

MICHIGAN FARMER

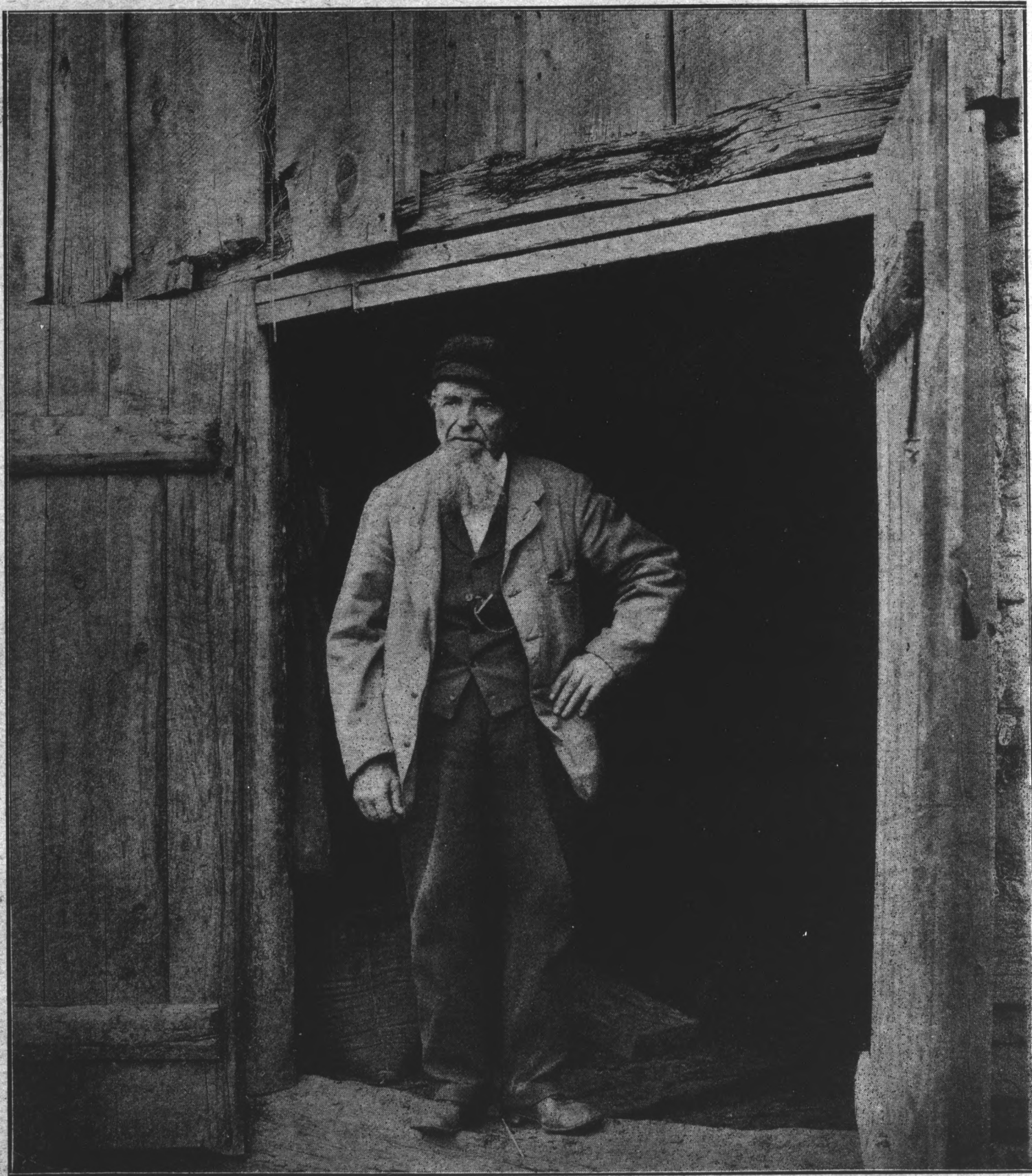
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VOLUME CLXIV NUMBER FIFTEEN

DETROIT, OCTOBER 7, 1922

CURRENT COMMENT

THE MICHIGAN FARMER SAYS:

Don't put off until next spring what you can do this fall.

If you make your chickens lay for you, the bill collector won't.

A little oil in time on proper places will prevent future long faces.

Time is money when spent in proper seed selection.

Man has an advantage over animals in that he can act well-bred even though he is not.

Guessing and gambling go together. Take the guess-work out of farming and it will be less of a gamble.

You are putting your crops away for the winter. Are you doing as much for your farm machinery?

Michigan sugar growers do not raise "cane" but they "beet" the other fellows to it.

The Income Tax Issue

NEXT month we shall have the opportunity to go to the town hall and vote on an amendment to the state constitution granting to the state legislature authority to provide for an income tax scheme, the funds for which will go toward the support of the state government.

It was largely through the efforts of farm organizations and farm leadership that this opportunity was made possible. In fact, the resolution received practically the united support of the representatives from the rural districts.

The nature of the amendment, however, is arousing wide opposition. Large classes of voters who live by their wits, or who require no property of their own to earn their income, will vote solidly against this measure. These people are not asleep and when the count is made the "nays" will aggregate no small number.

The only hope for passing this amendment lies in a full vote from the rural districts of the state. There will of course, be much support from real estate owners in our towns and cities, but the bulk of the votes must be put in the ballot boxes by farmers. The time is at hand when every voter in every township would be apprised of this chance to aid in leveling the burdens in our state taxing scheme. If

lost now the chance may not come again soon, since the ratio of farmers and real estate owners to other classes of votes is gradually diminishing.

The farm bureau, the grange, the gleaners' arbor and the farmers' club will all have their part in the fight for this change in our organic law. Some systematic movement, however, should be inaugurated toward enlisting the active support of those who are not identified with any of these organizations as their votes will be needed to carry the measure.

It has been suggested that every farmer reader take it upon himself to talk to his immediate neighbors about the necessity for getting out a full farmer vote at the coming election. We heartily concur in the suggestion and pass it along with the hopes that it may make possible a full registration of votes on the income tax amendment to the state constitution.

Opportunity for Improvement

LAST week poultry tourists covered about two hundred miles in order to see about a dozen places where they have been getting some profitable results with chickens.

It seems that this is an indication that you have to go a long way to find instances of accomplishment in even such a common thing as chicken raising. The hundreds of farms which were passed had chickens which were either producing a meager profit or none at all because, like Topsy, they "just grewed up" instead of being given the little extra care and attention which would make them useful and profitable members of the barnyard congregation.

Investigation shows that about one-third of the hens in the state are eating their heads off, but literally their heads are left on because the farmer can't pick them out. Three million hens in this state could be sent to the market and the egg production of the state suffer very little, while the profits of Michigan poultry raisers would be greatly added to.

Good stock, well taken care of, is just as essential to success in keeping poultry as in other lines of live stock. It is that little extra care and attention to proven and well-known principles of production that mean so much in results. In many cases if it means nothing else, it will mean more pin money for the farmer's wife, to which she is more than due.

