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DETROIT, DECEMBER 25, 1920

CURRENT COMMENT

Our County Government

HOME rule in counties is the slogan and aim of a group of public spirited citizens who are advocating a plan which would permit the establishment of a commission or other revised form of government where the majority of the electors in any county voted in favor of such a change. The idea which this group is advocating is based on the premise that the county board of supervisors is in reality a legislative body, without an executive head, and that more economic business results would be secured by abolishing or reducing this body and providing for an operating executive department.

With the promotion of this idea in view a meeting was held at Lansing a year ago, at which a committee was appointed to study the problem and report at a later meeting. This committee, composed of Elvin Swarthout, of Grand Rapids, Prof. Robt. T. Crane, of Ann Arbor, and Rep. Orville E. Atwood, of Newaygo county, reported at a public meeting held at Lansing last week. At this meeting those present from widely scattered counties reached three conclusions, viz., that a change in the form of county government is vitally needed; that it would be necessary to submit a constitutional amendment before anything could be accomplished in county government reorganization, and that it was desirable that the voters of the several counties should elect the type of government to be used by popular vote, thus forcing the issue on no one but giving the people of any county the opportunity to better their form of government or experiment in that direction. Pursuant to this program a general committee of seven members was appointed to further the plan. This committee includes P. C. Gilbert, Traverse City; Elvin Swarthout, Grand Rapids; C. E. Wilcox, Detroit; F. L. Baldwin, Escanaba, and C. Roy Hatten, of Grand Rapids.

Regardless of the merits of the proposal, its advocates are to be complimented for their spirit of fairness in the proposition of self-determination by the voters of the several counties regarding a change in the form of county government in case an amendment providing for such a referendum is submitted and adopted. There can be no serious objection to the submission of such a proposed amendment to the constitution, providing sufficient time is given for the voters to study the question and inform themselves as to its import and possible results. That there is room for improvement in any of our established civic organizations

is entirely reasonable. That any such civic division be given the right to experiment in such improvement if its people so desire is an equally reasonable proposition. That initial experiments would be as successful as their advocates believe is perhaps doubtful, but this cannot be foretold, and such experiments might prove valuable object lessons for the other counties.

If the proposition is submitted to the voters in the form of a proposed amendment as planned, the proposal should be sufficiently broad to permit a variety of experiments, instead of confining it to a single or set project, since conditions vary greatly in the different counties, particularly as to density of population and taxable property, and it is essential that all the people of every county keep in the closest possible touch with county affairs. If greater economic efficiency in county government can be secured without sacrificing this principle it is unquestionably desirable. But a radical change from the representative government by a board of supervisors elected from the lesser civic units of the county is a matter for careful consideration and experiment, rather than wholesale adoption, hence the wisdom of the promoters of the plan in not advocating any definite and compulsory change in county government.

Inventory Your Resources

IT will pay every farmer to make an inventory of the fertility resources of his land at the start of operations rather than waiting for a marked decline in crop yields or a succession of crop failures to force the use of purchased plant foods. When one has practiced a rational system of crop rotation and live stock feeding, with a view of maintaining and increasing soil fertility, and finds the land becoming less and less productive it is evident that something is needed to correct soil conditions or furnish actual plant food for the growing crops.

If clover and other legume crops fail to make a satisfactory stand the use of lime may prove more profitable than the purchase of commercial fertilizers. On most stock farms, however, the judicious use of certain chemical plant foods along with the supply of farm manure will increase the yield and improve the quality of farm crops. Reports of field tests in different parts of Michigan indicate that phosphorus is the one element needed to increase crop yields on the majority of stock and dairy farms, as well as on farms where no system of animal husbandry has been practiced for years. Results from the use of acid phosphate have been more satisfactory than raw rock phosphate, due undoubtedly to the deficiency of organic matter in the soil.

The advisability of using fertilizers carrying nitrogen and potassium depends largely upon the fertility of the land and the kind of crops one is growing. If the soil is deficient in nitrogen and no manure or cover crops are plowed under the yield of crops is sure to be limited to the amount of that element that becomes available during the growing season of the crops. This holds true with regard to the supply of potassium, although most of our soils contain sufficient quantities of this element to maintain the yield of general farm crops for many years, provided, of course, that the other conditions of the soil are favorable for its becoming available at proper periods during the growing season.

Many farmers who have changed over from crop growing to dairying or stock raising have discovered too late that such a system will not restore fertility and at the same time give a satisfactory profit without the use of commercial plant foods. As a result they have been forced to sacrifice good animals that could easily have been car-

ried some years ago, before the soil had been robbed of its fertility. The use of commercial fertilizers in such quantities as are required to assure profitable crop yields, while the soil is yet in a fair state of productivity, will result in greater benefit to the farmer and those dependent on him for food than if the practice is postponed until the land fails to produce profitable crops of any kind. The fact that farmers were able to maintain and, even, increase the yield of certain crops during the period of the war created an impression in the minds of many economists that such a process could continue indefinitely. Those well-posted in the problems of the soil, however, know that the cashing in of soil fertility to meet the demands of stimulated production has left many farms in such condition that profitable agriculture is possible only through the proper use of fertilizers.

The kind and quantity of fertilizers to use are problems that must be worked out by the individual according to his farm and conditions under which he is farming. As a general proposition it will pay to use a rather heavy application of manure and fertilizer on a smaller acreage and grow soil-improving crops on the balance of the tillable land and not attempt to grow large crops on more acres than one can handle to advantage. All kinds of commercial plant foods are expensive, and unless one is ready to meet the other essentials of crop production he is sure to find them unprofitable, both from the standpoint of the year's production of crops and the permanent fertility of the soil.

Ralston-Nolan Bill

OUR readers will remember previous comment in these columns on this bill, (H. R. 12,397) now pending in congress. This is the bill championed by a committee of manufacturers and merchants, with headquarters in Chicago, which proposes a federal tax on land values to provide for a reduction of at least twenty-five per cent of the federal tax on business. The committee is still working, soliciting subscriptions from business men to promote the passage of this bill to saddle a new tax on land values. We have before us a recent letter of solicitation from the committee, forwarded from the office of the Michigan State Farm Bureau. Organized agriculture will be on the job to fight this bill, which these interests will attempt to force through the new congress. But individual effort will count and should not be neglected. See or write your newly elected congressman and urge him to oppose this bill which would impose new tax burdens on the already overtaxed farmers of the country.

STATE GRANGE MEETING.

AT the annual meeting of the Michigan State Grange held last week at Grand Rapids, Albert B. Cook, of Owosso, was unanimously elected Master to succeed John C. Ketcham, of Hastings. Other officers elected were as follows: C. H. Bramble, of Tecumseh, overseer; Mrs. Dora B. Stockman, of Lansing, lecturer; Miss Jennie Buell, of Ann Arbor, secretary. Mrs. Allie Bennett, of Kent county, Mr. John C. Ketcham, of Barry county, Mr. George B. Horton, of Lenawee county, and W. F. Taylor, of Oceana county, were elected members of the executive committee.

A resolution was adopted opening the way to establishing working relations with the Michigan State Farm Bureau. Some of the other resolutions adopted were those urging temporary restriction of immigration; the complete reorganization of the state government on more efficient lines; the extension of rural postal delivery ser-

vice; urging the National Grange to support measures to provide for the proper labeling of fabrics and clothing containing shoddy; to investigate profiteering in funeral furnishings by undertakers and for greater publicity on farmers' profits as a means of gaining the consumers' sympathy.

After one of the most bitter debates in the history of the Grange the Michigan State Constabulary was indorsed by a vote of 115 to 104. In so doing the organization reversed its action at the Saginaw meeting a year ago when a resolution calling on the legislature to repeal the act which created the force was passed.

The Grange adopted a report offered by Mrs. Cleighton Johnson, of Lowell, chairman of the committee on home economics, which declared for a new home economics building for the Michigan Agricultural College, and for the extension of the system of visiting county nurses. A detailed report will be given in next week's issue.

News of the Week

Wednesday, December 15.

THE assembly of the League of Nations goes on record as favoring the limitation of armaments by the powers for the next two years by agreement among them.—The budget estimates of the various state agencies of Michigan for the next two fiscal years approximate \$57,000,000.—Volcanic eruptions and earthquakes along the frontier of Chile and Argentine do much damage.

Thursday, December 16.

THE Bethlehem Steel Corporation refuses to sell fabricated steel to builders and contractors in the New York and Philadelphia districts, to be erected on a union shop basis.—The California Farm Bureau Federation completes the formation of a million dollar corporation to take over on a five-year lease a two-million-bushel grain elevator at Oakland.

Friday, December 17.

A RIOT between the Filipino constabulary and the Manila police results in the death of eleven men.—The United States Senate passes an anti-strike bill, and votes to revive the war finance corporation and the extension of liberal credits for exportation of farm and other products.—A break in the coal market permits the city of Pittsburgh to purchase coal for its schools at \$5.50 per ton.

Saturday, December 18.

SENATE and house leaders agree on a program providing for an emergency tariff measure to serve as an embargo on importations of wheat, cotton, wool, beans, potatoes, live stock and meats.—The Irish home rule bill promises to become a law at an early date.—Albania is elected a member of the League of Nations.—The population of the United States on January 1, as enumerated in the fourteenth census was 105,708,771, and that of Michigan is officially given as 3,668,412.

Sunday, December 19.

THE first assembly of the League of Nations which has been in session at Geneva, Switzerland, since November 15, adjourns. The outstanding achievement of the League's session appears to be the founding of the International Court of Justice.—Seven employees of the United States navy are drowned while attempting to cross the Kanawha river in West Virginia.

Monday, December 20.

CONSTANTINE of Greece, removed from the throne of that country by action of the allied powers during 1917 is welcomed back to Athens following the recent plebiscite which favored his return.—The bodies of 200 dead are taken from the earthquake zones on the frontier of Chile.—It is learned that the French government has decided to divide Syria into four states.

Tuesday, December 21.

OPPOSITION to the emergency tariff bill develops in the house of representatives.—Automobile manufacturers make public their belief in an early revival of trading in automobiles.—The general strike in central Germany has been called off.—American relief workers in Armenia have been evacuated from that country safely.—Violent earthquake shocks are reported from the island of Yap in the southern Pacific.

Possibilities in Marketing Hairy Vetch

By Walter Jack

THE reputation of our good friend, Hairy Vetch, has suffered much from the inappropriate appellation, "Sand Vetch." Because of the connection, many who would otherwise find advantageous use for this valuable legume, hold firmly to the conception that it is adapted to sandy soil. I have been told: "You can't raise it on our heavy clay soil." I have had the satisfaction to demonstrate that on average clay soils that this crop will do as well as on a sandy loam, and much better than on many of the light sands, and my impression is that it seeds as well, and a clay loam soil will require less seed for the acre.

"It makes me think I'm back in the old country," a Polish gentleman told me as I showed him a field in full bloom. He said that in his country the soil was a heavy clay, in his particular locality and that the crop grew luxuriantly, and was equalled only by the stand we had. The ground on which this particular crop was raised was quite low and lacked underdrainage. This soil, as is true of all undrained clay soils, was subject to heaving, yet the root system of hairy vetch is such that it will hold well in such soils. In this it is better adapted to clays than other legumes. It further has the advantage of being able to withstand soil acidity to a considerable degree. I have observed on one

red clay knoll, where the soil is so acid that litmus paper will change color almost instantly. There many plants show very vigorous growth. These features indicate that the name "Sand Vetch" is inappropriately applied.

I have observed one particular spot for three years. This is the wettest part of a clay farm. A few seed had been accidentally dropped there, and for years, the owner told me that he had been fighting the plant, fearing that it would take possession of his farm. He cut the growth and would burn it, but during the drying process, perhaps sufficient seed would mature and shatter to continue the stand. I explained the value of this plant, and this farmer and neighbors have secured seed.

Considerable encouragement may be given the sale of seed by those who have some to spare. I believe the grower can well afford a centrifugal machine for separating the mixture, and should carry an "ad" in the state farm paper. The fall of 1919 I found considerable difficulty in getting extra seed. I ordered from a seed house in early August, and was unable to secure shipment until the latter part of September. This made it rather late

for planting, but owing to heavy snow, and continued cold weather during the winter, the growth was more satisfactory than anticipated.

Fruit growers, particularly in the east, tell me that if it were possible to secure hairy vetch they would plant it more extensively than they have done at present. When the merits of the legume became known, there will undoubtedly be many times the demand there is at present. At one time I interviewed over fifty grape growers, and only found two who had used this legume and rye as cover crop, while many recognized its value, yet declared they were unable to secure seed.

There is wonderful opportunity for vetch growers to organize. Michigan will probably be our largest source of seed for some time, and it was on the farm of J. M. Tyler, of Jonesville, and that of Rev. Mr. Young, of Hillsdale, that the writer became thoroughly enthused with the possibilities of the plant. Mr. Tyler is probably the pioneer vetch grower of that part of the state, while Mr. Young built up an apparently worthless farm to considerable degree of productivity by the use of this legume.

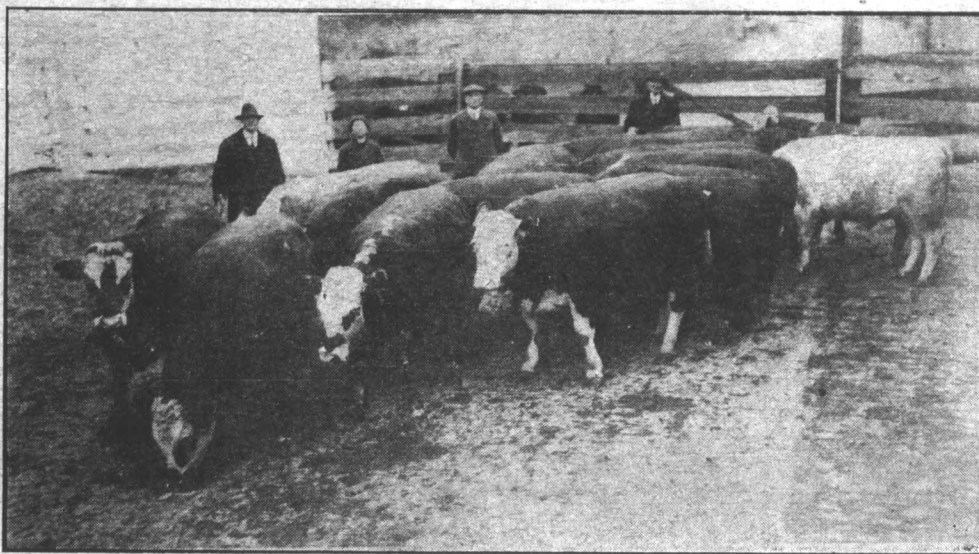
The value of the plant as cover crop, as green manure, and as a nitrogen

gatherer, and its abilities to withstand hardship, will extend its use beyond the requirements of the fruit grower and gardener. The dairyman, the pork producer, the poultryman and the wool grower will find it advantageous. Where alfalfa is hopeless, vetch will do nicely. We find cows relish it as pasture and hay, hogs are fond of the plant and particularly of the small ripening pods. The chickens pick at tender plants, and a farmer who has started in an experimental way, told the writer his barn was not strong enough to hold his Jersey bull when a forkful of vetch hay was brought to him.

The possibilities of this wonderful crop are appreciated by but very few, and this year above all others there seems to have been a falling off in the demand for this seed. It may be in view of falling prices, the migration from the farm during earlier months of the summer, that they did not give much thought to a permanent and constructive system of agriculture. Other farmers believe that when one has vetch it is there to stay, but the centrifugal separating machine has solved the problem for the wheat grower. However, we hope that hairy vetch will be so persistent that no other crops can be raised in competition with it.

Michigan Takes Honors at Buffalo Show

MICHIGAN cattle feeders can well feel proud of the splendid showing made at the annual live stock exhibitions held the past few years at Buffalo. The accompanying picture shows the grand champion carload of steers, which were fed and exhibited by E. A. Beamer, of Lenawee county. After the awards were made the steers were sold in the auction ring. Conditions of the trade were so bearish and prices had broken so badly that the successful bid of \$15.25 by New York butchers gives an erroneous impression of the very high finish which these animals carried. This is not the first winnings of Mr. Beamer at this show. A year ago he took the



blue ribbon on a load of two-year-old Hereford steers, and the first year the show opened he carried away the grand champion carload money. Mr. Beamer is not only a successful feeder of beef cattle and hogs, but he is a recognized agricultural leader and owns one of the best farms in southern Michigan. He has another reason for feeling proud. His 12-year-old son, Miles, was awarded the highest honors on two calves shown in the boys' and girls' class at this same live stock exposition. An account of Master Beamer's success appears on the Boys' and Girls' page of this issue. We wish to extend to both father and son most hearty congratulations.

Congress Slow to Aid Agriculture

A Few Lawmakers Seem Anxious to Delay Action—By E. E. Reynolds

PRICES of farm products continue to decline. The situation on the farms in large sections of the country daily becomes acute. Insistent demands for relief are coming from all parts of the country. Petitions and demands for immediate emergency remedial legislation have encumbered the mails of representatives from the farming districts. Delegations of farmers and senators and congressmen from the great agricultural states have presented the urgent needs of farmers in emphatic language at the hearings and conferences, and on the floors of the house and senate.

Congress is fully informed as to the actual conditions. Nevertheless, with the exception of the introduction of a large number of bills and resolutions intended to help the farmers, and lengthy debates on trivial points of procedure, nothing was accomplished the first eight days of the session to provide the much needed legislation. There is an apparent effort being made

by certain senators to delay action, and a very small group of senators can do much to thwart the will of the majority. Notwithstanding all the talk about the importance of agriculture and the necessity for fostering the farming interests as a means of safeguarding the food supply of the people, there are few men in congress outside the strictly agricultural states and districts who show any interest in the farmer's welfare, and many manifest a spirit of opposition every time a proposition aiming to benefit agriculture comes before congress. These men, it is evident, are going to do their best to delay the agricultural relief bills, until necessity compels them to be laid aside for the passage of appropriation bills.

THE proposed embargo on wool has created much discussion. In urging quick action upon his bill placing an embargo on wool and woolen goods, Senator Smoot said, "that unless some-

thing is done very soon, as far as the wool industry of the United States is concerned, the industry will perish."

The statement was made by Senator Smoot that "South American wools are now selling at nine cents a pound. The Cleveland Woolen Mills the other day bought a South American clip of wool, 1,500,000 pounds, in round numbers. It cost them twenty cents a pound with all expenses and commissions paid, delivered at the port of entry. We today have in the United States over 800,000,000 pounds of wool. Not five per cent of the last clip of wool in this country has been sold."

An embargo on wool was urged before the house ways and means and the senate agriculture committees, by representatives of the wool growers. Dr. S. W. McClure, of the National Wool Growers' Association, told the senate committee that the embargo should be retained until the revision of the tariff. According to Dr. McClure's testimony there is a sufficient

supply of wool now in this country to meet the demands of the nation for two years, without the production or importation of another pound, and there are enormous supplies in other countries that have been unable to transport their wools for the last three or four years. These statements led Senator Kendrick to suggest that "with the door left open for other wools to come into this country the situation is absolutely hopeless for the wool growers."

Senator Warren said, "the government of the United States at the close of the war had on hand some 600,000,000 pounds of wool that it has been putting on the market from time to time, which, of course, has added to the overhead; and a large portion of that wool was bought originally in foreign countries. There is at the present time in the neighborhood of 40,000,000 pounds in the hands of the government that is thrown on the market from time to time through sales

effected by soliciting sealed bids, and that has helped an overload, which has accumulated not only in foreign countries but here at home. The trouble here is not the low price of wool so much as it is that there is no market here for wool."

Woolen manufacturers are protesting against an embargo on wool, but are willing that the sheep raisers should have a forty per cent tariff on wool. The sheep men are demanding an embargo until a new tariff schedule can be put into effect.

MICHIGAN'S congressional delegation has indicated to the Michigan State Farm Bureau that its support will be behind any measures that may be introduced in congress this winter intended to protect the sheep industry of Michigan and the United States which admittedly is in jeopardy because of huge financial losses, running into millions of dollars, which have been suffered by the wool growers of Michigan and the country through the virtual collapse of the wool market. The farmers of the country, through their organizations, are supporting the American Farm Bureau Federation in its effort to have enacted at the present short session of congress an embargo on wool, wool products and frozen muttons. It is believed that such legislation will afford American sheep producers the protec-

tion that is essential, if the industry is to continue in growth.

AFTER a lengthy debate the joint resolution of the house and senate agriculture committees designed to relieve the agricultural situation passed the senate in an amended form and was sent to the house for further action. The resolution directs the secretary of the treasury to revive the activities of the War Finance Corporation, "with the view of assisting in the financing of the exportation of agricultural and other products to foreign markets."

THE Johnson immigration bill, prohibiting all immigration for a period of one year, was passed by the house on December 13, but its defeat is predicted in the senate. Brothers and sisters of citizens are exempted from the provisions of this bill. In discussing the Johnson bill, Representative Knutson, of Minnesota, said that, "Spain is a seething mass of anarchy, and its government is dumping it on the United States. If tonnage were available from ten to fifteen million Europeans would migrate to America within a year."

Senator Dillingham, of Vermont, has introduced a bill in the senate limiting immigration of any nationality admissible to the United States to five per cent of the number of persons of such

nationality already residing here in any one fiscal year. The provisions of the bill do not apply to immigrants who are native-born or naturalized citizens of countries of the western hemisphere. Statistics presented by Senator Dillingham show that this restriction would not interfere with the normal immigration from northern Europe, but would reduce the number of immigrants from southern and eastern Europe and Asia to a third the normal immigration from these countries.

Representative James W. Fordney, of Michigan, chairman of the house ways and means committee, announces that hearings on a general revision of the tariff would begin on January 6, 1921, and continue thereafter for a period of six weeks. January 21-22-24 are the dates selected for hearings on Schedule G, including agricultural products and provisions.

The Capper-Volstead bill passed the senate on December 15, and was sent to the house for a conference of amendments. Senators Nelson, Dillingham and Overman were appointed conferees on the part of the senate. It is not thought that there will be any serious disagreement in conference, and it is probable that the bill will soon be ready for the President's signature or veto.

