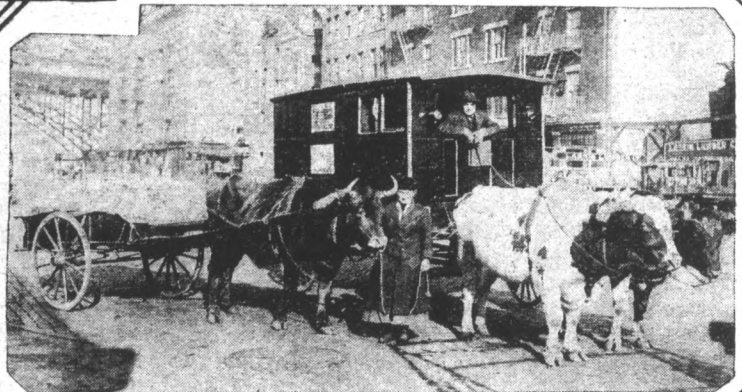
Ferrets for sale. White or Brown. Send for free instruction book and price list. LEVI FARNSWORTH, New London, Ohio.

WORLD EVENTS IN PICTURES



Philadelphia girl saves seventeen men and women who were caught in a burning building.

A goose race such as is common in European countries will feature the coming poultry show at Madison Square Gardens.



This couple with their house on wheels are enroute from Connecticut to California.

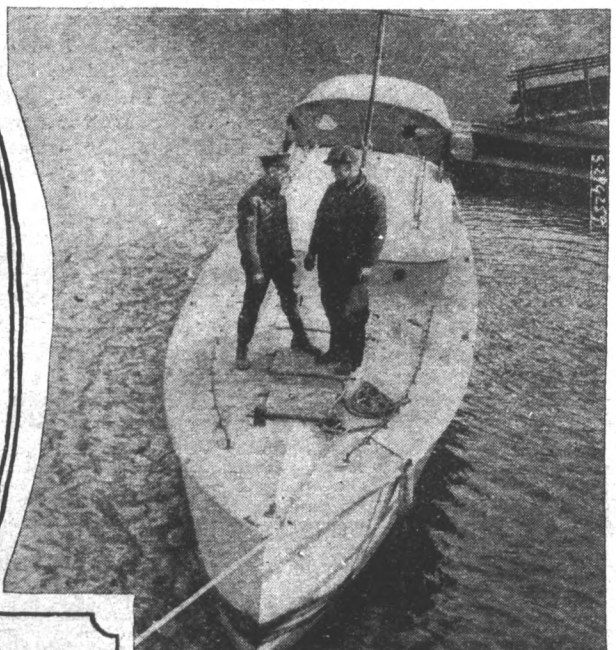
Newspaper men leaving their headquarters in northern Canada in an effort to locate the three naval balloonists reported to be approaching the village of Mattice.



How a police officer holds his man while ringing for assistance. The hold renders the man helpless. This is one of the many things taught recruit policemen.



Miss Stewart has the distinction of being the first woman to be appointed a national bank examiner.



This new torpedo boat is operated by two men and has a speed of thirty knots per hour. Its high speed and low visibility should enable it to approach within range of enemy vessels.

THE VOICE OF THE PACK

By EDISON MARSHALL

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Her fingers no longer clasped his. Strength had come back to him, and his fingers closed down until the blood went out of hers, but she was wholly unconscious of the pain. In reality, she was conscious of nothing except the growing flame in his face. It held her eyes, in passionate fascination. His pupils were contracting to little bright dots in the gray irises. The jaw was setting, as she had never seen it before.

"Do you think, Snowbird, that you'd even have to ask me?" he demanded. "Don't you think I understand? And it won't be in your defense—only my own duty."

"But he is so strong—and you are so weak—"

"I won't be so weak forever. I never really cared much about living before. I'll try now, and you'll see—oh, Snowbird, wait and trust me: I understand everything. It's my own fight—when you kissed me, and he cried down that word in anger and jealousy, it put the whole thing on me. No one else can make him answer; no one else has the right. It's my honor, no one else's, that stands or falls."

He lifted her hand to his lips and kissed it again and again.

And for the first time he saw the tears gathering in her dark eyes. "But you fought here, didn't you, Dan?" she asked with painful slowness. "You didn't put up your arms—or try to run away? I didn't come till he had you done, so I didn't see." She looked at him as if her whole joy of life hung on his answer.

"Fought! I would have fought till I died! But that isn't enough, Snowbird. It isn't enough just to fight, in a case like this. A man's got to win! I would have died if you hadn't come. And that's another debt that I have to pay—only that debt I owe to you."

She nodded slowly. The lives of the mountain men are not saved by their women without incurring obligation. She attempted no barren denials. She made no effort to pretend he had not incurred a tremendous debt when she had come with her pistol. It was an unavoidable fact. A life for a life is the code of the mountains.

"Two things I must do, before I can dare to die," he told her soberly. "One of them is to pay you; the other is to pay Cranston for the thing he said. Maybe the chance will never come for the first of the two; only I'll pray that it will. Maybe it would be kinder to you to pray that it wouldn't; yet I pray that it will! Maybe I can pay her that debt only by being always ready, always watching for a chance to save you from any danger, always trying to

protect you. You didn't come in time to see the fight I made. Besides—I lost, and little else matters. And that debt to you can't be paid until sometime I fight again—for you—and win." He gasped from his weakness, but went on bravely. "I'll never be able to feel at peace, Snowbird, until I'm tested in the fire before your eyes! I want to show you the things Cranston said of me are not true—that my courage can stand the test."

"It wouldn't be the same, perhaps, with an eastern girl. Other things matter in the valleys. But I see how it is here; that there is only one standard for men and by that standard they rise or fall. Things in the mountains are down to the essentials."

He paused and struggled for strength to continue. "And I know what you said to him," he went on. "Half-unconscious as I was, I remember every word. Each word just seems to burn into me, Snowbird, and I'll make every one of them good. You said I am a better man than he, and sometime it would be proved—and it's the truth! Maybe in a month, maybe in a year. I'm not going to die from this malady of mine now, Snowbird. I've got too much to live for—too many debts to pay. In the end, I'll prove your words to him."

His eyes grew earnest, and the hard fire went out of them. "It's almost as if you were a queen, a real queen of some great kingdom," he told her, tremulous with a great awe that was stealing over him, as a mist steals over water. "And because I had kissed your fingers, for ever and ever I was your subject, living only to fight your fights—maybe with a dream in the end to kiss your fingers again. When you bent and kissed me on that hillside—for him to see—it was the same: that I was sworn to you, and nothing mattered in my life except the service and love I could give to you. And it's more than you ever dream, Snowbird. It's all yours, for your battles and your happiness."

The great pines were silent above them, shadowed and dark. Perhaps they were listening to an age-old story, those vows of service and self-gained worth by which the race has struggled upward from the darkness.

"But I kissed you—once before," she reminded him. The voice was just a whisper, hardly louder than the stir of the leaves in the wind.

"But that kiss didn't count," he told her. "It wasn't at all the same. I loved you then, I think, but it didn't mean what it did today."

"And what—" she leaned toward

him, her eyes full on his, "does it mean now?"

"All that's worth while in life, all that matters when everything is said that can be said, and all is done that can be done. And it means, please God, when the debts are paid, that I may have such a kiss again."

"Until then, I make oath that I won't even ask it, or receive it if you should give it. It goes too deep, dearest—and it means too much."

This was their past. Not until the debts were paid and her word made good would those lips be his again. There was no need for further words. Both of them knew. The soldier of the queen must be tried with fire, before he may return to kiss her fingers. The light burns clear in this. No instances of degeneracy, no exceptions brought to pass by thwarted nature, can affect the truth of this.

In the skies, the gray clouds were gathering swiftly, as always in the mountains. The raindrops were falling one and one, over the forest. The summer was done, and fall had come in earnest.

CHAPTER VIII.

THE rains fell unceasingly for seven days: not a downpour but a constant drizzle that made the distant ridges smoke. The parched earth seemed to smack its lips and little rivulets began to fall and tumble over the beds of the dry streams. The Rogue and the Umpqua flooded, and the great steelhead began to ascend their smaller tributaries. Whisperfoot hunted with ease, for the wet shrubbery did not crack and give him away. The air was filled with the call of the birds of passage.

All danger of forest fire was at once removed, and Snowbird was no longer needed as a lookout on old Bald Mountain. She went to her own home, her companion back to the valley; and now that his sister had taken his place as housekeeper, Bill had gone to the lower foothills with a great part of the live stock. Dan spent these rainy days in toil on the hillsides, building himself physically so that he might pay his debts.

It was no great pleasure, these rainy days. He would have greatly liked to have lingered in the square mountain house, listening to the quiet murmur of the rain on the roof and watching Snowbird at her household tasks. She could, as her father had said, make a biscuit. She could also roll up her sleeves over trim, brown arms and line upon the distant sky, the leap with entire good humor do a week's laundry for three hardworking men.

an instant's flash, it evolved into a

He would have liked to sit with her, through the long afternoons, as she knitted beside the fireplace—to watch the play of her graceful fingers and perhaps, now and then, to touch her hands when he held the skeins. But none of these things transpired. He drove himself from daylight till dark, developing his body for the tests that were sure to come.

The first few days nearly killed him. He over-exercised in the chill rain, and one anxious night he developed all the symptoms of pneumonia. Such a sickness would have been the one thing needed to make the doctor's prophecy come true. But with Snowbird's aid, and numerous hot drinks, he fought it off.

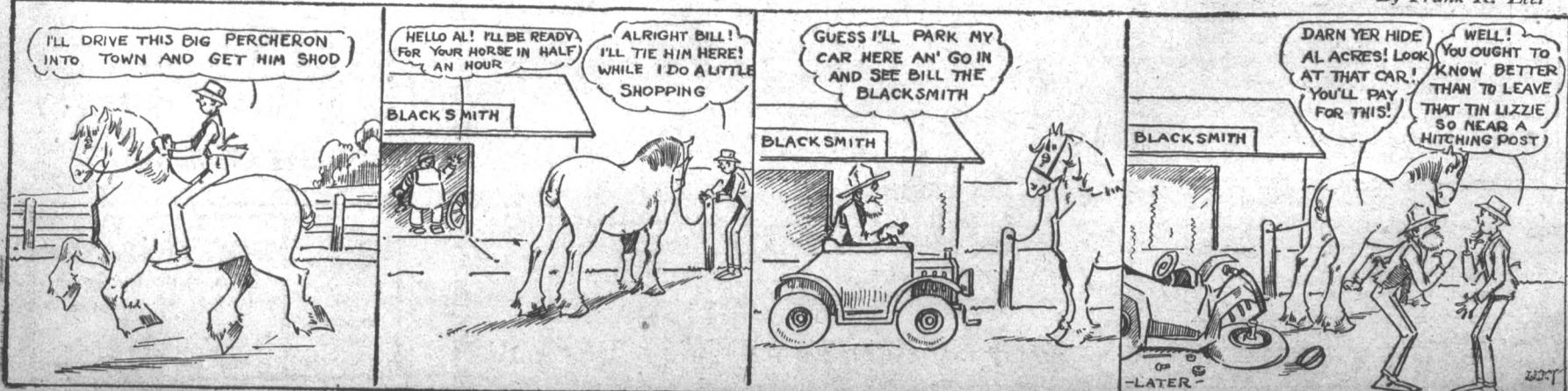
She had made him go to bed, and no human memory could be so dull as to forget the little, whispered message that she gave him with his last spoonful of medicine. She said she'd pray for him, and she meant it too—literal, entreating prayer that could not go unheard. She was a mountain girl, and her beliefs were those of her ancestors—simple and true and wholly without affectation. But he hadn't relaxed thereafter. He knew the time had come to make the test. Night after night he would go to bed half-sick from fatigue, but the mornings would find him fresh. And after two weeks, he knew he had passed the crisis and was on the direct road to complete recovery.

Sometimes he cut wood in the forest: first the felling of some tall pine, then the trimming and hewing into two-foot lengths. The blisters came on his hands, broke and bled, but finally hardened into callosities. He learned the most effective stroke to hurl a shower of chips from beneath the blade. His back and limbs hardened from the handling of heavy wood—and the cough was practically gone.

Sometimes he mended fences and did other manual labor about the ranch; but not all his exercise was taken out in work. He didn't forget his friends in the forest, creatures of talon and paw and wing. He spent long days roaming the ridges and fighting through the buckbrush, and the forest yielded up its secrets, one by one. But he knew that no mortal span of years was long enough to absorb them all. Sometimes he shot ducks over the marshes; and there was no greater sport for him in the wilds than the first sight of a fine, black-pencil line upon the distant sky, the leap through the air that it made until, in an instant's flash, it evolved into a

AL ACRES—No Sensible Horse Would Do Otherwise

—By Frank R. Leet



flock of mallard passing with the wind; and then the test of eye and nerve as he saw them over the sights.

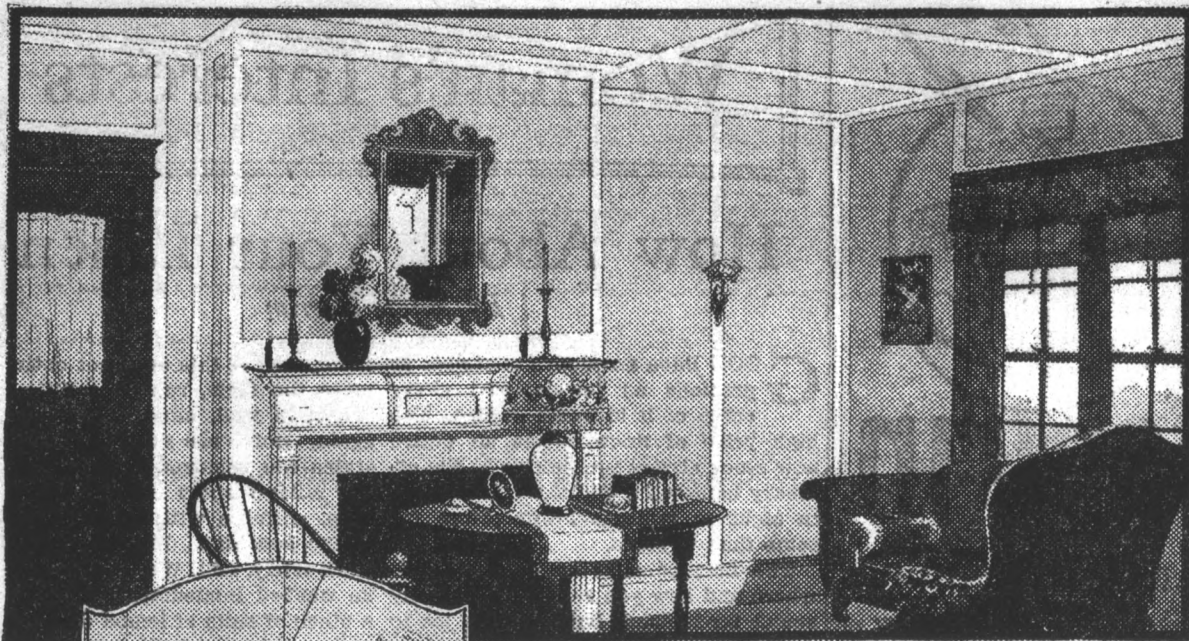
His frame filled out. His face became swarthy from constant exposure. He gained in weight. A month glided by, and he began to see the first movement of the largest forest creatures down to the foothills. For not even the animals, with the exception of the hardy wolf pack, can survive if unprotected from the winter snow and cold of the high levels. The first snow sifted from the gray sky and quickly melted on the wet pine needles. And then the migration of the deer began in earnest. Before another week was done, Whisperfoot had cause to marvel where they had all gone.

One cloudy afternoon in early November found Silas Lennox cutting wood on the ridge behind his house. It was still an open question with him whether he and his daughter would attempt to winter on the Divide. Dan of course wanted to remain, yet there were certain reasons, some very definite and others extremely vague, why the prospect of the winter in the snow fields did not appeal to the mountaineer. In the first place, all signs pointed to a hard season. Although the fall had come late, the snows were exceedingly early. The duck flight was completed two weeks before its usual time, and the rodents had dug their burrows unusually deep. Besides, too many months of snow weigh heavily upon the spirits. The wolf packs sing endlessly on the ridges, and many unpleasant things may happen. On previous years, some of the cabins on the ridges below had human occupants; this winter the whole region, for nearly seventy miles across the mountains to the foothills, would be wholly deserted by human beings. Even the ranger station, twelve miles across a steep ridge, would soon be empty. Of course a few ranchers had homes a few miles beyond the river, but the wild cataracts did not freeze in the coldest of seasons, and there were no bridges. Besides, most of the more prosperous farmers wintered in the valleys. Only a few more days would the road be passable for his car; and no time must be lost in making his decision.