Every farmer, regardless of the size of his flock, should avail himself of the profit-producing information Mr. E. C. Foreman and his associates are spreading, so as to do his share to get rid of the state's three million star boarders. In attempting this he will not only help to make Michigan famous as a poultry state, but he has the positive assurance that greater profits will be his reward.

Europe's Sugar Crop

SINCE sugar prices are dependent upon world production and consumption, our farmers will be interested in reports on this crop just received from Europe.

This official statement is to the effect that the August estimate of an excess of 500,000 tons over last year's production for all Europe except Russia, must be revised downward. At the present time the official estimates are placed at only 225,000 tons above last year's out-turn.

This reduction comes about largely through the lower content of sugar in the beets. During the summer just past the weather in Europe has favored leaf growth to the detriment of the root and the average sugar content in Germany has been reduced from 17.8 last year to 15.2 this year; in France

from 16.2 to 13.38 and in Belgium from 15.8 to 13.3.

Furthermore, indications point to an improvement in the consumption of this product by many European countries. The per capita consumption of sugar in the United Kingdom before the war was eighty-six pounds, of which fifty-nine pounds were absorbed for domestic consumption. Since the war began that consumption dropped to an average of seventy-one pounds, with but fifty-two pounds used in the homes. There is reason for believing that the appetite of the Englishman will be calling for more and more sweets, and the reports of trading for the first seven months of the present year bear out this belief. During that time the total consumption of sugar for this year was 938,135 tons as compared with 814,837 tons for the same period in 1921. Thus England alone will take nearly one-half of the estimated 225,000 pound surplus. In Italy, too, a much heavier consumer of sugar is evident this year and the same trend is apparent in France and some other districts of the continent.

The conclusion is that the sugar situation in Europe cannot be used to force down prices in this country for the 1922 output of sugar.

Key Days in Farming

JUST as there are a few instances in each person's life that have a far-reaching influence over his whole life, so do we find in each year of any farmer's work a few days' labor that count a hundred-fold more for success than does the ordinary daily routine.

Usually these days do not come by accident. They are key days in the year's work. The careful farmer plans to see that no other duties disturb when it is time to perform these all-important tasks.

On another page of this issue is reported the account of selecting seed potatoes for next year's crop. Days spent at this type of work are key days to the farmer. If he hopes to accomplish more next year than he did this year or last year, then he should count the hours used in the selection of good seed potatoes, or good seed corn, as all important.

By working hard, two men possibly can dig and select a sufficient quantity of potatoes to plant five acres of ground next year. According to tests and observations, it has been found that the average crop from high-class seed shows an increase of from twenty to ninety bushels per acre when compared with a crop grown from ordinary seed. Men who follow close culling of seed year after year are producing, according to our experts, double the yields of potatoes that the common grower secures.

If this be true, and we have no reason for questioning the conclusions of these men, then two or three days' work in the potato field before the regular crop is dug, may mean nearly as much in next year's crop as the entire labor for 1923 will accomplish. Don't overlook the key days, whether you are growing potatoes, or corn, or cucumbers. They are the days that unlock to you the extra yields and add to the profit side of the ledger.

The Country Doctor

PERHAPS it is because we, in health or in sickness, have not appreciated what service the country doctor is giving that the number of men who are fulfilling his duties is growing less and less every year.

As compared with others of his profession, the country doctor's life is not an easy one, for he often travels out into the night on roads of uncertain

passability and in weather of varying degrees of discomfort, to give comfort and alleviation to those in pain.

Because he acts the part of the Good Samaritan in giving an unselfish service, his field of endeavor is not attractive to the young doctors who seek fertile fields in which to establish their practices. Therefore, the country doctor is an older man than his city colleague, who usually has to serve about twice as many persons to maintain a good practice. When one of these doctors retires, it usually means one less doctor in the rural field.

This diminishing supply of country doctors is already attracting the attention of those who are studying the problems of rural development. Individually we can do our bit by showing our appreciation of what the country doctor is doing.

Chickens

MR. WEBSTER'S book, what's full of words, but empty of sentences, says chicken is a domesticated fowl. That's all right as far as Mr. Webster goes, but he don't go far enough. For inst., I would say that chicken is a live individual what has got the habit of layin' for us. Some is wild but some is got sufficiently domesticated to approach without danger.

Last week I had one of these business trips men often make but, like the rest of the men's wives, Sophie didn't know I was out lookin' over the chickens. And they was these what



you call a classy kind of chickens I went to see, too.

For inst. Most all of them wore these interestin' short skirts what come no lower than the knees and from there

down they had on these white, or tan stockings, they call nude color, what makes them look like they ain't got none on. They all wore red hats, which is very becomin', but they had on different kinds of dresses, some was white and some red, while others was black, which the sales lady at Jones' store told Sophie is the prevailin' color this fall.

Somebody says that the best way to find a girl out is to call on her when she isn't in. Now, the man what was with me, who was awful good at pickin' them out, says that ain't necessary, 'cause you kin tell by lookin' at a chicken what her reputashun is. He says, too, most any man kin learn how to do this. If that is so, I think it should be part of what you call the compulsory educashun of the young man before he embarks in the chicken business, 'cause it is very important to know whether you are going to become attached to a star boarder or the kind what is industrious and has got a good reputashun.

Now, even if I am married, I just wish I could tell a chicken. But they say you gotta be awful careful of what you tell them, otherwise you maybe have to suffer what they call the consequences. So I'm goin' to be careful, 'cause I don't like such sickness.

I know this much, the birds with the finest feathers ain't the best kind. They are the kind what is expensive to have anything to do with. They are the kind what make you get your own breakfast, instead of furnishin' eggs for it. They spend too much time fixin' up and showin' their beauty.

Now, in closin', I want it, what you call specifically understood for family peace, that all this time I have been talkin' about the chickens what go to bed with their clothes on and stand sleepin'. They ain't roosters, but they roost just the same.

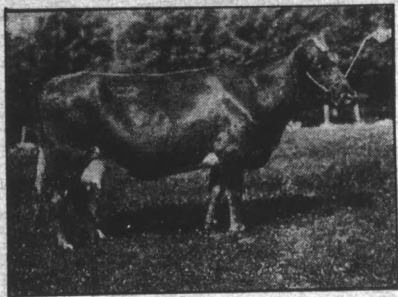
HY SYCKLE.



The Type of Scrub Cow Used as Foundation Stock.

MICHIGAN will tell visitors at the National Dairy Exposition at Minneapolis next week, how to get good dairy cows at comparatively small cost. These visitors will not receive this information through the ear but via that more impressive route, the eye. The men who are putting on this exhibit will have the goods to show very concretely what has been done.

The exhibit comes from Alpena county. The American Guernsey Cat-



"Rosy," a One-half Blood.

tle Club has prevailed upon the Leer Guernsey Breeders' Association of the above county to exhibit specimens showing the improvement that has been wrought in the dairy herds of that community through the use of pure-bred sires.