The object of the Capper-Volstead bill, as explained by Senator Nelson, "is to allow the various farmers' organizations of the country to operate freely, without being directly embarrassed by or having the department of

justice hold up to them the Sherman anti-trust law. Instead of giving them a free hand, as you might say, we provide in the second section that if they go to extremes, if they aim to enhance prices unduly or to create a monopoly, then the matter can be heard before the secretary of agriculture or the Federal Trade Commission, as the case may be, and after the secretary of agriculture or the Federal Trade Commission has made a decision in the case, it can be brought up in the district court of the United States and litigated."

The bill as passed by the senate provides that the Federal Trade Commission, instead of the secretary of agriculture shall pass on complaints against any cooperative association.

The bill to create a federal live stock commission and to regulate the meat packing industry has been laid aside under a unanimous consent agreement to take the vote on January 24, 1921.

In the District Supreme Court, Justice Spafford refused a request for a further delay in the litigation in which the plans by which the packers proposed to dispose of their interests in the stock yards are involved, and has named December 21 for argument in the matter. It is evident that the government will demand that the court appoint trustees to take over the interests of the packing concerns.

For the purpose of determining the actual facts in regard to how much farmers' paper is outstanding, the senate committee of agriculture has wisely passed a resolution calling upon the Federal Reserve Board to furnish it with a complete report of credits extended to separate industries and commercial concerns.

Michigan Agricultural News

STATE FARM BUREAU NEWS.

THE State Farm Bureau traffic department is now actively engaged in handling claims for members and checking up on freight bills. Its work in securing refrigerator cars for shippers has been considered excellent, considering the prevailing shortage throughout the state. H. S. Spencer, president of the Fruit Growers' Express Company, writes the department that "we have every reason to believe that we will be furnished service next year as we have been in the past. Plans for the acquisition of additional equipment are under way."

The elevator exchange has made a provision whereby all members of the State Farm Bureau may do business in hay, grain and beans if they so desire. The success of the bureau is based upon its ability to sell grain for a better price and less overhead cost than the farmer can secure through ordinary channels. It says business can be done economically only through organizations working on a purely cooperative basis and would fail entirely if it tried to deal directly with individuals. Its provision to offer service to farm bureau members who are not members of cooperative elevator associations provides that County Farm Bureau members may become members of the exchange with the understanding that farm bureau locals in counties thus taking membership will be organized as soon as feasible. By this method members of any County Farm Bureau may secure the services of the exchange.

More than two hundred cars of commodities for farmers have been handled through the purchasing department since November 1. This department has been buying bran, middlings, flour, coal, cottonseed meal, wool twine, drain tile, fence posts, and other commodities for members at prices which have been a saving over current quotations. These savings are made through the combined power of salesmanship and volume buying. The business is being done through cooperative associations and County Farm Bureaus which collect signed orders for these commodities and forward them to the

state office. This department also does business only through organizations and would find it impossible to make savings for the farmers if it were dealing with him direct. Purchases are being made only upon the receipt of bona fide orders from organizations.

MICHIGAN LIVE STOCK MEN MEET IN JANUARY.

THE thirtieth annual meeting of the Michigan Improved Live Stock Breeders' and Feeders' Association will be held January 12-13, 1921.

On Wednesday, January 12, will occur the meetings of the various allied organizations, as follows:

- Michigan Sheep Breeders' and Feeders' Association.
- Michigan Swine Breeders' Association.
- Michigan Horse Breeders' Association.
- Michigan Holstein-Friesian Association.
- Michigan Guernsey Cattle Club.
- Michigan Jersey Cattle Club.
- Michigan Hereford Breeders' Association.
- Michigan Shorthorn Breeders' Association.
- Michigan Aberdeen Angus Breeders' Association.
- Michigan Red-Polled Breeders' Association.
- Michigan Poland-China Breeders' Association.
- Michigan Duroc Jersey Breeders' Association.
- Michigan Berkshire Breeders' Association.
- Michigan Chester-White Breeders' Association.
- Michigan Oxford Sheep Breeders' Association.

On Thursday, January 13, will be held the general meeting of the parent association, which embraces all of the other organizations. Several speakers of national repute have been obtained for this program, including H. R. Smith, of the Union Stock Yards, Chicago; W. L. Houser, president of the Wisconsin Live Stock Breeders' Association; O. E. Bradfute, president of the National Farm Bureau Association, and R. R. Graves, Dairy Division, United States Department of Animal Industry, Washington, D. C.

There was never a time when there should be closer cooperation among the live stock men of the state than at the present time. Grave problems very seriously affecting the farmers are at present before our national legislative body and will soon be under consideration by our state legislature. If the farmer is to receive his just dues it is necessary that they get together

and stand solidly back of needed legislation. It is hoped that we may have a large attendance at these meetings and that our sentiments be made known in a very definite way.

SUGAR BEET COMMITTEE REPORT.

A CONVENTION of delegates from sixteen important sugar beet producing counties of Michigan was held at the State Farm Bureau offices at Lansing last Wednesday. The report of the committee of five chosen at a meeting called in October by the State Farm Bureau and consisting of A. C. Smith, of St. Clair county; Clarence Oviatt, of Bay; L. H. Kirtland, of Monroe; Thomas Price, of Saginaw, and C. E. Harriot, of Clinton, was presented and after the discussion of each item separately the report was adopted as a whole as follows:

Three meetings have been held by your committee of five, created at your last meeting, held on October 19, since that time in efforts to prepare in detail a plan which might improve methods for the marketing and production of sugar beets. These meetings were held on October 19, November 3 and December 14.

The problems involved have all been carefully reviewed, full consideration having been given the attitude as we understand it, of the beet growers over the state, calling for a more equitable price for their beets; the attitude of the manufacturers which seems steadfastly to call for dealings with individuals rather than with a unit of growers; the advisability of the circulation of contracts making the State Farm Bureau selling agent of the sugar beet growers in Michigan; the question of the advisability of including in such a contract provisions which would compel growers to market all beets through this agency; the advisability of purchasing and distributing seeds direct to the growers instead of having this effort continued as in the past by the factories and further, other correlated matters.

It was found after careful analysis that while a contract making the farm bureau or any organization the selling agent of the growers for the ensuing year or series of years could be written, that, unless it contained a provision absolutely binding upon the grower, it had no value as it would not interfere in any way with a grower, who had signed up, executing independently another agreement with the factories and fulfilling it.

A contract is an agreement between

two or more parties for the express execution of certain purposes. It is not binding on one party should the other party fail to execute his part of the agreement. Hence, while contracts could be executed with the growers making the farm bureau selling agent for them, if the factories refused to buy these beets from the agent, the other contracting party or the grower would be free to deal individually and separately with the factories as the farm bureau, as selling agent, would have abrogated the agreement by non-fulfillment of its undertaking to sell the beets.

Thus it may be seen that for a contract of this nature to be effective it must contain so-called "teeth" which would bind growers into a unit not to produce beets if the factory buyers refused to deal with the selling agent of the growers.

There is no question that each one of the twelve thousand odd growers in Michigan has the absolute and unqualified legal right to refuse to grow sugar beets for any reason he may see fit. He likewise has the absolute and unqualified legal right to delegate another the sole and exclusive right to represent him in making a contract with the sugar company, and in case of their refusal to deal with his duly appointed agent, to refuse to grow a single sugar beet.

But, can these individual rights be exerted collectively and in pursuance of a common understanding, to compel the sugar companies not to pay them any particular or higher price for their product, but merely to compel them to deal with their jointly appointed agent or representative, and in case of the companies' refusal to jointly and collectively agree not to raise any sugar beets?

There are no statutes existing in Michigan or nationally that clearly define collective bargaining or the line of demarcation between it and a combination in restraint of trade, or in other words, a monopoly or trust.

The Michigan anti-trust statute specifies: that a trust is a combination of capital, skill or arts by two or more persons or associations of persons for the purposes, among other things, "to limit or reduce the production, or increase or reduce the price of merchandise or any commodity; to prevent competition in manufacturing, making, transportation, sale or purchase of merchandise, produce or any commodity."

And, "that it shall be unlawful for two or more persons or associations of persons to make or enter into or execute or carry out any contracts, obligations or agreements," by which they shall agree in any manner to keep

(Continued on page 801).

With the Ewes and Lambs

THE thought of the prudent shepherd is always toward his ewes; if pregnant he plans to bring them to a safe and happy lambing. Day by day he cautiously conditions them for the coming of the lambs. For him that period means a supreme success or a miserable failure. The responsibilities rest upon his shoulders; and if he loses a large percentage of the lambs at lambing time it is some fault of his management.

A wise shepherd can feed his ewes liberally without overloading them with too much fat. He can plan to give them opportunity to walk about and exercise every day when the weather is pleasant. He can feed once a day in some distant part of the pasture, or adopt some scheme to overcome the tendency to sluggishness on the part of the ewes.

Feed liberally, but do not overload them with too much fat, means that the young lamb, developing in the body of its mother, should have an abundance of protein, the ingredient of lean flesh, blood, nerve and brain. It should also have lime and phosphorus to make bones. If the ewes have alfalfa or clover hay and roots or ensilage it balances things up nicely. These feeds are rich, both in flesh and bone-making materials. If the alfalfa and clover are cut and put up at the right time and the roots and silage are properly stored and preserved they may be adequate. Even then it is usually wise to feed a little grain feed. A little oats, corn and bran make a safe and economical grain ration. It makes more vigorous lambs and fills the ewes' udder with milk. The ewe that brings forth her lamb without having enough force stored up in her body to fill her udder with milk is not likely to own her offspring. There is something about an udder full of milk that is almost akin to mother love. Animal mother love lies more in the udder than in the heart.

Success lies in never withholding protein and bone-making feeds nor feeding them too much. Feed to have the ewes in good condition at lambing time, but avoid getting them sluggish from over-feeding. To feed them along on the middle-ground requires skill and experience, but it is a proposition that must be mastered before one can succeed in bringing a flock of ewes through a safe and happy lambing period.

As lambing time draws near it is wise to separate from the flock the ewes that are near their time. If a number of small pens are available it will be well to give each ewe a separate pen so that she will have a quiet place to lamb. An early lambing, provided one has good conveniences brings to grass a strong crop of lambs and to market a bunch of heavy-weights. Early lambing is safe and sure if one has proper shelter and gives the ewes and lambs painstaking attention. With a comfortable shed, a strawy bed and a little extra care, few lambs will be lost.

Rarely is it necessary to assist the ewe at lambing time, yet it is well to be on hand as there will be times when a little help will mean the saving of a valuable ewe and lamb. If twins come no time should be lost in getting them nursing, for the ewe frequently forgets to find her second lamb, and it becomes hungry and chilled perhaps too late to be revived. Ewes that refuse to own their lambs may often be conquered by tying them in their pens and compelling them to let the lambs nurse. She may vigorously resist at first, but restrained from injuring the lamb, she will in time accept it as her own.

After the lambing period is safely over, feed the ewes a good milk-pro-

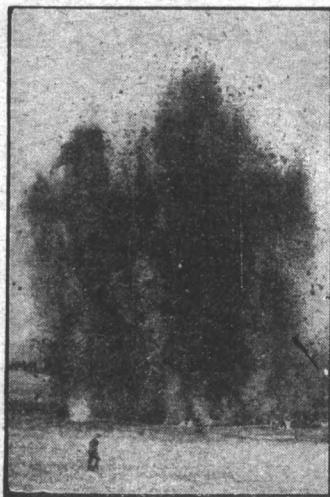
ducing ration. Make creeps so that the lambs can go to troughs in the alleyways and eat wheat bran, cracked corn and a little oilmeal. A few oats will help out and be especially valuable if the lambs are to be developed for breeding purposes. Feed both ewes and lambs liberally and judiciously.

COMPARATIVE COST OF STUMP BLASTING IN SANDY AND CLAY SOILS.

TO those unfamiliar with blasting, a stump is a stump. The ordinary farmer will point to a stump in a field and ask how much it ought to cost to get that stump out. If you ask him, "Is it standing in a dense clay soil or a loose sandy soil?" he will reply in surprise, "What difference does that make?"

It is because of the general ignorance of the beginner as to this feature of blasting that most of those trying stump blasting for the first time fail to obtain satisfactory results.

However, the kind of soil in which a stump is standing makes all the difference in the world. A stump in sandy



Explosives Work Fast.

soil must be loaded differently and loaded much more heavily than a stump in clay soil. I know for I have been blasting stumps for nearly forty years and have used many tons of dynamite on such work.

To give your readers a little information on this subject, I will cite two or three blasting jobs that I did in 1917.

On Clarence Brown's farm, the soil is a light sandy type. He had twenty eight pine stumps in one of his fields which he wanted to get rid of. It required 149 pounds of dynamite, 114 feet of fuse and twenty-eight caps to dispose of them. It cost him \$38.77. I used as high as eighteen pounds of dynamite under one stump, twelve under another and from one and a half to ten pounds under the rest.

Just compare the above with the cost of some stump blasting I did for Eugene Allen on whose farm a clay soil predominates. He had eighty-one stumps to be taken out. I did it with fifty-two pounds of dynamite, 150 feet of fuse and eighty-one caps. The work cost him \$14.11. The stumps were elm, oak, maple, ash and basswood. These stumps were of about the same average size as the stumps on the Brown farm, yet I was able to get out eighty-one of them for a little more than a third what it cost to blast twenty-eight out of sandy soil.

F. E. CAMPFIELD.

It is a great mistake to put the large breeds of cattle upon poor, scant pasture as it is to put the small, diminutive breeds upon a rich, luxuriant pasture. The breed should be selected to meet the conditions.

Many men who would make a profit by feeding out one carload of beef cattle make a failure when they plunge into the business too heavily.

The tools that make you like the work

Disston Tools! The kind that are made specifically for their jobs—that enable you to do the thousand-and-one jobs on the farm in the least time.

Poor tools are great time wasters. They are too costly in labor for the wise farmer to use.

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HENRY DISSTON & SONS, Inc.

General Offices
Philadelphia, U. S. A.

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DISSTON SAWS AND TOOLS

Cook Feed

FINISH HOGS FOR MARKET

—by cooking potatoes, pumpkins and other feed. If the market on potatoes is off, cook and feed to sell at a profit.

Also use Hudson Cookers for boiling spray mixture, canning, scalding hogs and poultry, or for wash-day and cleaning dairy utensils. Heat quickly—burn cobs, wood or coal.

The HUDSON Way

One of these Hudson Cookers will exactly meet your needs.

HUDSON Round Stove and Kettle Style. Heavy Jacket, carefully made and framed. Lug handles on sides. Best gray iron removable kettle with extra heavy bottom. Should last forever. Made in four sizes—40 to 80 gallons.

MODOC Big capacity Cooker at a low price. One-piece furnace style with 20-gauge galvanized steel boiler. Direct application of heat gives quick results. Three sizes—60 to 120 gallons.

Get the Cooker you need from your dealer or write today for catalog.

Hudson Mfg. Co., Dept. 57, Minneapolis, Minn.

HUDSON FEED COOKERS

SAWS ANY WOOD IN ANY POSITION ON ANY GROUND 4 in. to 5 ft. Through 1 Man With a Folding Machine Beats 2 MEN With a Cross-cut Saw 5 to 9 cords daily is the usual average for one man

1 Man With a Folding Machine Beats 2 MEN With a Cross-cut Saw 5 to 9 cords daily is the usual average for one man

Runs Easy No Backache Weighs only 45 lbs. Easily Carried

Saws Down Trees

Our 1921 Model Machine saws faster, runs easier and will last longer than ever. Adjusted in a minute to suit a 12-year-old boy or strongest man. Ask for catalog No. M44, and low price. First order gets agency.

Folding Sawing Mach. Co., 161 W. Harrison St., Chicago, Ill.

CLOVER AT WHOLESALE

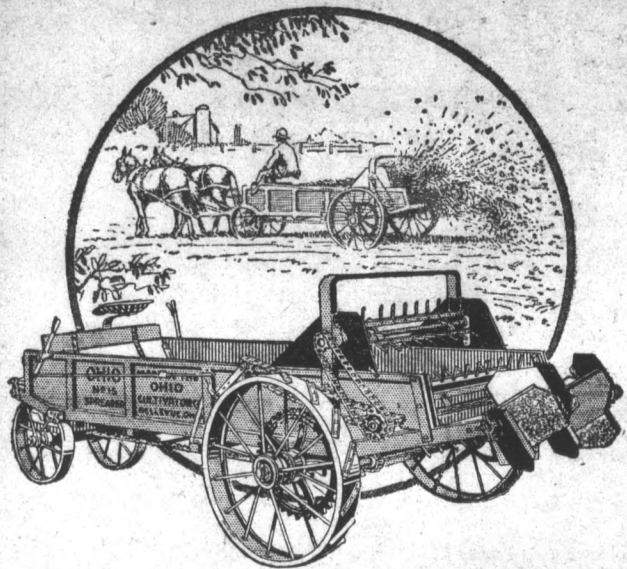
We save you money. Illinois crop of excellent quality. Buy now while crop is moving. Prices sure to be higher later. Don't buy field seeds of any kind until you see our samples and prices. We specialize on guaranteed Quality Clover, Timothy, Alfalfa, Alsike and Sweet Clover, shipped subject to your approval and test. Write today for Free Samples, Prices, Big Seed Guide.

American Mutual Seed Co., Dept. 131 Chicago, Ill.

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the cheapest, handiest belt power you can buy? Then ask me about my **LITTLE TWISTER** Power Transmitter if you own a Ford or Dodge car.

FRANK R. WEISGERBER, Salina, Kansas

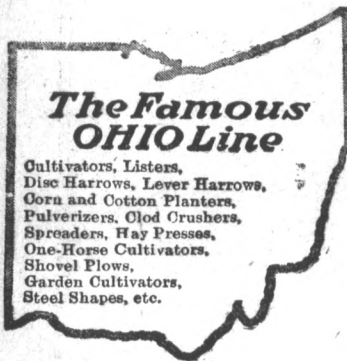


Do You Fertilize Your Barnyard Or Your Fields?

The manure pile beside the stable door is washed by the rain and soaked by the drippings from the eaves, and in six months one-half of its fertility is in the only soil on the farm where crops are never grown.

The hauling and spreading of what is left—using the old farm wagon—is the sort of work that drives the farmer's boy to city tasks.

Get a spreader—the kind that is built to last—and put it where the manure pile used to be. It will double the value of the manure and reduce your work by half.



The Famous Ohio is made in two easy-loading styles—the Bellevue No. 10 and the Ohio No. 15. Forty years of experience in the manufacture of farm implements is built into every spreader. See your dealer today.

The Ohio Cultivator Company,
Bellevue, Ohio

OHIO

FAMOUS SPREADERS

Our Service Department

WHITEWASH FOR SPRAYING CATTLE BARN.

Will you please send me a recipe for spraying my cow barns, (containing twenty-six cows)? I have not the least idea how much lime, salt, etc., to use to the gallon, as it is my first experience.

Gratit Co. Mrs. A. W. W.

The way to make whitewash is to slack the lime, stir it thoroughly and let it settle for a short time. There will be a certain amount of sediment in the bottom. Add only a sufficient amount of water to make the whitewash work satisfactorily in the spray pump. Of course, you cannot have it too thick or it will clog up the spray nozzle. If it does this, then you will have to add more water so that it will go through the nozzle. That is about the only rule that is necessary to make whitewash. If you add salt to this whitewash it will stick a little better and be a little more durable. If you spray your cow barn you should add a disinfectant. Any good commercial sheep dip is all right, or use coal tar disinfectant. Add about one gill of this sheep dip to two gallons of whitewash and mix it in thoroughly. This will in no way interfere in applying the mixture with the spray pump and it will keep your barn in a sanitary condition.

C. C. L.

PREPARING CHICORY.

I raised a little chicory to try for coffee, and would like to know how to prepare it. Would this be the right time to dig it, or is it too late?

Jackson Co. F. S. A.

Chicory roots increase in weight more rapidly during the last part of the season than at any other time; however, frost should be guarded against, since a frozen root is spoiled if allowed to thaw out in the field. If sliced while still frozen and put in kiln to dry out, but little damage is done.

The preparation of chicory is quite simple. The roots should be carefully washed, cut into pieces not more than half an inch in diameter and irregular in shape and placed in shallow biscuit or pie pans in the oven when there is a gentle fire. To test when done remove some of the larger pieces and allow to cool and if sufficiently dried they should be brittle, while if underdone they are more or less soft and pliable.

GROWING PEAS FOR CANNERY.

Will peas do well on clay soil that is well drained? Will the harvesting interfere with haying or wheat harvest? About how many loads of vines per acre? How much could two men harvest per day with a two-mile haul to the winery? What is a fair average yield of shelled peas per acre?

Shiawassee Co. G. L. K.

There is no better soil in which to grow peas than a well-drained clay soil. The great danger from growing peas is that a draught will strike them just before they fill and this is more apt to happen on light soil than on clay loam.

Harvesting early peas, that is, Alaskas, is quite apt to come at the same time that you would want to cut clover hay. Sometimes you can get the clover hay cut before the pea harvest, but many times they come together. It is impossible to state how many loads of peas can be grown on an acre.

This depends on soil and weather. It does not take so very long to harvest the peas as they can be cut with a mowing machine and raked and load-

ed at once on the wagon, or you can get a regular pea harvester which throws the peas off to one side in gabels. As a matter of fact, the pea harvest must be done when the peas are ready to can, as it only takes a few days before they are too large, consequently you must get help enough to handle your acreage in a reasonably short time.

Peas, like all other crops, vary so much in yield that it is difficult to answer your last question. Peas ought to yield you a ton per acre, of shelled peas. Many times they do not, and then again they yield more. I have grown sixteen tons of shelled peas on twelve acres and then I have had crops that would not yield over one-half ton per acre.

C. C. L.

BEET TOPS FOR FEED.

What do you think of beet tops and beet roots for feed for milch cows? Do you think beets would make the milk taste or have any peculiar smell?

Shiawassee Co. Mrs. G. McK.