Once the snows came in reality, there was nothing to do but stay. Seventy miles across the uncharted ridges on snowshoes is an undertaking for which even a mountaineer has no fondness. It might be the wisest thing, after all, to load Snowbird and Dan into his car and drive down to the valleys. The fall round-up would soon be completed, Bill would return for a few days from the valleys with new equipment to replace the broken lighting system on the car, and they could avoid the bitter cold and snow that Lennox had known so long. Of course he would miss it somewhat. He had a strong man's love for the endless drifts, the crackling dawns and the hushed, winter forest wherein not even Wolf or Whisperfoot dares to go abroad. He chopped at a great log and wondered what would suit him better—the comfort and safety of the valleys or the rugged glory of the ridges.

But at that instant, the question of whether or not he would winter on the Divide was decided for him. And an instant was all that was needed. For the period of one breath he forgot to be watchful—and a certain dread Spirit that abides much in the forest saw its chance. Perhaps he had lived too long in the mountains and grown careless of them: an attitude that is usually punishable with death. He had just felled a tree, and the trunk was still attached to the stump by a stripe of bark to which a little of the wood adhered. He struck a furious blow at it with his ax.

(Continued next week).



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The next time you are in town visit the Beaver Board dealer. Let him show you the big flawless panels of Beaver Board—all ready to use on your walls and ceilings. He will tell you all about this "Do-it-yourself Way" to renew the old home or build everlasting walls and ceilings in the new home. Ask about Beavertone, a velvety flat wall paint especially made for Beaver Board in a variety of beautiful colors.

If you cannot locate the Beaver Board dealer write to the nearest of the District Sales Offices listed below.

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Woman's Interests

How About Your Linen?

By Addie Farrar



GOOD linen nowadays is almost as precious as jewels, and every scrap of it is worth saving. The high price of linen makes an entire new stock almost prohibitive to the ordinary housewife, and there is nothing in sight to indicate lower prices for some time to come.

The first point to be considered is where and how you keep it. This may sound far-fetched, but it has a lot to do with the wearing qualities of linen and also the health of the family. The ideal linen store-place should be a well-ventilated cupboard in a warm, dry position and in a good light. And yet I have seen housekeepers tuck linen, fresh from the ironing board and not perfectly dry, away in a dark, airless drawer.

Recently I saw a linen closet that was ideal. The shelves were just wide enough to admit one layer of linens, and in order that the articles might have proper air and always be perfectly dry, these shelves were made of

the spots. If this does not entirely remove the stain, rub on a little borax, rub it in well, and try boiling water again. Some use salts of lemon. Fruit stains are removed in the same way. For mildew spots rub the stains with soap, sprinkle with chalk and bleach in the sunshine. Buttermilk will also work fairly well. Wet ink stains should be washed immediately in milk. Put a pinch of salts of lemon on iron mould stains and pour boiling water through the spot. Be sure to rub the salts of lemon in well and repeat until stain is out. Paint on linen should be removed with a mixture of ammonia, turpentine and paraffin.

I have found that it is always best to have all linen marked either by a large monogram or a small embroidered initial. It adds to the distinction and beauty of all household linens to have them individualized by your "trade-mark." It takes only a few minutes to do the work, as on towels outline stitch is pretty, and even on sheets you can

into smaller cloths that may be used for lunch, tray or carving cloths, and the smaller pieces into doilies. If the center is badly worn, cut large squares from the corners of the cloth which is apt to be good, and set together with lace insertion which can be bought cheap at sales, and if you wish, edge with lace. Crochet insertion and lace is pretty if you care to take the time. You will have in this way a handsome lunch cloth. Oftentimes, I cut napkins for everyday use from worn table cloths. These I hem and they last a long time. Centerpieces, small doilies and carving cloths all may come from scraps. I made an entire breakfast set from a fine old table cloth. After getting out a lunch cloth from the four corners and crossing with imitation cluny lace, I cut a centerpiece, several plate doilies, and the smaller doilies from the ends left and in odd moments buttonholed the edges in blue mercerized cotton. The clippings too worn for use, I put into the medicine chest for "First Aid."

From one cloth I made a very handsome luncheon set by using bits of fine old lace curtains to combine with it. I appliqued the bits of net, the design being fine and dainty, on the linen, buttonholed around it and then cut the linen from underneath. Bureau scarfs may be made the same way, and right here let me diverge long enough to say that bits of fine old curtains may be used to applique on children's dresses, make yokes, and cuff and collar sets. Of course, it goes without saying, that only very fine curtains are useful for this work.

Old bath towels may be cut up into wash cloths—the better parts being used for this, and a quickly-made crocheted edge in color worked around the four sides. The worn parts made good cleaning cloths and fine dish cloths. Linen towels should be carefully darned and patched at each washing. It is a good plan to keep one old one on hand to patch the others with. Worn out, the best parts may be converted into little doilies to put under plants or the like, and several old ones stitched together to form a big new towel will make a good cloth for drying glassware.

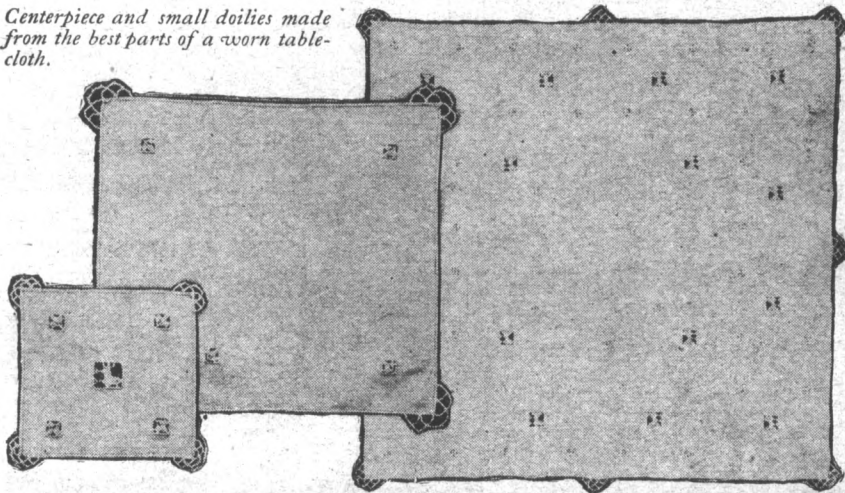
One thing more, remember it is no economy to store linen for long periods without using it. If starched the starch rots the fabric and gives it a bad color when left undisturbed for some time. It is the "best linen" which is most likely to suffer in this way and if you seldom use it for "company" then give it an occasional turn on the family table, so that it may go through the wash and keep its color. If you do not use it often, be sure that you keep blue paper about it.

WOMEN'S INTERESTS AT THE STATE GRANGE.

THE woman's work committee of the Michigan State Grange made a comprehensive study of their field of work and at the recent session suggested a somewhat ambitious program for the year 1921.

In national and international affairs they urged that American women work for a thorough peace which will eliminate the possibility of future wars. Although thankful for national prohibi-

Centerpiece and small doilies made from the best parts of a worn table-cloth.



lattice work, the whole being white enameled. A little ventilator at the top of the door admitted air freely and was covered with fine white muslin, which, while it let in the air, kept out the dust. Each shelf was labeled, and on the door hung a linen book in which was listed the entire household linen stock, the date of its purchase and the price. Linen gives better wear if used uniformly. The clean linen may be put at the bottom of the pile, and the daily supplies taken out from the top. In this way each article gets its turn at wear and washing.

The life of linen may be prolonged twenty-five per cent by laundering. It is a scientifically known fact that hard water is ruinous to clothes, therefore the water should be softened. Many a laundress adds caustic soda to the already prepared soap solution when washing, and this gives excessive alkalinity and ruins the strength, color and wearing qualities of the fabrics. Leaving clothes overnight in a dirty soap bath also rots them, and insufficient rinsing makes them yellow and leaves soap which in time eats the linen.

Always before going to the wash, linen should be carefully examined. Small holes should be darned, for if let go they are liable to catch on the board, washing machine or wringer and become very big ones. Stains, too, should be removed. Tea and coffee stains are most easily removed while still wet. Place the table cloth over a basin and pour boiling water through

use outlining and a darning stitch to fill in. The close embroidered initials, while prettier, take more time.

Having looked after the storing, listing, mending and washing of your linen you may find that some of it seems too badly worn to be useful. But don't throw it away without a second look. Every scrap can be utilized. Sheets and table cloths seem to wear out in the middle faster than about the edges and this is natural as they get more wear in those parts. If the sheets are thin in the middle and the sides are good and strong, cut them through the center and then join the outer or selvage edges together making a seam down the middle, and hem the outer edges. If the center of the sheet is too badly worn, parts of it can be cut off and the sheet made to fit a three-quarter or a single bed. Oftentimes, an old sheet badly worn in places will have enough good in it to make a pillow slip or two, and when past all use the ironing-board can claim the old sheet for a cover.

Worn pillow cases are most useful for protecting fancy waists and blouses or children's dresses from dust, when they are kept hanging in closets. Cut a hole in the middle of the end of the case just big enough to let the hook of the hanger slip through. Place the blouse on the hanger then slip the case over and you have a splendid protector without cost or time.

If a table cloth is too much worn to make darning worth while, convert it

though thankful for national prohibition, anxiety was expressed lest our public officials fail in the enforcement of the constitutional amendment. The Shepherd-Towner bill providing for public protection of maternity and infancy was endorsed. These women want the "Truth-in-Fabric" law passed, and favor a bill regulating and supervising distribution of food. The establishment of a smoking-room for women lobbyists at the national capital was looked upon with scorn.

As to affairs here in Michigan the women are anxious that a new Home Economics Building at M. A. C. be provided, and that Grange workers cooperate with home demonstration agents and club leaders and with other agricultural organizations to improve the home life and social conditions of our farm folks. They urged the amendment of the mothers' pension law to apply to any woman filling a mother's place in keeping a home together.

They protested against much of the literature and many of the movie films that are now flooding the country. A plea was made for modesty and comfort in women's dress. They urged that home-keepers make a more careful study of food values and nutrition.

An important part of women's work in the Grange was held to be the development of future leaders for this

and other rural organizations. The responsibility for the Juvenile Grange is largely a part of the women's program.

Recommendations to Lecturers.

The home economics committee recommended to lecturers that the following be emphasized in their programs: The erection of a Home Economics Building at M. A. C., and enlarging the extension work of the Home Economics Department. Under the subject of nutrition infant feeding, foods for children and adults, and hot lunches in schools, should be featured. Proper dress for the high school girl, the business woman and the housewife ought to be included in the year's program. Household management may be classified under household accounts, personal accounts, personal budget and home conveniences. Since the women folks usually look after the poultry on the farm, the questions of raising, culling and marketing should find a prominent place in Grange discussions.

Other suggested topics are: Government control of packing houses, the Truth-in-Fabric bill, the Red Cross and country visiting nurses, the Shepherd-Towner bill mentioned above, the advisability of the appointment of women police for the protection of girls where local conditions require, and the effects of tobacco, especially cigarettes, upon our young people.

Program for Farmers' Week

NO better women's program was ever offered to the home-makers of Michigan than the one prepared for "Farmers' Week" at the M. A. C. next week, January 31 to February 5.

Miss Ada Blanchard has done a wonderful piece of work in bringing the facts that are worth while regarding the choosing of material for clothing for the home-maker. She has established stations in Boston where women can go and have expert advice regarding the wearing quality of materials, what dyes will not fade when being laundered, and the remaking of garments. She comes to Michigan to give us the value of Massachusetts' experience.

Miss Sally Lucas Jean has been for a number of years director of the Child Health Organization of New York City, and has done a work that is nationally recognized in relieving malnutrition among children. Since recent surveys shows that in some places fifty per cent of the children in well-to-do families are undernourished, no woman in Michigan can afford to miss Miss Jean's message.

Miss Alma Binzel is an expert in child psychology and has done much to aid parents in understanding the best methods of developing the minds of their children. She is recognized as an authority in this country on the subject.

Mrs. Dora Stockman is state lecturer in the State Grange and the first woman member of the State Board of agriculture. Her grasp of all the problems of the home is so thorough and her solutions so constructive that no mother or housewife should fail to hear her.

Mrs. Alvord, president of the State Federation of Women's Clubs, is known everywhere in Michigan where there is an organization of women, and the message she will bring to us Farmers' Week will be vital and full of interest.

Tuesday, February 1, Clothing Day.

Dean Sweeney, presiding.
"Standardizing of Textiles," Miss Winifred S. Gettemy, Head of Household Art Department.

"Shoes," Miss Cecil Van Steenberg, Assistant Professor of Household Art Department.

"Remaking of Women as Purchasers," Miss Ada Blanchard, Director, Clothing Facts Bureau, Boston.

Wednesday, February 2, Farm Bureau and Home Demonstration Day.

Mrs. John Ketcham, presiding.
"Relation of M. A. C. to the Woman in Her Home," Miss Mary Sweeney, Dean of Home Economics.

"Woman's Part in the Farm Bureau," Mrs. Louise H. Campbell, State Home Demonstration Leader.

"Home Problems," Mrs. Dora Stockman, Member State Board of Agriculture.

"Why I Would Like a Home Demonstration Agent in Our County," Mrs. Edith Wagar, Member Executive Committee, Monroe County Farm Bureau. Address, Miss Agnes Ellen Harris, United States Department of Agriculture, Washington, D. C.

Thursday, February 3, Farm Bureau Day.

Joint meeting, men and women.
4:00 p. m.—"The Happy Medium," a play, Home Economics Students.
4:30 p. m.—Tea for guests of the College, Home Economics and Home Demonstration Division.

Friday, February 4, Child Health Day.

Mrs. Louise H. Campbell, State Leader, presiding.

"Making the Children More Worth While," Miss Alma Binzel, University of Minnesota.

"Home Economics and Children's Health," Miss Sally Lucas Jean, Director, Child Health Organization.

"What Michigan Club Women Are Doing for the Child," Mrs. W. R. Alvord, President, State Federation of Women's Clubs.

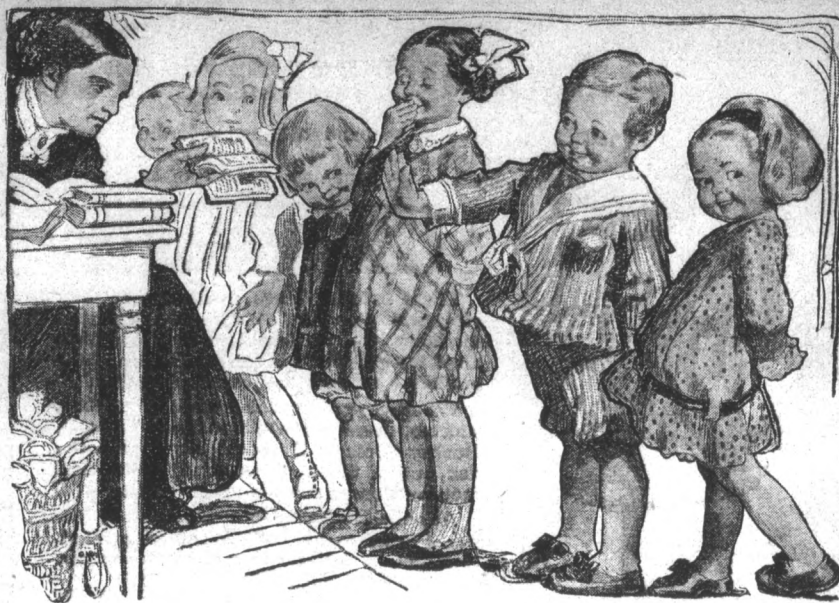
LESS DONT'S.

LITTLE BOY seems determined to break every bone in his body, and I found that I was getting into the habit of saying, "Don't" to everything he suggested, obsessed by the fear that he might hurt himself. Finally his father took me to task, saying that I was either teaching the boy to do things without consulting me—on the theory that I would say "No" anyhow—or else I was letting him grow up unable to do anything and all the more likely to sustain a serious injury when he finally began to do big feats, without properly trained muscles.

Fortunately I heeded the warning, and now at five years of age, Little Boy climbs a short ladder, has a special perch in the cherry tree, does trick riding on his tricycle, steers his Irish Mail and card down fairly steep hills, walks the top of the porch rail, and still comes to Mother when any new adventure is to be undertaken, firm in the belief that she won't say "Don't" unless she can give him some really good reason for the admonition.

LYDIA M. THORNTON.

A wire letter basket is a handy kitchen equipment. Baked potatoes can be put in it when taken from the oven, and turned upside down it makes a fine rack for cooling bread or cake.—
L. M. T.



Two Ways to Spell a Good Thing

Teacher: "Spell Dessert."

Bobbie: "Is it where the camels live?"

Teacher (severely): "Certainly not. It is the best part of dinner."

Bobbie: "Oh, I can spell that—"

"J-E-L-L-O"

Nobody knows better than the children what the best part of dinner is, and Bobbie expresses the prevailing conviction regarding it.

Delicious pure fruit flavors, freshness, wholesomeness and sparkle—these are famous Jell-O qualities.

And nothing to do but add boiling water, cool and serve.

Put up in six pure fruit flavors: Strawberry, Raspberry, Lemon, Orange, Cherry, Chocolate. Each in a separate package, at any grocer's or any general store, 2 packages for 25 cents.