One of the outstanding features is that prior to the year 1909 little or no effort had been made to improve the live stock in the Leer community. As a common practice sires were selected from their own herds and by that process of inbreeding of scrub cattle the herds were constantly degenerating, producing as a result, a very inferior type of scrub cattle, as shown in the accompanying illustration.

Finally, on May 22, 1909, as a result of the untiring efforts of Mr. W. T. Raven, Dairy Extension Specialist, Michigan Agricultural College, the



"Daisy," a Three-fourths Blood.

Alpena Tells the World

Leer Farmers' Exhibit at National Dairy Exposition Shows How Good Cows Were Produced

By C. O. T. Scheetz

Leer Guernsey Breeders' Association was organized with twenty charter members who subscribed a total of one hundred thirty cows. A sufficient sum was raised to purchase three registered pure-bred Guernsey sires.

Each of the three sires were placed at the head of a number of herds giving a total of not less than forty cows for each group. A breeding fee of one dollar per cow was charged by the association. The funds obtained in that manner were used to defray the expenses of maintaining the sires and to assist in replacing sires as it became necessary to do so. The association has found that small sum sufficient to carry on this very fundamental work.

The herds of the association members are divided up into three groups and each sire is used two years in each group. When the circuit of the groups has been made by each sire he is then replaced by another registered pure-bred sire. During the life of the association to date, eleven different sires have been used. Each time a new sire is needed the members insist that only the best obtainable will do.

The good effects of that practice is



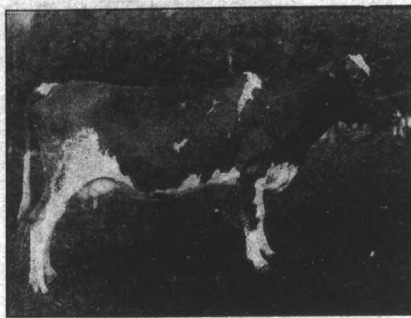
"Dimples," a Seven-eighths Blood.

clearly shown by the desirable confirmation of the offsprings—and the attractive prices that have been received for the surplus stock which were sold. As a matter of fact, the temptation to sell has been so great—as to threaten the financial affairs of the association, because of the reduced number of cows in the present association.

Here is another influential factor which has resulted. Each year the association has an assembly of their Guernseys, known as the Leer Guernsey Breeders' Association Fair. At this time the individuals shown are classified according to their age and placed by an expert judge, who likewise gives his reason for the placings. By this measure the members of the association are constantly kept up to

date and guided in the selection of their breeding stock.

Special effort is now being made and fortunately, the plans are nearly completed whereby each one of the members is going to be the proud owner of at least one pure-bred Guernsey



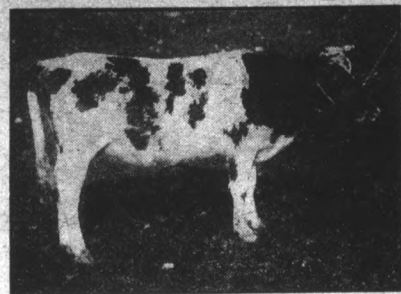
"May," a Fifteen-sixteenths Blood.

heifer as a start toward the production of pure-bred Guernseys instead of all high-grades.

Furthermore, the organization of a cow-testing association is likewise nearly completed so that production records of each individual may be had.

Two pure-bred Guernsey sires are at the present time owned by the association, one of which will accompany the exhibit to the National Dairy Show.

The exhibit to the National Dairy Show will consist of a sire known as Golden Berkshire No. 32039 whose sire was Glenwood May King of Ingleside No. 18265. Dam, Imported Poll II of the Nicolles No. 31651. The females



"Blossom," a Thirty-first Thirty-Second Blood.

consist of the several following: A genuine scrub cow (representative of foundation stock).

One-half blood, named "Rosy."

Three-fourths blood, named "Daisy."

Seven-eighths blood, named "Dimples."

Fifteen-sixteenths blood, named "May."

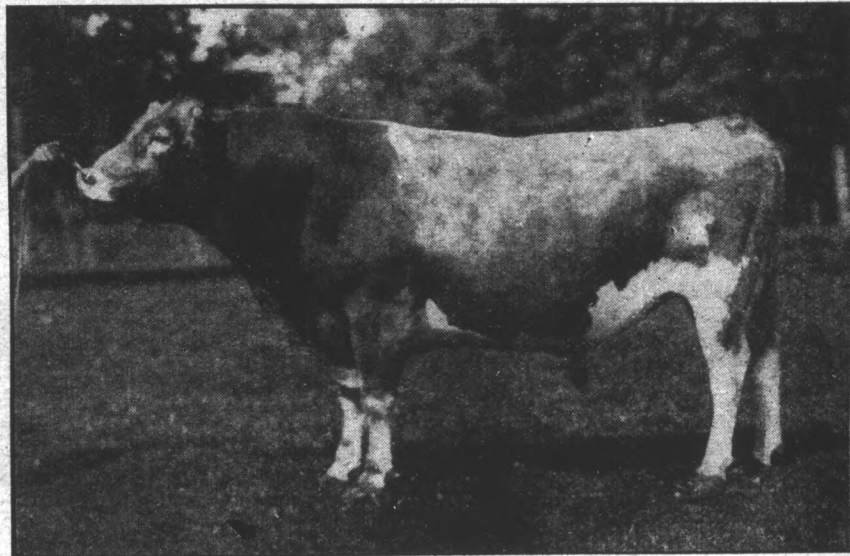
Thirty-one thirty-seconds blood, named "Blossom."

Unfortunately the only sixty-third sixty-fourth blood born to date proved to be a male.

A continued improvement in the cattle is shown by the succeeding generations, and as a result of the efforts of the Leer Guernsey Breeders' Association there are now approximately twelve hundred grade Guernseys distributed throughout Alpena county and neighboring counties.

The officers and directors of the Leer Guernsey Breeders' Association at the present time are as follows: President, William Barsen; secretary-treasurer, Neil Bensen; directors, Marton Barson, Hans Hansen and H. J. Henderson.

Other members of the organization are: A. W. Anderson, Sigward Anderson, C. J. Anderson, Torval Bensen, Barney Bensen, Thos. Bensen, George Carr, Anton Christensen, George Enger, Hans Hawkinson, Truls Hansen, Olaf Munsen, Martin Olsen, Otto Olsen, Jens Wong, Thomas Wilson.



"Golden Berkshire," No. 320329, One of the Excellent Pure-bred Guernsey Sires Now Being Used by Members of the Leer Association.

Cabbage, Celery and Onion Crops

Outlook in Michigan is for Yields Above the Average

MICHIGAN'S crops of cabbage, celery and onions are in excellent condition and promise better than average yields, according to the report issued September 21 by Charles Sperle, U. S. Special Truck Crop Reporter, in cooperation with Verne H. Church, Agricultural Statistician, and the Michigan State Department of Agriculture. A special survey has just been completed of the acreage and condition in the leading commercial sections and is summarized in the following report:

Cabbage.—The condition in Saginaw county is 100 per cent of normal and with continued favorable weather the average yield will be about ten tons

per acre. About one-third of the crop has been harvested to date, and 305 cars have been moved. Twenty-two per cent of the 1,400 acres in that district is under contract.