Beet tops and beets are both splendid feeds for dairy cows for part of the ration, but it will not do to feed them in large quantities, especially the tops. If they are fed in large quantities it will taint the milk, and also has a diarrhetic action which is not good for the cows. But in small quantities, say one-half bushel night and morning will do the cows no harm and will improve the ration. All cattle do better if a part of the ration is a succulent food. This food helps them digest and assimilate the dry part of the ration so that beet tops and beets add even more to the ration than their food analysis would show.

C. C. L.

RATION FOR CALVES.

Please give me a balanced grain ration for calves about six weeks old, and is whole shelled corn good to feed to small calves?

Shiawassee Co. R. S. B.

Six weeks old calves ought to have some skim-milk as part of the ration. If they only had a little it would be much better than none. With this milk they ought to have some form of grain. For instance, wheat middlings makes a nice grain ration to feed to young calves. This can be stirred into the milk so that they will get all the feed. It is an excellent thing as soon as possible to teach young calves to eat other grain. They can eat shelled corn, oats, or barley. Any of these grains without being ground. Sometimes we have to fuss with them a little in order to get them to do this, but it only takes a short time to teach them. Besides getting this grain they ought to have clover hay and a little corn silage if you have it. In fact, any roughage you feed dairy cows is good for calves just as soon as they are old enough to eat it and they will eat it much younger than many people realize.

If you lack skim-milk at all, then a gruel, consisting of mixtures of many kinds of grains, the more the better, is about the best substitute you can give, and after a calf gets to be six weeks old he can get along pretty well if you take pains in giving him this gruel. The grain should be thoroughly mixed and then water added sufficient to make a rather thin gruel so the calves can drink it readily. It ought to be fed warm.

C. C. L.

North Carolina, Arkansas and North Dakota farmers have progressed to the point that state organizations will be formed soon.

Mammoth Clover Wanted.

We are now buying Mammoth clover. Also Red and alsike. Send samples to
O. M. SCOTT & SONS CO.,
3 Sixth St., Marysville, Ohio.

Col. Dan S. Van Ree

the successful livestock auctioneer R. 10, Grand Rapids Mich. Office phones City 3238, Bell So. 1979, res. Bel So. 3472. The man that holds a selling certificate

Cotton Seed Meal

\$47.50 per ton, sacks included. Instant shipment.
GEORGE W. YOUNG CO., Owosso, Mich.

Certified Petosky Seed Potatoes

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

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

2000 Ferrets they hustle rats and rabbits booklet and price list free.
N. A. KNAPP & SON, R. 2, New London, Ohio.

FARM HELP

Wanted Position as Farm Manager on stock and grain farm by experienced energetic young farmer, understands all farm machinery and feeding cattle, hogs and sheep. Best of references. Open to Mar. 1 Box L 1225 care of Michigan Farmer, Detroit, Mich.

Situation wanted by single man on farm. Thoroughly experienced dairy and general farming.
Write Box G 1225, Michigan Farmer, Detroit, Mich.

PUBLIC SALE

Buy as Uncle Sam buys "the best" now offered at Auction Bargain Prices.
U. S. Army Wool Blankets (Olive Drab reclaimed) \$5.50
U. S. Army O. D. Wool Shirts 5.50
U. S. A. Trench Coats (S.L.) 15.00
U. S. A. Leather Dress Shoes 8.00
U. S. A. Socks (heavy wool) pair .50
U. S. A. O. D. Wool Breeches (reclaimed) 2.50
Army and Navy Knit Gloves (heavy wool) pair .75
Army and Navy Underwear (heavy wool) garment 1.50
and 5,000 other articles for fall and winter wear. SEND 10c FOR ARMY & NAVY CATALOG 110, ARMY & NAVY STORE CO., 245 W. 42d St., New York Largest Camp & Military Outfitters

CLOVER AT SACRIFICED PRICES

Big clover growers of the middle west came to us and made bedrock 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.

Utilizing Roughages

IN order to get the most out of the common roughages found on the farm they should be utilized in a proper and economical manner. Not all the success of utilizing the roughage depends on the use made of it; the roughage, whatever it is, must be of good quality. We have good roughages and inferior roughages and nearly every farmer will have some of both.

Straw is pretty universally produced. I know a dairyman who would not consider it as a supplemental roughage. We make it a point every year to have this straw, especially the oats straw, so it will be available as fall and winter feed. It would be disastrous to success to fill up the mangers with nothing but straw, but when we feed silage or linseed meal a craving is created in the animals for a little of this dry, bright straw, so much so that when a herd of twenty and more runs to a stack of the straw each day for an hour or so the stack diminishes very rapidly. If the refuse straw is kept cleaned up about the sides of the stack and used for bedding if dry, or spread on the fields, we are able to secure a great deal of nutritious feed from our straw.

We also store from ten to twenty tons of straw in the barns, either blow it in at threshing time or bale from the stack as soon as possible after threshing. Baled straw is nice to feed, as it comes in easily handled flakes. When a flake of it is thrown into the rack it is compact, palatable, and easily munched by the cattle, sheep or horses; in fact, I think it superior to loose straw because the sweet flavor of the straw is retained better and dust is not created in handling.

I have heard many men say they could not get their live stock to consume much of the coarser roughages. One should not expect an animal to eat very much at a time. These roughages should not be fed merely to fill an animal; when a certain feed is given, no matter what grade it is, it should be given to nourish the body of an animal. A few pounds of straw given with other feeds will satisfy a dairy cow's appetite for straw, and if she relishes it there is no question but what it has been of value as a feed. Recently I saw a small herd of cows and calves whose biggest part of the ration was straw and shredded fodder and it was a rather unthrifty looking herd.

The best way to utilize the coarse farm roughages is, so it seems to me, to feed them on a "free-choice" plan, like Mr. Evvard worked out for hogs at the Iowa station several years ago. Put the roughage where it can be reached easily or where it will be accessible at various times, feed the live stock liberally of other feeds and they will develop a liking for the roughages and consume large amounts of them during the course of the year. We find it possible in this way to utilize practically all the coarse roughage produced on the farm.

The cornstalk when cut and shocked may have considerable feeding value, but when thrown in racks or spread on a field the stock does not get very much sustenance from it, largely because it is hard and cannot be easily masticated. When shredded its value as feed is increased considerably. When put in the silo we have a strong rival to blue grass pastures. It is with corn silage that our stock consumes most of the other roughages. Much the same happens when feeding linseed oilmeal with other dry feeds and without silage.

To make the roughages most palatable they should be harvested in good

condition. Wheat, oats or rye straw that has been badly weathered and bleached before threshing or has been poorly stacked or has lost much of its bright color and sweetness; straw that is badly infested with rust; corn fodder which is immature, or very old and rather musty—these will be largely rejected by the stock. The value of a roughage depends much on its quality and freshness.

J. L. JUSTICE.

SHRINKAGE OF HOGS.

EXPERIMENTS show that where stock cars are protected on the north during stormy weather, hogs will shrink a pound and a half less, going to market.

A pound of shrink or a pound of fill at the market are just the same as a pound of meat, when selling to the packer. If a farmer can fix his car so that his hogs will be comfortable and feel good when they arrive at market he will not have much shrink. The more nearly normal conditions can be provided the less will be the shrink.

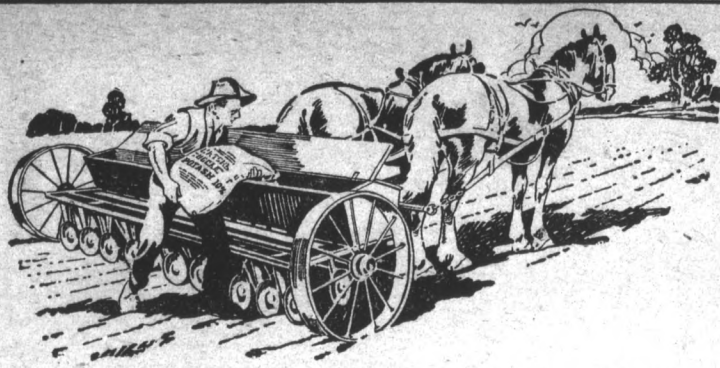
It has been found that a mixed lot of hogs obtained from several farms are liable to have a greater shrink than where the entire shipment has been obtained from one farm. This is due to the tendency of fighting. Fighting often proves fatal to fat hogs. A hog fattens from within and as he gains in weight he presses against the lungs. During the extreme exertion incident to fighting his "engine" (lungs) is not able to keep up with the demand and he suffocates inwardly. Hogs from different farms driven to town and yarded together frequently start a fight while in the yards that they renew when loaded in the car. The cramped quarters proves an added exertion and when taken out dead at the market it is a case of "smothered" which is another kind of shrinkage that could be avoided by keeping together in an open lot for a day or two.

SHORT COURSES AT M. A. C.

WITH the opening of the new year seven special winter courses will get under way at M. A. C. Headed by the eight-weeks' course in general agriculture, the list includes two weeks of dairy manufactures, eight weeks of dairy production, eight weeks of horticulture, eight weeks of farm mechanics, four weeks of poultry husbandry and four weeks of advanced poultry instruction.

The work in general agriculture is divided into periods covering two seasons. It is similar to the sixteen weeks' course which opened in November, except that it is less comprehensive. That in dairy production takes up all phases of this specialized branch of farming, where possible being preceded by at least one term's work in general agriculture. The other dairy course takes up the theory and practice of butter and cheese making, with instruction in Babcock testing and separators, creamery calculations and mechanics and the connection of bacteriology with dairy manufacturing.

Practical methods in fruit growing will be taught in both the horticultural and poultry courses. In the former, fruit diseases, fruit insects, apiculture, soils and orchard machinery come in for discussion, while the latter though mainly devoted to poultry management, includes some work in fruit growing and the control of fruit diseases and insects. The work in farm mechanics will take up farm buildings, farm conveniences, tractors, and the choice of drainage and concrete or farm shop work.



Restore the Potash

During the past few years farmers have been urged to bend every effort to produce maximum crops without giving much consideration to the effect on their soils. Established rotations were broken up and the very best parts of the farm put into the most needed crops, while the poorer parts were neglected.

In a way it was a return to the pioneer's method of mining the soil.

Today is the period of readjustment for the farmer as well as for the merchant and the manufacturer.

The farm labor situation and the uncertainty of future prices are such that prudence demands that the cost of producing a unit of crop be reduced as much as possible. This requires more crop units per acre and a return to the rotations known to be best for a given locality.

The great factor in reducing the cost of crop production is the right method of feeding the crops.

The composition of commercial plant foods has been profoundly changed during the period of Potash famine. Phosphoric Acid has replaced all or a part of the Potash in American fertilizer formulas, while just the opposite has taken place in Europe, where there was a shortage of phosphates.

Now is the time to get back to normal again and to return to the fertilizer formulas that were so profitable and satisfactory in the past. But this cannot be done without effort on the part of the farmer and without sufficient notice to the manufacturer to prepare for the change.

Therefore think the matter over carefully, and if your previous experience has shown you that

Potash Pays

notify your dealer that you wish to use fertilizers with 5 to 10 per cent. of Potash and a little more to make up for the drain on the soil during the Potash famine.

And do it right away, for it takes time for the manufacturer to import it and it is only fair that he should know what your demands will be.

The price of Potash has fallen much faster than the prices of farm products so you may feel assured that you can again get a profit from its use. The main point is to insist that the right kind of fertilizer shall be ready for you when needed. In order to insure this, prompt action on your part is essential.

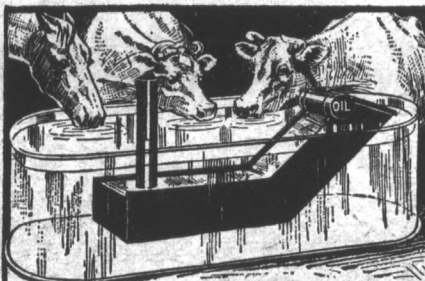
Take up the matter with your dealer at once. If we can help you write to us.

SOIL AND CROP SERVICE, POTASH SYNDICATE

H. A. HUSTON, Manager

42 Broadway

New York



Empire Oil-Burning Tank Heater

Greatest improvement ever made in tank heaters. Fits any tank. Burns from 14 to 16 hours on one gallon of kerosene. Any child can operate it with safety; no sparks, ashes or smoke. The heating chamber is entirely under water; no heat wasted. Guaranteed. Saves feed—pays for itself repeatedly.

Empire Non-Freezing Hog Waterer

Made of heavy galvanized iron—large capacity (70 gal.); drinking trough on outside where hogs can reach it; oil burner directly under trough—guaranteed not to freeze. Keeps water warm for 2¢ per day. An abundance of fresh, clean water at right temperature. Keeps hogs healthy—fatten faster on the same feed.

FARMER AGENTS

Special offer to farmers willing to show our Heater and Waterer to prospective buyers. Write at once for price and special offer.



Dickey Glazed Tile Silos

Best of materials, six different diameters, everlasting hollow tile roof, easiest to build—such features as these have made the Dickey pre-eminent among silos.

The Fruit Jar of the Field
Send for catalog No. 9
W. S. Dickey Clay Mfg. Co.
Macomb, Ill.
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YOU CAN'T CUT OUT A BOG SPAVIN OR THOROUGHPIN but you can clean them off promptly with

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

and you work the horse same time. Does not blister or remove the hair. \$2.50 per bottle, delivered. Will tell you more if you write. Book 4 R free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Varicose Veins, Ruptured Muscles or Ligaments, Enlarged Glands, Wens, Cysts. Allays pain quickly. Price \$1.25 a bottle at druggists or delivered. Made in the U. S. A. by W. F. YOUNG, INC., 268 Temple St., Springfield, Mass.

Big Four Stock Salt

(Medicated)

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Upper Peninsula News

By L. A. Chase

THE published announcement that the Public Domain Commission has ordered that hereafter no Christmas trees be cut on the state lands for commercial purposes should arouse general approbation. At a time when the state is endeavoring in a painfully inadequate way to restock its cut-overs with new growth to replace that removed by the lumbermen, there is little to be said in favor of the removing of thousands and hundreds of thousands of young spruces, balsams and pines which, if given a decent chance to grow would become merchantable timber. We have to decide whether or not to indulge ourselves in a temporary pastime at the expense of future necessities of our lumber industry. The past season 209,000 young trees for planting were shipped to the upper peninsula from the state tree nursery at Higgins Lake. This will not go far towards replacing the havoc wrought by the Christmas tree gatherers. Indeed, the total number of acres planted to trees by the state's forestry department is less than one-one-thousandth of the total acreage of the cut-over lands now found in Michigan. If after nearly twenty years of reforestation work, Michigan now has but 9,124 acres of planted trees on its own lands, we can readily see that it will be a good while before artificial planting re-stocks the deforested area of Michigan.

In response to a telegraphic summons from Dean H. L. Russell, of the College of Agriculture, University of Wisconsin, J. A. Doelle, of the Upper Peninsula Development Bureau, recently attended an important meeting at St. Paul, Minnesota. The meeting was called by Governor-elect Preus, of Minnesota, for the purpose of considering the problem of development in the upper great lakes region, and about twenty men especially interested in these problems were present. Mr. Doelle was appointed the Michigan representative on a committee of four to formulate plans for a second meeting which will occur in St. Paul, next January, for the purpose of framing a definite legislative program, both state and national. The Wisconsin member of this committee is Dean Russell, and the Minnesota member, Mr. J. H. Hay, deputy-commissioner of agriculture of Minnesota. The chairman of the committee is President E. G. Quamme, of the Federal Land Bank of St. Paul. As the matter now stands the program for the January meeting will involve consideration of such national problems as rural credits, including the extension of land security credit, personal credit, and colonization; great lakes waterways; the utilization of salvaged war explosives; forestry, including federal and state action on forest regulation; extension of federal regulations of rivers and highways, regarding drainage improvements and navigation, and such regional problems as land classification, bureau of information service to incoming settlers, the development of the tourist business, including the conservation of fish and game, scenic highways and game refuges; land clearing work, and community planning. It will be readily apparent that this program involves many matters of great concern to the agricultural development of Cloverland.

A recent visitor to the Otter Lake district of Portage township, Houghton county, is enthusiastic over the indications of progress there. This is the territory served by the Otter Lake Agricultural School, and whatever may be the reason, there was discovered much evidence of rural progress there. This was a cut-over country, but all

the large holdings have been disposed of to settlers, mostly Finns, and it was noted that the younger generation, instead of leaving the district, is marrying and taking up new land there with a view to permanent home-making. It is said to be the intention of the Wooster Lumber Company, of Chasell, to continue its logging railroad through this district and on to Sidnaw. If this is done, it will greatly assist the development of the Otter Lake section, and will also afford a new short line to the copper country for the Chicago, Milwaukee & St. Paul Railway and its copper range connection.

The St. Ignace Enterprise expects several consolidated schools to be established in Mackinac county in the near future. This is in line with a resolution adopted at the recent annual meeting of the Upper Peninsula Educational Association held in Escanaba, which reads: "We favor such consolidation of rural school districts as will make it impossible for any school to have less than twelve pupils in regular attendance, allowing for appeal only in exceptional cases of trying geographical situations; and no school district should be allowed to exist in the state of Michigan whose boundary lines do not include sufficient assessable territory to provide a first-class school in every sense of the word." The latest figures from the department of public instruction show that there are now twenty-eight consolidated schools in Michigan organized under the state-aid act of 1917 and 1919 relating to rural agricultural schools. It is to be hoped that Mackinac county will materially swell this number, as the Enterprise indicates it means to do.

COMMITTEE OF SEVENTEEN MAKES STATEMENT.

DELVING into the complex mechanism of the American system of marketing farm products the Committee of Seventeen of the American Farm Bureau Federation, in session at Chicago, pauses a moment to give out the following statement:

Resolved, that we deem it morally wrong and highly detrimental to the interests of agriculture and the consumers to permit the practice now in vogue of selling grain, cotton and other farm products which the seller or his principal do not own at time of sale. This practice is commonly known as "short selling."

Resolved, further, that we do hereby petition congress to enact such legislation as will stop this practice at the earliest possible date.

The Farmers' Marketing Committee of Seventeen recommends that the system for handling the grain crop of our country to the best interests of the producers and the public should include the following:

First. Farmer-owned elevator companies and sales agencies to operate on the local and terminal markets of the United States.

Second. Farmers' export companies and sales agencies to operate on foreign markets for the purpose of handling the exportable surplus.

Third. The grain growers of the United States should as soon as possible by mutual contract or otherwise arrange for the sale of all grain on the basis of cooperative bargaining.

Fourth. That the foregoing shall be carried into effect with the ultimate view of the protection of the just rights of the producer and the orderly marketing of farm products.

The committee wishes to assure the grain producers of the country that it keenly appreciates the necessity of prompt action, and that as quickly as the necessary data can be gathered by its experts, it will perfect and present a plan to carry the foregoing principles into effect with the cooperation of the various existing farmers' organizations interested in grain marketing.

EMMET COUNTY REPORT OF COW-TESTING ASSOCIATION.

At the annual meeting of the Emmet County Cow-testing Association, held at the Bear Creek Grange Hall, Paul Hayward, the tester, gave the report of the association for the past year.

In this report Mr. Hayward gave the average record of cows tested: Number of cows, 237; pounds of milk 5,450; test, 4.2 per cent; pounds of fat, 232.9; cost of feed, \$90.05; income over cost of feed, \$59; returns from \$1.00 of feed, \$1.65; cost of one pound of fat, 36c; cost of 100 pounds of milk, \$1.65.

The highest milk production record for the association was made by a grade Holstein owned by Charles Lempke, with a record of 11,943 pounds of milk and 354.1 pounds of fat. The highest fat production record was made by a grade Guernsey owned by Paul Schnelle, with a record of 6,700 pounds of milk and 445.6 pounds of fat. The best herd record for both milk and butter-fat was the grade Holstein herd of Charles Lempke, ten in number, that produced an average of 9,538 pounds of milk and 317.1 pounds of fat. The next herd in point of butter-fat was owned by Paul Schnelle, the herd numbering twelve grade Holsteins and Guernseys, averaged 6,700 pounds of milk and 315.1 pounds of fat. There were other good records but these were the highest.

Among the 237 cows, eighty produced over 250 pounds of fat; thirty-two produced over 300 pounds; eleven produced over 350 pounds, and four over 400 pounds.

Mr. Hayward has been a fine tester and every member dislikes very much to have him leave. Much of the success of the year's work has been due to his thoroughness and interest in the work. This work has been very successful during the past year and it would be a backward step to discontinue it.—V.

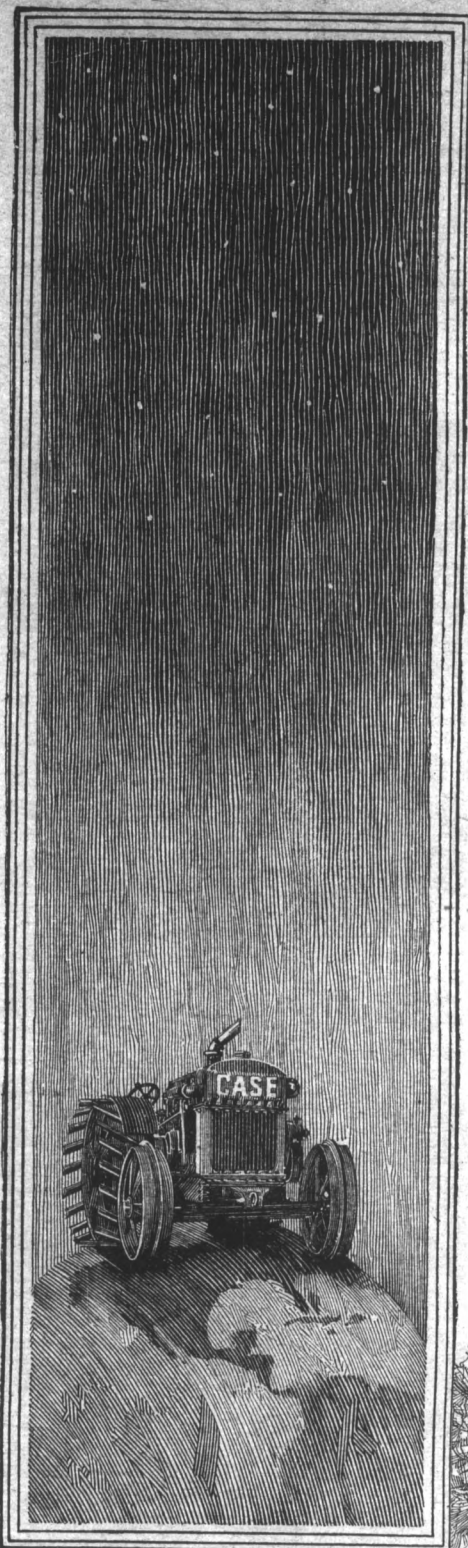
POULTRY HOUSE CURTAINS.