THE GENESEE PURE FOOD COMPANY
Le Roy, N. Y., and Bridgeburg, Ont.


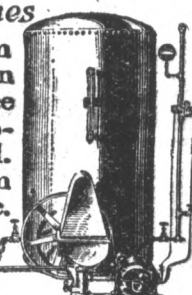
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We offer you sure saving, guarantee everything we sell and guarantee that you must be satisfied that you have made a saving by buying Direct-From-Kalamazoo—or we will return your money. Ranges, Pipeless Furnaces, Combination Coal and Gas Ranges, Kitchen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

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

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

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



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Direct to You

Hides and Furs

are Cheap in Price

So are our PRICES on making FUR COATS, ROBES and LADIES' FURS.

We tan your HIDE and make you a fine FUR COAT or ROBE for \$15.00, using the best grade of lining for either job.

LADIES' FUR SETS made from Rabbit, Raccoon, Fox, etc.

Get our CATALOG, it's FREE. Twenty years tanning HIDES and FURS.

THE BLISSFIELD TANNERY
W. G. White C., Inc.,
BLISSFIELD, MICHIGAN



Frozen Direct from fishery to you. Herring large round per lb. 4¢c. large dressed 5¢, skind. ready to fry 7¢. Remit with order or send for complete price list.

Consumers Fish Co., Green Bay, Wis.

---FISH---

Free, Our New January price list. All varieties Fancy New Frozen Smoked, Spiced, Salted and Canned Lake and Ocean Fish. QUALITY FINEST EVER, PRICES LOWEST IMAGINABLE. It will pay you to write for our New Price List before ordering elsewhere.

JOHNSON FISH CO., Dept. 6, Green Bay, Wis.

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Strawberry Plants \$4.00 per 1000

Sen. Dunlap and Pocomoke, or Gibson the leading varieties also the well known Brandywine and Warfields, \$4.00 per 1000. \$2.25 per 500. \$1.75 per 250. All plants state inspected and guaranteed to be first class or money refunded. No catalogues.

Mrs. Filena Woolf, Swan Lake Fruit Farm, Allegan, Mich.



Why Let Them Die?

THOUSANDS upon thousands of baby chicks die because of improper brooding. Why should you let these dollars slip through your hands when you can obtain

BUCKEYE COLONY BROODERS

These brooders have made three chicks grow where one grew before, have reduced the labor to a fourth and the cost to a third; have turned chicken raising from an unprofitable venture to a certain industry.

Wherever poultry raisers talk about their success, there you will find Buckeye users. Buckeye Colony Brooders have taken the risk out of the business, and a hundred thousand users proclaim their merit.

Ask the Buckeye User—He Knows!

Burn coal or kerosene. Self-regulating, sanitary and economical. Endorsed by experimental stations, agricultural colleges and county agents everywhere.

Send a postal for a Buckeye catalog that tells why Buckeye equipment makes poultry raising profitable. why you run no risks in its use and why it is universally recommended. Address the factory.

The Buckeye Incubator Co.

340 Euclid Avenue

Springfield, Ohio



February Poultry Notes

By R. G. Kirby

SORT over the vegetables and estimate the amount needed for home use. All that can be spared will prove fine green feed for the hens and help to keep the breeding stock in vigorous condition until they can use the range every day. Mangels are cheaper than sprouted oats and are good health producers but possibly they are not relished by the hens as much as oat sprouts.

Dry mash hoppers can be made by sketching the side view of a hopper on the side of a packing box. Then saw out the hopper and use the boards removed to close up the front and top. Use a small cleat in the front of the hopper as a lip to keep the birds from drawing out the mash with their bills. A piece of wide-meshed poultry wire stretched across the opening will enable the hens to eat, but prevent wasting of the mash. Open receptacles for serving dry mash do not work well according to our experience, as the hens frequently scratch in them.

When it is snowing and blowing it is much satisfaction to know that the hens have hoppers of dry mash serving them cafeteria fashion, with the balanced ration which is as near as possible to ideal for egg production. Of course it is not exactly like the spring ration on the range, but it does help to keep hens thrifty and makes them lay.

We do not believe that a poultryman with good hens ever lost any money by supplying a dry mash, either home-made or one of the commercial brands. Many farmers who have never used the mashers find that the hens pay for them and then pay a profit. They find that the hens with mash need less hard grain and lay more eggs. After giving a dry mash a fair trial they find it is not wasted money and do not try to keep hens over winter without using it.

Electric lights have not only proven a help in obtaining winter eggs on many farms, but the lights have been a protection from prowlers. When the laying-houses can be quickly lighted from the house the chicken thief is less anxious to make frequent trips. Even the watchdog can do quicker and more effective work if the lights are turned on so he can pick a good place to take hold.

If you have a surplus of pumpkins in storage, feed them to the hens. Pumpkins may soon spoil and the hens will enjoy picking out the seeds and eating the pulp to the rind. Cut them in halves and the birds will eat out the insides and then the remaining shells can be thrown out of the litter. The pumpkin pulp helps to furnish bulk to the winter ration. The bulkiness is necessary in some of the poultry feed in order to keep the birds healthy. That is one reason that green food cannot be successfully supplied by feeding tablets as a substitute.

A cellar is usually considered the best location for an incubator. But any vacant room will be satisfactory if it has some ventilation and the family will cooperate by walking quietly about the house and not banging doors. Incubator thermometers often require so much observation that it takes many trips down the cellar stairs to keep the machine regulated. Many poultrymen and women have avoided that work and brought out good hatcheries by running the incubator in the kitchen.

Of course, an incubator cannot be located near a stove as the temperature of the outside air will have a direct influence on the air in the machine. In some homes when an incubator has been in the kitchen they have discontinued using the kitchen stove for three weeks and used an oil stove for cooking. Then the house is heated by a furnace or stoves in another room and it is possible to keep the kitchen heat uniform enough so that the incubator can be fairly well regulated.

Buyers of hatching egg boxes can save money by purchasing them in quantities and ordering early so shipment can be by freight. Nothing is gained trying to ship hatching eggs without proper packages. It takes too much time to make home-made packages and the breakage will be large if they are made wrong. One setting of eggs sells for enough to buy about a dozen or more packages and it takes only a few minutes to pack and address a commercial container.

Never try to hatch eggs that have been chilled. It is a waste of eggs and time. When saving eggs for hatching they must be gathered frequently and stored where they will not be too cold nor too hot. A temperature of about fifty degrees Fahrenheit seems the most satisfactory. Even then eggs for hatching should be stored no longer than necessary as the fresher the eggs the better they are apt to hatch.

NATIONAL GRAPE GROWERS MEET.

PROHIBITION had no deleterious effect on the grape industry of the United States; but, on the contrary, prices last year for the product of American vineyards were higher than ever before, some growers realizing \$130 to \$150 a ton, while in 1919 they got about \$75, and in 1914 only \$35. This feature was brought out in the reports of delegates to the annual congress of the National Grape Growers' Association meeting, in Cleveland, January 18-19, where were brought together sales managers and other representatives of local cooperative grape growers' organizations in New York, Pennsylvania, Ohio, Michigan, Iowa and the Dominion of Canada. Local associations the past year that plunging in the poultry business is risky, even when eggs have been price of the fruit in many instances as

Hubers Reliable Chicks—700,000 For 1921.

By Parcel Post Prepaid. By Special Delivery. Guarantee Live Delivery. Eggs for Hatching by Setting or 100.



We have installed the most modern features of the Hatching Industry, which will insure chicks as strong as Hen Hatched Chicks and full of pep. This is our 12th season. With the great increasing demand for our chicks and the fine Testimonials, Photos, Show Reports and Wonderful Egg Records we receive from our customers proves that our chicks from stock of Good Quality, Bred for Heavy Egg Production and that they are Properly Hatched. To insure success buy our Reliable Chicks. We hatch all our chicks from pure bred, free range farm stock. S. C. White and Brown Leghorns, S. C. Anconas, Barred Rocks, R. C. and S. C. Reds, S. C. and R. O. Buff Orpingtons, S. C. Black Minorcas and White Wyandottes. Special combination offer on chicks and brooder stoves. Before buying elsewhere send for illustrated catalog and prices. Place order at once and avoid disappointment in the rush of the season.

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



64 BREEDS Most Profitable chickens, ducks, turkeys and geese. Choice pure-bred, hardy, non-fertile raised. Fowls, eggs, incubators at low prices. America's great poultry farm. 28th year. Send 5¢ for large valuable book and catalog. **R.F. NEUBERT Co., Box 814 Mankato, Minn.**

FOR SALE Candee Mammoth Incubator. Best Scorp. \$5.00 per 100 lbs. **TYRONE POULTRY FARM, Fenton, Mich.**

POULTRY

DAVID OLD CHICKS HOMESTEAD FARMS

It will pay you in selecting Chicks for the coming season to consider the quality of our **Pure Breed Practical Poultry**. We will send you our new spring catalog, which explains this breeding. Also the catalog tells how to brood your Chicks successfully; it describes our **High Class Egg Leghorns And All Standard Breeds**.

Both Chicks and Hatching Eggs from all breeds guaranteed, and delivered post paid.

Pullets—Also 25 White Rock Pullets. We will send you description and price.

Yearling Hens—A few White Wyandottes, Anconas, and White Leghorns; the last of the season.

Cockerels—Barred and White Rocks; Brown Leghorns.

STATE FARMS ASSOCIATION, Kalamazoo, Michigan

Chicks Baby Chicks

Single Comb White Leghorns a Specialty

We are not running a hatchery but have the largest most up-to-date poultry plant in Michigan. All the eggs that go into our incubators are produced on our own farm from our high producing winter layers.

We cull our flocks 3 times, 1st in early fall, 2nd just before winter sets in and again before the breeding season.

The regular hatchery man can not do this as he does not own the flocks but buys the eggs.

Our supply is limited, therefore place your orders early. Prices quoted on application.

Macatawa White Leghorn Co., Inc. R. 7, Holland, Mich.



Chicks

White Leg. 15¢
Eng. Leg. 15¢
Brown Leg. 16¢
Anconas 17¢

Sent Prepaid by Parcel Post

Special price on 1,000 lots. Get your order in for some of these high grade chicks, hatched from selected bred-to-lay breeders, kept on free range.

WE GUARANTEE SAFE DELIVERY
WYNGARDEN'S HATCHERY
Box M. ZEELAND, MICH.

30 DAYS TRIAL

Don't Take Any Chances!

Find Out What an incubator is made of before you buy. We will gladly send you samples of materials we use. Get our Catalog and samples before buying. We give 30 Days Trial—10-Year Guarantee. These two made, nationally known machines.



Both Freight Paid \$18.25 East of Rockies Only \$18.25

Wisconsinins are made of genuine California Redwood. Incubators have double walls, air space between, double glass doors, copper tanks, self-regulating. Shipped complete with thermometers, egg tester, lamps, etc., ready to run. Send today for our new 1921 catalog, free and postpaid.

Large Size 180-EGG INCUBATOR AND BROODER, BOTH \$22.50.

WISCONSIN INCUBATOR CO. Box 82, Racine, Wis.

MONEY BACK IF NOT SATISFIED

You Take No Risk With An

Ironclad Both \$19.75
30 Days Trial Freight Paid
10 Yr. Guarantee

Think of it! You can now get this famous Iron Covered Incubator and California Redwood Brooder on 30 days trial, with a 10-year guarantee, freight paid east of the Rockies.

150 EGG INCUBATOR CHICK BROODER

Incubator is covered with galvanized iron, triple walls, copper tanks, nursery, egg tester. Set up ready to run. Brooder is roomy and well made. Order direct from this advertisement—money back if not satisfied or send for free catalog.



IRONCLAD INCUBATOR CO. Box 85, Racine, Wis.

\$15.95 Buys 140 Egg-Champion Belle City Incubator

Hot-Water, Copper Tank, Double Walls Fibre Board, Self-Regulating Safety Lamp, Deep Nursery. With \$9.95 Hot-Water 140-Chick brooder—Both for only \$23.95

Freight Prepaid

East of Rockies and allowed towards Express. With this Guaranteed Hatching Outfit and my Guide Book for setting up and operating, your success is assured. Save time—Order now—Share in my \$1000 in Prizes

Or write for Free Poultry Book, "Hatching Facts." Jim Rohan, Pres. Belle City Incubator Co. Box 14 Racine, Wis.

\$12.25 FOR A BADGER 140 EGG INCUBATOR

140 CHICK BROODER \$6.75
Built of California Redwood with double walls. Insulate top covered with wall board gives double protection. Hot water—Copper Tank—Self Regulating—Thermometer—Deep Nursery. Set up and shipped COMPLETE with all fixtures. Order DIRECT or send for descriptive circular.

BADGER INCUBATOR CO. BOX 136, RACINE, WIS.

much as \$20 a ton. Thus, Pennsylvania growers were offered but \$30 a ton last fall, but through their combined efforts they got \$100 from the start. Growers in the Chautauqua and Erie Belt received in three pools to grape juice factories from \$123.50 to \$140 a ton for their grapes, while without organization they would have obtained about \$106. The association in that belt handles all the sales of its members, retaining \$1.50 a ton, with likely \$2.00 a ton commission next year.

The Hudson River district of New York has about four hundred members and sold its grapes this year at \$115 to \$175 a ton with three per cent commission. Trucks are playing a most important part in marketing the grapes of these eastern districts, and thus higher prices are obtained.

The Niagara district, the only belt in Canada, was organized in a cooperative selling association last August, and in the two months of marketing last fall from twelve centers sold four hundred and twenty cars, the price being about \$20 more than the growers individually had been able to secure. This district comprised a narrow strip of about 4,500 acres, where about ten thousand tons is produced, of which about twenty per cent came into the United States. The duty on these grapes is about \$15 a ton.

GRAPE growers are generally interested in the basket situation for 1921, and the consensus of opinion at this meeting was that by waiting a

while and all organizations standing together the ordinary "Jumbo" baskets would be obtained for around \$95 a thousand. Some associations are contemplating establishment of their own factories. Most of the large markets, particularly Cleveland, Pittsburgh and Philadelphia, are imperative in their demands for Jumbo baskets, while the eastern trade, as in New York and New Jersey, is satisfied with the larger package and is favorable to the new wire-bound basket.

Affiliation with the American Farm Bureau Federation was favored in this convention so that the association would receive the support of that larger body, and close cooperation with the Grange was urged in all sections where the two organizations are active. Other resolutions passed were that the National Grape Growers' Association give market prices to local organizations as f. o. b. their loading point; that sales managers convene a month before sales open to talk over marketing; that advertising be carried, especially to encourage the use of table grapes; that the zone system of selling grapes be not considered; that the federal statutes be followed with respect to containers, namely, two, four, twelve and thirty-two quart packages; that states license brokers and buyers of grapes; that the ad valorem tax on grape juice be reduced from ten per cent to two per cent; that the executive committee act to fix a just tariff on grapes shipped between Canada and the United States.

Michigan Farmers' Auto Tour

By J. H. Brown

THE Second Michigan Farmers' Automobile Tour will start from the farm of Hon. George B. Horton about ten miles southwest of Adrian in Lenawee county. An appropriate program will be held there Sunday afternoon, August 7, and on the following day there will be three sessions in which the subject of farm forestry will be given special attention. A well-known forester of national repute will speak and with the fine forests of Mr. Horton's to draw lessons from the program should interest every farmer and all other farm folks.

We will camp two nights at the Horton farm. Tuesday, August 9, we will drive through Toledo to Norwalk, ninety-six miles, and camp for the night. Next day drive to Cleveland, fifty-eight miles, and camp two nights. Big program and sight-seeing on Thursday, Friday drive to Akron, and have lunch, then drive to Alliance, thirty-five miles, and camp for the night. Saturday drive to Pittsburgh and camp two nights. Monday, drive to Wheeling and camp two nights. On Wednesday drive to Zanesville and camp one night. Next day to Columbus and camp two nights. Choice from there will be to Cincinnati or Indianapolis, and return home by way of Fort Wayne.

The State Granges of Ohio, Pennsylvania, West Virginia and Indiana, will join us in our various camps and take part in the programs. We will have fine programs, noted speakers, bands of music, community singing, moving pictures, sports, and so forth all along the route.

The expenses of the tour will be at the lowest possible minimum. Gasoline and oil, food to eat, with lunches at noon on the road, will be but little more than staying at home. Lodging will cost us nothing. Each car will be equipped with a tent, cots or beds, bedding, and cooking utensils. Some sort of a gas or oil stove is best for cooking. Trucks will travel with us to carry some of the equipment each tourist has on his car. This will help lighten the bulky load some cars carry and will not cost the tourist anything for the privilege.

In preparing for this trip we advise tourists to wear their old duds and leave their jewelry at home. For financing themselves they should use their home bank book, or bank or express travelers' checks. Get the checks in ten-dollar denominations which can be cashed along the way. We advise against carrying any considerable amount of money loose on the trip.