The crop of 200 acres at Charlotte, Eaton county, is in excellent condition. One hundred and sixty acres is under contract for kraut, the remaining forty acres is available for market. There is sixty-seven acres under contract near Jackson, and this is in excellent condition. There are 250 acres at Mason, of which forty-five is under contract. Two cars have been shipped to date. The total shipments last year from this point were sixty-five cars.

At Jonesville, ten per cent of the

200 acres has been harvested and all but seventy acres is under contract. At Quincy, 170 acres of the total of 250 is under contract. The growth of the late crop has been retarded by hot weather and there has been some worm damage. Coldwater has 350 acres of which 100 acres is early. Sixty per cent of this has been harvested. Approximately two-thirds of the entire acreage is under contract. The early crop is Copenhagen and the late, Kraut King.

The crop in Berrien county has been seriously injured by worms. The condition at this time is only about forty per cent of normal. In Cass, Branch and Hillsdale counties, the condition averages about eighty per cent; in

Jackson, Eaton and Ingham counties, from ninety-five to 100 per cent.

The 1922 commercial acreage in these eight commercial producing counties shows an increase of 123 per cent over last year. The estimated acreage is 3,108 as compared with 1,392 acres last year; the acreages by counties for 1922 being: Saginaw, 1,400; Branch, 600; Ingham, 300; Eaton, 250; Hillsdale, 233; Berrien, 150; Cass, 100, and Jackson, 75 acres.

Celery.—Commercial celery is produced in eight counties, the total acreage this year, according to preliminary estimates, being 3,850, located as follows: Kalamazoo, 1,040; Ottawa, (Continued on page 364).

LATE AGRICULTURAL NEWS

STANDARD CONTAINER BILL.

THE Vestal standard container bill, providing legal dimensions for hampers, sound stave and splint baskets for fruits and vegetables has passed the house and is now before the senate. It would eliminate fake measures and many unfair practices.

TRUTH-IN-FABRIC BILL UNDER OPIATES.

THE Truth-in-Fabric bill is still in committee, with little prospect of being pried out so long as Chairman Winslow of the inter state and foreign commerce committee, the Massachusetts hefty weight, sits on the pigeon holes.

POTATO EXCHANGE HAS NEW MANAGER.

AT the last meeting of the board of directors of the Michigan Potato Exchange, C. C. Wells, editor of the organization's magazine, and auditor of the exchange, was made acting manager. The resignation of A. B. Large was accepted at the same meeting. O. S. Wood, a leading farmer, banker and cooperator of Mecosta, and a member of the board of directors, was appointed to supervise the activities of the exchange. He will spend a portion of each week assisting Mr. Wells.

Few persons are better known among the potato growers and the co-operative managers than Mr. Wells. In his position as editor of the Potato Growers' Magazine he was brought in very close relations with the growers and as auditor of the books of the various associations an intimate personal acquaintance with the managements of the hundred or more associations resulted. This, together with a detailed knowledge of the entire business and the aid of Mr. Wood, should place the exchange under very safe management.

INCREASE LIMIT OF FARM LOANS.

THE American Farm Bureau Federation is backing the bill to increase the limit on individual loans made by the Federal Land Banks, through the cooperative farm loan associations, from \$10,000 to \$25,000. The joint stock land banks have a loan limit of \$50,000 to any one person.

MUSCLE SHOALS NOT DEAD.

THERE is a strong probability that the President will call an extra session of congress about November 15, in an attempt to secure action on the ship subsidy bill; but there is much doubt that he will be able to assemble a quorum in so short a time after the election.

Whatever may be the primary object of the President in calling an extra session, there are several bills that undoubtedly will have precedence over the ship subsidy. The American Farm Bureau Federation is confidently predicting that the Muscle Shoals proposition will come up first if an extra session is called. It is out of both committees and the fight will be on the floor of the house and senate. None of the reports on the proposal except the one prepared by Senator Ladd in favor of accepting the Henry Ford offer has met with any favor.

The \$7,000,000 appropriation for continuing the work on the dam at Muscle Shoals, which was due to begin October 1, commits the government to the completion of the dam, and nar-

rows the project down to two proposals—government ownership and operation or acceptance of the Ford offer, which means government ownership but government controlled private operation.

Proof is coming to the American Farm Bureau Federation's Washington office that the people everywhere are taking great interest in the Muscle Shoals proposition. There is no legislative proposal now before the public that is receiving more attention. Many farm bureaus are sending in resolutions that they have adopted in favor of the government accepting the Ford offer.

MANY LAWS ENACTED.

DURING its second session, the sixty-seventh congress enacted about 300 laws out of 3,498 bills and 358 resolutions in the house, and 1,249 bills and 289 resolutions in the senate. Appropriations of the session aggregated \$2,250,000,000, and \$3,751,917,000 was made available, altogether, for the government needs during the fiscal year.

APPROPRIATIONS FOR AGRICULTURE.

APPROPRIATIONS under the budget system are now up for discussion in the department of agriculture and at the farm organizations headquarters. It is understood that the budget officer of the department of agriculture asked for \$129,000,000 for the next fiscal year, of which \$71,000,000 was for roads and \$3,000,000 for the department's building program. The department is sorely in need of additional quarters for its constantly expanding activities.

The department was told that it could have only \$83,000,000. As con-

gress has already authorized the expenditure of \$65,000,000 for roads, this would leave only \$18,000,000 for the actual work of the department. The department is now asking for an appropriation which, exclusive of roads, would be below \$34,000,000, about the same as was appropriated for the present fiscal year.

FIRST NATIONAL CONFERENCE OF COOPERATIVE MARKETING ASSOCIATIONS CALLED.

ANATIONWIDE conference of co-operative marketing associations has been called, to be held in Washington at an early date, at the suggestion of Senator Capper, for the purpose of securing united action upon rural credit legislation and recommending it to congress.

The convention will be a meeting of representatives of all the more important cooperative marketing groups in the country, without regard to their origin or affiliation, but will be strictly a meeting of these business organizations of farmers.

KENT GROWERS STUDY POTATO FIELDS.

MUCH convincing evidence was found by the Kent potato growers during the recent tour of potato fields of that county, showing the advantage in using certified seed. This tour was planned by County Agent Vining, while J. W. Weston, potato specialist of the M. A. C., cooperated in advising the growers.

On the farm of John Hammers, near Rockford, any novice could have told to the row where plants from common potato seed left off and those from certified seed began. The latter had green tops, and growth undoubtedly will continue until killing frosts come.

On the common stock, the tops were practically dead.