When ordinary cloth curtains are used on the poultry house windows the supply of fresh air is soon diminished because of the curtains becoming dusty. Canvas soon becomes dusty and allows little air to enter. The burlap from old sacks is fine for protecting the windows as the material is coarse enough to stop draughts but still permit plenty of air to enter. Nearly every poultryman accumulates a supply of wornout burlap sacks which can be pieced together for curtains.

If the curtain frames are hinged to the top of the window the usual plan is to hook them to the ceiling of the house when they are raised. They should be so arranged that the birds cannot roost on the frames. Of course it is not necessary to lower the curtains but a few nights each year and sometimes Leghorns will select the frames as a permanent roosting place. Then the curtains are soon ruined and they may become infested with mites. Burlap curtains that roll down from the top are very satisfactory. In some cases they can be placed in a slot and easily shoved back and forth. If the curtains swing back and fasten to the roof they can often be hooked so close to the ceiling that there will be scarcely any room where the birds can roost.

A combination of curtains and windows is the most desirable. Then if the curtains are closed on a stormy day, the glass still permits plenty of light to enter. If the entire open-front is protected by curtains, the house is too dark if a severe storm from the south forces the poultryman to keep all of the curtains closed.—K.

A pure-bred bull will exert a stronger influence upon the progeny when mated with cows of mixed breeding than when he is mated with pure-breds or high-grades.



Greetings!

"The World Over"

To you, our legion of friends, old and new, we send our heartiest Yuletide greetings.

In the rich farm lands of the United States, in Canadian wheat fields, on the wide plains of South America and Europe—wherever Case Machinery has gone, there we count our friends.

To you who toil in these fields, year by year bringing from the soil life and strength for your nation, we owe our greatest debt. For seventy-nine years we have striven to make your task easier, your work more joyous.

In a spirit of warm friendliness and rejoicing, we wish you the age-old, "Merry Christmas".

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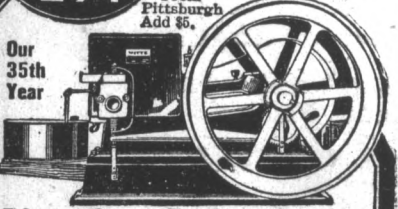
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EVERBEARING RED RASPBERRIES.

WE find that everbearing red raspberries are true to name and will produce berries until late in the fall. With a light snow on the ground we have picked red berries from the canes and found the flavor good. As a novelty they are fine and it is a pleasure to treat the city friend to a shortcake made of fresh red raspberries several months beyond the normal season.

But as a commercial proposition we do not like the everbearers. They produce fruit over a long season but at no time is there enough to make profitable picking. Even the first crop we find inferior in size and quantity to a variety like the Cuthbert, which bears bountifully in season and then rests up for the next crop.

A variety like the Cuthbert produces its berries at a time when there is little competition from other fruit. The commercial raspberry picker who hires labor at picking time cannot hire them to hunt for berries. The crop must be so abundant on the canes that rapid harvesting is possible. In our experience with the St. Regis everbearers they lack in quality and quantity during the regular bearing season. Later in the year they are still producing fruit but it takes a long time to fill the boxes, compared with the earlier varieties and the berries come at a time when there is an abundance of other fruit.

Raspberries are very attractive out of season, but regardless of scarcity there is a limit to how much the public will pay. When peaches and apples are on the market there is less necessity for buying raspberries. So we keep a few everbearing raspberries as a novelty but the regular commercial sorts like the Cuthbert prove to be the profit winners. G. REYNOLDS.

HOW WE TRAINED PEACH TREES.

THE writer once had the chance of working in a large peach orchard with a grower who had enjoyed more than thirty years' experience in the training of peach trees. Here are some of his methods: He always left a promising limb that headed in the direction of the prevailing winds. This helped the tree from becoming lopsided.

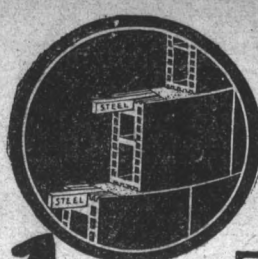
When heading back a twig the last bud next to the cut was always an outside bud so that the direction of growth would be outward. This helped the tree to develop a large fruiting area. If inside buds had been left the new growth would naturally start inward.

The peach trees were always given an annual pruning. This helped the trainer to develop a symmetrical tree. Peaches cannot be properly grown if they are neglected and then severely pruned to make up for lost time. Crotches must be avoided as much as possible as the peach wood is brittle and heavily loaded limbs are easily broken at the crotches during severe wind storms.

This grower favored the open center type of tree. It enabled the sun to reach down in the deep green foliage and color up the fruit. Peaches with a blush are the most attractive. It seems as if all growers have some peaches when any have them. It follows that the owner of the first-class attractive fruit has a great advantage in disposing of his product.

When limbs break they should be mended by inserting bolts and fastening the bolts with wire. Tying a wire around a limb to mend a break is bound to strangle the limb and cause it to die. G. REYNOLDS.

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Section of Natco Silo wall showing still air spaces and steel reinforcing

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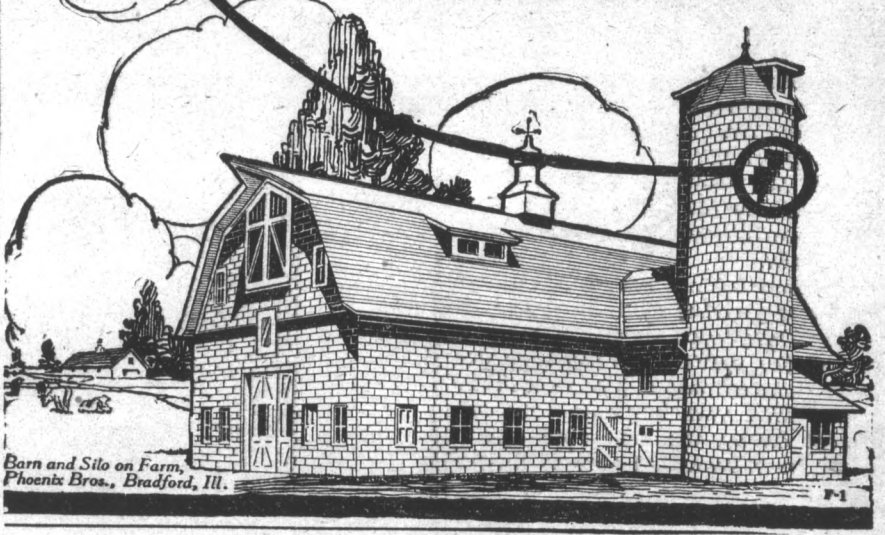
Natco Silos

are strongly reinforced with high grade steel bands, doubled in the bottom courses where the pressure is greatest. The double-shell tile also increases the wall strength and provides for secure mortar joints. The still air spaces conserve the natural heat of the silage—resist frost. Heavy galvanizing protects all exposed ironwork.

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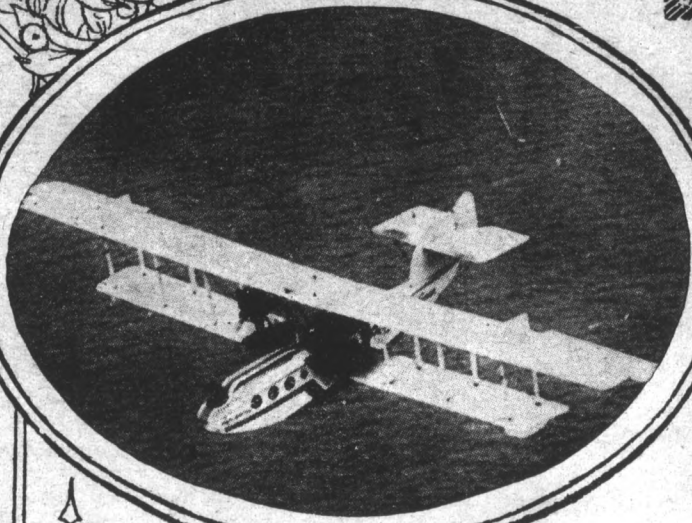
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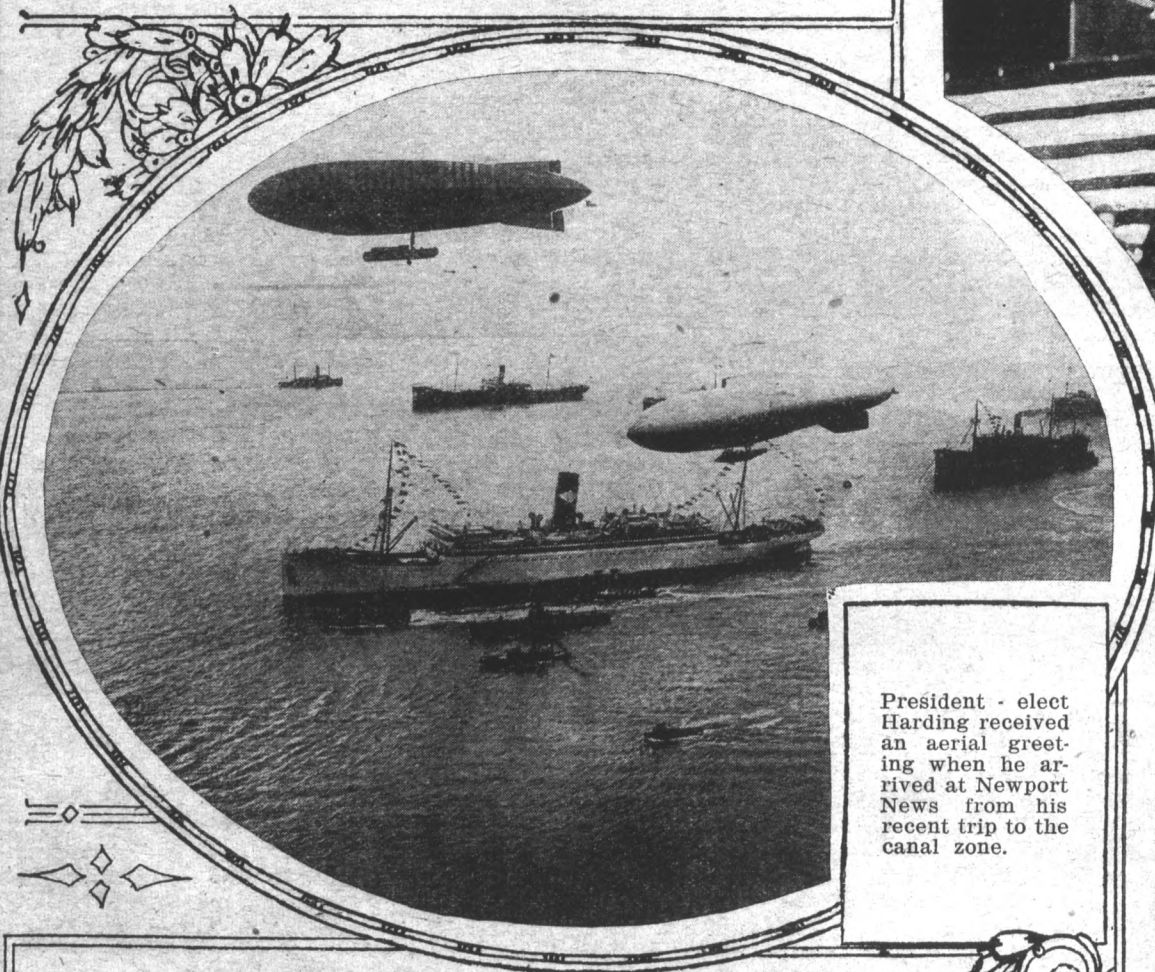
WORLD EVENTS IN PICTURES



A striking sculpture by Gardet. The child at the right represents Christianity gazing in wonder at the Christ-child.

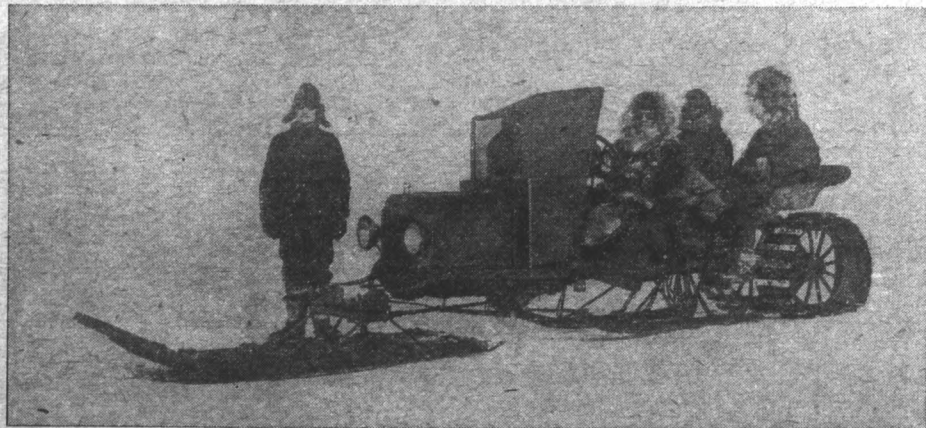


The luxurious air liner seaplane F-B-11 which carries passengers regularly between Tampa, Florida and Havana.



Thousands greeted Warren G. Harding, President-elect, upon his arrival at Norfolk, Va., from his southern vacation.

President-elect Harding received an aerial greeting when he arrived at Newport News from his recent trip to the canal zone.



When the snows are deep the automobile becomes an auto sled. This machine is used in Alaska and makes thirty miles an hour, thus overcoming many of the former handicaps of travel in arctic regions.



Mrs. Muriel McSwiney, widow of the late Lord Mayor of Cork, arrived in this country recently on the White Star Liner Celtic.

THE VOICE OF THE PACK

By EDISON MARSHALL

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Everywhere the forest people were preparing for the winter that would fall so quickly when these golden September days were done. The Under Plane of the forest—those smaller people that live in the dust and have beautiful, tropical forests in the ferns—found themselves digging holes and filling them with stores of food. Of course they had no idea on earth why they were doing it, except that a quiver at the end of their tails told them to do so; but the result was entirely the same. They would have a shelter for the winter. Certain of the birds were beginning to wonder what the land was like to the south, and now and then waking up in the crisp dawns with decided longings for travel. The young mallards on the lakes were particularly restless, and occasionally a long flock of them would rise in the morning from the blue waters with a glint of wings—and quite fail to come back. And one night all the forest listened to the wail of the first flock of south-going geese. But the main army of waterfowl would, of course, not pass until fall came in reality.

But the most noticeable change of all, in these last days of summer, was a distinct tone of sadness that sounded throughout the forest. Of course, the wilderness note is always somewhat sad; but now, as the leaves fell and the grasses died, it seemed particularly pronounced. All the forest voices added to it—the wail of the geese, the sad fluttering of fallen leaves, and even the whisper of the north wind. The pines seemed darker, and now and then gray clouds gathered, promised rain, but passed without dropping their burdens on the parched hillsides. Of course all the tones and voices of the wilderness sound clearest at night—for that is the time that the forest really comes to life—and Dan Failing sitting in front of Lennox's house, watching the late September moon rise over Bald Mountains, could hear them very plainly.

It was true that in the two months he had spent in the mountains he had learned to be very receptive to the voices of the wilderness. Lennox had not been mistaken in thinking him a natural woodsman. He had imagination and insight and sympathy; but most of all he had a heritage of wood lore from his frontiersmen ancestors. Two months before he had been a resident of cities. Now the wilderness had claimed him, body and soul.

These had been rare days. At first he had to limit his expeditions to a

few miles each day, and even then he would come in at night staggering from weakness. He climbed hills that seemed to tear his diseased lungs to shreds. Lennox wouldn't have been afraid, in a crisis, to trust his marksmanship now. He had the natural cold nerve of a marksman, and one twilight he brought the body of a lynx tumbling through the branches of a pine at a distance of two hundred yards. A shotgun is never a mountaineer's weapon—except a sawed-off specimen for family contingencies—yet Dan acquired a certain measure of skill at small game hunting, too. He got so he could shatter a grouse out of the air in the half of a second or so in which its bronze wings glinted in the shrubbery; and when a man may do this a fair number of times out of ten, he is on the straight road toward greatness.

Then there came a day when Dan caught his first steelhead in the North Fork. There was no finer sport in the whole west than this—the play of a fly, the strike, the electric jar that carries along the line and through the arm and into the soul from where it is never quite effaced, and finally the furious strife and exultant throb when the fish is hooked. There is no more beautiful thing in the wilderness world than a steelhead trout in action. He simply seems to dance on the surface of the water, leaping again and again, and racing at an unheard-of speed down the ripples. But now and again amateur fisherman without souls have tried to pull him in with main strength, and are still somewhat dazed by the result. It might be done with a steel cable, but an ordinary line or leader breaks like a cobweb. When his majesty the steelhead takes the fly and decides to run, it can be learned after a time that the one thing that may be done is to let out all the line and with prayer and humbleness try to keep up with him.

Dan fished for lake trout in the lakes of the plateau; he shot waterfowl in the tule marshes; he hunted all manner of living things with his camera. But most of all he simply studied, as his frontiersmen-ancestors had done before him. He found unceasing delight in the sagacity of the bear, the grace of the felines, the beauty of the deer. He knew the chipmunks and the gray squirrels and the snowshoe rabbits. And every day his muscles had hardened and his gaunt frame had filled out.

He no longer wore his glasses. Every day his eyes had strengthened. He

could see more clearly now, with his unaided eyes, than he had ever seen before with the help of the lens. And the moonlight came down through a rift in the trees and showed that his face had changed too. It was no longer so white. The eyes were more intent. The lips were straighter.

"It's been two months," Silas Lennox told him, "half the four that you gave yourself after you arrived here. And you're twice as good now as when you came."

Dan nodded. "Twice! Ten times as good! I was a wreck when I came. Today I climbed halfway up Baldy—within a half mile of Snowbird's cabin—without stopping to rest."

Lennox looked thoughtful. More than once, of late, Dan had climbed up toward Snowbird's cabin. It was true that his guest and his daughter had become the best of companions in the two months; but on second thought Lennox was not in the least afraid of complications. The love of the mountain women does not go out to physical inferiors. "Whoever gets her," he had said, "will have to tame her," and his words still held good. The mountain women rarely mistook a maternal tenderness for an appealing man for love. It wasn't that Dan was weak except from the ravages of his disease; but he was still a long way from Snowbird's ideal.

And the explanation was simply that life in the mountains gets down to a primitive basis, and its laws are the laws of the cave. Emotions are simple and direct, dangers are real, and the family relations have remained unchanged since the first days of the race. Men do not woo one another's wives in the mountains. There is no softness, no compromise: the male of the species provides, and the female keeps the hut. It is good, the mountain women know, when the snows come, to have a strong arm to lean upon. The man of strong muscles, of quick aim, of cool nerve in a crisis is the man that can be safely counted on not to leave a youthful widow to a lone battle for existence. Although Dan had courage and that same rigid self-control that was an old quality in his breed, he was still a long way from a physically strong man. It was still an even break whether he would ever wholly recover from his malady.

But Dan was not thinking about this now. All his perceptions had sharpened down to the finest focal point, and he was trying to catch the spirit of the endless forest that stretched in

front of the house. The moon was above the pines at last, and its light was a magic. He sat breathless, his eyes intent on the silvery patches between the trees. Now and then he saw a shadow waver.

His pipe had gone out, and for a long time Lennox hadn't spoken. He seemed to be straining too, with ineffective senses, trying to recognize and name the faint sounds that came so tingling and tremulous out of the darkness. As always, they heard the stir and rustle of the gnawing people: the chipmunks in the shrubbery, the gophers who, like blind misers, had ventured forth from their dark burrows; and perhaps even the scaly glide of those most-dreaded poison people that had lairs in the rock piles.

Then, more distinct still, they heard the far-off yowl of a cougar. Yet it wasn't quite like the cougar utterances that Dan had heard on previous nights. It was not so high, so piercing and triumphant; but had rather an angry, snarling tone made up of ows and broad, nasal yaws. It came tingling up through hundreds of yards of still forest; and both of them leaned forward.

"Another deer killed," Dan suggested softly.

"No. Not this time. He missed, and he's mad about it. They often snarl that way when they miss their stroke, just like an angry cat. But listen—"

Again they heard a sound, and from some far-lying ridge, they heard a curious echo. So far it had come that only a tremor of it remained; yet every accent and intonation was perfect, and Dan was dimly reminded of some work of art cunningly wrought in miniature. In one quality alone it resembled the cougar's cry. It was unquestionably a wilderness voice—no sound made by men or the instruments of men; and like the cougar's cry, it was simply imbued with the barbaric spirit of the wild. But while the cougar had simply yowled in disappointment, a sound wholly without rhythm or harmony, this sound was after the manner of a song, rising and falling unutterably wild and strange.