Those members of the tour association who went to Mackinaw and the Soo, who have not already sent in their application and registration fee of two dollars should do as soon as possible. The car owner can register his car for the two dollars. Then when we meet at our first camp at the George B. Horton farm, at Fruit Ridge, near the Ohio line, each tourist registered, except the car owner, can pay the fee at that time. The total expense for registration and use of camp conveniences and baggage truck for hauling tents, cots and bedding from camp to camp for the whole tour, is only two dollars for each tourist. This applies to adults only, as there will be no fee for children in any family car.

At this time there are about forty car spaces left for registration, and these will be filled in order of their receipt. After that cars can get in only when a vacancy occurs, as may happen before the tour starts, from sickness or other cause.

The first tour, held in August of last year, was sponsored by the Michigan Farmer. Now that the feasibility of touring has been demonstrated the one for 1921 will be conducted on its own responsibility, the fees mentioned above it is calculated are sufficient to cover overhead expenses. The 1921 tour will be under the management of the writer. All correspondence should be directed to him at 118 North Division Street, Battle Creek, Michigan.

NO SERMON THIS WEEK.

We are sorry to disappoint our many readers who look forward to Mr. McCune's weekly sermon. On account of illness Mr. McCune was unable to get his copy to us in time for this issue. His topic for next week will be "The Kingdom Within."



A Big Stump Pile—Quick

"Every stump in that pile was blasted out with dynamite. That, John, is why it was so easy to do the whole job—get the stumps out and pile 'em."

"What kind do I use? Hercules, of course—20% Low Freezing Extra. It does the work, stumps and roots, better than anything else I've ever tried. I'm strong for

**HERCULES
DYNAMITE**

"Of course you can't use the 20% for everything. When it comes to ditching and boulder blasting I use Hercules 60% Nitroglycerine Dynamite. But for stumps in heavy soil you can't beat the 20%. It does the trick and saves money."

"If you want pointers on the use of dynamite write the Hercules Powder Co. for their book, 'Progressive Cultivation.' That book has been worth a lot to me."

Hercules Dynamite is for sale by leading
Hardware and Implement Dealers



HERCULES POWDER CO.

910 Market St., Wilmington, Del.

Gentlemen: Please send me a copy of "Progressive Cultivation."

I am interested in dynamite for

Name

Address

MICHIGAN'S LARGEST PEDIGREE POULTRY FARM

By Purchasing Chicks from our

LAKEWOOD'S PEERLESS LAYERS

You will lower your chick mortality, and increase your winter egg production. Official records from 200 in 9 months to 310 eggs in one year. Write for catalog.

LEGHORNS, ROCKS, REDS, WYANDOTTES
LAKEWOOD FARM, BOX B, HOLLAND, MICHIGAN

AMERICAN POULTRY ADVOCATE

Our 28th Year. 3 Months' Trial, 25c. \$1.00 a Year. Interesting Copyrighted Articles Each Month on the Breeding, Care and Management of Poultry and Rabbits, by Leading Writers. SAMPLE COPY and Book list FREE. THE E. V. & E. M. PIERCE CO. Owners and Operators of THE SUPERIOR CHICK HATCHERY, Lock Box 197, Prairie Depot, Ohio. Syracuse, N. Y.

BABYCHICKS
OF SUPERIOR QUALITY

Post Paid. SAVE MONEY, by sending for our catalog. \$15.00 per hundred up. 500,000 chicks for 1921 and the quality will be of the best. Bred for Egg Production and the Show Room. Catalogue Free. THE E. V. & E. M. PIERCE CO. Owners and Operators of THE SUPERIOR CHICK HATCHERY, Lock Box 197, Prairie Depot, Ohio.

BABY CHICKS

Crescent Strain S. C. White Leghorns, Mottled Anconas, Brown Leghorns, Buff Leghorns, Black Minorcas, Rhode Island Reds, Plymouth Rocks (Barred also White) and Wyandottes (Silver laced and White). Flocks on separate farms. Send for booklet, containing much of value to poultry raisers. CRESCENT EGG COMPANY, Allegan, Mich.

Stop! Look! Listen!
Chicks, Quality Chicks

Send Your Order to the

City Limits Hatchery and Poultry Yard,

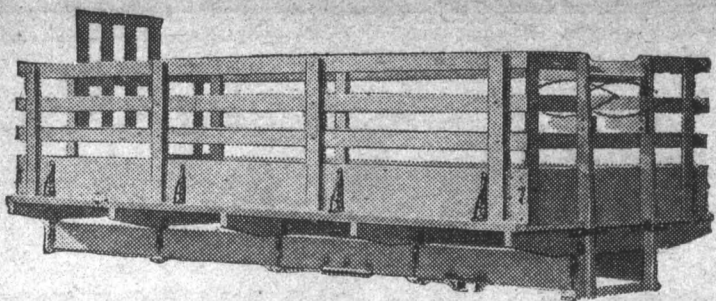
R. 5, Holland, Mich.

for your S. C. White Leghorns, S. C. Brown Leghorns, English White Leghorns, S. C. Anconas, and S. C. Barred Rocks.

BABY CHICKS

25 for \$6.25, 50 for \$11.00 and 100 for \$20.00. Single Comb White Leghorns; White, Buff and Barred Plymouth Rocks; S. C. R. I. Reds and Anconas. Fenton Chicken Hatchery, Box 244, Fenton, Mich.

Additional Poultry Ads on Page 129



3 Handy Wagon Beds

Make Them Yourself—Free Plans Tell How

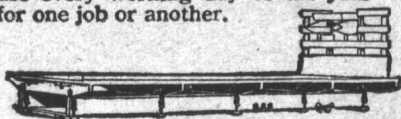
Why bother with heavy wagon beds that take two men to lift off and on?

With a set of A-P hardware, any man handy with saw and hammer can make these three beds—hay rack, grain bed, stock rack—to fit any wagon.

The beds are made in sections. It's easier and quicker for one man to lift in place a single section than for two men to carry and change a heavy, clumsy bed of the ordinary kind.

On receipt of the coupon below, we will send you without obligation a free set of "blue print" plans. They tell plainly how to cut material and how to fit in place every piece of hardware.

The hay-rack below is a bed that you use every working day of the year for one job or another.



The hay-rack can be changed in a jiffy by one man alone to a bed for hauling grain. Just bolt the sides and end-gate on separately—only eight nuts to tighten in all—lock the four end-gate fasteners. You then have a low, wide, strong bed for hauling all kinds of grain, as shown below.



For hauling stock there are two additional sides and an end that fit on the grain-bed in sections. Just lock four end-gate clamps. Your stock rack is ready for use. As shown in the large picture above.

Allith-Prouty Co.

Dept. 4701, Danville, Illinois

Please send me without obligation your free plans telling how to make A-P combination wagon beds. Also tell me the name of nearest dealer who handles the hardware sets.

Name.....

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

Dealer's Name.....

Plans Free

Send for them today. Look them over. See for yourself how easy it is to put these handy beds together. Judge for yourself how strong and durable they are. Don't go without these easy-to-handle wagon beds any longer, when they can be had for the making.

Mail the Coupon

Allith-Prouty Co.

Dept. 4701

Danville, Illinois

Michigan Fruit Trees AT Reduced Prices

Direct from Nursery to Planter. Also Roses, Spireas, Barberry, Vines, Maple trees, and full line of berries, Grape Vines, Etc. Send today for Price List.

CELERY CITY NURSERIES,
Kalamazoo, Mich.

The Wolverine Detroit Nurseries

Clarence Aldrich, Lessee

Fruit Trees and Small Fruit Plants, Shade and Ornamental Trees, Evergreens, Flowering Shrubs, Roses, Vines, Perennials a specialty.

A Good assortment of Everything

Ask For Price List

Mail address R. 2, Farmington, Mich.

Residence and Sales grounds on Grand River Avenue 17 miles from Detroit City Hall. No agents.

TREES & PLANTS THAT GROW

Free Catalog



A Guarantee Worth While. Express Prepaid

For over 60 years we have supplied nursery stock to people who know and appreciate the best. Write for Catalogue now. PETER BOHLENDER & SONS, Spring Hill Nurseries, Box 30, Tipppecanoe City, (Miami County) Ohio.

PROGRESS TREES and PLANTS GROW

because they are propagated right, dug carefully, and packed securely. Write for our Catalog and NO-RISK offer of trees, shrubs and plants. We pay express charges. Why pay for your trees before you get them? It's not necessary if you deal with THE PROGRESS NURSERY COMPANY. 1312 Peters Avenue, Troy, Ohio

PEACH TREES

Pear, Apple, Etc. OUR TREES GROW Plant Good Stock. Grow own fruit; reduce living cost. Improve value, appearance and production of farm, garden or orchard. Fruit wanted everywhere. Free catalog. MITCHELL NURSERY, Beverly, Ohio

APPLE AND PEACH TREES

25c EACH postpaid. Send for 1921 Bargain Catalog of Fruit Trees, Plants and Vines, Farm, Flower and Garden Seeds. Special prices and samples of Grass Seeds on application. ALLEN'S NURSERY & SEED HOUSE, Geneva, Ohio

EVERBEARING STRAWBERRY

Our free Catalog describes and illustrates a full line of choice small fruit plants. SEND FOR IT. J. N. ROKELY, R. 6, Bridgman, Mich.

Strawberry Plants 26 varieties, \$3.75 per 1000. History and illustrated book gives all details about most vigorous true-to-nature, productive stock now grown. Book free. MAYERS-PLANT NURSERY, Merrill, Michigan

EVERGREENS

For Windbreak Hedge and Lawn. All hardy, vigorous and well rooted. We ship everywhere. Write for free Evergreen book. Est. 1886. World's Largest Growers. The D. Hill Nursery Co., Inc., Box 230, Dundee, Ill.

Men Wanted to sell dependable fruit trees and shrubbery. Big demand. Complete co-operation. Commission paid weekly. Write for terms. Williams Sons' Nurseries, Rochester, N.Y.

CLOVER



Isbell's

BELL BRAND

Purest Obtainable

You can absolutely depend upon Bell Brand Clover and Grass Seeds. They are the choicest quality, fully tested, and guaranteed as to purity and germination. Every bag is plainly marked. Hardiness and climate adaptability are bred into them—the result of 42 years' experience growing seeds that grow.

FREE SAMPLES

Send your name for catalog and samples—clover and any field seeds you want. Isbell's 1921 Seed Annual describes and gives valuable information on the best seeds that you can buy at any price. Write today.

S. M. ISBELL & COMPANY (4)
314 Mechanic St. Jackson, Michigan

NEVINS SUCCESS WITH SMALL FRUITS

Do you know that you can obtain more health, pleasure and profit from a garden of strawberries and raspberries than from any other equal amount of land on your place? My beautiful new Catalogue greets you with a smile, and tells you something about ourselves and our favorable location where soil and climate combine to produce plants of superior quality. It tells: How to select varieties best adapted to your soil and needs. How to prepare the soil for planting. When to plant. The different systems of small fruit growing. How to plant. How to care for the patch. How to pick and market the fruit so as to obtain the highest prices. How to renew the patch. It is a **Fruit Grower's Guide** and whether you buy your plants of us or not you will need this helpful book—"**Nevins Success with Small Fruits**." Send for your copy today. A postal will bring it.

ELMER H. NEVINS, Ovid, Mich.

Big Profits Growing STRAWBERRIES

\$500 to \$700 Per A. from Keith's Big New Land Plants

Will pay you big to get your start from our carefully selected New Land Plants grown on fresh rich virgin soil. The best for you to plant for big profit. One variety brought growers \$700 per A. last year. We ship direct to you from our fields and guarantee them to satisfy or your money back. Three special varieties for Home Gardens. Write today for our New Catalog on Strawberries, Raspberries, Grapes, etc. and see our NEW LAND plants illustrated. It's FREE. KEITH BROS. NURSERY, Box 602, Sawyer, Mich.

Our Boys' and Girls' Page

How Animals Fight

By Chittenden Marriott

MAN is the only animal who deliberately fashions weapons with which to fight. Some of his monkey cousins throw stones and nuts and anything that is handy; and a few of the larger and more powerful apes are said to use clubs, but none of these weapons were fashioned for fighting. All other animals depend on the weapons with which nature has equipped them.

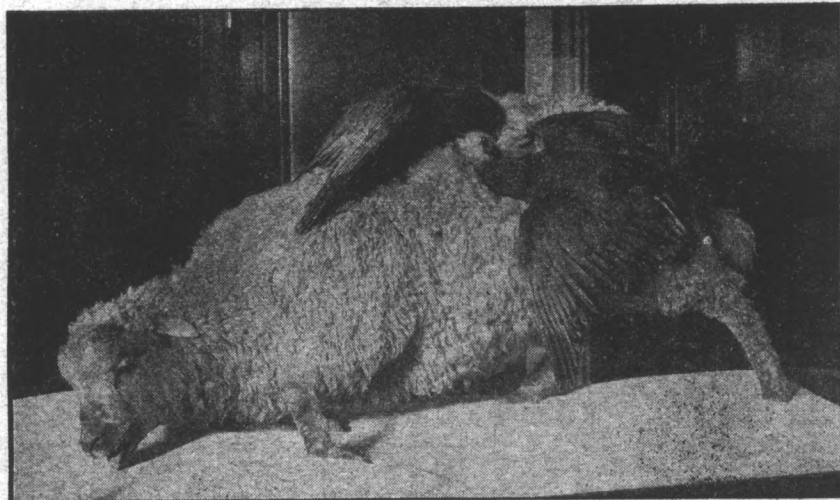
And nature has not been stingy either in the perfection or the range of her gifts. To each and every species she has given some natural weapon with which it can capture (or fight to retain possession of) its food, defend itself against enemies that seek to make food of it, fight for the possession of its chosen mate, and protect its young. To one species she has given teeth, to another claws, to others hoofs, spurs, poison fangs, dagger-like bills, stings, stench, spit balls and the like. Species which she did not endow with sufficient means for de-

backs with the enemy on top of them, so that they can use all four sets of claws to rip his undersides to ribbons.

A fight between two equally-well matched cats is a whirlwind in which each is trying to get undermost. The under-cat is in no such serious a fix as the under-dog is said to be.

When compelled to face a much stronger adversary, from which they are unable to escape or to which they are unwilling to abandon their food or their young, cats, like most other animals, bare their teeth, arch their backs, bristle their fur, and snarl in an attempt to frighten the foe away.

Very different are the fighting methods of dogs, wolves, and their kindred. These have no claws and rely almost solely on their teeth. In attacking large game they bite at his heels, attempting to hamstring the victim to prevent it from running away, or, when in packs, they spring at their quarry's throat and try to drag it down by weight of numbers. If the chosen vic-



The Kea Plunges its Powerful Beak into the Kidney Fat of the Sheep and Devours It.

fense have either perished or survive only by their swift heels or the ability to conceal themselves with which she had supplied them.

Meat-eating animals, whether quadruped, birds, or fish, are naturally especially well provided with offensive fighting powers, for they depend on these for their food (the first need of every living thing), and their lives are one long fight. Grass-eaters are less well provided and are equipped for defense rather than for offense; but their defensive powers (or their capabilities for flight or concealment) must be good, for they are the chosen food of the greater carnivores. And eaters of nuts, worms, insects and the like, all have to defend themselves and their young against more powerful enemies.

Moreover, the males of most species have to fight with each other more or less desperately in order to win their mates; and this alone puts fighting qualities at a premium.

Most animals have several different ways of fighting, according to whether they are fighting against others of their own kind or against outsiders who wish to eat them or whom they wish to eat.

Thus cats, from the household pet up to the lion, try to spring or pounce on the backs of the game they hunt and, unless the victim is much smaller, to cling there, tearing at its throat, till it falls. But when they come to defend themselves against each other or against some enemy of fairly equal powers they try to get on their own

tims also unite in self-defense they try to frighten some unlucky beast into breaking away from the rest and then concentrate on him. Some sorts of smaller game, (such as rabbits) they easily kill with a single bite; but other sorts, (rats, for instance) which are fighters themselves, they try to bite, to toss quickly into the air, to catch and bite again, toss again, and so on till the victim is dead.

In fighting with their fellows some of the dog tribe "slash" with knife-like teeth and then jump away to avoid a counter stroke; others bite deep (at the throat, if possible, and hold on. Most sorts try to knock their opponents over on their backs so as to get at their throats. (In fighting with one of the big cats a wolf would try to bite and jump away before the cat could slash his abdomen). Always the canines try to keep on top and never to fall on their backs.

Bears fight chiefly with their fore-arms, with which they either strike or hug, though they also use their jaws and sometimes their mere weight to crush their foes. Their feet have claws, of course, but they use these comparatively little in fighting; it is the strength of their blow that does the work. (Bears have been taught to wear gloves and box). The great weapon of the bear in fighting with larger adversaries is the hug; once let him wrap his arms about his enemy, and he will break his backbone and squeeze the breath out of him.

Most of the deer and cattle tribes

Send Your Name No Money



JUST send your name, address and size and I will send these five pieces of winter underwear to you on approval. Don't pay a penny until they are delivered to you by postman.