The hills showed with greater exactness the advantages of the carefully selected seed. As an example, one hill from a row where certified seed was used yielded nine merchantable potatoes out of ten, while an adjacent hill, grown from uncertified seed, produced only four merchantable tubers out of twenty. On the farm of W. S. Fowles, a number of hills were dug in adjoining rows. It was found that the average hill from home-grown seed gave three merchantable potatoes and four unmerchantable ones, while the hills from the certified seed produced an average of seven merchantable and four unmerchantable.

The work of selecting out the best hills for growing the coming season's crop is, in the opinion of Mr. Weston, the most profitable work that the potato farmer can do. The average increase due to selection of good seed has been in the neighborhood of ninety bushels per acre. Men who have practiced careful seed selection for the past three years have doubled their yields.

A definite plan for seed selection was presented by Messrs. Weston and Vining. The plan is to first select a portion of the field where it appears that the best potatoes are being produced. From this plot all diseased hills which would include those affected with wilts, blackleg, curl-leaf, mosaic, and the giant hills should be removed.

After this is done, each remaining hill should be dug separately and arranged so that the potatoes can be studied in conjunction with the tops. From these hills the grower should choose a number of the very best to provide seed for his seed plot the coming year. With these hills removed, the next step is to take out all the hills not desired for seed. Those remaining should be stored and used for planting the commercial field next spring.

As the farmer goes about this work, his first question will be: "What kind of a potato do I want, and what is the best type of hill to choose seed from?" Mr. Weston advised that a hill with but one vine should have at least four merchantable tubers, one with two vines at least six, one with three vines not less than eight, and a four-vine hill should have at least ten potatoes fit for market. Tops should be healthy, vigorous and true to type. The tubers should run uniform, have a tendency toward compactness, supplied with only a few shallow eyes, and having the stem attached at or near the end of the tuber, rather than to one side.

This, briefly stated, covers in general the program offered at the various meeting places in the Kent county tour. At the majority of places there was good attendance and a fine appreciation on the part of farmers of the work being carried on by Mr. Vining and the extension department of the college.

SCHEDULE FOR LAND-CLEARING SCHOOLS.

The following are the remaining dates for the land-clearing schools in northeastern Michigan.

Mikado, October 10; Lincoln, October 11; Curran, October 13, all in Alcona county.

Cumins, in Oscoda county, October 14.

Hillman, in Montmorency county, October 18.

Emerson, in Alpena county, October 19.

Posen, October 20; LaRocque, October 21; Millersburg, October 23; Ottawa, October 24, all in Presque Isle county.

Wednesday, September 27.

THE Greeks call no Venizelos, their great leader during the war, to help them in the present crisis. The Turks are organizing to occupy Thrace.—A Chinese cabinet has authorized the issue of a ten million dollar bond issue to help the government through financial straits.—Georges Carpentier, the fistic idol of France, was knocked out by Siki, a Senegalese African.

Thursday, September 28.

IT is reported that Harrison Hebeck, Wisconsin farmer, realized \$10,875 from eighty acres of white clover seed.—President Harding rules that the United States prohibition boats cannot search ships outside of the three-mile zone, although the tariff bill permits this twelve miles from shore.

Friday, September 29.

GREEKS plan to send 250,000 men to bar the Turks from Thrace.—The rumor that the Greek king, Constantine, abdicated to the favor of his son proved false.—Tom Watson, senator from Georgia, and one of the most famous political characters of the country, died in Washington.—In a navy test, an airplane made seven hits out of seventeen trials in bombing battleships.

Saturday, September 30.

UNLESS more coal is sent up the lakes before the shipping season is over, many in the northwest section will go coalless.—The United States sends a fleet of twelve warships to pro-

tect American interests at the Dardanelles.—November 12-8 has been designated as Cancer Week, during which the public will be educated in the danger of cancer and its control.

Sunday, October 1.

THE Irish Parliament has established military courts which will try persons hindering the restoration of order.—A legless beggar in New York was found to live in a high-class hotel and own an automobile operated by a private chauffeur.—Flaming forests in Minnesota imperil four towns.

Monday, October 2.

THE railroads are keeping the steel mills busy with orders for new equipment.—The Russian government is asking Henry Ford for a monopoly on the handling of Ford cars in that country.—Two million dollars' worth of liquor from the Bermudas has been smuggled to Chicago on Pullman cars.

Tuesday, October 3.

AT the national aviation meet to be held in Detroit early in October, airships are expected to go two hundred and fifty miles per hour, setting new speed records.—In 1897 George T. Jones Borrowed \$100 from H. B. Stuart at ten per cent compounded monthly. Now he owes Stuart \$304,840,332,912.685.16. He has gone bankrupt.—The signing of the British-Turkish truce ends Turkish hostilities in the near east.—The commissioner of internal revenue reports that John D. Rockefeller pays a larger income tax than Henry Ford.

News of the Week

Explosives Popular in Southern Mich.

Demonstration Put On by Extension Men In Livingston County Draws Big Crowd

A SEETHING, shooting wall of smoke and earth and water and brush—a wall twenty rods long and two hundred feet high—was the very spectacular and unusual greeting extended on August 21 at A. O. Dunk's Puritan Farms between Brighton and Milford, to nearly two thousand farm folks. These people had motored to Mr. Dunk's three-hundred-acre farm to witness demonstrations of the possibilities in getting rid of surplus water on boggy land, in the vertical drainage of "cat-holes" and in blasting big stones so they can be easily handled.



A. O. Dunk.

Not only was this greeting spectacular, but it also proved to have a practical side to it. The results brought hope to the hearts of many who had been struggling for years in an attempt to farm bog land or to make it possible to work across a low, mucky spot in some field, or again to clear away a big boulder.

This staggering wall was shot into the air through the use of seventy pounds of fifty per cent nitroglycerin put up in half-pound cartridges. The cartridges were planted in holes thirty inches apart along the line of a proposed ditch, which was planned to shorten the course of a meandering stream. The writer returned to the field of action the following day and saw the water of this stream singing along merrily on its course through the new channel cut by the blast.

This was only a part of the demonstration program mapped out by Mr. Bolander, agricultural agent for Livingston county. Having had experience in the use of explosives in northern Wisconsin, Mr. Bolander was confident that the farmers of Livingston county and of southern Michigan would find much to commend this pow-

planted, capped and wired, and that the big crowds were safely protected from flying materials.

The task of straightening the creek was a most difficult undertaking. The new channel was projected across a bog filled with springs and underlaid to some unknown depth with peat and quicksand. The terrific explosion carried away the great bulk of the muck and other material which had to be moved in order to turn the stream in its new course. There was, however, a quantity of loose material which kept settling back into the channel. This was successfully cleared away, however, by throwing a temporary dam across the old channel and raising the water so it could be forced down the new ditch. By constantly stirring the shallow places with shovels and forks, it proved to be the work of but a few hours before practically the entire volume of water had been diverted to where it was wanted.