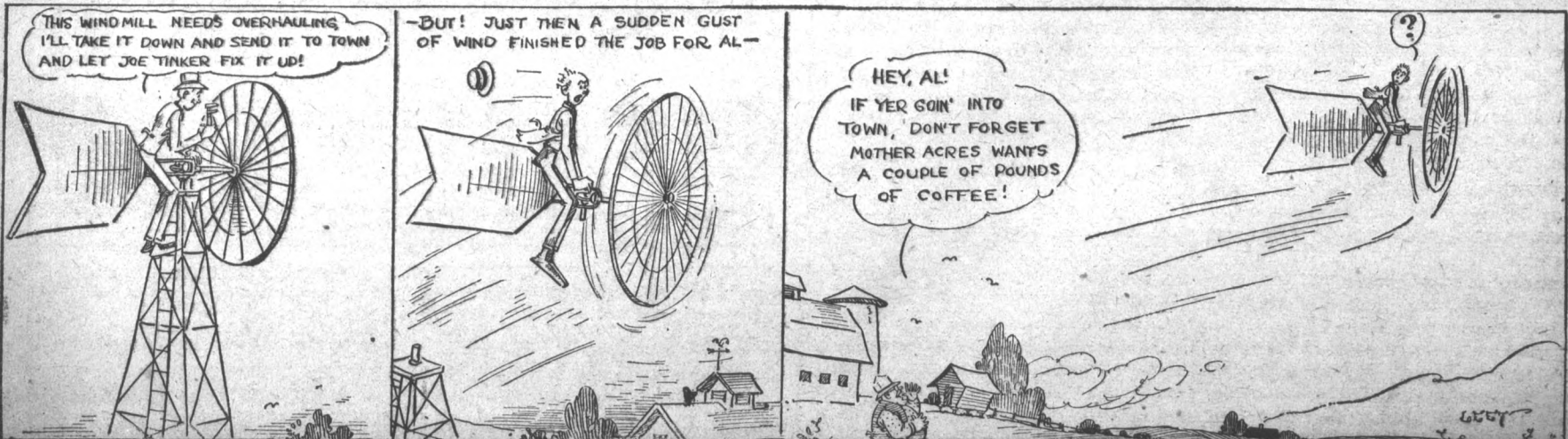
CHAPTER II.

DAN felt that at last the wilderness itself was speaking to him.

He had waited a long time to hear its voice. His thought went back to the wise men of the ancient world, waiting to hear the riddle of the universe from the lips of the Sphinx, and how he himself—more in his uncon-

AL ACRES—AP's Course in Aviation Starts Unexpectedly.

—By Frank R. Lect



scious self, rather than conscious—had sought the eternal riddle of the wilderness. It had seemed to him that if once he could make it speak, if he could make it break for one instant its great, brooding silence, that the whole mystery and meaning of life would be in a measure revealed. He had asked questions—never in the form of words but only ineffable yearnings of his soul—and at last it had responded. The strange rising and falling song was its own voice, the articulation of the very heart and soul of the wilderness.

And because it was, it was also the song of life itself—life in the raw, life as it is when all the superficialities that blunt the vision had been struck away. Dan had known that it would be thus. It brought strange pictures to his mind. He saw the winter snows, the spirits of Cold and Famine walking over them. He saw Fear in many guises—in the forest fire, in the landslide, in the lightning cleaving the sky. In the song were centered and made clear all the many lesser voices with which the forest had spoken to him these two months and which he had but dimly understood—the passion, the exultation, the blood-lust, the strength, the cruelty, the remorseless, unceasing struggle for existence that makes the wilderness an eternal battle ground. But over it all was sadness. He couldn't doubt that. He heard it all too plainly. The wild was revealed to him as it never had been before.

"It's the wolf pack," Lennox told him softly. "As long as I have been in the mountains, it always hits me the same. The wolves have just joined together for the fall rutting. There's not another song like it in the whole world."

Dan could readily believe it. The two men sat still a long time, hoping that they might hear the song again. And then they got up and moved across the cleared field to the ridge beyond. The silence closed deeper around them.

"Then it means the end of the summer?" Dan asked.

"In a way, but yet we don't count the summer ended until the rains break. Heavens, I wish they would start! I've never seen the hills so dry and I'm afraid that either Bert Cranston or some of his friends will decide it's time to make a little money fighting forest fires. Dan, I'm suspicious of that gang. I believe they've got a regular arson ring, maybe with unscrupulous stockmen behind them, and perhaps just a penny-winning deal of their own. Suppose you know about Landy Hildreth—how he's promised to turn state's evidence that will send about a dozen of those vipers to the penitentiary?"

"Snowbird told me about it."

"He's got a cabin over toward the marshes, and it has come to me that he's going to start tomorrow, or maybe has already started today, down into the valley to give his evidence. Of course, that is deeply confidential between you and me. If the gang knew about it, he'd never get through the thickets alive."

But Dan was hardly listening. His attention was caught by the hushed, intermittent sounds that are always to be heard, if one listens keenly enough, in the wilderness at night. "I wish the pack would sound again," he said. "I suppose it was hunting."

"Of course. And there is no living thing in these woods that can stand against a wolf pack in its full strength."

"Except man, of course."

"A strong man, with an accurate rifle, of course, and except possibly in the starving times in winter he'd never have to fight them. All the beasts of prey are out tonight. You see, Dan, when the moon shines, the deer feed at night instead of in the twilights and

the dawn. And of course the wolves and the cougars hunt the deer. It may be that they are running cattle, or even sheep."

But Dan's imagination was afire. He wasn't content yet. "They couldn't be—hunting man?" he asked.

"No. If it was midwinter and the pack was starving, we'd have to listen better. It always looked to me as if the wild creatures had a law against killing men, just as humans have. They've learned it doesn't pay—something the wolves and bear of Europe and Asia haven't found out. The naturalists say that the reason is rather simple—that the European peasant, his soul scared out of him by the government he lived under, has always fled from wild beasts. They were tillers of the soil, and they carried hoes instead of guns. They never put the fear of God into the animals and as a result there are quite a number of true stories about tigers and wolves that aren't pleasant to listen to. But our own frontiersmen were not men to stand any nonsense from wolves or cougars. They had guns, and they knew how to use them. And they were preceded by as brave and as warlike a race as ever lived on the earth—armed with bows and arrows. Any animal that hunted men was immediately killed, and the rest found out it didn't pay."

"Just as human beings have found out the same thing—that it doesn't pay to hunt their fellow men. The laws of life as well as the laws of nations are against it."

But the words sounded weak and dim under the weight of the throbbing darkness; and Dan couldn't get away from the idea that the codes of life by which most men lived were forgotten quickly in the shadows of the pines. Even as he spoke, man was hunting man on the distant ridge where Whispefoot had howled.

Bert Cranston, head of the arson ring that operated on the Umpqua Divide, was not only beyond the pale in regard to the laws of the valleys, but he could have learned valuable lessons from the beasts in regard to keeping the laws of the hills. The forest creatures do not hunt their own species, nor do they normally hunt men. The moon looked down to find Bert Cranston waiting on a certain trail that wound down to the settlements, his rifle loaded and ready for another kind of game than deer or wolf. He was waiting for Landy Hildreth; and the greeting he had for him was to destroy all chances of the prosecuting attorney in the valley below learning certain names that he particularly wanted to know.

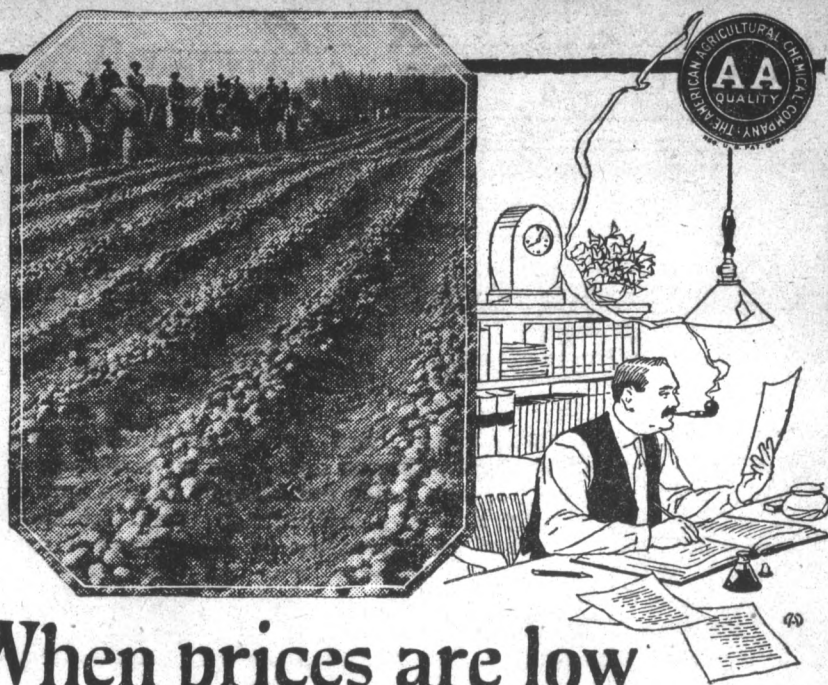
There is always a quality of unreality about a moonlit scene. Just what causes it isn't easy to explain, unless the soft blend of light and shadow entirely destroys the perspective. Old ruins will sometimes seem like great, misty ghosts of long-dead cities; trees will turn to silver; phantoms will gather in family groups under the cliffs; plain hills and valleys will become, in an instant, the misty vales of Fairyland. The scene on that distant ridge of the Divide partook of this quality to an astounding degree; and it would have made a picture no mortal memory could have possibly forgotten.

(Continued next week.)

Sunshine Hollow Items

By Rube Rubicon

At the school meeting Morgan Peabody asked Dorothy Tuttle if he could see her home. Dorothy told him she thought he could get a very nice view from the top of the flag pole. Morgan is always trying to take Dorothy to a dance. Dorothy says Morgan is just good enough dancer to get off people's feet after he steps on them, and that's all.



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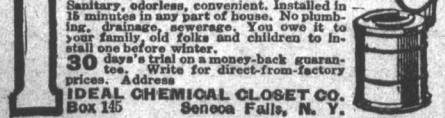
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Woman's Interests

"Inasmuch—"

PERHAPS it is because I'm growing old and have forgotten how to play, but somehow I just can't see the American Christmas this year. There always has to be someone to take the joy out of living, and the joyous Christmas time finds no exception. Now I don't want to take the joy out of Christmas, but to substitute for the selfish way of grabbing the fun for ourselves, the really deeper joy of making it a day of gladness for someone else.

With millions of children starving in Europe, thousands of them who do not even know what sugar tastes like and who never saw milk, whose bread is made of weeds, with flour perhaps one day in two months, not to mention starving China, how can American mothers shut eyes, ears and hearts to it all, while they go on spending their money loading their own spoiled pets

You can help the home by contributing money. If it's only a dollar it will be thankfully received. Or you can send potatoes, beans, provisions, canned fruit, apples—anything that's food for growing youngsters. Clothes, too, are welcomed, for many a child who comes to the home must have his garments burned as quickly as they can be removed.

Or you can share your home with one of the children. If you do not want to adopt a child, open your home as a temporary boarding place for some boy or girl. The one thing about this which you may not like is that in order to board any child, not a blooded relation, you are required to get a license from Lansing. This is done as a means of controlling unscrupulous persons who take children to board.

Or perhaps you've been wanting to adopt a child. Here is your chance.



Wards of the Michigan Home for Children. Only Two of Many Who Need Aid.

with toys and gorging them on Christmas Day, and ignore the appeals for money to give European kiddies just one square meal a day?

Yet they are going blithely about planning on a big day for their own, elevating their eyebrows if you confess you are not filling up the house with electric trains and meccannos and German dolls and Grand Rapids doll bugies. Hundreds of dollars squandered on children who already have too much, but only a pittance for those who starve!

We needn't go to Europe to find children to help. America has a plenty; and even Michigan can show a goodly number of little folks who need a friend. True, we have lots of agencies looking after our needy, but agencies can't function without outside assistance. Why not show your respect for the big feast day this year by giving your bit to the Child whose birth you celebrate?

There's a fine chance to help children through the Michigan Home for Children in St. Joseph. Carried on by private subscription, it is maintained as a sort of "receiving home" for children who are forsaken, or who are orphaned, or half-orphaned. Many children are placed there to be released for adoption, while others are cared for temporarily, to help a family through a bit of bad luck.

Just now the home is looking for homes for boys. Boys seem to be a drug on the market when folks decide to adopt a child. But boys need homes and mothering just as much as girls do. Sometimes more. The home requires a probation period of one year before the final release is given on the child. It is felt that this is only fair to the prospective parents. They are required to give all sorts of references before they are allowed to take a child, so it is felt that if the child lives with them one year this will give time for its characteristics to show up, and allow the foster-parents opportunity to decide if they want to keep their charge.

The list of officers and trustees of the home contains names well known in Michigan. Humphrey S. Gray, of Benton Harbor, is president; Washington Gardner, Albion, honorary president; William E. Tallmadge, Grand Rapids, first vice-president; Edwin S. George, Detroit, second vice-president; James R. Stone, St. Joseph, secretary; Nelson C. Rice, St. Joseph, treasurer; Rev. Albert H. Stoneman, St. Joseph, state superintendent. The board of trustees is composed of Allan D. Swain, Grand Rapids; Rev. Caroline Bartlett Crane, Kalamazoo; Burt E. Taylor, Eugene W. Lewis, David C. Carter, Detroit; Mrs. W. T. Bradford,

Birmingham; William A. Vawter, Benton Harbor; Dr. Edward J. Witt, Dr. Hattie A. Schwendener, St. Joseph; Mark Merriman, Jackson; William E. Underdown, Ann Arbor; Frank E. Bell, Negaunee, and the officers.

Communications regarding the home may be addressed to Rev. Albert H. Stoneman, St. Joseph, Michigan.

The work is carried on in a half-dozen large cities through local organizations, however. Here a representative takes children for the city and county and places them in good board-

ing homes. If you live near one of these cities and want a child, address the local representatives. In Detroit, Leon W. Frost represents the home; Mrs. D. S. Sinclair is Grand Rapids' representative; Miss Blanche M. Bennett, Lansing; Miss Marjorie Potter, Flint; Mrs. H. S. Mallory, Ann Arbor; Mrs. George A. Robertson, Jr., Battle Creek; Miss Harriet Ballard, Jackson; Miss Elizabeth McBratnie, Saginaw; and Mrs. Marguerite Schell, Marquette, complete the list of local representatives.

DEBORAH.

Good Tidings at Christmas

Our Weekly Serman—By N. A. McCune

BE not afraid; for behold, I bring you good tidings of great joy which shall be to all the people: for there is born unto you this day in the city of David a Savior, who is Christ the Lord." Luke 2:10, 11.

One Christmas eve, in the last years of the eleventh century, a service was being held in the little church near the castle of Fontaines, in old Burgundy, France. To the service came the Lord of Fontaines, his wife, and their little son, a child with golden locks and blue eyes, who was later to become the most influential man of his time. As he gazed upon the burning candles around the altar and listened to the singing of the hymns, he fell asleep. And while sleeping, he dreamed he saw the infant Jesus. As he gazed on the tender face of the infant Lord, so small, yet so mighty, there came into his heart a deep love for the Christ, that never burned out. Before he died, Europe was debtor to Bernard of Clairvaux.

It is no wonder that the gospels picture the coming of Christ as an event of "great joy." It is the most happy event that ever lighted up a dark world. There are the shepherds, watching their flocks by night, and they hear the angel chorus. There are aged Simeon and Anna, who are in raptures, as they behold the infant Messiah. And there is the Magnificat of Mary, as she thinks of the coming King. Hymn writers have echoed the joy of Scripture. Hymns that touch on the nativity are radiant with gladness. "Joy to the World! the Lord is Come," sings Watts. "Hark! the herald angels sing," is Wesley's hymn, while an American newspaper writer, Joshua Holland, begins his song, "There's a song in the air! There's a star in the sky! There's a mother's deep prayer, and a baby's low cry!" But probably the greatest Christmas hymn written by an American, was the one by Phillips Brooks. It runs:

"O little town of Bethlehem,
How still we see thee lie!
Above thy deep and dreamless sleep
The silent stars go by;
Yet in thy dark streets shineth
The everlasting light;
The hopes and fears of all the years
Are met in thee tonight."

THE good news that Christmas brings is the good news that a Savior has come down to earth, to live among men. As one looks up at the starry heavens on a clear night, he feels how small he is. What are those worlds, many of which astronomy tells us are much greater than our earth? How long have they been there? What stupendous force keeps them traveling on, on, and yet on, in their orbits? And then to turn and think that the Being who controls the universe, whose power guides those stars, who upholds all things by the word of his power—to think that this Being became man, and was born in a barn and became subject to poverty and toil, is to glimpse the meaning of Christmas. As St. John puts it, "And the Word became flesh and dwelt among us." And it is the same Word who created

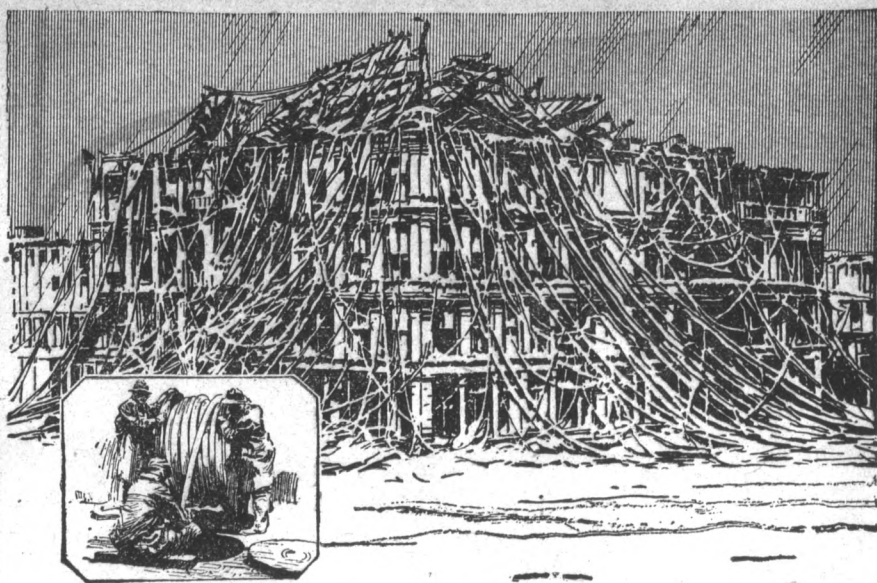
all things. And wherever this good news has gone, it has brought peace and goodwill.

A Japanese student in America was very depressed. He began the search for what he called the beautiful life. At times he gave up in despair, and contemplated what is not uncommon in his native land, suicide. But one day he returned to his room with radiant face and said, "I have found the beautiful life. It tells all about it in this little book." The little book was the New Testament. One day an American traveller in the far east was travelling wearily on camel-back through an arid country. Presently the fields began to look better. They were cultivated, and there was some live stock. Going on, the farms became more and more prosperous, until his party arrived at a Christian mission. The improved fields were only a reflection of the improved humanity, that the mission had touched.

Christmas means everything to us, because it is the birthday of a Savior. A great Person has come into the world. His object is to usher in a sinless world. He was human, "like as we are." He ate, He drank, He lay down and slept, He became tired with long journeys, He found it necessary to pray, He had friends, but the one difference between him and others was, He was the one perfect Man. The great object for which He entered the world was, to give men victory over themselves. He came to found a whole, healthy, perfectly normal race. Christ loved normal humanity, and He was willing to do anything, pay any price, suffer any torture, that would make a normal humanity possible.

A Hebrew legend runs like this: Once there lived in far Judean hills two affectionate brothers, who worked their fields together. One had a wife and a houseful of children. The other was unmarried. One night in the harvest time the older brother said to his wife, "My brother is lonely. I will go out and move some of my sheaves over to his side, so that when he sees them in the morning his heart will be cheered by the abundance." And he did. That same night the other brother said to his workmen: "My brother has many children to feed. I do not need this wealth. I will go and move some of my sheaves over on his field, so that he shall rejoice in the morning, when he sees how great is his harvest." And he did so. They did it that night and the next, in the dark. But on the third night the moon came out from behind a cloud as they met face to face. Each man had his arms full of sheaves. On that spot, the legend says, the temple of Jerusalem was built, for it was esteemed that that was the place where earth came nearest to heaven.

It is but a legend, but the very spirit spoken of, between the two brothers, is the spirit, multiplied a million fold, that Christ had. And this is not legend. This is fact. That is why Christmas is a happy time. It is the birthday of this King.



The Contributions of Science

The greatest material benefits the world has received have come from the laboratories of the scientists. They create the means for accomplishing the seemingly impossible.

Science, after years of labor, produced the telephone. From a feeble instrument capable of carrying speech but a few feet, science continued its work until now the telephone-voice may be heard across the continent.

In February of 1881 a blizzard swept the city of Boston, tearing from the roof of the Bell telephone building a vast net-work of 2,400 wires. It

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Now through the advance of science that number of wires would be carried in a single underground cable no larger than a man's wrist.

As the fruit of the effort of science greater safety and greater savings in time, money and materials are constantly resulting.

And never before as now, the scientist is helping us solve our great problems of providing Telephone service that meets the increased demands with greater speed and greater certainty.



AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

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One System

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And all directed toward Better Service

One Man Saws 40 Cords a Day

At a Cost of 1 1/2 c a Cord!

Send today for Big Special Offer and Low Direct Price on the OTTAWA, the One-Man Saw, the first made and sold direct from factory to user. Greatest labor saver and money-maker ever invented. Saws any size log at the rate of a foot a minute. Does the work of ten men. As easily moved from log to log or cut to cut as any wheelbarrow. 4-Cycle Frost Proof Engine has balanced crank shaft—pulls over 4 H.P. Magneto equipped; no batteries needed. Special Clutch lever controlled enables you to start and stop saw with engine running. Automatic Speed Governor. Easy to move, costs less to operate. When not sawing, engine runs pumps, feed mills and other machinery. Pulley furnished.

OTTAWA LOG SAW

Cuts Down Trees—Saws Logs By Power
Patent Applied For

30 Days Trial No waiting—no delay. Let the OTTAWA saw your logs and pay for itself as you use it. **10-YEAR GUARANTEE.** See the OTTAWA at work on your farm once and you will never give it up. Thousands in use, every owner a booster. Out-saws any other on the market. Send today for FREE BOOK and Special Offer.

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It is well established and supported by conservative financiers, that there is no class of Investment Securities that equal State, County, and City Bonds (Termed Municipals) for absolute safety, as the whole taxable property of the issuing organization is pledged for the payment of both principal and interest.

We specialize in MUNICIPAL BONDS of highest class, that yield to the investor from 5% to 6% annual interest, that is Exempt from all Government Income taxes; more yield and safer than Savings Banks. Denominations from \$500 up. Full descriptions sent free.