MEN
2 Winter Union Suits
3 Pairs Hose \$2.98
All For

This is a wonderful opportunity of getting \$6.00 worth of winter underwear for \$2.98. Our price is an amazing bargain. Compare it with others and see for yourself. These two union suits are made of heavy cotton yarn, woven in narrow elastic rib, fleece on inside; high neck, long sleeve, ankle length. Color, white only. Sizes 34 to 46. The three pairs of hose are made in seamless fashion style with double heel and toe, woven in narrow elastic rib. Black only. 9 1/2 to 11. Price Smashed! Send now—tomorrow may be too late. We can only furnish this price-smashing bargain as long as stock lasts.

Send Now Just your name and address, no money. Pay the postman \$2.98 when he brings the five pieces of winter underwear to you. We pay the delivery charges. If for any reason whatsoever you don't find the underwear all you expect, send them back and we will cheerfully refund your money at once. This is our risk, not yours. Be sure and give size. Order by No. 41.

Walter Field Co., 218 S. Michigan Ave., Chicago
"The Bargain Mail Order House"

America's Foremost Poultry Journal

5 MONTHS' TRIAL 25 cts.

For over 30 years the leader in down-to-date poultry helpfulness. Tells how to get more winter eggs, how to hatch, feed, house and breed successfully. Issued Monthly, 40-100 pages. Only 25c. stamps or coin for 5 months' trial. Full year subscription, \$1.00. Poultry Success, Box 15, Springfield, Ohio.

POULTRY



LOOK! 1,000,000 for 1921.

Postage PAID. 95% live arrival guaranteed. FREE feed with each order. 40 breeds chicks, 4 breeds ducklings. Select and Exhibition grades. A hatch every week all year. Book your order NOW for early spring delivery. Catalogue free, stamps appreciated. NABOB HATCHERIES, Gambier, Ohio

BABY CHICKS

Pure Bred in all the leading breeds. The most moderate method of hatching. Delivered Parcel post prepaid to you. Best prices. Circular free, do not delay.

Wolf Hatching and Breeding Co.
Dept. M., Gibsonburg, Ohio.

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

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

DAY OLD CHICKS
and hatching eggs from select heavy producing stock. Delivery guaranteed. W. H. Leghorns, Bar, Rocks, W. Wyand., S. C. Reds, B. Orp. Cat. free. GOSHEN POULTRY FARMS, R-19 Goshen, Ind.

DAY-OLD-CHICKS

\$15.00 to \$27.50 per 300. Hatching eggs, \$2.00 to \$15.00 per setting and \$9.00 to \$15.00 per 100. From 25 varieties of pure bred, farm raised fowls: Chickens, Geese, Ducks, Turkeys and Guinea. Price list and circular free. Plenty of nice breeding stock. Book now for early spring delivery. WILMINGTON HATCHERY & POULTRY CO., Wilmington, Ohio.

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CHICKS, We ship thousands each season. Send for prices and testimonials. FREEPORT HATCHERY, Box 12, Freeport, Mich.

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Fine White Rock Cocks and cockerels, splendid birds, \$4.00 and \$5.00. Write at once. Mrs. Elsie M. Robinson, Petersburg, Mich.

fight with their horns and to a less degree with hoofs. They seldom need to fight for food; but the males fight furiously, chiefly with their horns, against each other for rulership over the cows. And having won the leadership of the herd the victor, aided by the younger males, must defend his big family against all outside enemies. The buffalos, in days when they were numerous, when attacked by wolves that would not be driven away, would form a ring, horns lowered, within which the calves and cows were secure.

All the big "herbivores" use their horns to repel attacks, but most of them are always ready to take advantage of any chance to trample their foes with their hoofs, which range all the way from razor sharp to crushingly heavy.

Horses, mules, zebras and the like strike with their fore feet and bite and tear with their jaws—until they get a chance to turn around and deal a knockdown blow with their heavy heels. After this they trample their prostrate foes. Of course neither horses nor cattle can really fight against a big cat that lands fairly on their backs.

The skunk—well, the skunk has its own means of defence, and the least said about it the better.

The camel and the llama, under sufficient provocation, will hurl at their annoyers a "spit-ball" of semi-digested food, whose effects are not so lasting but are scarcely less unpleasant than those of the skunk's effusions. And, of course, the elephant will at times squirt a very wet and very forcible stream of water at one who displeases him. However, he prefers to do real fighting with his tusks, his trunk, or his heavy feet.

Musks, ferrets, weasels, and the like seem to kill not for food, but merely for the love of killing. In reality, however, they kill recklessly because they live on the blood rather than on the flesh of their victims—and blood is a very small part of the bulk of any animal. They are very deadly foes, for they are slender enough to go nearly anywhere and they are very strong, very quick, and very fierce.

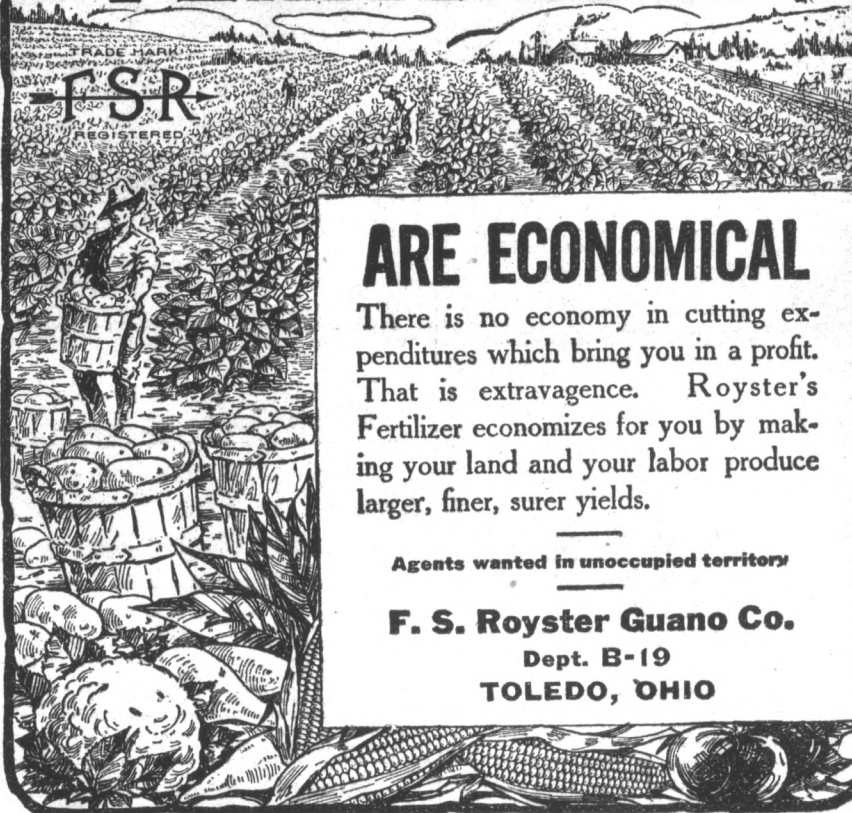
The kangaroo fights with his feet. He sits up, as the bear does, but he strikes with his hind and not his fore feet. His claws are sharp and his muscles strong; and when he lands he is likely to rip and to stun his enemy.

Birds of prey are naturally fierce fighters, because, like beasts of prey, they win their food by fighting. Most of them fight chiefly with their feet, for all of them possess sharp claws, controlled by mighty muscles, that clutch and tear and strangle their victim. Such birds use their beaks little in killing for food; they do not need to do so. But when they are fighting with each other they use both claws and beaks. And when they are defending their nests against some stout enemy who is after their young they use also their wings, which are very effective, for with them they can deal blows that may blind, or even hurl the aggressor headlong, from the heights to which he has climbed.

In New Zealand a species of parrot attacks sheep and kills them in order to eat the kidney fat. For a time they did great damage, but they have now been nearly exterminated by sheep-owners—who want to reserve sheep for themselves.

Most birds (other than birds of prey) fight with their bills; and anyone who has been pecked by a cross, setting-hen can testify that the hint to go away delivered by a hard bill is a forcible one. The males of some species of birds are also armed with spurs, which they use with deadly effect against each other and sometimes against much larger foes.

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Barred Rocks egg contest winners, eggs from strain
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the heavy laying strain at only \$16
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Hatching eggs, 8 varieties, Circular FREE.
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Rhode Island Whites If you have ever
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Rhode Island Reds R. C. Large fancy cock-
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S. C. Anconas. Bred-to-Lay and Exhibition strains;
Cockerels from flock with 207 egg average \$5.00 and \$8.00
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Manning's Ancona Farm, Coldwater, Mich.

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Michigan's Color and Egg Strain. Both Combs. Cock-
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White Wyandottes 15 pullets at \$2.50
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Cockerels from flock with 207 egg average \$5.00 and \$8.00
each. Eggs for hatching \$2.00 per 15.
FRANK DELONG, R. 3, Three Rivers, Mich.

White Wyandottes Winners Chicago
Cockerels from flock with 207 egg average \$5.00 and \$8.00
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Giant Bronze Turkeys,

Fine vigorous pullets 16-18 lbs. splendid color. Young
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Bronze, Narragansett, White Holland, Black and
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The World's Greatest
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Blue Bell, Supreme Champion at the Smith-
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The Junior Champion Bull, Junior Cham-
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A very choice lot of young bulls—sired by
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Woodcote Trojan-Erics

We are offering ten cows bred to either
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Write for our 1921 BULL SALE LIST

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The 2nd Annual

Mich. Aberdeen Angus Breeder's Ass'n Sale will be
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This space is contributed by Geo. Hathaway & Son,
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Having decided to sell part of my herd
of pure bred Aberdeen Angus cattle,
consisting of males and females of different ages,
ANDREW P. EITEL, Vermontville, Mich.

Reg. Aberdeen Angus bulls and heifers from 6 to
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of breeding, also Berkshire Swine, boars ready for
service and pigs both sex singles, pairs or trios,
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REGISTERED Aberdeen-Angus. Ten heifers, six
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heifer calves. Also registered bulls from 1 month to
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Bull calves for sale. Sired by Anton's May King that
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Two young cows and bull not related. All out of Adv.
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PAUL LOVE, St. Ansell Farms, Jackson, Mich.

Registered Guernseys 9 mos. old bull calf,
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Guernseys. Federal Inspected. Only 1 serviceable
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Containing blood of world champions.
HICKS' GUERNSEY FARM, Saginaw, W. S. Mich.

Guernsey Bulls of May Rose Breeding
Farms. Their dams have records
420 to 650 lbs. fat also a few cows and heifers are
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GUERNSEY BULL CALVES whose
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19,460.20 milk, 999.05 fat. Their mother's sire's dam
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E. W. McNitt, Route 9,
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"We bought our first regis-
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A Good Note accepted in payment of finely bred reg-
istered Holstein bull calves. Quality
of the best, and at prices within reach of all. Write.
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We have what you want in BULL CALVES, the large,
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Dam's records up to 30 lbs. Write for pedigrees and
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Holsteins of Quality

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Estimates furnished by the Dairy Division of the
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4,500 lbs. of milk per year.

A good Holstein bull will increase the production
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Let us help you find a good one to use on your
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From 31.18 and 28.39 lb. dams

Sire—King of the Pontiacs Segis No. 169124, who is
by King of the Pontiacs and from Hillsdale Segis
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Dams:—Topsy Clothilde Fobes No. 172806 made 31.18
lbs. butter and 623.8 lb. milk in 7 days.
Sunny Brook Nina Segis No. 43727 at 4 years produced
28.39 lbs. butter and 587.6 lbs. milk in 7 days and
105.94 lbs. butter and 2319.6 lbs. milk in 30 days.

These bulls are nicely marked and Good Individuals.
Herd under federal supervision. Come and see them.
For pedigree and information write Mr. Fred Alt, Mgr.

James B. Jones Farms,
Romeo, Mich.

Holstein Friesian heifer and bull calves, purebred
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Splendid individuals and breeding. Write us your re-
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on Nov. 1st will move their Herd of
Pure Blood Holsteins to their new
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and for the next 30 days we will sell
what bull calves we have cheap as we
will be unable to get our buildings com-
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want a son of Flint Maplecrest Boy
at your own price.

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Roscommon, Michigan

"Top Notch" Holsteins

Buy a "milk" Bull of Quality from the Breeders
of the world's only cow to produce 800 lbs. milk in 7
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Our advertised bulls are selling fast.
Here are two good ones:

No. 1. King Vale Colantha De Kol, No. 307701

Born Oct. 11, 1918.
A "TOP NOTCH" individual, backed by fifteen
dams who average 30.73 lbs. butter in 7 days.
Price \$175.00 f. o. b. Howell.

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Born Dec. 6, 1919.
His 4 nearest dams average 25.39 lbs. butter in 7 days.
Dams, a 22 lb. cow with a daughter who produced 38-
744 lbs. milk and 1543 lbs. butter in two consecutive
years. Price \$125.00 f. o. b. Howell.

No. 1 Bull about one quarter white,
No. 2 Bull about half and half.

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Our herds under U. S. Supervision.

Here Is A Good One.

Born June 2nd, by Maplecrest De Kol Hengerveld.
A sire having three sisters each with records of over
1200 pounds of butter in a year, two of them former
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Calf's dam by an own brother to Highland Hartog De
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If progeny counts, where can you equal it?
Priced \$100.00 for quick sale.
Hillcrest Farm, Mgr. F. B. Lay, Kalamazoo, Mich.

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27.25—31.05 Bull Calf. Born Dec. 12, 1920 Dams
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granddaughter of Pieterle Hengerveld Segis, he
by King Segis. Sire of Calf, a grandson of King
of the Pontiacs from a 31 lb. daughter of King
Pontiac Calypso with 41 A. R. O. daughters, he by
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2 Heifer calves sire a 27 lb. son of Maple Crest Korn-
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old sister and a 27 lb. sire. Terms \$50 down \$50 a year.
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Reg. Holstein-Friesian cows and heifers, priced to
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FOR SALE Herd of sixteen pure bred
Holstein Cattle. H. D.
JONES, Black and White Farm, Fremont, Mich.

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HOLSTEIN CATTLE

February, 10th, 1921

Three-Fourths Mile South and One-Half Mile
West of Shepardsville, Mich. on G.T. R.R.

Including seven females and six males,
one of these cows has a record of 31.63
lbs. butter in seven days. There will
be two of her grand daughters and two
of her sons in this sale.

Charles Ridenour, R. 2, Ovid, Michigan.

For Sale \$450.00

Cash or Terms

A show bull from A. R. O. Dam born December 15,
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MODEL KING SEGIS GLISTA
Whose grand dam, GLISTA ERNESTINE, has six
times made better than thirty pounds of butter.
Buy now in order to have 1921-22 winter calves.

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Under State and Federal Supervision

Cluny Stock Farm

Offers the best selection of young bulls from 8 to
12 months we ever raised; out of dams up to 29.76
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Yearly records up to 24000 lbs. milk and 1000 lbs.
butter. Sired by our Senior Herd Sire, Maple-
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lbs. butter in 7 days and 1344 lbs. butter and
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dam is a 30 lb. 10 yr. old maternal sister of Dutchland
Colantha Denver who made 36 lbs. in 7 days and 1335
lbs. butter and 23431 lbs. milk in 1 year. Several carry
the blood of both these sires.

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

Send for pedigrees and prices.

R. Bruce McPherson, Howell, Mich.

Federal Herd Bull For Sale Old enough
Accredited for service.
Dams records, 7 da. milk 467.50, butter 20.85, 305 da.
milk 16,115.3, butter 648. She has 2 A. R. O. daughters.
His sire a 24 lb. grandson of Colantha Johanna Lad,
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All for \$500. Vernon Clough, Farma, Mich.

Reg. Holstein bull calf born Nov. 1920 extra
choice breeding and individ-
uality, \$60 reg. and del. J. R. Hicks, St. Johns, Mich.

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Cows with calves at side, open or bred
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bulls not related.

Allen Bros. Paw Paw, Mich.

Address Until June 1st, 1921.

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Herefords For Sale Fairfax and Disturber blood,
150 Reg. head in herds, \$35
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The "Marvel Cow" of all Breeds A JERSEY

Vive La France 319616 has won this
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four official records, which are as fol-
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Age	Lbs. Milk	Lbs 85% Butter	Carried ca Days
Test Began	9210.4	745.	199
2 yrs.	12744.8	1050.	153
3 " 2 mo.	14925.7	1213.6	175
4 " 7 "	15271.8	1222.6	245

Average butter-fat test 6.8 per cent.

Just think! Over 50,000 lbs. of milk.
Over 4,000 lb. of butter and 5 living
calves before her seventh birthday.
Isn't she a Marvel? And a Jersey.
Yes she is certainly a Great Cow, but
not the only Great Jersey.

Write Sec'y Henrickson of Shelby,
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There are others.