A second ditch was built along a

roadway which led across this same marshy field. Here sticks of fifty per cent nitroglycerin, weighing one-half pound each, were placed at eighteen-inch intervals along the course of the drain. These were buried so the top of the charge was within about twelve inches from the surface of the ground. After being planted, the charges were capped and the wires connected. When the current was turned on, there was a low rumble followed quickly by a muffled explosion simultaneously with which streams of water and dirt and smoke shot into the air several times higher than the nearby trees. Then like hail the mud began spattering

in twenty-eight pounds of the fifty per cent nitroglycerin. This was exploded. The immediate results were not satisfactory, although they may prove in time to be so. The opinion of the men having the work in charge is that they did not place the charge deep enough. In the event that this is attempted at a later date, we shall be glad to give the readers of this journal a report on results. It is stated that perhaps fifty per cent of the attempts at vertical drainage are successful.

The final work of the day was to show the audience how large stones can be reduced to handling size. A boulder some six feet across and nearly as many in depth was chosen for this demonstration. Two pounds of the same grade of explosive that had been used on the other work were taken from the cartridges and laid on top of the boulder. This was covered with some of the cartridge paper to keep the explosive clean. Over the paper was spread a layer of mud from twelve



The Big Crowd Gathered Upon this Hill to Watch the Engineers Work.

to eighteen inches thick. The explosion which followed the firing of this material reduced the stone so that it could be easily handled. None of the fragments were thrown any unreasonable distance from where the stone had lain.

Notwithstanding the visitors came primarily to witness the blasting demonstrations, they also took occasion to examine several practical ideas used in equipping this farm and also to learn of some of the farm management plans which are being worked out by Mr. Walters.

The main barn attracted especial comment. This was built on a hollow-tile wall, stable-high, the balloon-frame type of construction being employed in the super-structure. Modern steel stanchions and cement floors, gutters and mangers were used in the stables.

Mr. Dunk has learned the value of alfalfa. Five years ago this farm was in a very badly run-down condition, having been rented over a period of a quarter of a century previous. He now has forty-two acres devoted to alfalfa. This crop is furnishing the bulk of the feed for his dairy herd. The keeping of the cows in turn gives manure for restoring additional acres each year to profitable production.

The farmers were highly pleased with the day's outing. Mr. Dunk very kindly furnished about fifteen hundred of the visitors with lunch, which, by the way, was served in the dairy stable and may it be said that so far as we could observe, every person appeared to have an unusually good appetite and enjoyed the service.

We confidentially believe that the success of the day is the beginning of a general program looking toward the recovery of many waste acres to agriculture through the use of modern explosives, and for this we are to thank Mr. Bolander for his faith in this kind of land reclamation, Mr. Dunk for his generosity in supplying the explosives and the equipment, Mr. Walters for

the sleepless nights in preparing for the occasion, and Messrs. Mathewson and McAdams for their expert work and advice.

WAR-TIME SUGAR RATINGS.

A REPORT has just been received by the Department of Commerce to the effect that war-time sugar ratings will again be introduced to the Bulgarians. This decision was recently reached by the Public Provisional Council. The sugar crops of Hungary have been short and the insufficient supplies of this product is responsible for the above action. The government will maintain control over the prices, importations, distribution and the consumption.

SUGAR COMPANIES START CAMPAIGNS.

THE Caro plant of the Michigan Sugar Company will begin its campaign about October 15, when it is believed a sufficient quantity of beets will be in storage for the slicing operations to begin. Tests of beets this year are not up to the standard of previous years, and with the reduced acreage a campaign of about seventy-five days will complete the run, which usually has lasted for one hundred days or longer.

The Mt. Clemens Sugar Company, one of the largest in the state, will

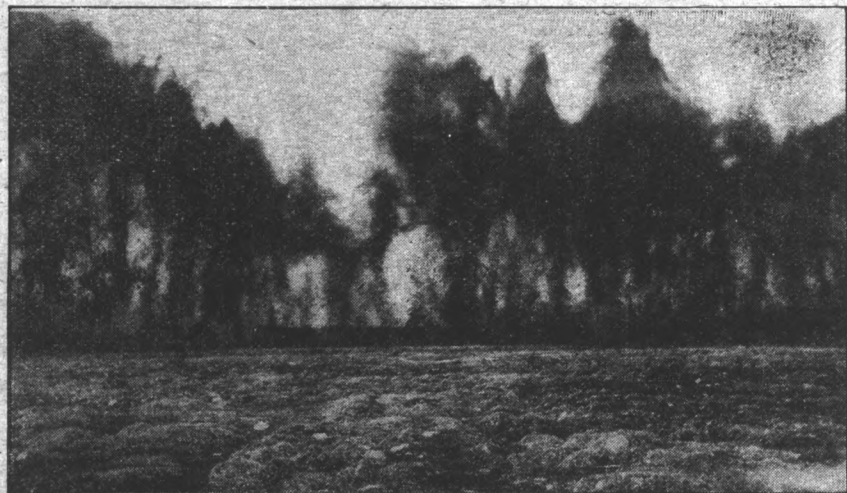


This Peculiar Shaped Cloud of Dirt and Smoke Followed the Firing in the "Cat-hole."

open for the season's run about the middle of October, it is announced. About five hundred men will be employed for about three months, as the campaign will be longer than usual at this plant.—M.

EIGHT-YEAR-OLD GIRL KILLS LARGE EAGLE.

AN eagle with a wing spread of seven feet was killed by an eight-year-old girl, the daughter of Mose Petrie, a farmer near Sault Ste. Marie, and brought to that city for exhibition. The bird, nearly as large as the girl, had attacked a goose in the Petrie farmyard, and the child, attracted by the commotion, struck the eagle on the head with a stick, despatching it.—M.



What Happened when Mr. Nitroglycerin Puts on His Cap and Goes Ditching.

er to their use. Through the cooperation of Mr. Dunk and his farm superintendent, C. W. Walters, it was possible to show some of the things that could be done with this powerful agent.

The demonstrations and lectures of the day were in the hands of experts. A. Mathewson, of Wisconsin, a practical explosive engineer, and A. J. McAdams, specialist in land-clearing work of the Michigan Agricultural College, saw that the explosives were properly

down as each one hurried to see what the explosion had done. A ditch averaging from three to three and one-half feet deep had been cut along the entire course and the debris was thrown well back from the banks.

The next effort was to see what could be done with a "cat-hole" located in one of the large fields on Mr. Dunk's farm. In an attempt to break through the hard-pan below, the experts bored down about twelve feet in the center of the depression and put

Advice from Experimentors

USE CARE IN SELECTING SEED CORN.

THE seed specialist at the New York Experiment Station recommends that seed corn should be selected in the field instead of in the shock, or from the crib next spring. By selecting the seed ears from standing plants, it is possible to get them from healthy vigorous plants.

He recommends that the seed selection should begin as soon as the husks commence to dry. Well developed average ears should be chosen from strong, healthy stock. Care should be taken to avoid loose broken stalks, or ears that are hanging loose on the stalk, as this condition is often due to disease or some inherent weakness.