PRUDDEN & COMPANY

Nasby Bldg.

TOLEDO, OHIO.

References: Any bank or business firm in Toledo.

Fruits FLORIDA FANCY SELECT FRUIT Fresh from our groves to you, large boxes contain about 200 Oranges and Grapefruit mixed. \$4.00. Half boxes, \$2.25. We have all kinds. The People's Fruit Co., 924 Twigg St., Tampa, Fla.

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We will send you POSTPAID FOR FOUR DOLLARS. Our Special Bundle of Assorted Towels—Retail Value Five Dollars.

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Do you put in there?

FEED, yes. But — WHAT KIND is it?

At the fairs and dairy shows, many of the most successful dairymen tell us they get more dollars' worth of milk out of a dollar's worth of **BUFFALO CORN GLUTEN FEED**, fed mixed with wheat bran or millfeed, oats, etc., than any feed they know of.

They probably never had anybody offer a reason *why* **BUFFALO CORN GLUTEN FEED** makes milk the way it does. They did not care *WHY* so much, as long as they got the milk. But the *very high digestibility*, in large measure, *accounts for it*.

See that there is plenty of **BUFFALO CORN GLUTEN FEED** mixture in the feed trough in front of your cows—and you will understand *why* **BUFFALO CORN GLUTEN FEED** is so well thought of on thousands of real dairy farms.

FEED UP! Your dealer should have **BUFFALO CORN GLUTEN FEED**. If he does not, write us for literature and sample, giving us his name and address.

Corn Products Refining Co.
New York Manufacturers of Chicago
BUFFALO CORN GLUTEN FEED



Write to

National Starch Co., 606 Ford Bldg., Detroit, Mich.

Let the hair go with the hide

Specialists in tanning Horse, Cow, Calf or any kind of hide with hair or fur on it. We make robes, coats, caps, gloves, muffs, rugs, etc., to your order. You save money and we save your furs. Free catalog of stylish fur garments: Free instructions for handling furs. Fur garments and goods of all kinds repaired and made like new. We mount large and small game, birds and fish. Write today.

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on salted horse and cattle Hides, with the hair on, for **COATS -- ROBES**
Best result from large spready cow hides for **COATS**
Trade with your hide buyer. Get a black hide. We make **ROBES**
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Custom Tanner, 30 Years' Experience.

\$22.00 FOR THIS FINE FUR COAT
Made-to-order from your own cow or horse hide to your own measure. We tan and manufacture the raw hide into a warm serviceable coat for this small charge.

SEND US YOUR HIDES
We make up any kind of skin to suit your individual desire—

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We have been leaders in the tanning business since 1878 and guarantee satisfaction.

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Whether prices are high or low we always quote highest market prices and pay what we quote. No commission—no deductions—you get **ALL** your money—every cent your furs are worth. You can depend on Fox for fair and honest grading, quick returns and a square deal.

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LET US TAN YOUR HIDE.

Horse or Cow hide, Calf or other skins with hair or fur on, and make them into coats (for men and women), robes, rugs or gloves when so ordered. **Your fur goods will cost you less than to buy them and be worth more.**

Our illustrated catalog tells how to take off and care for hides; how and when we pay the freight both ways; about our safe dyeing process on cow and horse hide, calf and other skins; about the fur goods and game trophies we sell, taxidermy, etc.

Then we have recently got out another we call our **Fashion Book**, wholly devoted to fashion plates of muffs, neckwear and other fine fur garments, with tanning and making charges. Also fur garments remodeled and repaired. For Fox, Raccoon and smaller skins, the **Fashion Book** is all you need. Catalog is for big stuff.

You can have either book by sending your correct address naming which, or both books if you need both. Address

The Crosby Frisian Fur Company,
571 Lyell Ave., Rochester, N. Y.

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

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

Our Boys' and Girls' Page

Inexpensive Entertainment

Boys and Girls Can Put on a Good Entertainment

AMONG the inexpensive home entertainments that can be developed without much work or equipment, it is hard to beat "Aunt Jerusha's Family Album." An old picture frame can usually be obtained from the attic of some member of the community. If possible it should be a very large frame. A gilded frame looks the best. A home-made frame can be constructed from four smooth boards and a little gilt paint.

The characters can be selected from the community children. They can dress to represent Aunt Jerusha, the hired man, big sister's beau, the mail man, supervisor and many other people of the community whose photos might appear in Aunt Jerusha's album. The master of ceremonies should be one who can tell good stories or give humorous descriptions. The evening of the entertainment the large picture frame is supported at one end of a room or community hall. A sheet curtain can be strung on a wire in front of the frame. As their turn arrives each character dressed in appropriate costume poses behind the frame. The person selected to introduce each character can relate funny instances of the life of that character and they can be true or otherwise, and illustrated with suitable stories.

If necessary the work can be made easier for the person introducing the incidents about each one are plainly written out so they can be read as the characters appear. Stories can be selected from the humorous departments of current magazines and made to apply personally to the life of the characters as they appear in the frame. The efforts of the actors to look like the photos is sure to be a strain on their composure. The crowd is apt to try and make them laugh, and the show will usually be classed as funny and worth looking at even if it is ridiculous and does not require much practice.

Costumes can be worked up by each actor from various materials found at home. They need cost no money. One of the great advantages of an entertainment of this kind is the fact that there is no expense, and if a small admission is charged the gate receipts can all be used for a worthy purpose and not exhausted in paying bills. Considerable burlesque on public characters of the day can be worked out by dressing certain boys and girls to represent them. This, combined with a humorous introduction by the leader is sure to bring out a good laugh for each picture in the frame. The album can also contain historical characters that are well known in the school work. Two characters in various poses can be introduced to show a picture of some historical action. During the pose a well-worded humorous description on the historical event can be delivered to entertain the crowd. For such pictures in the album it is necessary to have a very large frame and place it far enough back from the audience to make the effect as good as possible.

Much of the success of the entertainment will rest in imitating local characters in such a way that everyone is amused and nobody touched on too tender a spot. For this reason it is not a bad idea for the boys and girls to elect a censor from among the old folks and have this censor observe the display of the album before the presentation in public. All the big motion picture companies have their films censored before being shown to the public so the boys and girls might find it desirable to do likewise.

At the end of the show a voting contest might be held to determine the best picture of each type and then prizes of very nominal value can be distributed to the winners. The best part of an entertainment of this kind is the fact that it limbers up the crowd and makes everyone laugh and feel good. Then in the social hour following there is bound to be much friendly

Michigan Boy Takes Blue Ribbon at Buffalo



MILES E. BEAMER, of Blissfield, Lenawee county, twelve years old, who won the state championship in the Michigan Boys' and Girls' Beef Calf Club in 1919, exhibited two Hereford yearling calves, "Pat" and "Mike," at the Buffalo Fat Stock Show, held in Buffalo, New York, December 8-9-10, which won first and second prizes in their class, and "Pat" also won the grand championship of the show in the Boys' and Girls' Special Class, total premiums amounting to \$90. "Pat," the grand champion, was put on feed April 5, and made a gain of 535 pounds and was sold to Frederick Fuhrman, mayor of Buffalo, at \$19.50 per hundred pounds.

spirit displayed and the evening be voted a big success.

This entertainment was given at our Community Hall and the affair was reported by all to be a great success. It afforded much amusement and required little time and work in its preparation.

COMPETITION IN HONEY MARKET.

THERE is a necessity for concerted action on the part of Michigan bee-keepers if the home market is not to be over-run by California honey, says B. F. Kindig, expert apiarist at M. A. C., in his monthly letter to honey producers of the state.

Because demand on the part of the public has fallen off, because sugar prices have dropped and because a large amount of extracted honey is now in the hands of the producers, the market has tended to slump badly this fall, and the situation would be critical even without the menace of the California inroads.

"The California Honey Producers' Cooperative Exchange of Los Angeles is now putting up California honey in small containers," says Mr. Kindig. "A number of cars of this honey have already been shipped east and the exchange is developing a plan of national advertising which it expects to put into action soon. This will place California honey on the Michigan market at a price which many will hesitate to pay for the Michigan honey which is of much better quality. There are only two ways to counteract this influence: one is to advertise Michigan honey; the other to put Michigan honey into the home of every honey eater in the state. What will we do about it?"

In support of his plea for united action, Mr. Kindig points to the attitude of President-elect Harding, who holds that farmers should be encouraged to join cooperative associations to reap their just measure of reward. He also points to conditions in Wisconsin, where regulations have been promulgated making it compulsory for all out-of-state honey to be labeled.

As for the methods to be followed he declares that "it is becoming more and more evident that an exchange that serves its members best is one that puts up the honey in the packages in which it is to be sold to the consumer. Such an exchange is not entirely at the mercy of the bottlers, but is in a position to do bottling and go out and find a market for their product."—HENSCHAW.

LEG WEAKNESS IN POULTRY.

Please tell me what is the matter with my hens and pullets. All summer one after another became lame, gradually got worse and finally could hardly walk. They appear well and healthy and eat well after the lameness comes on. The roosts in coops are not high. Please tell me the cause and cure.

Lenawee Co. Mrs. S. L. S.
In old birds rheumatism may be the cause of leg weakness. A rapidly growing cockerel seems more subject to the trouble than a pullet. The sick birds should be isolated as the lameness and weakness keeps them from obtaining their share of food and they will be rapidly devitalized if that continues.

Ground bone, milk, and lime water are needed in the ration. Oats will be better than corn as they will give strength without forming fat. The leg weakness most often occurs among heavy breeds which are growing rapidly and eating heavily. Their weight seems to become too great for their strength and they cannot get around.

Birds with plenty of range and exercise are not so subject to leg weakness. By keeping a balanced ration before them and making them scratch for the grain, it is possible to nearly eliminate the trouble in the flock. Lameness is also caused when the

birds are tubercular. In such cases the hen will also become very light and soon die. Sometimes an abscess of the foot will occur. It is commonly called bumble-foot and is due to a prick or bruise on the sole of the foot. In such cases the abscess must be removed and the wound dressed each day with tincture of iodine until healing takes place.

RESOLUTIONS ADOPTED BY FARMERS' CLUBS.

AT the recent meeting of the Michigan State Association of Farmers' Clubs a number of resolutions relating to state and national affairs were adopted. In the following paragraphs is given the substance of these formal statements:

State Affairs.

A change in our school laws to provide a plan of taxation that will conform to a state unit plan was recommended.

The plan of consolidating rural schools was urged upon rural districts and the legislature was asked to amend the law to make the plan of consolidation more easily operative.

The organization commended the activities of the state police and asked the coming legislature to appropriate adequate funds for its maintenance.

The legislature was urged to make an appropriation sufficient to carry on effectively the splendid work inaugurated by the State Live Stock Sanitary Commission, looking toward the eradication of tuberculosis in cattle and stamping out other live stock diseases.

The wool pooling system and a plan of manufacturing wool into blankets and robes were commended.

The legislature was advised and recommended to provide appropriations asked for by the State Board of Agriculture for the erection of needed buildings at the Michigan Agricultural College, and for the carrying on of the work of the institution.

The association went on record as recognizing the State and American Farm Bureau organizations as the outstanding economic agricultural associations of the state and nation.

Endorsement was given to the cooperative soil survey program of the Michigan Agricultural College and the United States Department of Agriculture proposed for this state.

The work of the State Board of Health was endorsed and support offered to localities establishing free clinics and visiting county nurses, and the work of the anti-tuberculosis society was commended.

The members believed that the farmer should be accorded a wage similar to that paid to other labor and a return for his management and investment on a par with that of other industries.

The association asked that adequate appropriation and suitable accommodation be extended to the State Historical Society in order to preserve to future generations the records of the pioneers of our civilization.

The legislature was asked to repeal the law creating a boxing commission and legalizing boxing in this state.

National Affairs.

The effort to establish a continuous waterway from the great lakes to ocean ports was endorsed.

It was recommended that national farm organizations be federated in order that their power may be strengthened.

Congress was asked to place an embargo on wool, woolsens, sheep products and beans until a tariff bill can be enacted.

The full enforcement of the Volstead prohibition law was demanded.

A tariff law to protect the American farmer against the cheap labor in other countries in the production of cattle, wheat, beans and milk was commended.

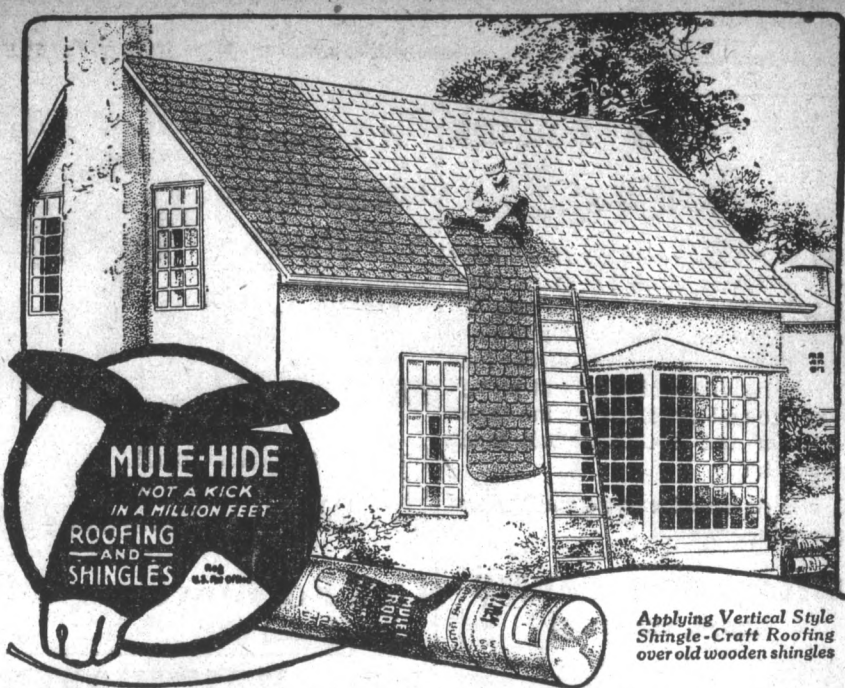
Congress was asked to re-enact immigration laws barring from our shores individuals inimical to the best interests of our country.

They urged the prompt passage of laws by congress outlawing speculation on the future price of farm products.

The appointment of a practical farmer to the position of secretary of agriculture was asked.

In Wisconsin the Equity Union has practically completed arrangements to affiliate with the farm bureau.

First returns from Vermont show that eighty-five per cent of the farmers visited are joining the farm bureau.



Asphalt Shingle Effect —Roll Roofing Price

WHEN cost is an important consideration and quality cannot be ignored, SHINGLE-CRAFT offers a happy medium with its asphalt shingle effect at practically a roll roofing price.

Even though SHINGLE-CRAFT does cost only a trifle more than the ordinary plain slate-surfaced Roofing, it contains the same qualities which have earned for MULE-HIDE smooth finish Roofing that remarkable record of service:

"Not a Kick in a Million Feet"

Any MULE-HIDE dealer can get Shingle-Craft Roll Roofing for you on short notice if he hasn't it already in stock.

If there is no MULE-HIDE dealer in your vicinity write to us direct, mentioning the name of your lumber dealer.

We also Manufacture:

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We still have a few hundred ready to lay pullets bred from our heavy winter laying strain for sale.

Prices quoted on application Baby Chicks and 8 weeks old Pullets in season.

Order Now.

Macatawa White Leghorn Co., Inc.
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400 PULLETS

Now Beginning To Lay.

There are still about 400 of the S. C. White Leghorn Pullets originally offered. These Pullets, six months old first week in December; drooping red combs; pure white. They are now beginning to lay, and will pay for themselves. We have 21 Anconas and 16 White Wyandottes, the last for this season. These are fine birds.

Write us if you are interested. All our stock is reliable. We guarantee everything. Have our 1920 Catalog? If you want to make sure of these Pullets, you should write now.

Cockerels We have 50 fine Barred Rock Cockerels from our well bred Barred Rock Colony. Send for description.

STATE FARMS ASSOCIATION, Kalamazoo, Michigan

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.

Whittaker's R. I. Reds Cockerels offering big bargains R. and B. Combs. Write for price list. Day Old Chicks. Reds only. Breeding stock carefully selected for egg production and color. Eggs for hatching by the sitting or hundred. Our stock is bred in 75 Mich. counties and in nearly 450 Mich. towns. The most popular strain of Reds in the state. Write for free catalog.
INTERLAKES FARM, Box 39, Lawrence, Mich.

BARRED ROCKS

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

Barred Plymouth Rock Cockerels large birds from a prize-winning laying strain \$5.00 each. J. A. BARNUM, Union City, Mich.

Barred Rocks Surplus cockerels all sold. Hatching eggs next spring from stock rich in blood of Parks best pedigree pens. R. G. KIRBY, R. 1, East Lansing, Mich.

Barred Rocks egg contest winners eggs from strain with records to \$30 a year. \$2.00 per setting prepaid by P. P. Circular free.
FRED ASTLING, Constantine, Mich.

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

BRED-TO-LAY S. C. White Leghorns from pedigreed males mated with hens selected by M. A. C. expert as extra heavy layers. Selected cockerels at a bargain. Pullets The Ferguson Co., R. 6, Ann Arbor, Mich.

CHICKS

for 1921 Bred-to-Lay S. C. W. Leghorns. Booking orders now for early hatches. \$10.50 per 50, \$20 per 100, \$35 per 500. Safe delivery postage paid.

SUNNYBROOK POULTRY FARMS, Hillsdale, Mich.
CHICKS! Standard bred White Leghorns and Brown Leghorns. Bred to lay, large white eggs. 50 chicks \$7.50, 100, \$15.00 and 500, \$72.50. Safe arrival guaranteed. Parcel post brings them to your door. Catalog free. Wolverine Hatchery, R. 2, Zeeland, Mich.

CHICKS Pure-bred S. C. White and Brown Leghorns from heavy laying strains. Parcel-post brings them from heavy door. Safe arrival guaranteed, \$15.25 per 100 post-paid. Catalogue free. Royal Hatchery, R. 2, Zeeland, Mich.

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

For Sale R. C. and S. C. R. I. Red cockerels Dark red. Good stock. G. W. VAN FOSSEN, Hillsdale, Mich.

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

FOR SALE Rose Comb Brown Leghorn cockerels \$2 each. White China Geese. Both sex. D. E. SPOTTS, Hillsdale, Mich., 228 Lewis St.

JOHN'S Big Beautiful Barred Rocks are hen hatched quick growers, good layers, sold on approval \$4 to \$8. Circulars photos. John Northon, Clare, Mich.

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

Rhode Island Reds R. O. Standard bred cocks and cockerels \$3 to \$5 each. Address BURT SISON, Imlay City, Mich.

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

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

Single Comb Ancona cockerels Sheppard's strain at \$2.50 each. Mrs. Neil Cochran, Route 2, Tekonsha, Mich.

White Chinese Geese, Order early. White Pekin Ducks, R. C. B. Leghorns. Mrs. CLAUDIA BETTS, Hillsdale, Mich.

Additional Poultry Ads. on Page 801

BREEDERS' DIRECTORY

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

Wildwood Farms Angus

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

Our herd is under State and Federal Supervision.

WILDWOOD FARMS ORION, MICHIGAN

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

WOODCOTE ANGUS

Imported Herd Bulls
ELCHO OF HARVESTOUN (45547)
by Jason of Ballindalloch (38048)
EDGARD OF DALMENY (45501)
by Escort of Harvestoun (36006)
Woodcote Stock Farm, Ionia, Mich.

The 2nd Annual

Mich. Aberdeen Angus Breeder's Ass'n Sale will be held at M. A. O. East Lansing, on Jan. 14, 1921. This space is contributed by Geo. Hathaway & Son, Ovid, Mich. A few females and an aged bull to spare at private sale.

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

RUSSELL BROTHERS, Merrill, Mich.

Head your herd with a son of May Rose Noble of Jean De Luth 38183 and get type and production combined. We offer a few sons out of superior A. R. dams. Some old enough for service. Write or come and see, together with several near relatives of each. We also offer at this time a few high class A. R. cows. PAUL LOVE, St. Austell Farm, Jackson, Mich.

For Sale Having decided to sell part of my herd of pure bred Aberdeen Angus cattle, consisting of males and females of different ages. ANDREW P. EITEL, Vermontville, Mich.

Village Farms Guernseys

for sale High grade milking cows, heifers and heifer calves. Also registered bulls from 1 month to serviceable age whose dams are on test and making good records. Write or come and see the herd. Her Griffin Herdsman, O.J. Winter Prop. Sebawaing, Mich.

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

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

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

Registered Guernseys

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

For Sale 2 Registered Guernsey cows 6 register ed bulls ready for service. Write or write JOHN EBELS, R. 2, Holland, Mich.

Registered Guernsey bulls two ten months old excellent breeding back of them.
GEO. W. REEVES, R. 7, Grand Rapids, Mich.

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



Mr. Datus Clark, Member Farm & Market Council, Albany, N. Y. writes:

"Twelve years ago, my Holstein start cost \$1,100. The thinking farmer can decide as to the financial end. I now have eighty head and have sold as many dollars worth of cattle as I have bought and have made much more in milk than I would have with scrub or grade cattle."

Send for Free Booklets

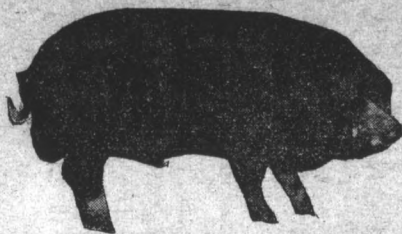
The Holstein-Friesian Association of America
164 American Bldg., Brattleboro, Vermont

Holsteins of Quality

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

Sale BRED SOW Sale

40 Head
Large Type
Poland
China Gilts



Wednesday
Jan. 5, 1920
at farm near
Manchester
Mich.

BRED TO { F's Clansman Grand Champion at Michigan State Fair 1920
Smooth Buster first Jr. yearling boar Michigan State Fair 1920

Sale takes place under cover. All trains will be met A. M. of sale day. Get a sow bred to one of these boars. Send for catalogue. Everything immuned.

Col. Ed. Bowers
Auctioneer

A. A. Feldkamp
Prop.

MR. DAIRYMAN!