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"The Key to Dairy Profits" and "Jersey
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how farmers are making real profit today
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where. Whether you are interested in
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Free—Write today
American Jersey Cattle
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The Wildwood Farm

Jersey Cattle, Majesty strain, Herd on State accred-
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BUTTER BRED JERSEY BULLS
CRYSTAL SPRING STOCK FARM,
Silver Creek, Allegan County, Michigan.

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

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

Jersey bulls for sale: From Marguerite's Premier
a grandson of Pegasus 29th and R. of M. dams.
SMITH & PARKER, R. 4, Howell, Mich.

Meridale Interested Owl No. 111811 heads my herd
bull calves from this great sire and one of R. of M.
dams for sale. Leon E. Laws, R. 6, Allegan, Mich.

Bloomdale Shorthorns

See our cattle get our prices and breeding before buy-
ing. Both bulls and females for sale.

CARR BROS. & CO., Bad Axe, Mich.

BIDWELL SHORTHORNS

BUY A BULL

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

BIDWELL STOCK FARM,
Box D, Tecumseh, Michigan

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

The Maple's Shorthorns

Kirklevington Lad, by Imp. Hartford
Welfare. In service, bulls for sale.

J. V. WISE, Gobleville, Mich.

Richland Shorthorns

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

BRANCH COUNTY FARM,

Breeders of

American Polled Shorthorn Cattle

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

Registered Shorthorn Bull

Great grandson of the Famous White Hall Sultan.
Sired by Sultan Lad No. 40773 out of Duchess 11th No.
15705 of the noted Duchess family. This bull is as
fine a bull as anyone need look for, his color is roan,
he was calved Aug. 18, 1915. Write for Particulars. A
bargain. MAPLE GROVE FARM,
Ernest E. Rea, Hillman, Mich.

Milking Shorthorns Breeding the best bulls from
high producing cows.
O. M. YORK, Millington, Mich.

VALLEY VIEW FARMS

Choice young Shorthorn cows and heifers for sale at
all times, bred or open, or a carload, also a few young
bulls strong in Sultan Blood. Write
S. H. PANGBORN & SON, Bad Axe, Mich.

MEADOW Hills Shorthorns, Herd headed by Sil-
ver King, full brother of Lavender Sultan Pur-
due University's great sire. For sale females of all
ages, a few young bulls. Geo. D. Doster, Doster, Mich.

Central Michigan Shorthorn Breeders Association
offer for sale 75 head; Both
milk and beef breeding, all ages. New list ready Jan.
15. M. E. MILLER, Sec., Greenville, Mich.

Milking Shorthorns. Bull calves \$100.00 each.
Federal accredited Herds, Davidson
and Hall, Beland and Beland, Tecumseh, Mich.

Scotch-Topped Shorthorns Two cows, 2 year old
heifer, yearling heifer,
and bull calf. Write for pedigrees and prices.
SHOESMITH & BRICKER, East Lansing, Mich.

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

Reg. Red Polled bull calves, from 8 mos. to 1 year
old, sired by Famous Chamer, 75% same blood as
Chamer 1919 International Grand Champion. Our herd
State and Federal tested, Westbrook Bros., Ionia, Mich.

HOGS

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

Registered Berkshires for sale. Two young boars,
ready for service, two young gilts, a sow,
and younger ones of either sex. Let me know your
wants. JOHN YOUNG, R. 2, Breckenridge, Mich.

Bred Berkshire gilts for April farrow \$50. One short-
horn bull \$125. One Hampshire ram lamb \$35. Berk-
shire pigs \$10 & \$15. M. G. Mosher & Sons, Osseo, Mich.

Duroc Jersey Sow Sale

Friday of Farmers' Week

February 2nd

East Lansing, Mich.

This is a consignment sale put on by the
Michigan Duroc Breeders' Association

Each consignor guarantees his entry to
be a good representative of his herd.
Auctioneer or Mr. Kelly of The Michigan
Farmer will handle mail bids.

DUROC JERSEY SWINE

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

Michigan Holstein Breeders—Attention!

If you are looking for a herd sire the following list will interest you. All sired by SEGIS KORNDYKE DE NIJLANDER, a 32 lb. son of a twice 30 lb. 5 year old Michigan Prize winner on production, and her dam a 29.43 lb. cow with 731.5 milk in 7 days and almost 3000 lbs. milk in 30 days. Sire of the sire of these calves is a grandson of Pontiac De Nijlander 35 lb. thrice Michigan Champion:

No. 1 Born Feb. 23, 1920. Dam has 28.12 lbs butter 602.60 milk in 7 days; 113.10 butter and 2511.60 milk in 30 days at 4 yrs. of age. She increased her 3 yr. old record 10 lbs. and we look for 35 lbs. next time. Her dam is a 32 lb. cow and her granddam a 29.43 lb. cow. Light in color, a real bull.

No. 2 Born June 7, 1920. Dam a 30 lb. Jr. 4 yr. old. Granddaughter of King Segis, a Michigan Prize Winner on production. Butter 30.79, milk 653.1—30 days, butter 124.21, milk 2779.9. Here is a prize, nicely marked and from a wonderful dam and sire.

No. 3 Born April 15, 1920. Dam a 2 yr. old daughter of King Segis Pontiac, sire of 135 A. R. O. daughters and of several outstanding sons such as K. S. P. Alcartra, Hackney and Pabst bulls. She has 16.68 butter, 356.8 milk at 2 yrs. Her dam is a 24.17 lb. cow with two 30 lb. daughters—calf's 8 nearest dams average almost 30 lbs. butter. Beautiful marked and a splendid individual.

No. 4 Born March 14, 1920. Dam another daughter of King Segis Pontiac with 15.44 butter, and 343.40 milk at 2 yrs. This calf traces 6 times to Hengerveld De Kol, 3 times to Pontiac Korndyke and twice to King Segis. His 15 nearest dams average 23.35—a splendid, big boned, light colored calf.

No. 5 Born Mar. 28, 1920. Dam a 2 yr. old daughter of King Segis Pontiac, a 37 lb. son of King Segis. Not tested. Calf nearly all white—a good one.

No. 6 Born Mar. 23, 1920. Dam's a 18.50 lb. 3 yr. old sired by a grandson of Pontiac De Nijlander 35.43, seven of this calf's nearest dams average 26 lb. butter in 7 days—Calf more white than black.

No. 7 Born Mar. 27, 1920. Dam a 17.55 lb. three year old and granddam a 29.43 lb. cow with 731.5 milk. Calf is half white and black.

No. 8 Born March 8, 1920. Dam a 13.61 lb. 2 yr. old, daughter of King Segis Pontiac. Her dam a granddaughter of Paul Beets Burke sire of 106 A. R. O. daughters. Calf is a big growthy fellow, more white than black.

Prices, \$100.00, \$150.00 \$200.00 and up. If you can, come and see them—it is worth the trip. Herd under Federal Supervision.

Wah-Be-Me-Me Farms

White Pigeon, Michigan

HOGS



Spring pigs by Walt's Orion, First Sr. Yearling Detroit, Jackson, Gd. Rapids and Saginaw 1919 Phillips Bros, Riga, Mich.

Brookwater Duroc Jerseys

BOARS—Ready for Service Bred Sows and Gilts

Write us for Prices and Pedigrees Mail orders a Specialty. Satisfaction guaranteed. BROOKWATER FARM, Ann Arbor, Mich. H. W. Mumford, Owner J. B. Andrews, Mgr.

DUROC JERSEYS

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

Michigan Durocs Bred gilts and sows for sale at private treaty. Also bred sow sale February 21st. Satisfaction guaranteed. O. F. FOSTER, Mgr., Pavilion, Mich.

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.

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

Duroc Jerseys Boars Boars of the large heavy boned type at reasonable prices. Write or better come and see. F. J. DRODT, Monroe, Mich.

Duroc Jersey boars from 8 mo. to 1 yr. old. Select young sows mated to maintain size and correct type. Prices reasonable, shipped on approval and guaranteed right. W. E. BARTLEY, Alma, Mich.

Write Me at once I have just what you want heavy bone registered Duroc Jersey boars ready for service. W. H. MAYES, L. B. 605, Durand, Mich.

DUROC JERSEYS

Carey U. Edmonds, Hastings, Mich.

FELDKAMP'S POLAND CHINA SALE.

FORTY-THREE Poland China hogs were sold by A. A. Feldkamp for an average of \$71.29 at his farm near Manchester, Michigan, January 5. This offering entered the sales ring in excellent condition and the bidding was spirited from the time Colonel Edward Bowers opened the sale until the last animal was sold. Mr. Feldkamp is to be congratulated upon the quality of his offering and the success of this, his first public sale. Sales were made as follows:

1 L. K. Andrews, Norvell.....	\$ 66.00
2 E. J. Collins, Britton.....	57.00
3 Geo. J. Kempf, Tecumseh..	70.00
4 Melville & Higgins, Tecumseh	63.00
5 Wilber Comstock, Manchester	71.00
6 Fred Baker & Son, North Adams	70.00
7 E. R. Leonard, St. Louis....	165.00
8 Elmer Blaisdell, Manchester	69.00
9 Wm. Haselmerdt, Manchester	61.00
10 Wm. Haselmerdt, Manchester	61.00
11 N. F. Borner, Parma.....	145.00
12 N. F. Borner, Parma.....	87.50
13 Albert Sutton, Manchester..	78.00
14 Chas. Udmayer, Ann Arbor	69.00
15 Elmer Blaisdell, Manchester	57.00
16 Wm. Schlicht, Manchester..	75.00
17 George Sutton, Manchester..	71.00
18 Thos. Tasker, Parma.....	77.00
19 Wilber Comstock, Manchester	81.00
20 E. A. Collins, Clinton.....	71.00
21 A. D. Gregory, Ionia.....	80.00
22 Amos Curtice, Manchester..	66.00
23 A. D. Gregory, Ionia.....	75.00
24 A. D. Gregory, Ionia.....	70.00
5 Fred Baker & Son, North Adams	71.00
26 Reuben Sadt, Manchester...	66.00
27 N. F. Borner, Parma.....	82.00
28 I. Knickerbocker, Manchester	55.00
29 Albert Meyers, Manchester	56.00
30 Raymond Jacobs, Grass Lake	54.00
31 Homer Lehman, Manchester	56.00
32 Ed. Uphams, Manchester....	65.00
33 Geo. Kempf, Tecumseh.....	56.00
34 Clyde Geiske, Manchester..	55.00
35 Reuben Kappler, Manchester	53.00
36 Walter Curtice, Norvell.....	60.00
37 A. M. Kiebler, Manchester...	55.00
38 Jas. Strather, Manchester...	52.00
39 Leo Austin, Norvell.....	66.00
40 John Curtice, Norvell.....	101.00
41 Fred Udmeyer, Ann Arbor	76.00
42 H. Needham, Saline.....	71.00
43 George Eisele, Manchester..	60.00

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

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

Dehorning Old Cows.—Our eleven-year-old cow will come fresh in about three weeks, and I would like to know if it will do to have her dehorned soon after she calves? B. W., St. Louis, Mich.—There is no particular risk in dehorning a cow of her age, but the work should be speedily done, plenty of bedding placed under her to prevent injury, if she should fall. Apply pine tar and oakum to wound, if she runs out in cold, frosty weather.

Chronic Garget.—Have a cow that has had garget for some time. Now she gives stringy, cheese-like milk. A bunch has formed on the milk vein. Is my other cow that stands beside her in danger of becoming diseased? D. A., Imlay City, Mich.—Your other cow is in no particular danger of contracting garget. Apply equal parts of tincture of iodine and camphorated oil to caked portion of udder once a day. If her bowels are costive, give epsom salts.

Wart of Eyelid.—We have a year-old heifer with a wart over her left eye which has been growing for the past sixty days. It is the size of a sewing thimble. C. H. H., Leslie, Mich.—Either cut it off, or apply olive oil daily.

Malignant Sore.—Ever since last spring my mare has been troubled with sore leg. The sore is low down on the back part of hind leg; it is much like cracked heel. A. J. C., Perry, Mich.—Cautiously apply lysol daily and keep the leg clean.

Dr. LeGear says

"Your cows need a tonic now!"

Winter Feeds lack the digestive, laxative and medicinal properties that cows need for big milk production. These are all contained in *Dr. LeGear's Stock Powders*. This famous tonic will help your cows produce *More and Richer Milk*. For example

"My Jersey Cow gave only 6 quarts of milk a day and 5 to 6 lbs. of butter a week. After feeding Dr. LeGear's Stock Powders 4 weeks she gave 6 to 12 quarts a day. After 8 weeks she gave from 5 to 10 lbs. a week more butter fat." L. B. Weaver, Grand Rapids, Mich.

Unequalled for conditioning horses, cattle and all other farm stock

Get it from your dealer to-day.

30c-60c-\$1.20 pkgs. 25-lb. Pail \$3.00 100-lb. Drum \$9.00. Except Rocky Mt. States and west.

Dr. L. D. LeGear Medicine Co., St. Louis, Mo.

DR. LEGEAR'S STOCK POWDERS
GUARANTEED

O. I. C. BOARS

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

J. CARL JEWETT, Mason, Mich.

O. I. C. HOGS

all ages sired by Callaway Edd 1918 world's grand champ. boar and C. C. Schoolmaster 19.9 world's grand champion also Wonder Big Type and Giant Buster. Write your wants, all stock shipped on approval.

CRANDELL'S PRIZE HOGS, Cass City, Mich.

DUROC JERSEYS Boars and gilts by Mich. Pathfinder. E. D. HEYDENBERG, Wayland, Mich.

Down With Prices on last fall and this spring's O. I. C. Boars. WEBER BROS., Royal Oak, Mich.

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

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

O. I. C.'s Fall pigs by O. G. Big Callaway have size and quality and are priced right. C. J. THOMPSON, Rockford, Mich.

O. I. C. Bred Gilts for Mar. and Apr farrow also a few choice service boars. CLOVER LEAF STOCK FARM, Monroe, Mich.

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

We Are Offering at special low prices some of our choice O. I. C. fall pigs sired by State Fair winners. WEBER BROS., Phone 408, Royal Oak, 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

For Sale O. I. C. Swine. Strictly Big Type with good boars and gilts left of same type and blood lines, that won for us at Ohio and Michigan State Fairs. Priced very cheap. Write us before you buy. NEWMAN'S STOCK FARM, R. 1, MARLETTE, MICH.

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.'s Big Type Gilts, bred for Mar. and April farrow. Boars all ages. Write me for prices. G. F. ANDREWS, Mason, Mich.

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

L. S. P. C. a few choice boars, gilts bred to Black Giant one of the best pigs out of Ill. this fall. Also a grandson of The Clansman and Harrison Big Bob. H. O. SWARTZ, Schoolcraft, Mich.

Big Bob Mastodon Spring gilts bred for March and April and some sows bred to Big Bob his sire was champion of the world, his dam's sire was Grand Champion of Iowa State Fair. O. E. GARNANT, Eaton Rapids, Mich.

L. T. P. C.

70 head of Poland Chinas at private sale. Am offering some fall boar pigs good enough to head any herd. Summer and fall pigs \$25 each. The first chee will bring you the first choice. HART, FULCHER & CLINE, Address F. T. Hart, St. Louis, Mich.

BIG TYPE POLANDS

Bred gilts for sale. Also a few choice fall pigs by The Clansman and his son The Clansboy. They are great. Immune and registered. Come or write. WESLEY HILLE, R. 6, Ionia, Mich.

Big Type P. C. a few first class, 200 lb. boars left also some fall boar pigs good enough to head any herd. Come and see or write. E. R. LEONARD, R. 3, St. Louis, Mich.

Big Type Poland China boars Long, heavy boned spring boars. Sired by Brewbaker & Son's great heard boar Gertsdale Timm. Stock all double immuned. H. C. OVEN, Ovid, Mich.

LARGE Type Poland Chinas. A few choice fall boars for sale. Write or come and see them. A. A. FELDKAMP, R. 2, Manchester, Mich.

Additional Stock Ads. on Page 133

LATEST MARKET REPORTS

GRAIN QUOTATIONS

January 25, 1921.

Wheat.

Detroit.—Cash No. 2 red \$1.88; May \$1.81; No. 2 white and No. 2 mixed \$1.86.

Chicago.—No. 1 red \$1.91; No. 1 hard \$1.75½; March \$1.67.

Corn.

Detroit.—Cash No. 3 yellow, new 68c; No. 4 yellow, new 65c.

Chicago.—No. 3 mixed 62@62½c; No. 2 yellow 68c.

Oats.

Detroit.—Cash No. 2 white 45½c; No. 3 white 44c; No. 4 white 41c.

Chicago.—No. 2 white 42½@42¾c; No. 3 white 40¾@41½c.

Beans.

Detroit.—Immediate and prompt are steady at \$4 per cwt.

Chicago.—White beans steady. Hand-picked beans choice to fancy \$4.25@4.50; red kidney beans \$8.75@9 per cwt.

New York.—Market is dull. Choice pea, new \$4.50@4.75; do medium at \$5.50; red kidney \$9.25@9.50 per cwt.

Rye.

Detroit.—Cash No. 2 rye \$1.66.

Seeds.