Seed selected in this way usually contains considerable moisture, and, therefore, should be thoroughly dried before freezing weather sets in. This can best be accomplished by hanging the ears in a heated room until well dried and then storing in a dry place out of the reach of rats. Ordinary wire fencing is often used in various ways to suspend seed ears from the roof of the storage house.

MANURE PRESERVATIVES.

AFTER conducting a series of experiments, the New York Experiment Station is recommending the use of acid phosphate as a manure preservative. Acid phosphate not only checks the loss of nitrogen from the manure, but materially increases its fertilizer value by supplying the plant food in which it is deficient.

Ground rock is also recommended to

use with manure and is undoubtedly of some value as the source of phosphates, but it is practically useless as a manure preservative as it does not unite chemically with the nitrogen in the manure, but instead allows it to escape as ammonia.

These tests show that gypsum caused considerable loss of the elemental nitrogen and added but little to the fertilizing value of the manure, and, therefore, cannot be recommended as a desirable material to use in connection with manure. Peat is quite effective in checking nitrogen losses, but is also difficult to obtain.

MAKES FIVE DOLLARS WITH ONE.

WITH an investment of two dollars in acid phosphate for use on fall wheat, the Missouri Experiment Stations in many tests throughout the state find that the increased production amounted to \$11.80 in money value, or a return of \$5.40 for each dollar invested.

For a number of consecutive years they have been applying one hundred seventy-five pounds of fifteen per cent acid phosphate per acre. This brought an increase in wheat of 5.7 bushels, and where clover was seeded on the wheat, the increase in clover hay products was 1,222 pounds per acre.

It is figured that the acid phosphate costs about two dollars at present prices. With wheat at a dollar per bushel, the increased yield would bring \$5.70, and with clover hay at \$10 per ton, the gain in hay production would amount to \$6.10. Thus the two dollars invested in acid phosphate brought a profit of \$11.80 per acre.

Francisco Farm Notes

By P. P. Pope

BRAINS AND ENERGY APPLIED.

YOU have heard of applied science. In late years you have heard much talk of mixing brains with the soil. If ever there was a time when it was worth while to do some hard thinking in regard to our work, that time is here and now.

The farmer is working on very close margins, and in many instances on no margin at all. No class of people but the farmers could ever stand up under such conditions and still keep going. The farmer has had a heavy burden to carry all through the reconstruction so

far, and I have often thought how fortunate for the country that we had a class of sane, sensible, intelligent level-headed, progressive men on our farms. They have been the bone and sinew of our good country and may

indeed have saved it from great confusion and disorder. I wonder if instead of harping about our troubles and blaming Tom, Dick and Wall Street for our hard luck, it would not be better to just be glad that we have been able to be of real service to our country in time of need. But it isn't enough to "just be glad." We, the farmers, still have a great service to perform. We are the great wealth producers, and it is up to us in a large measure, to bring back prosperity to ourselves and to our country.

I have talked with many good thinking farmers lately, and it seems to be

the prevailing opinion that now, more than ever before, it is essential, if we would win success, to study the very best practices in agriculture and apply them religiously to our job. It is not the farmer who is contented with antiquated methods, with average crops, with inferior seeds, and with scrub stock that is going to forge ahead these days. He will most surely go the other way. It takes good work all around now to hold one's own. The man who wins out will be the one who does a superior job. It is in the crop a little better than the average that the profit lies; it is the cow a little better than the average that pays her way and some besides; it is the price a little higher than the average that leaves a margin to build on.

It is the ways and means of securing these things that take the brains, and, let me add with emphasis, the energy to apply them. Brains alone are not enough, no matter how powerful your motor may be, if your transmission is faulty, your power is of little avail. We all have a great deal to learn, of course, most of us are like the man who would give a lot to know as much as he thought he knew when he put on long pants, but if we would all do somewhere near as well as we already know how, there would be a big change in the universe. It takes energy to apply brains, in other words, to do as well as we know how. Mental energy requires lots of nerve force. A man may be ever so handy with his hands but if he is inclined to take it easy above his ears he'll not get far. So let us give heed to the work of our hands that it may be directed into useful channels and thus bring prosperity to ourselves and to our people.

TOP NOTCH BEACON FALLS RUBBER FOOTWEAR



Mileage in Arctics

BUY your arctics with the same care you buy your tires. Demand long wearing qualities.

Top Notch Arctics are scientifically constructed. They have patented long wearing heels that last as long as the soles, tough knurled toe caps and strong reinforcements at every vital point of wear.

Top Notch Footwear costs no more than the ordinary kind. There is a dealer in your vicinity who sells it. Identify our product by the Top Notch Cross.

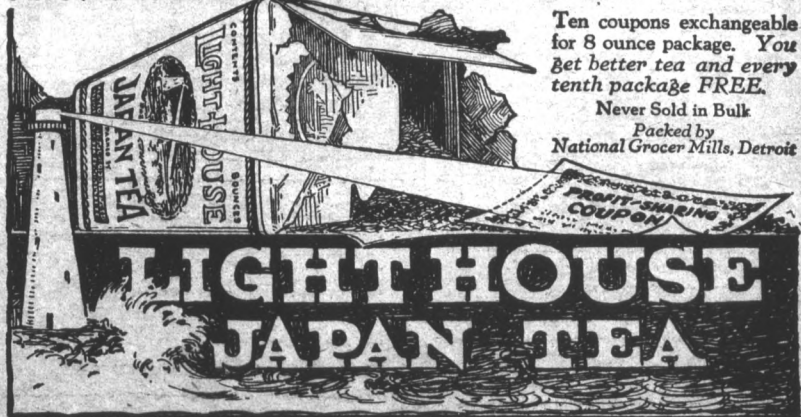
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A Guarantee of Rubber Footwear Mileage

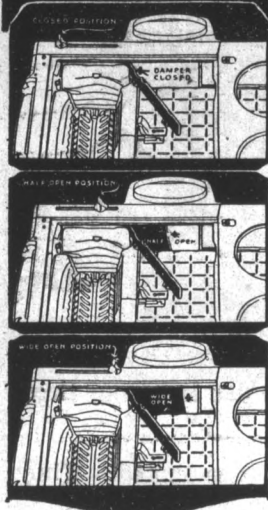
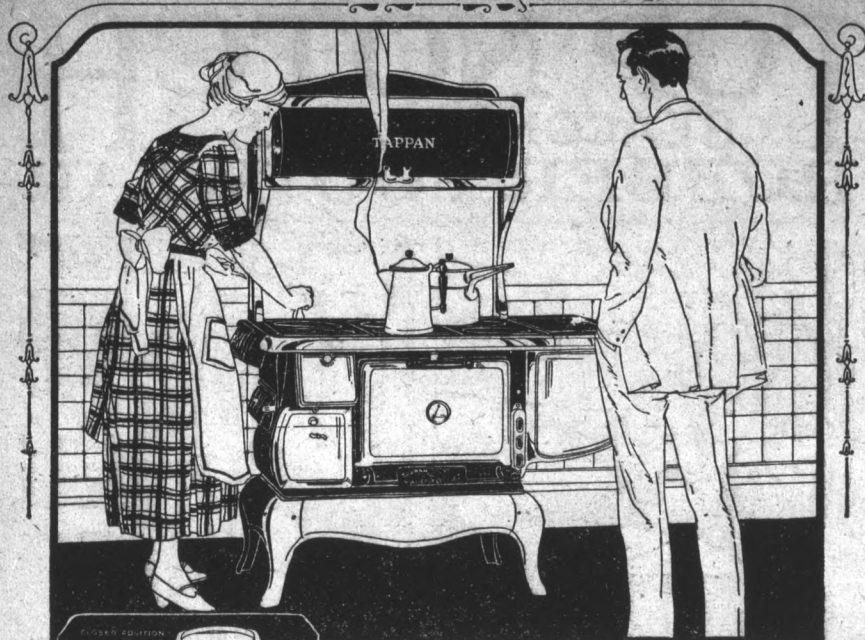
Top Notch Redfore Arctics:
Red Soles
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Ten coupons exchangeable for 8 ounce package. You get better tea and every tenth package FREE.