Are you using a first class herd sire?
You can't afford to use a poor one.
We have good ones of all ages listed at reasonable prices.
Let us know your needs.

The Michigan Holstein-Friesian
Association

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

NOTICE

The Winwood Herd

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

JOHN H. WINN, (Inc.)

Roscommon, Michigan

Superior Holsteins

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

Bull Calves

sired by my new herd bull, a grandson of

May Echo Sylvia

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

A. W. COPLAND

Birmingham, Mich.
Herd under state and federal supervision

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

The Traverse Herd

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

TRAVERSE CITY STATE HOSPITAL
Traverse City, Mich.

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

"Top Notch" Holsteins

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

Our advertised bulls are selling fast. Here are two good ones:

No. 1. King Vale Colantha De Kol, No. 307701.
Born Oct. 11, 1919.

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

No. 2. Cornucopia Wayne Segis King, No. 318409.
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 38-74 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.

McPherson Farms Co. Howell, Mich.

Our herds under U. S. Supervision.

507.5 lb. milk 22.8 lb. butter aver. of 5 nearest dams of granddaughter of De Kol 2nd Butter Boy 3rd. Due in Mar. to 27 lb. bull. Price \$300. Terms. M. L. McLAULIN, Redford, Mich.

For Sale Holstein-Friesians

A bull calf ready for service. Combines show type and production.

Herd sire, Model King Segis Glista, whose grand-dam is Glista Ernestine, the only cow of the breed that has six times made better than 30 lbs. butter.

Grand River Stock Farms

Corey J. Spencer, Owner
315 N. East Ave. Jackson, Mich.

\$100

Registered Holstein Bulls

Best blood in America. Ready for service, grandson of King of the Pontiacs. Herd sire King of the Pontiac Segis.

Herd under State and Federal Supervision.
JAMES B. JONES FARMS
ROMEO, MICH.

An Introduction

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

ALL THREE are working to a common purpose—to increase the production of Michigan Dairy herds. We believe all three should work together.

We feel sure that no Michigan bull has ever been better equipped for the work.

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

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

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

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

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

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

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

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

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

Cluny Stock Farm

Offers the best selection of young bulls from 8 to 12 months we ever raised; out of dams up to 29.76 for aged cows and over 26 lbs. for 2 yr. olds. Yearly records up to 24000 lbs. milk and 1000 lbs. butter. Sired by our Senior Herd Sire, Maplecrest Application Pontiac, whose dam made 35 lbs. butter in 7 days and 1344 lbs. butter and 23421 lbs. milk in a year, or by Dutchland Konigen Sir Rag Apple, our Junior Herd sire, whose dam is a 30 lb. 10 yr. old maternal sister of Dutchland Colantha Denver who made 36 lbs. in 7 days and 1315 lbs. butter and 2541 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.

Here Is A Good One.

A yearling son of Maplecrest De Kol Hengerveld, The sire having three sisters, each with records of over 1200 pounds of butter in a year, two of them former world champions. Calf's dam sister to three each with records of over 1200 pounds by Pontiac. Aagie Korndyke. This combination of breeding has produced more 1000 to 1200 pound cows than any other of the breed. If progeny counts, where can you equal it? Price \$150.00 for quick sale.

Hillcrest Farm, Mgr. F. B. Lay, Kalamazoo, Mich.

Federal Accredited Herd Bull For Sale Old enough Dams records, 7 da. milk 467.80, 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, and three heifer calves 7 mos. old not related to bull. All for \$500. Vernon Clough, Parma, Mich.

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

Registered Holstein Heifer born Sept. 20, 1920. Sire a son of King Ona. Dam is a 2 yr. old daughter of a 24 lb. cow and a 30 lb. bull. Price \$125 delivered your station.

EARL PETERS, N. Bradley, Mich.

Reg. Holstein bull calf born Nov. 1920 extra choice breeding and individuality, \$80 reg. and del. J. R. Hicks, St. Johns, Mich.

Reg. Holstein Bull for sale. Write me your wants. WM. TANTON, Dockerville, Mich.

Registered Hereford Bull Bargains

In order to reach every farmer and breeder wanting good bulls I will offer for a limited time a few good ones at \$100 to \$125 ages 12 to 18 mo. (act quick). Farm six miles So. of Ionia, Citz. Tel. 122-4.

Jay Harwood & Son, Ionia, Mich.

HEREFORDS

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

Allen Bros. Paw Paw, Mich.

Address Until June 1st. 1921.

907 Osborne St., Kalamazoo, Mich.

Herefords For Sale Fairfax and Disturber blood, 150 Reg. head in herd. reduction on all sires. choice females for sale. Write me your needs. Earl C. McCarty, Bad Axe, Mich.

For Sale Three Hereford bulls, sire Ella's Walker. No. 61517 grand son of the great Beau Real. Address A. L. SMITH, Eckford, Mich. farm eight miles south of Marshall, Mich.

Very Handsome Jersey

bull calf, born July 4th 1920. Solid color, type and breeding such as to satisfy the most critical. Sired by Oxford's Champion Fox 168681 out of Oxford Daisy's Princess, Register of Merit record 8311 lbs. milk, 468 lbs. butter with first calf, milked 50 lbs. per day with 2nd calf. Sister to Sadies Crown Princess 16578 lbs. milk, 1031 lbs. butter in one year. Dam of calf, Eminence's Tormentor Bess, 1st. prize at Kalamazoo Fair, 401 lbs. butter at two years old, 521 lbs. at three yrs. old. Priced very low quality considered, only \$75.00. A few older ones at the same price.

C. S. BASSETT, Kalamazoo, Mich.

The Wildwood Farm

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

For Sale Tuberculin tested Jersey herd consisting of 10 cows and herd sire. Having heifers coming fresh to take their place, I will make a very attractive proposition on these.
E. A. LIVINGSTON, R. 10, St. Johns, Mich.

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

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

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

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

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

Meridale Interested Owl No. 11311 heads my herd bull calves from this great sire and out of R. of M. dams for sale. Leon E. Laws, R. 6, Allegan, Mich.

BIDWELL SHORTHORNS

that will put weight on your dairy calves—the difference 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

Bloomdale Shorthorns

See our cattle get our prices and breeding before buying. Both bulls and females for sale.
CARR BROS. & CO., Bad Axe, 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 service Jan. 15th. We also are offering at the 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.

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

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

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

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

DECEMBER CROP REPORT FOR MICHIGAN.

THE acreage of wheat and rye sown this fall in Michigan is considerably less than last year. The acreage of wheat now on the ground is about four per cent less than the average annual harvested acreage for the past fifteen years. The acreage of rye was more than doubled during the war, reaching an estimated acreage of 900,000 acres in 1919. There was a marked decline last year, and a further decreased acreage was sown this fall, although it is still fifty per cent greater than the pre-war average. The December Crop Report for Michigan, issued by Verne H. Church, Agricultural Statistician, United States Bureau of Crop Estimates, and Coleman C. Vaughan, secretary of state, also shows that the average monthly wages paid by farmers during the past season were twenty-five per cent greater, and day wages from fifteen to twenty per cent greater than in the previous year.

The acreage sown to winter wheat is estimated at 839,000 as compared with 922,000 sown last year, a decrease of nine per cent. Dry weather greatly hindered the preparation of the ground, which, together with a shortage of labor, caused much to be sown late and appreciably decreased the acreage. Germination was slow and uneven, but ample moisture in November and mild weather have given the crop a chance to overcome the handicap with which it started. The condition is eighty-nine per cent which is one per cent below the ten-year average, and three per cent less than last year on December 1. The amount of wheat marketed at mills and elevators in the state during November is estimated at 745,000 bushels, and the total amount since August 1, 5,744,000.

About four per cent less acreage of rye is estimated to have been sown this fall, the amount being 635,000 acres as compared with 660,000 last year and 900,000 two years ago. The condition figure is ninety-two per cent, the same as the ten-year average, but three per cent below the condition one year ago.

The average wages for men hired by the month during the past season were \$53 and board, and \$75 without board. Last year they were \$42 and \$60, respectively. Day wages for harvest labor were \$4.10 with board and \$4.95 without, as compared with \$3.50 and \$4.30 last year. For other than harvest labor they were \$3.30 and \$4.15, as compared with \$2.80 and \$3.60 last year.

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.

Fungus of Scar Tissue.—My mare got a bad wire cut, wounding shin below hock joint, the wound has healed fairly well, but a large bunch of proud flesh is left in wound. What will reduce this bunch? E. N., Reed City, Mich.—It is considered the best treatment to cut off such a fungus growth, then apply a saturated solution of permanganate of potash to wound (cautiously) twice a day. Paint it on with a small brush. Apply equal parts of oxide of zinc and boric acid twice a day. Occasionally paint sore with tincture of iodine. During hot weather such a wound requires diligent treatment, for if neglected it will surely fill with fungus tissue.

Hemorrhage.—I am anxious to know what caused the death of one of my hogs. During summer they were fed chop, milk, dishwater, and some cooked rye. The hogs seemed to thrive. Some time ago I shut them in the pen, grained them heavily, found one dead the other morning, but it had not been sick. A. C., Memphis, Mich.—The cause of death is most likely to be either brain or internal hemorrhage, or perhaps valvular heart disease.

Weak Cow.—My six-year-old cow freshened last spring. One-quarter of udder caked and opened. Local veterinarian removed quarter. The wound finally healed; now she is weak in hind quarters and has trouble getting up. O. W. L., Cedar Springs, Mich.—Apply equal parts of turpentine, aqua ammonia and raw linseed oil to back daily. Give her one-dram doses of ground nux vomica in feed two or three times a day.

ATTENTION—FARMERS AND BREEDERS

PUBLIC SALE OF BIG TYPE

POLAND CHINAS

Thursday, January 6th, 1921

At The

Fair Grounds, Allegan, Michigan

NEVER has there been a better opportunity to procure the blood lines of the most noted families of the breed and at your own price.

40 HEAD 40

Bred gilts, fall yearlings and tried sows, a few fall pigs and some extra choice boars, all from sows from such great boars as

GRAND MASTER—The first big type boar shown actually weighing over 1,100 lbs., the grandsire of the \$50,000 boar and the \$17,200 sow sold from the Grover herd.

MASTODON WONDER—The sire of A's Mastodon, the grand champion of Iowa in 1917.

HILLCREST WONDER—The 1915 Grand Champion.

HILLCREST BOB—By BIG BOB, the greatest progenitor of the big type breed. All sows bred to either Big Smooth Jones, from the noted Jones family, or Bob's Rival by Colonel Bob, that sold for \$2,800 as a pig.

Don't fail to attend this sale. Bring the boys with you. It will be the best investment you can make.

Lunch at 11, sale at 12 sharp, come early and look them over before the sale.

Sale will take place in comfortable buildings, rain or shine.

Write for Catalog to

Den Blyker Brothers, F. B. Lay,
Allegan, Michigan Kalamazoo, Mich.

The Largest and Leading Holstein State Auctions Her Best Cattle!!

175 Head

From Fifty Herds

Show Ring Individuals Guaranteed Healthy Close to Freshening
A LARGE NUMBER OF THE LEADING HOLSTEIN BREEDERS OF THIS COUNTRY
PURCHASED THEIR FOUNDATION STOCK IN NEW YORK STATE

New York is the largest Holstein state in the Union. There are 100,000 Holsteins to choose from. Every popular blood line is well represented. Both long and short time record animals may be secured in this sale. The offerings in this sale have been selected with the idea that they would go to all sections of the country as representative of the very best type the state could produce. They are samples of New York's best. Everyone is an excellent individual; everyone is guaranteed free from disease, and behind each offering stands the state association, combining the leading breeders of every section of New York.

This is the first opportunity afforded buyers in a New York State sale to select exclusively from the tops of its leading herds. It will be by all odds the best opportunity to purchase foundation animals such as have gone to make the breed in other states and such as represent the greatest Holstein state at its very best.

A very large percentage of the offering is either fresh or due to freshen at sale time.

A dozen cows with 30-lb. records; a large number from 30-lb. dams; many yearly records of note represented.

The catalog will be ready January 1st. Get one. Look it over and wire a reservation to Secretary Zimmer who will see that you are comfortably quartered and cared for during the sale.

NEW YORK HOLSTEIN ASSOCIATION
E. R. Zimmer, Secy., Syracuse, N. Y.

First State Sale

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 1919 world's grand champion also Wonder Big Type and Giant Buster. Write your wants, all stock shipped on approval.

CRANDELL'S PRIZE HOGS, Cass City, Mich.

CATTLE

Milking Shorthorns. Bull calves \$100.00 each. Federal accredited Herds. Davidson and Hall, Beland and Beland, Tecumseh, 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 for sale, from 3 mos. to 1 year old, sired by Famous Charmer grand son of Charmer 1919 International Grand Champion. WESTBROOK BROS., Ionia, Mich.

HOGS

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

Fine Registe ed Berkshire pigs for sale, prolific, large litters. O. H. WHITNEY, Merrill, 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.

Brookwater Duroc Jerseys

BOARS—Ready for Service

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

Open Gilts

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

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

BROOKWATER FARM

ANN ARBOR, MICHIGAN

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



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

DUROC JERSEY SWINE

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

For Sale Duroc Jerseys of the big heavy boned type. CHAS. BRAY, Okemos, Mich.

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

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

Duroc Boars ready for service. Sired by Jacks Cherry Orion King number 18829 son of the \$10,000.00 Champion Jacks Orion King 2nd all large type and heavy bone out of good sows. THE JENNINGS FARMS, Bailey, Mich.

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

Write Me at once I have just what you want heavy bone registered Duroc Jersey boars ready for service. W. H. MAYES, L. B. 505, Durand, Mich.

Duroc Jersey boars from 6 mo. to 1 yr. old. Young sows old enough to breed for spring litters all in good condition and at fair prices. Safe delivery guaranteed. W. E. BARTLEY, Alma, Mich.

DUROC JERSEYS

Carey U. Edmonds, Hastings, Mich.

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

Michigana Durocs. We can fill your wants. Several lines of breeding represented including the Sensations. Satisfaction guaranteed. O. F. Foster, Pavilion, Mich.



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

Big Type Chester Whites Spring boars sired by Wildwood Jr. 2nd Hill's Big Bone, Col. Wykoff, Smith's Giant and Champion X Jr. and out of good big dams. Cholera immune and satisfaction guaranteed. Also fall pigs, either sex, not related. N. L. HILL, Jr., Mackinaw, Ill., Tazewell, Co.

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.

Additional Stock Ads. on Page 801

LATEST MARKET REPORTS

GRAIN QUOTATIONS

December 21, 1920.

Wheat.

Detroit.—Cash No. 2 red \$1.96; March \$1.91; No. 2 white and No. 2 mixed \$1.94.

Chicago.—No. 1 mixed \$1.76; No. 1 northern \$1.75.

Corn.

Detroit.—Cash No. 3 yellow, new 83c; No. 4 yellow, new 78c.

Chicago.—No. 2 mixed 72½c; No. 2 yellow 78c.

Oats.

Detroit.—Cash No. 2 white 53c; No. 3 white 51½c; No. 4 white 48½c.

Chicago.—No. 2 white 49@49½c; No. 3 white 48½@49c.

Beans.

Detroit.—Immediate and prompt are lower at \$3.90 per cwt.

Chicago.—White beans steady. Hand-picked beans choice to fancy \$4.25@4.50; red kidney beans \$9@9.50 per cwt.

New York.—Market is dull. Choice pea, new \$5.25; do medium \$5.50@5.75; red kidney \$10.

Rye.

Detroit.—Cash No. 2 rye \$1.60.

Seeds.

Detroit.—Prime red clover \$12.25; February \$12.50; alsike \$17; timothy \$3.50.

Toledo.—Prime red clover, cash and December \$12.10; alsike \$17; timothy \$3.40.

Hay.

No. 1 timothy \$26@27; standard \$25@26; light mixed \$25@26; No. 2 timothy \$24@25; No. 1 clover mixed \$23@24; No. 1 clover \$22@23; rye straw \$14.50@16; wheat and oat straw \$13.50@14 per ton in carlots at Detroit.

WHEAT

On the bear side there is an increase of 40,000,000 bushels in our wheat crop and reports that Argentine wheat was turning out even better than expected. Also the visible supply increased over 5,000,000 bushels. On the constructive side, however, was the discovery that 33,000,000 bushels out of the 48,000,000 in the visible was at the seaboard of Buffalo waiting export. The Canadian visible decreased nearly 3,000,000 bushels. The Saskatchewan crop estimate was reduced 25,000,000 bushels which is in line with current belief that the Canadian official estimate is too large. The Australian estimate was reduced 12,000,000 bushels. The British commission has taken nearly 3,000,000 bushels during the past week and the total export sales in five days were around 8,000,000 bushels. It is said that larger amounts could have been sold were cargoes available. This has taken place in spite of the close of lake navigation, reports of slow flour trade in England, and close approach of the time when shipments can be started from Argentina. The world's stocks of wheat and flour in second hands is said to be the smallest for December in ten years.

CORN

The corn market is weak. Receipts have increased perceptibly but by no means have they reached midwinter volume when the size of the crop is considered. The price is most unsatisfactory so that producers are disposed to hold except when compelled to sell to obtain ready cash. Demand is slow, especially from industries. Export sales of around 5,000,000 bushels for January and February, shipment have been made. The live stock population is gradually reducing but still remains rather large compared with pre-war levels. With lower prices, farm consumption of corn will be heavy. Strength in wheat will affect the corn and oats markets but the position of corn is weak and will remain so apparently for the next two months.

SEEDS

As in nearly all other crops, the government report showed an increase in the clover seed crop over earlier estimates. Total was placed at 1,760,000 bushels compared with 1,341,000 bushels last year, 1,197,000 in 1918, and 1,488,000 bushels in 1917. Wisconsin and Iowa especially show big increase in yield over the November 1 returns.

Prices show little net change for the week, although the report caused a decline. Trade buying is still limited although heavy seeding next spring is expected.

FEEDS

The big decrease in the purchasing power of farmers represented by the decline in the value of their crops, the unsatisfactory markets for live stock, open weather and cheapness of farm-grown feeds causes very light demand for wheat and oil mill by-product feeds. Prices eased slightly during the week. Linseed oil meal has lost practically all its premiums over cottonseed meal.

BEANS

Wholesale grocers are out of the bean market until after the first of the year and inventories have been completed. A few dealers have been forcing the market and the result has been a further decline of 25c to \$3.25 to growers for choice hand-picked beans in the dirt, and \$4 cleaned f. o. b. Michigan points. The action of congress as to an embargo or duty on beans is being watched closely and such a measure, if passed, would immediately affect prices, although at the present time, the domestic market is below the foreign and no importations are coming. The government report estimated the total crop of six states on December 1 at 9,075,000 bushels, a decrease of 289,000 bushels from the November returns.

HAY

According to the bureau of markets, buyers are purchasing hay only from hand to mouth because of the belief that prices should be lower in line with prices for grain, while producers refuse to sell because of extremely small returns. Severe weather which would stimulate consumption and any other factor likely to affect shipments would have a big influence on the market. The average price to producers at \$16.72 compares with \$20.15 last year and \$13.18 for the five years of 1914-1918.

Live Stock Market Service

Markets for December 22.

DETROIT

Cattle.

Receipts 1,025. Market strong, due to light receipts.
Best heavy steers \$9.50@11.00
Mixed steers and heifers 8.00@ 9.00
Best cows 6.50@ 7.50
Handy light butchers 5.50@ 6.00
Light butchers 4.50@ 5.50
Best cows 6.50@ 7.00
Butcher cows 4.50@ 5.00
Common cows 3.50
Canners 2.50@ 3.00
Choice bulls 6.50@ 7.00
Bologna bulls 5.50@ 6.00
Stock bulls 4.00@ 5.00
Feeders 6.50@ 8.00
Stockers 5.00@ 6.50
Milkers and springers....\$ 45@ 80

Veal Calves.

Receipts 1,224. Strong on the good grades; common and heavy slow.
Best \$13.00@14.00
Others 4.50@11.00

Hogs.

Receipts 5,734. Market is generally 25c higher.
Mixed hogs \$ 9.50@ 9.65
Pigs and lights 10.25

Sheep and Lambs.

Receipts 6,165. Good lambs strong; common lambs and sheep dull.
Best lambs \$10.25@10.50
Fair lambs 8.50@ 9.50
Light to common 4.00@ 7.50
Fair to good sheep..... 4.00@ 4.25
Culls and common 1.50@ 2.50

CHICAGO

Hogs.

Estimated receipts today are 21,000; holdover 11,691. Market mostly 10@15c higher. Bulk of sales \$9.20@9.35; tops \$9.65; heavy 250 lbs up medium, good and choice \$9.10@9.30; medium 200 to 250 lbs medium, good and choice \$9.35@9.45; light 150 to 200 lbs common, medium, good and choice \$9.25@9.55; light lights 130 to 150 lbs com-

EGGS AND POULTRY

Egg prices have been suffering recently from the effects of too high altitude as consumption has been reduced. Prices are high notwithstanding the decline when costs of other foods are considered. Poultry prices are holding up well in contrast with the weakness in other meats. Latest quotations are: Chicago.—Eggs, fresh firsts 68@69c; ordinary firsts 59@64c; poultry, spring chickens 25c; hens, general run 20@21c; roosters 18@23c; ducks 26c; geese 24c; turkeys 38c. Detroit.—Eggs, fresh candled 70@73c; live poultry, spring chickens 24@25c; leghorns 20c; heavy hens 24c; small hens 18c; roosters 18c; geese 24c; ducks 32@33c; turkeys 42@43c.

BUTTER

A slight improvement in the butter market was seen this week with a small advance on all grades. Fancy butter was especially in demand while undergrades and storage holdings moved more slowly. Some of the Danish butter has been rejected because of being out of condition. Receipts were lighter than last week at Chicago, Boston and Philadelphia and account to some extent for the recovery. Prices are as follows: New York 55c; Chicago 51½c; Philadelphia 55½c; Boston 53c.

CHEESE

Absence of demand characteristic of the holiday season featured the cheese market during the week. Country markets are barely steady with receipts at distributing points showing increase.