Detroit.—Prime red clover cash and March \$12.50; alsike \$15.65; timothy \$3 per bushel.

Toledo.—Prime red clover, cash and January \$12.60; alsike \$16; timothy \$3.07½.

Hay.

No. 1 timothy \$22@23; standard and light mixed \$21@22; No. 2 timothy \$20@21; No. 1 clover mixed and No. 1 clover \$19@20; rye straw \$13@14; wheat and oat straw \$12@13 per ton in carlots at Detroit.

WHEAT

In spite of numerous developments favorable to higher prices the wheat market last week weakened decidedly and lost over 20 cents from the recent high point, but rallied at the opening Monday. Export sales were made on every session, including about 640,000 bushels sold for shipment as far ahead as April at prices 19½@20c over the March delivery. Holland, Switzerland, Spain, France, Italy, Denmark and Germany bought wheat in the United States during the week, while Greece took 2,000,000 bushels of Canadian. Portugal was in the market with an order totaling over 9,000,000 bushels, although part of it may be filled in Argentina. The statistical situation gained strength in the week's reports as the Canadian crop was reduced in the final returns to 263,000,000 bushels, or 30,000,000 less than the preliminary estimate. Broomhall says the Australian surplus will not be over 88,000,000 bushels compared with 104,000,000 in the official returns. The visible supply in the United States was again reduced and is now the lowest for January with three exceptions, since 1892. Much of the wheat sold abroad for future shipment might be cancelled on a large scale, particularly if Argentine prices should be considerably below ours.

CORN

The corn movement expanded still further the past week and prices receded to new low levels on the crop. Iowa and Illinois farmers are selling rather freely and Nebraska and South Dakota are also ready to let go. Indiana and Ohio have the advantage in freight costs to the eastern trade so that eastern shippers are buying less than usual at Chicago. The weakness in the market had the effect of unsettling consumptive demand and there is no disposition as yet to anticipate future requirements. The industrial demand shows no increase but on the other hand, it is not expected to decrease. Export sales have averaged about 300,000 bushels per day and at one time prices delivered at United Kingdom ports were 13 cents under Argentine corn. The new crop in that country will not be harvested for three months.

OATS

The oat market continues in the same rut as of late, declining along with corn to a new low on the crop. Export demand is trifling and eastern demand is sluggish so that even moderate receipts have been more than

enough. The Danube countries are supplying European needs.

SEEDS

Seed prices continue to shadow the lower than a week ago. Conditions price movements of the grains and are still promise a fairly broad spring trade, although there is no anxiety as to the size of the supply. Stocks in the hands of seedsmen generally are light.

FEEDS

The policy of holding off buying for future feed requirements has continued to be the wiser course as further weakness has been apparent the past week, especially in the mill feeds. The oil meals show no particular change. Costs to the consumer are still quite high compared with the farm value of the feed grains.

HAY

Hay prices remain relatively high to the buyer when their feeding value, compared with concentrates, is considered. More western hay is coming and consumptive demand has not increased enough to absorb it. The outlook does not appear encouraging to producers so long as present freight rates remain in force.

EGGS AND POULTRY

Heavier receipts traceable to milder weather and a resulting disposition on the part of buyers to hold back, brought about a sharp decline in egg prices during the past week. Further adjustment of this sort will occur inside of sixty days but will be influenced more or less by weather conditions. Case egg stores declined from 1,824,000 on December 1, to 409,000 on January 1, while frozen eggs in storage declined from 29,945,000 cases on December 1, to 27,325,000 on January 1. Supplies of the latter are larger than a year ago but case egg stocks are much smaller than last year. Storage stocks of all classes of poultry showed a big increase during December, but are slightly smaller than on January 1 last year. Latest quotations were as follows:

Chicago.—Eggs, fresh firsts at 61@61½c; ordinary firsts 57@60c. Poultry, spring chickens 27c; hens, general run 28½c; roosters 20c; Detroit.—Eggs, fresh candled 65c.

Live poultry, spring chickens 25@26c; leghorns 20@22c; heavy hens 27@30c; light hens 20c; roosters 18c; geese 27@28c; ducks 38c; turkeys 38@40c.

BUTTER

The slight firmness in butter markets noted a week ago failed to hold during the past week. The principal factor in the market has been the supply of foreign butter, particularly Danish, in eastern markets. The Frederick VIII arrived with 17,850 casks but the New York markets seemed to have discounted this supply in advance and displayed less weakness than the other. This butter sold actively at 49½@50½c. It is reported that new offers of this butter are made for February delivery as low as 42c without the duty. California and New Zealand butter were also offered in New York. Storage holdings of creamery butter on January 1 were 58,753,000 pounds, a decrease of 21,000,000 pounds during December, or practically the same as during December a year ago. The closing tone of the market was unsettled with slight improvement in the undertone. Prices on fresh creamery butter on January 22 as reported by the Bureau of Markets were as follows: Chicago 45c; New York 50c; Boston 51c; Philadelphia 51c.

POTATOES

Changes in the potato market during the past week have been slight. Receipts at consuming markets were normal. New York shipping points were quoted slightly lower at \$1.30@1.35 per hundred pounds. Prices in consuming markets at the close of the week were as follows: Chicago.—Northern whites sacked \$1.20@1.30.

Detroit.—Michigan-Wisconsin round whites \$2.10@2.15 per 150 pounds.

DETROIT CITY MARKET

Only a few growers were at the market Monday and the movement of produce was about as brisk as usual Monday morning. Track sales to jobbers reported by the local office of the U. S. Bureau of Markets were as follows: Potatoes, supply liberal, market weak; Michigan 150-lb sack of round white \$2@2.10; apples, supply moderate, market weak, barrels New York Greenings, Baldwins, A-grade at \$4.50@5; cabbage, supply moderate, mar-

ket dull \$20@22 per ton; onions, supply liberal, market weak, Michigan yellow varieties 85c@\$1 per 100-lb sack; beets 75@90c per bushel; carrots 60@90c per bushel; parsnips 75c@\$1 per bushel; squash \$1.25@1.50 per bushel; turnips \$1.25@2 per bushel; parsley 75c per bushel. These prices represent large sales and wholesale conditions rather than small quantities to consumers.

STATE FARM BUREAU MARKET REPORT.

Following last week's decline and reports that exporters were again in the market for wheat and rye, the present situation shows considerable improvement and the market regained recent losses. Corn and oats continue weak. Reports of heavy corn receipts at Chicago demoralized the corn market. Generally oats have declined in sympathy with corn. The hay situation has not improved and even lower level of prices may prevail. More than fifty per cent of marketable surplus of hay yet unmoved, with only three months left to dispose of it. Seed prices have suffered sharp decline the past week; consignments of farmers' seed to the State Farm Bureau continue about the same. This indicates an appreciation of the service the seed department is rendering. Demand for soy beans, field beans, oats and barley is much more active. Indications point to brisk demand for this class.

COMING LIVE STOCK SALES.

Duroc-Jerseys.—January 31, August-Miller, St. Johns, Michigan.
Duroc Jersey.—February 2, Michigan Duroc Breeders' Association, East Lansing, Michigan.
Holsteins.—February 3, John H. Johnson, Farmington, Michigan.
Holsteins.—February 10, Charles Ride-nour, Ovid, Michigan.
Durocs.—February 12, Brookwater Farm, Ann Arbor, Michigan.

Live Stock Market Service

Markets for January 26.

DETROIT Cattle.

Market is dull.
Best heavy steers\$ 8.50
Mixed steers and heifers 6.50@ 8.00
Best handy wt bu steers 6.00@ 7.25
Handy light butchers.... 5.00@ 6.00
Light butchers 5.00
Best cows 5.50@ 6.50
Butcher cows 4.50@ 5.50
Common cows 3.25@ 4.00
Canners 2.75@ 3.00
Choice bulls 7.00
Bologna bulls 6.00@ 7.00
Stock bulls 5.00@ 5.50
Feeders 6.50@ 7.50
Stockers 5.00@ 6.25
Milkers and springers...\$ 50@ 90

Veal Calves.

Market strong.
Best\$14.00@15.00
Others 4.50@11.00

Hogs.

Market is steady.
Mixed hogs\$ 9.85
Pigs 10.25@10.50
Roughs 8.25
Stags 6.50

Sheep and Lambs.

Market strong.
Best lambs\$10.00@10.75
Fair lambs 8.00@ 9.00
Light to common 5.00@ 7.00
Fair to good sheep 4.00@ 5.00
Culls and common 1.50@ 2.50

CHICAGO Hogs.

Estimated receipts today are 32,000; holdover 11,908. Light weights mostly 10c lower; others are steady. Bulk of sales \$9.20@9.65; tops \$10.10; heavy 250 lbs up medium, good and choice \$9.15@9.65; medium 200 to 250 lbs medium, good and choice at \$9.25@9.75; light 150 to 200 lbs common, medium, good and choice \$9.60@10; light lights

130 to 150 lbs common, medium, good and choice \$9.50@10; heavy packing sows 250 lbs up smooth \$8.50@9; packing sows 200 lbs up rough \$8.25@8.50; Pigs 130 lbs down medium, good and choice \$9.25@9.75.

Cattle.

Estimated receipts today are 11,000. Market steady to strong; calves are higher. Beef steers medium and heavy weight 1100 lbs up choice and prime \$9.75@10.75; do medium and good at \$8.25@9.75; do common \$7.50@8.25; light weight 1100 lbs down, good and choice \$8.85@10.40; do common and medium \$7.25@8.85; butcher cattle, heifers, common, medium, good and choice \$5.25@9; cows common, medium, good and choice \$4.60@7.75; bulls bologna and beef \$5.25@7.50; canners and cutters, cows and heifers \$3.25@4.60; do canner steers \$4@5.50; veal calves, light and handyweight medium, good and choice \$11.25@13.50; feeder steers common, medium, good and choice \$6.50@8.85; stocker steers, common, medium, good and choice \$5.50@8; stocker cows and heifers, common, medium, good and choice \$4.25@6.25.

Sheep and Lambs.

Estimated receipts today are 19,000. Market steady to strong. Lambs 84 lbs down medium, good, choice and prime \$9.75@11.50; do 85 lbs up, medium, good, choice and prime \$9.25@11.25; do culls and common \$7.50@9; spring lambs medium, good, choice and prime \$8@9.50; ewes, medium, good and choice \$4@6; ewes cull and common \$2.50@3.50; yearling wethers, medium, good and choice \$8.25@10.25.

BUFFALO

Hog prices are steady at \$10.25@10.50 for heavy hogs, and \$11.25@11.50 for yorkers and pigs; best lambs are higher at \$11.25@11.50; calves steady at \$17.50.

Confidence

Confidence in yourself makes you sure of your "horse or cow" buy.

Confidence in us makes you sure of your clothing buy.

Confidence in our 75 years' experience—the oldest men's clothing concern in the country, who operate the largest single clothing plant in the world.

You want to know the best fabric, style and price of clothing for you?

For wear—service—looks—most-for-dollar you can't beat Clothcraft Serge Specials.

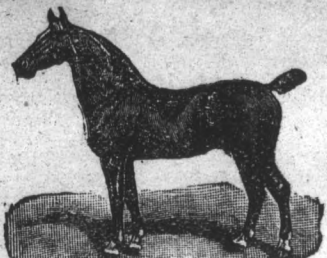
Learn something about these Serge Specials from the manufacturer who makes the greatest number.

A little folder, with a big message, gives simple facts about serges—with actual samples of cloth, in brown, gray, and blue—free. Just write "Send Serge Folder"—address:

THE JOSEPH & FEISS CO.
625 St. Clair Ave., N.W., Cleveland, Ohio

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AT SACRIFICED PRICES
BUYERS CAN SAVE BIG MONEY NOW
Big clover growers of the middle west came to us and made hedock prices to move their crops. They needed cash. We had the money to take their seed. This means lower prices to you because this fine lot of clover will not be hoarded for higher prices, but passed on at a legitimate profit to early buyers. Big volume on a small profit is our aim. Every bag is high testing, guaranteed seed sold on an absolute money back guarantee. This lot will save you money. Write for samples and big seed guide—all free.
American Mutual Seed Co. Dept. 431 Chicago, Ill.

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Has Imitators But No Competitors

A Safe, Speedy, Positive Remedy for

Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs and Lameness from Spavin, Ringbone and other bony tumors. Cures skin diseases or Parasites, Thrush, Diphtheria. Removes Bunches from Horses or Cattle.

As a Human Liniment and Antiseptic for external use it is invaluable.

Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.75 per bottle. Sold by druggists, or sent by parcel post, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address The Lawrence-Williams Co., Cleveland, O.

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on your Fordson tractor, it will make it possible for a ten year old boy to operate it with ease, it will crank easier and one man can start it on the belt, saves changing gears while in the field.

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Wonderful Value Wholesale Prices Highest Quality
Don't fail to investigate these bargains. Recleaned Tested Timothy \$3.95 bu. Sweet Clover unhulled \$4.50 bu. Sudan Grass 8 1/2 lb. Prices cover some grades of limited quantities. Clover and other Grass and Field Seeds at low prices. All sold subject to State or Government Test under an absolute money-back guarantee. We specialize in grass and field seeds. Located to save you money and give quick service. We expect higher prices—Buy now and save big money. Send today for our money-saving Seed Guide, explains all—free. American Mutual Seed Co., Dept. 631, Chicago, Ill.



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\$3.25 Box guaranteed to give satisfaction or money back.
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We save you money. Illinois crop of excellent quality. Buy now while crop is moving. Prices sure to be higher later. Don't buy field seeds of any kind until you see our samples and prices. We specialize on guaranteed Quality Clover, Timothy, Alfalfa, Alsike and Sweet Clover, shipped subject to your approval and test. Write today for Free Samples, Prices, Big Seed Guide. American Mutual Seed Co., Dept. 631, Chicago, Ill.

Heaves Fleming's Tonic Heave Powders good for "Heaves," thin, run-down, hide-bound horses. \$1.00 a package postpaid. Money back if they fail. Send for FREE Vest Pocket Veterinary Adviser. Describes Heaves and 200 other Horse and Cattle Diseases. **FLEMING BROTHERS, 252 Union Stock Yards, Chicago**

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

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

HAY Apples, Potatoes Wanted Highest prices paid. The E. L. RICHMOND CO., Detroit, Mich.

MOLASSES Richest Feed Lowest Cost Write for Special Price **CHICAGO MOLASSES COMPANY, 1131 East 77th Street, Chicago, Ill.**

For Sale Standing timber. Tamarack, Spruce and some Oak, Ash and Elm. Also number one 120 acres with good buildings. R.W. Anderson, Clarkston, Mich.

WANTED to rent furnished tenant house on Reg. Holstein dairy farm. Must be cheap and quick. Box H-159, care of Mich. Farmer, Detroit, Mich.

WOOL

The gradual improvement in the market for wool noted since the first of the year continued during the past week. The fine and fine medium grades have been purchased most freely. The market has become more steady and there are fewer lots offered at extreme bargains. The American Woolen Company is reported to have purchased several million pounds and mill operation is gradually increasing as a sufficient volume of orders for goods is being received. The London auctions show no particular change in prices but cross-breeds were in stronger demand than recently. Australian and New Zealand growers are inclined to hold back and only offer such quantities as the market will absorb without lowering quotations. South American markets have become more steady. Everywhere there is a greater feeling of confidence and in a few cases offers have been refused by wool merchants which would have been readily accepted not long ago. Boston reports larger receipts and shipments than for several weeks. The prices quoted by manufacturers on yarns and cloths are so low in many cases that it will be difficult to advance wool prices very much above the present level.

THE BUSINESS OUTLOOK.

THE general business outlook during last week showed additional improvement, particularly in manufacturing and wholesale trade. Developments in the field of foreign affairs were instrumental in causing the decline in wheat prices, breaks in some of the other grains and some classes of live stock being due primarily to heavy receipts.

It is safe to say that the most adverse news which must be faced before the end of the present business depression is reached will come from abroad. It is granted on every hand that the danger of a crisis in this country is definitely passed but the same cannot be said with equal assurance of European countries. The depression started first in the Far East in Japan, then appeared in this country six or eight months ago. European countries were in a bad way already and the disastrous effects of commodity price declines have not yet exerted their full influence in those countries. The United States has virtually led the world in the deflation of values.

Most European countries are receiving less from taxes, even though these are oppressively heavy, than their government expenditures require. Failure to settle promptly the German indemnity question is another unsettling factor. The European problem is a tremendous one in which the American people are extensively, although indirectly involved. South American countries also have big financial problems to solve so that the difficulties are not confined exclusively to war-stricken territory.

Not only will the American people be asked to assist in financing exports to foreign countries but it is expected that a large number of loans will be floated by foreign countries in this country during the coming year.

Belgium is already after a loan of \$30,000,000. Much of the funds raised by such means will be spent in this country for food and raw materials for manufacture. These must be obtained in some way, otherwise Europe can never pay its previous debts to us.

Congress has been virtually flooded with requests for tariff protection from practically every branch of production from the metals down to clothespins, although these requests have received rather less space in public print than requests for tariffs on farm products. Low rates of foreign exchange give foreign producers a decided advantage in this country, but if they are to pay their debts they must be allowed to sell somewhere.—G.

Dispense with the old sour-swill barrel. It is a disgrace on a modern hog-farm. Even pigs do not naturally like old musty, sour swill.

How To Profitably Meet The Drop In Crop Prices

Every cloud has a silver lining and even though farmers have had to stand large losses on account of the present slump in the market prices of crops, there is every good reason to rejoice and be optimistic. In 1919, when crops brought "top notch" prices, farmers fed one billion dollars to insects, which means that every 100 Acres was taxed about \$280.00 for the support of pests. Another billion dollar loss in 1921 in addition to the steadily declining market prices would cause a serious situation. But, thanks to a European Chemist and Agronomist, no such calamity will occur. There has just been perfected a marvelous, new seed treatment that will positively protect planted and unplanted seeds from destruction by insects, worms, mice, gophers, crows, rabbits and other damaging pests; also from mould and decay in over-wet soil. Samples of treated seeds with full particulars may be had free by simply writing to the Agricultural Chemical Company, Dept. 109, North and Sheffield Ave., Chicago, Illinois.



I will condition a Horse or Cow in twelve days.

Put flesh on its bones. Give it life and vigor. Can add 50% to looks and value. Satisfaction guaranteed or no pay. Send postal for free offer.
P. M. FAUST, BRYN MAWR, PA.

Farms and Farm Lands For Sale

200 Acres Near RR town Horses, 23 cattle and

Potato digger, threshing machine, vehicles, harnesses, machinery, hay, fodder, grain, vegetables, potatoes, etc. included; fertile loamy tillage, large spring-watered pasture; valuable woodland; variety fruit; equipped sugar grove; good 7-room house running water, large slate roof barn, silo, 40 ft. pigsty, etc.; owner left alone; low price \$6500, only \$1500 cash, easy terms. Deeds this and 40-acre farm only \$700 down page 29, Strout's Illustrated Catalog Bargains 33 States. Postpaid FREE. **STROUT FARM AGENCY, 814 BC Ford Bldg., Detroit, Mich.**

Virginia Farms

You can become happy and independent farming in Virginia. You can grow profitably grains, corn, fruits, alfalfa and all grasses, beef and dairy cattle. Virginia boasts the finest apple growing section in the world. Prices very reasonable, but advancing. We welcome you. Write now for illustrated hand book and maps.

G. W. KOINER,
State Commissioner of Agriculture, Richmond, Va.

High Class Dairy Farm For Rent

160 acres fertile land within one mile of town. Good buildings, barns to house 100 head of stock and feed for same. Will rent on share for term of years to good dairyman or stock man who can finance one-half of herd of 20 to 30 cows and furnish teams and tools. Address Box J115, care of Michigan Farmer, stating experience and financial ability in first letter.

VIRGINIA FARMS AND HOMES

FREE CATALOGUE OF SPLENDID BARGAINS.
R. B. CHAFFIN & CO., Inc., Richmond, Va.

For Sale 80 acre farm, Montcalm County Michigan near markets, good buildings, apple and small fruit orchard, soil number one clay loam. Farmed by owner for over fifty years. Particulars upon request. **M. R. Newell, East Lansing, Mich.**

120 ACRES good land fair buildings and good markets private lake of about 8 acres rest nearly all hard land. Address Box 201, Linden, Mich.

Farms and Homes in Delaware where the climate is pleasant, the lands productive and prices reasonable. For information write, State Board of Agriculture, Dover, Del.

FOR Sale 122 acres best of improved land, good building fine location 3 miles from Lansing, \$152. With 14 A. wheat. **S. W. HEMPEY, R. 7, Lansing, Mich.**

70 A. Farm, third timber, level loam, fair buildings, 20 mi. No. Detroit, half mi. to village. Owner 637 Selden Ave., Detroit, Mich.

MUMFORD'S BROOKWATER DUROCS Sell February 12th, at Ann Arbor, Mich.

It has been two years since Mich. Farmers and breeders have had an opportunity to buy Brookwater Durocs at Public Sale. This will be their opportunity to buy

50 Bred Sows and Gilts

They are a choice lot and will sell within the reach of the small breeder and progressive farmer. They are sired by and bred to prize winning boars of national reputation. There are some new blood lines offered in this sale that will mate well with your Brookwater stock.

In our judgement there never was a better time to buy one or more good brood sows to start a herd or to improve one already started. Brookwater Durocs are standard. They have made good and stood the test of time. There will be some show sows and show prospects sold. Get a catalog and attend the sale in Ann Arbor, February 12.

Brookwater Farm, Ann Arbor, Mich.

Herbert W. Mumford, Owner J. B. Andrews, Manager

PUBLIC SALE OF DUROC JERSEYS Monday, Jan. 31, 1921

12 Bred Sows 20 Pigs

Sired by Walt's Orion a son of Orion's King Fancy King and out of Orion's King Orioness. This boar is a sure breeder and gentle. For size and quality there are few 2 year old boars that are his equal. All of the sows in the sale are of the choicest breeding. Must be seen to be appreciated. They come from state and national show winners.

Will also sell well-matched pair Belgian geldings and two very good registered Holstein cows and one yearling bull, sired by Forest City Pontiac Ormsby King. Those from a distance will be met at trains.

August Miller, Prop., St. Johns, Mich.

Sale of Choice Durocs

The 7th Sale of Durocs will be held at Dowagiac, Michigan, on Saturday, February 12th, 1921, 12:30 o'clock.

Twenty-one choice fall and spring gilts sired by Liberty Defender and Col. bred Dams and bred to Orion Cherry Jack 6th, one of the strongest Orion bred boars in the State.

If you want some good Durocs, come to this sale. They will be sold regardless of weather.

If you cannot attend this sale send bids to Auctioneer C. O. Burch, Dowagiac, Mich. Send for Catalogue.

H. G. Keesler, Cassopolis, R. 5, Prop.

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

Big Type Poland Chinas bargain \$75 buys a bred gilt and a 250 lb. spring boar also choice gilts bred for \$40. Guarantee Satisfaction.
DORUS HOVER, Akron, Mich.

Poland China Bred sows and gilts at bargain prices, also spring boars and fall pigs, either sex.
CLYDE FISHER, R. 3, St. Louis, Mich.

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

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

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

Hampshires Again

Win Grand Champion Car Load At Chicago
They also out sold and out-bred all other breeds. Can you ask for more proof? Start now with the right kind. Write for free booklet. We give private herd register free to purchasers.
DEWEY HEAD, Box 15, Marion, Ohio.

Registered Hampshire gilts now ready to ship. Spring boars and fall pigs at a bargain.
JOHN W. SNYDER, R. 4, St. Johns, Mich.

SHEEP.

Wool-Mutton Shropshire Rams. Good strong individuals, royally bred, priced right. **A. H. FOSTER, Allegan, Mich.**

Shropshires Choice ewes, all ages, bred to imported ram. Also a few rams.
W. B. McQUILLAN, R. 7, Howell, Mich.

Brook Side Farm Offers Shropshire Registered Ewes Bred to an imported Minn. Ram. **Dan Booher, Prop., R. 4, Ewart, Mich.**

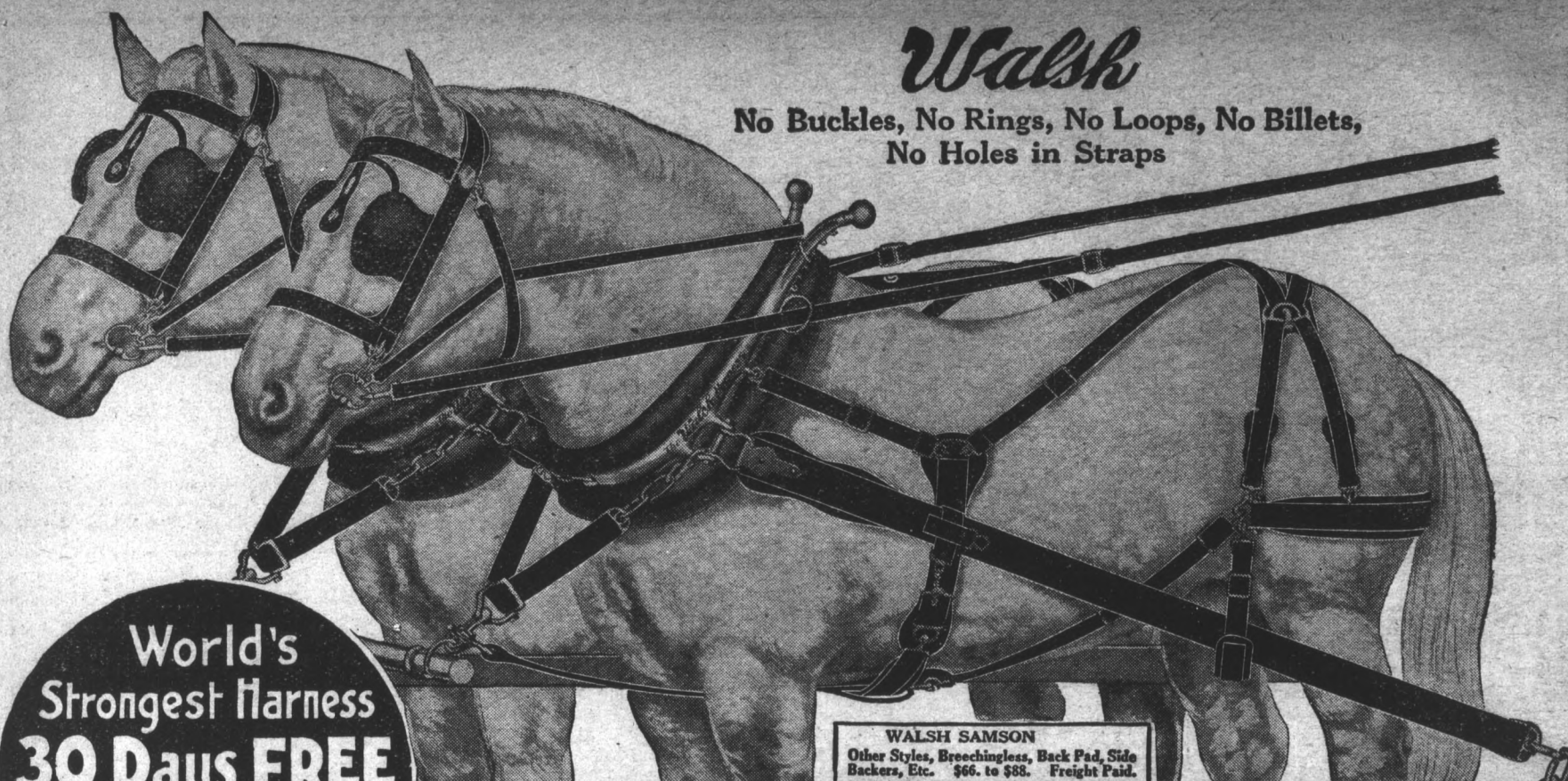
Registered Shropshire Ewes and rams. **Jno. Grieve, R. 3, Fowler, Mich.**

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

HORSES

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

Stallion Mons, wt. ton, gray. Pair of fillies coming 2 yrs. Large and sound. Must be sold at once all P. S. A. **JOHN LONGNECKER, Montague, Mich.**



**World's
Strongest Harness
30 Days FREE
Trial
6 Months to Pay**

Not A Buckle On It - All Styles - Fits Any Horse

Special Easy Payment Offer for this Month Only

Right now is the time to get your Walsh Harness. Easy Payment Terms will be withdrawn as soon as the spring rush begins. Try the Walsh 30 days Free—if satisfied, keep it and pay what you can each month. You can use your Walsh while paying for it. If not satisfied, return at our expense.

One look at the Walsh will convince you that it is an actual money saving to buy such high quality harness. Later you will find it saves repair bills, and outlasts two sets of buckle harness, because the Walsh has no buckles to tear straps—no rings to wear straps in two—no loops to pull out—no holes to weaken straps. Every Walsh strap gives its full strength. No patching—no mending—yet Walsh Harness costs less than buckle harness made of the same high grade of leather. Don't let this chance go by to try the Walsh on special easy terms. Send coupon today.

Thousands Use Walsh Harness

Years ago you thought Walsh Harness an experiment. Today it is no experiment. We can show you thousands of letters from farmers and teamsters all over the United States who are delighted with WALSH Harness. Thousands of re-orders come in from farmers who want it for all their teams. The reason they like WALSH Harness is that it has no buckles to tear or rings to wear the straps—it has no holes in straps. Every strap gives its full strength. Walsh Harness is as good today as it was years ago, and will last for a lifetime. We want to convince you of this. Our terms could not be more liberal and fair. Order a set of WALSH Harness on trial.

See the way this ring has worn and weakened the strap. You never saw an old fashioned ring and buckle harness that didn't look like this after a few years use. Look how the buckle cut the strap. Walsh Harness will outlast two sets of ordinary harness for the reason that it has no buckles to cut the straps, no rings to wear them.



Walsh Harness Has Every Improvement

Including built-in hame fasteners, safety neck yoke lock, quick detachable throat strap, improved breeching, world's best hame, strongest bridle made, better cross line adjustment, adjustable trace draft, etc. Every metal part is first galvanized to prevent rust and then enameled in black. Made in all styles, back pad, breechingless, side backers, lumber style, etc.

We cannot tell you about WALSH Harness as well as we could show you. All we ask is that you do as thousands of others have done and let us send you the WALSH harness book and later the harness itself on a free trial offer. See coupon. That will give you further facts. To convince you that WALSH Harness is the best, strongest and most reasonably priced harness made, we want you to

Send No Money—We Take All Risk

We don't want a cent of your money until you have proved for yourself that WALSH Harness is all we claim for it. Take a set. Examine every strap. Note the absence of friction where leather touches metal.

Notice the great strength of the straps, their uniform thickness and excellence of the leather. Notice the improved hames, safety neck yoke fastener, and the general lightness and handiness of WALSH Harness. Fits any size work horse with a moment's adjustment. Establish these facts in your mind and you'll be glad you got WALSH Harness. If not satisfied that it is the best harness you ever saw, return it at our expense.

We Receive Hundreds of Testimonials Like These

Atkinson, Minn.
I have used a set of Walsh Harness for over three years, and there is not one spot on the whole harness to show that it has worn.
C. E. A. ANDERSON

Dell Rapids, S. D.
I have used the Walsh Harness a year for all around farm purpose and can truthfully say I am well pleased with it. I am sure you have the best harness on the market regardless of price.
J. M. ANDERSON

Shelby, Iowa
I received my harness last March, and am well pleased with it. When I buy another harness it will be a Walsh.
CHRIS. MUXFELDT

Cleveland, Wis.
I honestly believe that the Walsh Harness will outlast two sets of the other make.
H. H. BOHNE

Derrick, N. D.
Received the harness and am more than well pleased with them, it is the best harness I have seen for the money. I had them on a team to town and everybody was asking where I had bought the harness. Would not take two sets of old style harness for them.
OLE HAUGEN

Republic, Mich.
I don't believe there are any other harness on the market that equals the Walsh in strength, handiness, and comfort for the team at any price. Box 60, HENRY J. PROVERT

La Valle, Wis.
I have used the Walsh Harness over two and a half years, and I am well satisfied.
E. A. SEELEY

Try Walsh Harness FREE On Your Team 30 DAYS

We leave you to be the judge and the jury. Our liberal installment plan of selling allows you to return harness without cost if not found satisfactory at the end of thirty days actual trial test. If found O. K., keep the harness and pay for it thru our easy terms. Remember, if Walsh Harness does not prove itself to be the best and strongest harness you ever saw, and at a price \$10. to \$15. below what other harness of equal quality leather is selling for, return it at our expense. Was there ever an offer on earth fairer than this? We also have a way for you to earn a little money on the side showing Walsh Harness to your neighbors. Fill out coupon and mail today.

JAMES M. WALSH, President
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EASILY ADJUSTED
"We are exceptionally well pleased with the Walsh Harness. It can be easily adjusted to fit any size horse. There are no straps cut by buckles. I would not buy any other harness but the Walsh Buckleless Harness if it cost double the price."
MATH. LAMB, Random Lake, Wis.

HORSE WORKS EASIER
"We have used one of your harness now for four years and we found the harness O. K. in every way. The horses seem to work easier in your harness than in any other harness. Your harness fits snug on the horse, no friction, no rubbing."
ALBERT J. STADMULLER, Oshkosh, Wis.

LASTS A LIFETIME
"I have had two sets of your harness and am very well pleased with them. They seem to be very strong and of good quality leather. If well taken care of should last a lifetime."
W. F. WIECHMAN, Evansville, Wis.

ADVISES OTHERS TO BUY
"I like my Walsh Harness fine and think it the only harness to buy. If I was going to buy another harness it would be the Walsh. I am well pleased with it. I would advise anyone to buy a Walsh for I think the harness is perfect in every way."
WILLIAM HOFFMAN, R. 4, Waterloo, Iowa.