POTATOES

The government report showed another increase in the potato crop, the final returns being 430,458,000 bushels compared with 357,542,000 bushels last year and a five-year average of 382,113,000 bushels. Potato markets continued dull the past week. Growers in certain sections are said to be holding for higher prices. Northern round white stock at shipping points has de-

clined further to \$1.15@1.30. Northern whites bring \$1.35@1.50 per 100 lbs. at Chicago. At Detroit, the Michigan stock is \$2.25@2.40 per 150-lb. sack.

APPLES

The government report indicated a total apple crop of 240,646,000 bushels compared with 153,238,000 bushels last year and a five-year average of 202,698,000 bushels. The commercial crop was estimated at 36,272,000 barrels compared with 26,223,000 barrels last year.

DETROIT CITY MARKET

Potatoes are selling around the dollar mark with the range from 90c@ \$1.10; cabbage 50@94c; apples 50c@ 2.25; onions 75c@\$1; pork 15@18c; poultry 25@28c; veal 18c. These prices represent wholesale values.

FARMERS LOSE FIVE BILLIONS ON CROPS.

THE government report as of December 1 shows that the total farm value of the principal crops produced in 1920 was \$9,148,519,000 compared with a value of \$14,087,995,000 for the crops raised last year, a decrease of nearly \$5,000,000,000 upon the most abundant harvest in our agricultural history. Such is the farmer's reward for increased production urged upon all classes last year and such is his contribution to a lower cost of living. To this loss must also be added the decrease in selling price of live stock, wool, dairy products and other things which come from the farm.

A leading New York bank has recently announced that business has lost about \$2,000,000,000 as a result of trade depression and perhaps \$1,000,000,000 in profits that might otherwise have been received. Shrinkage in inventory values is reported to have lost \$3,000,000,000 more. Since farmers have lost large additional amounts in the same way, particularly through reductions in the value of live stock on farms, it is obvious upon whose shoulders the biggest burden of deflation has fallen.

A RECORD HARVEST.

THE December 1 crop report of the United States Bureau of Crop Estimates was filled with surprises. The total wheat crop is placed at 790,000,000 bushels compared with 750,000,000 a month ago, 934,000,000 last year and a five-year average of 822,000,000 bushels. The corn crop is estimated at 3,232,367,000 bushels compared with the November estimate of 3,199,000,000 bushels, 2,858,509,000 harvested last year and five-year average of 2,760,484,000 bushels. The oats crop was estimated at 1,524,055,000 bushels, an increase of 80,000,000 over the November estimate, and compares with 1,248,000,000 harvested last year and a five-year average of 1,414,558,000 bushels. The barley yield was also increased over the preliminary estimate but the rye crop decreased slightly to 69,000,000 bushels, compared with 80,000,000 last year. Unpublished results of the census returns were used in estimating the yields, it is believed, and this caused the big revisions compared with the preliminary returns.

NOTICE TO GRAPE GROWERS.

The National Grape Growers' Association will hold its second annual convention at Cleveland, Ohio, on January 11, 1921, with headquarters at the Hollenden Hotel. For further particulars and reservations, communicate with Secretary W. H. Asbury, Unionville, Lake County, Ohio. Every bona

COMING LIVE STOCK SALES.

Bred Sows—January 5, A. A. Feldkamp, Manchester, Michigan.
Poland-China—Holsteins. — Thursday, January 6, Hillcrest Farm, Allegan, Fair Grounds, Allegan, Michigan.
Holstein-Friesian.—January 12-13, New York Holstein Association, Rochester, New York.
Aberdeen Angus—Michigan Aberdeen Angus Breeders' Association at M. A. C., East Lansing, Michigan, January 14, 1921.

BUFFALO

Here today medium and heavy hogs were strong at \$10@10.25; yorkers and mixed \$10.50; pigs \$11@11.25; lambs \$11; calves \$16.

Sugar Beet Committee Reports

(Continued from page 784).

price of such article, commodity or transportation at a fixed or graduated figure, or by which they shall in any manner establish or settle the price of any article, commodity or transportation between them or themselves and others, so as to directly or indirectly preclude a free and unrestricted competition among themselves, or any purchasers or consumers, in the sale or transportation of any such article or commodity or by which they shall agree to pool, combine or directly or indirectly unite any interests that they may have connected with the sale or transportation of any such article or commodity, that its price might in any manner be affected. Every such trust as is defined herein is declared to be unlawful against public policy and void."

Further, "that all contracts, agreements, understandings and combination made, entered into, or knowingly assented to, by and between any parties capable of making a contract or agreement which would be valid at law or in equity, the purpose or object or intent of which shall be to limit, control or in any manner to restrict or regulate the amount of production or the quantity of any article or commodity to be raised or produced by mining, manufacture, agriculture or any other branch of business or labor, or to enhance, control or regulate the market price thereof, or in any manner to prevent or restrict free competition in the production or sale of any such article or commodity, shall be utterly illegal and void, and every such contract, agreement, understanding and combination shall constitute a criminal conspiracy."

Then another section of this same statute provides that "the provision of this act shall not apply to agricultural products or live stock while in the hands of the producer or raiser nor to the services of laborers or artisans who are formed in societies or organizations for the benefit and protection of their members."

These last two quoted sections obviously are in opposition to each other, making a correct interpretation of how this law might operate if binding contracts were issued, practically impossible to gauge.

An exactly similar provision to the last previous quotation, in the Illinois statute, so far as agricultural products are concerned, was held unconstitutional by the United States Supreme Court on the ground that it denied the equal protection of the laws, contrary to the fourteenth amendment to the United States Constitution.

In view of this set of facts, which make it obviously seriously questionable the endurance and validity of any binding contracts which might be issued by the farm bureau or any organization to growers of sugar beets in Michigan and because an attempt is being made to have congress enact legislation absolutely defining agricultural collective bargaining, your committee came to the decision that it would be unwise, until a test case might prove growers' rights to agree to sell, and sell as a unit, to recommend issuance of contracts that would undoubtedly be contested by the sugar companies legally if they threatened to accomplish their specified purpose and probably be adjudged criminal. An unfortunate legal precedent thereby might not only be set for Michigan's organized agriculture but for the nation's. Such a precedent would militate against efforts to establish constitutional legislation covering the subject of collective bargaining.

Investigation as to advisability of securing seed and distributing it to contracting growers with the farm bureau was considered. Objections were that such a program would be purposeless and unless the factories could be forced to buy the beets grown. It was found that seed in adequate quantity could be secured and though laid down in Michigan for slightly less than the twenty-five cents per pound the factories have been securing for their seed, the gross saving would not be material enough to warrant establishing the machinery necessary to accomplish the task.

At this time little thought was given the subject of cooperative factories as there is not time enough between now and the 1921 beet harvest to finance and build such an establishment. It was agreed, however, that this was a subject that should be exhaustively and completely investigated.

While in the opinion of this committee, the problems of the sugar beet growers of Michigan are too many and are too complicated to permit of solu-

tion within the next year, or possibly the next few years, it was agreed that it is time that definite efforts be commenced looking toward the answers to the problems in the beet industry. With this thought in mind, it was the consensus of opinion of your committee, after all considerations had been carefully weighed, that a big forward step in betterment of sugar beet producing and marketing conditions may be taken immediately and in harmony with this judgment the following recommendations are submitted for action at the pleasure of this convention.

1. That the executive committee of the Michigan State Farm Bureau create a sugar beet growers' department of the Michigan State Farm Bureau which will have an advisory board of five members to be elected by the representatives of the sugar beet growers of the several sugar beet producing counties of Michigan, placing the sugar beet growers in position to work in harmony and conjunction with the other interests in the Michigan State Farm Bureau.

2. That all publicity for the beet growers and their department of the Michigan State Farm Bureau be handled through the regular publicity channels of the Michigan State Farm Bureau.

3. The sugar beet department of the Michigan State Farm Bureau put in circulation in the various sugar beet producing counties of the state, when the advisory board may deem the time appropriation contracts in the form of power of attorney for individual growers to sign authorizing the Michigan State Farm Bureau to act as selling agent for beets grown by the individual over a period of years; that this solicitation of these individual contracts be made locally in each of these several counties under the supervision of the sugar beet department of the Michigan State Farm Bureau; that these contracts further include a pledge of the individual, supported by a collateral note for an appropriate sum, to pay to the sugar beet department of the Michigan State Farm Bureau a sum amounting to five cents per ton of sugar beets that he may grow for the financing of this department of the Michigan State Farm Bureau and its development, such moneys to be assembled in the various counties for the sugar beet department of the Michigan State Farm Bureau.

4. That the immediate work of this sugar beet department of the Michigan State Farm Bureau include efforts to have enacted appropriate legislation to facilitate the solution of sugar beet marketing and production problems; complete investigation preliminary to building and equipping sugar beet manufacturing plants, such investigation to include all costs, available and appropriate sites, machinery, etc., annual labor survey in cooperation with the various sugar beet refineries in the state intended to make possible the securing of the best type of labor in adequate numbers; improvement of seed culture and distribution; improvement of unloading devices, methods of tare, etc., disposition of by-products of sugar beets.

After the adoption of this report Mr. C. E. Ackerman, of Shiawassee, was elected as Michigan delegate to the national federation meeting of sugar beet growers. An advisory board was then chosen by election as follows: Mr. Reavy, of Tuscola; L. H. Kirtland, of Monroe; James Price, of Saginaw; C. E. Harriot, of Clinton, and A. C. Smith, of St. Clair.

The accredited delegates from the various counties to this meeting were: Wayne—August Bunte and John Near; Isabella—Paul Mossholder and W. J. Hazelwood; Gratiot—Bert Millinger and Arthur Humphrey; Monroe—Fred Van Buren and Robert Stearns; Tuscola—D. B. Pinkerton and C. P. Hoover; Barry—Wm. McGhan; Clinton—Albert Nicols and George Fiedewah; Lenawee—Otto Wagner and H. F. Knoblauch; Lapeer—John Phelps and W. B. Wilson; Missaukee—Abe Lendtke, J. W. Schaefer and W. E. Bowler; Eaton—Clifford O'Neil and P. Smith; Sanilac—Phillip O'Connell; Saginaw—Henry Miller and Deb Terry; Midland—G. F. Histe; Shiawassee—A. Dennison and C. E. Ackerman; Bay—C. R. Oviatt.

After several addresses by delegates and others the meeting adjourned.

WOOL

Wool markets in the United States quieted down after the slight spurt of the preceding week when about 4,000,000 were sold. Foreign markets continue to slip, the latest auction in London being at the lowest level of the season on crossbreds. Australian growers are resisting the decline by heavy withdrawals from their auctions. The American Woolen Company sold over 8,000 pieces of overcoating cloth during the week, prices averaging about 30 to 40 per cent of the January, 1920, opening prices on these goods. Goods prices formerly at \$2.40 were sold at 80c and most of the goods sold below \$1 a yard. Figures on wool consumption during October show a total of 38,510,000 lbs., which is about the same as during each of the preceding three months. Normally, consumption averages about 50,000,000 lbs. monthly although that figure was exceeded under war and early post war conditions. The reduction of 22½ per cent in wages of textile workers affects cotton workers chiefly but some woolen mills are included. Latest quotations at Boston partly nominal are as follows: Ohio and Pennsylvania fleeces, delaine unwashed 45@48c; fine unwashed 30@31c; one-half blood combing 33@35c; three-eighths blood combing 28@29c. Michigan and New York fleeces, delaine unwashed 44@45c; fine unwashed 29@30c; one-half blood unwashed 32@34c; Wisconsin and Missouri and average New England one-half blood 28@29c; three-eighths blood 26@27c; one-quarter blood 24@25c.

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

Kentucky homespun smoking and chewing tobacco. 10 lbs. \$3.00; 20 lbs. \$5.00; 100 lbs. \$18.00. (Paul Ford, Agent, Jonesboro, Arkansas.)

POULTRY

S.C.R.I. Reds Carver and Whittaker's strain. Cocks and Cockerels. Price from \$3 to \$5 each. Alfred Deichmann, Pigeon, Mich.

White Wyandottes 15 pullets at \$2.50 each. 1 pen \$15.00. Cockerels from stock with 20 eggs average \$5.00 and \$8.00 each. Eggs for hatching \$2.00 per 15.
FRANK DeLONG, R. 3, Three Rivers, Mich.

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Michigan's best Giant Bronze breeding stock. Very large, excellent color, health and vigor guaranteed.
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Pure Bred Bronze Turkeys

Mrs. EUGENE RAMSDALL, Hanover, Mich.

White Holland Turkeys White African Guineas 80 acres of them. Reference C. H. Burgess, Prof., Poultry Mich. Agr. College, Farm for sale. Alden Whitcomb, Byron Center, Mich.

Bourbon Red Turkeys. Evans strain. Large well marked birds. Write for prices.
CHAS. A. BEATTY, Milford, Mich.

For Sale Bourbon Red Turkeys Select your breeding stock now.
SMITH BROS., R. 3, Augusta, Mich.

HOGS

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. 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 ½ mile west of Depot. City's Phone 124. Otto B. Schulze, Nashville, Mich.

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

O. I. C. Serviceable boars. A few extra good boars at farmers' prices.
H. W. MANN, Danville, Mich.

O. I. C's Fall pigs by O. C. 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.

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," by "Giant Buster," "A Giant" "Butler's Big Bob." Two of the best yearling prospects in Michigan great length, big bone. Come get your pick. Jno. C. Butler, Portland, Mich.

Large type Poland China's spring boars ready to ship. Everything immune from Cholera.
A. A. FELDKAMP, R. No. 2, Manchester, Mich.

L. S. P. C. a few choice boars at farmers' prices, 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 Masfodon 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.
C. E. GARNANT, Eaton Rapids, Mich.

For Sale O. I. C. Swine. Strictly Big Type with quality. Have a few 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.

My! Oh My! What An Opportunity

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

You can't get better breeding. Individually they will please you. Price \$50.00.
HILLCREST FARM, Kalamazoo, Mich.

L. T. P. C.

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

Big Type P. O. 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.

L. T. P. C. Spring boars and gilts now ready to ship. Something good at a right price.
W. J. HAGELSHAW, Augusta, Mich.

Big Type Poland Chinas spring gilts bred to grand son of the Clansman for April farrow also fall pigs registered and delivered to your town for \$20.
DORUS HOVER, Akron, Mich.

Big Type P. C. some very choice boars double immune, out 1100 lb. sire and mammoth sows from Iowa's greatest herds. E. J. Mathewson, Burr Oak, 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 sows and gilts.
G. A. BAUMGARDNER, R. 2, Middleville, Mich.

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

HAMPSHIRE spring boars and fall pigs at a bargain book your order now for bred gilts.
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Special Offer For December we will take orders for 1921 spring gilts bred for Mar. and Apr. farrow 1921 at \$50 each excellent breeding. Gilts to be shipped when safe in pig. Write or come and make your own selection at once.
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SHEEP

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Shropshire Rams lambs, yearlings and one 2 yrs. old, priced right.
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Wool-Mutton Shropshire Rams. Good strong bred, priced right. A. H. FOSTER, Allegan, Mich.

Registered Shropshire Rams and ewes all ages for sale. Well-wooled with size and quality. Priced to sell.
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Registered Shropshire Ewes and rams.
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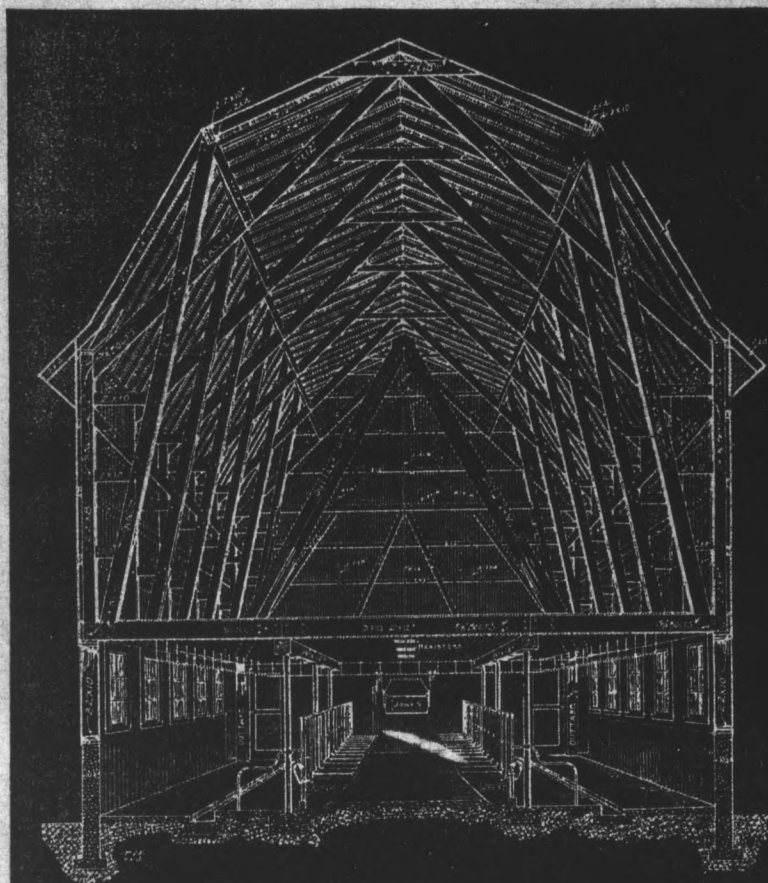
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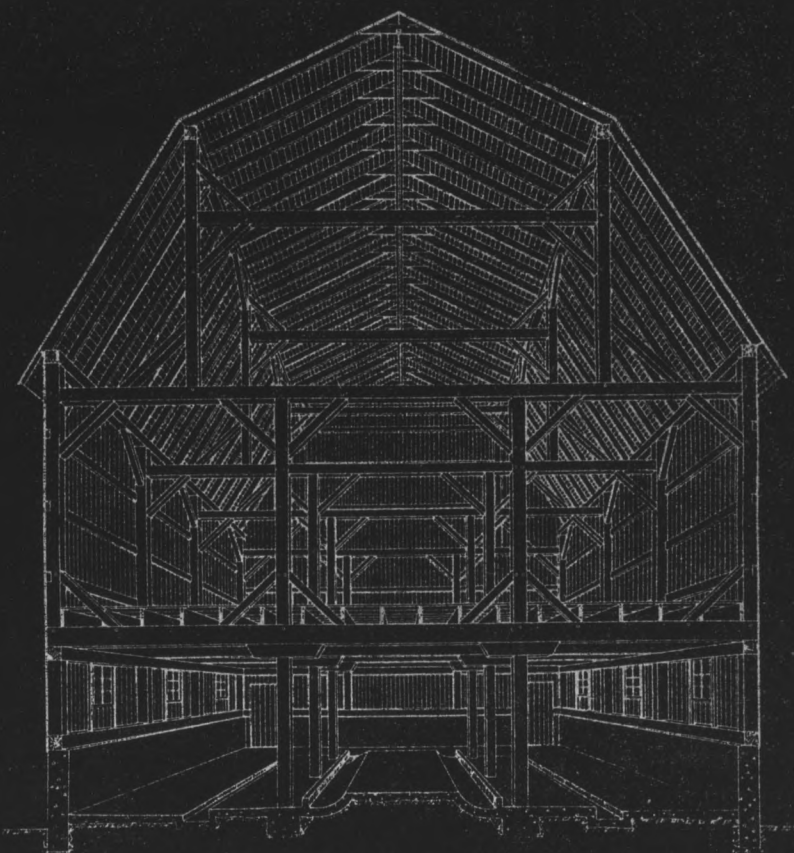
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You Build But Once—Be Sure You Plan It Right



THE JAMES WAY



TYPICAL TIMBER FRAME CONSTRUCTION

9 trusses for 100-ft. barn like this requires 706 board feet. At \$60 per M—\$381.24.

Which is the better way?

9 trusses like this requires 1266 board feet at \$80 per M—\$911.52. A difference of \$530.29.

Mistakes on paper are easily rectified and buildings on paper are readily moved. Once built, changes can be made only at great expense.

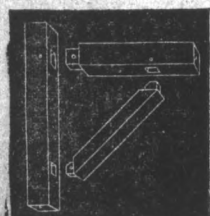
It pays to plan a remodeling job or a new dairy barn, *on paper, before* the foundation is dug, *before* the carpenters come, *before* actual work is begun.

The dairy barn is your factory, your workshop, in use almost daily throughout the year.

If it is not built right, if it is not correctly planned, it may lose you money every day.

Wrong location of posts, inconvenient arrangement of feed bins and feed rooms, incorrect arrangement of carrier tracking or stalls or pens, or the wrong designing of the hay loft, may compel you to take more steps, do more work and pay out more money for help each day during the life of the barn.

Save Work Daily — Save Building Costs



A chain is no stronger than its weakest link. A timber is no stronger than its tenon.

sages and alleys—even these small errors may be a source of daily expense and annoyance.

A barn correctly designed and built right in every detail is a constant money maker because it is a constant money saver.

If rightly planned, cow comfort and cow clean-

liness may be assured; plenty of light, abundant ventilation and easy disposal of litter will be provided; floor space will be used to best advantage; and all the chores made easy. In many a case, careful planning has cut barn work squarely in half.

What a barn will cost depends in no small degree on the care with which it is planned in advance.

It is no uncommon thing to see a man with the "Know how" build a barn at 20% to 30% less cost than

another, although the barn accommodates the same number of cows.

And the man with the "Know how" gets a handsomer building, more convenient and better.

How to Get the Low Bid

Regardless of who designs the barn it is well to submit the final plans to several contractors, getting bids from each.

By having as many sets of blue prints and specifications as there are contractors figuring on the barn, you can safely let the contract to the lowest bidder.

You get the low price, and the successful bidder binds himself to give you the same workmanship, construction and materials as those who bid higher. You hold him to the blue prints and specifications.

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To help our customers and others get the best barns possible, we, years ago, established the Jamesway Barn Plan Service under direct supervision of Mr. W. D. James, known as the leading dairy barn authority in the U. S.

Associated with him in this department is an architect and engi-

neer of unusual experience in ventilation, reinforced concrete, steel work and structural design.

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