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Sliding Damper Makes Baking Certain

The Tappan-Joy Sliding Damper gives you positive control over the baking heat. Open damper part way for slow baking, but close it tight for fast baking.

Made for Perfect Baking

THE Tappan-Joy Range is designed and built for perfect baking results.

The oven is roomy and is constructed so that heat circulates evenly all around it. The control of oven temperature is right under your thumb—the Joy has a Sliding Damper by which you can admit just the right heat for fast or slow baking. The oven door thermometer shows the exact heat of your oven at all times.

There is no uncertainty about Tappan-Joy baking. You know it's going to be right.

Have the Tappan Agent near you demonstrate the better cooking features of the Tappan-Joy ranges—If you don't know his name write us.

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News From Cloverland

By L. A. Chase

NEW SETTLERS.

THE Ewen Development Association is pushing for new settlers. Only about three per cent of Ontonagon county are now in farms, and it is deemed that an effort should be made to reduce the uncultivated area. Some of the best land in the Upper Peninsula lies in this section of the country.

DEPUTY GAME WARDEN.

TO help protect northern Michigan game from extinction, a writer in The Delta County Reporter, of Gladstone, suggests that everyone who receives a hunter's license, be made automatically a deputy game warden with power to arrest game law violators on sight or after the violation has taken place, and that the penalties for violation be drastically increased.

LEADS THE COUNTRY.

ON the basis of the showing of the United States census, Gogebic county is claiming priority among all the counties of the United States in its agricultural growth of the past ten years. This growth is evidenced even to the casual observer by the great increase of tilled acres, of new, big hip-roof barns and silos. There is really a good deal of basis for this enthusiasm over its agricultural development, as any visitor to the county during the past few years will testify. The Daily Globe of Ironwood, points to the hearty cooperation that has existed in Gogebic county between business men and mine officials and the farmers. It notes that the lumber companies have released large areas of cut-over lands to actual settlers on easy terms. The paper states that the banks have also been always ready to lend money to purchase pure-bred registered stock, but the principal credit is given to the county board of supervisors, which has a live agricultural committee, the county agent asserts, and which has cooperated liberally with the county fair. During the last year of the war, 1,200 kiddies were enrolled in Boys' and Girls' Clubs, it is stated, which, it is claimed, led the state, and which has resulted in making many real farmers, and which has included State Fair winners. Very liberal prizes have been awarded for pure-breds exhibited at the county fair, which numbered 130 in 1921, and were expected to number 200 in 1922. All this is regarded as a very good showing for a county presumed to be devoted primarily to the mining of iron ore.

MICHIGAN PASTURES FOR WESTERN STOCK.

HOW cattle breeders and growers in the west may be brought into direct connection with feeders in the east is receiving no little attention these days. In this connection the system now being practiced by one large Upper Peninsula firm is of interest. This firm which operates a large cattle ranch near Blaney, Schoolcraft county, previously had large holdings in Arizona. It desired to get closer to the eastern markets and to abundant summer pasturage at low cost for grazing lands.

In a report of its operations during

the past two years, recently published, the company sets forth in some detail its reasons for thinking that it has largely solved the problem. The factors which induced the company to locate in the northern cut-over country are given thus: The price of the cut-over land was found to be no more, or even less, than the rental on the western range; the weather records showed an annual rainfall that assured ample pastures during the summer; the grazing period was found to be equal or greater than in any other section of the country during which time cattle thrive on flesh-producing grass; while the soils were good for agriculture in a high degree.

Experience has shown that the grazing of cattle has cleared up the brush rapidly and got the land in shape for the plow. The process of fertilizing through grazing operations enhances the value of the land for cropping.

To test their theory, the company purchased a herd of mixed grades of cattle numbering 495 head of all ages. The experiment was tried out first in 1919. The owners came to northern Michigan with the equipment belonging to a southwestern cattle-ranch. The cattle on arrival were in an emaciated condition, the steers weighing 437 pounds, and the cows averaging 605 pounds. After a rest of ten days the cattle began to take on flesh, says the report. The gain continued until fall, but being not well equipped for standing a northern winter, some of the old stock succumbed.

In the spring of 1920 the survivors were again placed in fenced pastures, on March 20, and they then resumed putting on flesh throughout the summer season. The cattle were sold sixteen months after arrival. The steers made an average gain of 407 pounds per head, and the cows gained 305 pounds. Seven-month-old calves from some of these cows weighed 397 pounds when marketed.

From this experience the managers draw the inference that cattle shipped in from outside points must be kept in fenced enclosures, that only young, growing steers should be handled for marketing purposes, that provision for winter feeding should be made so that cattle may be held until favorable market conditions are realized after maximum growth is attained.

The tract secured by the company at Blaney comprised 22,700 acres of hardwood land with a strong clay and limestone soil. Most of the tract was covered with grass and brush, of which 9,000 acres has been fenced with woven wire fencing. There is a feed-barn for winter-feeding of 500 head of cattle. The two silos have a capacity of 250 tons each. As a last step in this enterprise, last year, feeding-sheds were erected at Green Bay, Wisconsin, with a capacity of 2,500 head, where cattle from the Blaney ranch can be shipped for finishing off on sugar beet pulp obtained from the local factory.

Thus the whole operation consists in breeding beef cattle on the Arizona ranch, shipping to northern Michigan for pasture, and finally to Green Bay for finishing for the Chicago market. It is doubtless true that the experience of this firm will be watched with interest by beef producers. It is too early to determine definitely what the success of the enterprise will be.



RAW FURS

High prices for your catch this year are assured. Be sure you ship to a reliable house and get every dollar your pelts are worth. Our many years in the business has taught us the secret of grading which means that you get top notch prices from us. Don't be fooled by promises—we guarantee to pay every cent your catch is worth, based on reliable grading. Send us a shipment and be assured. You will then become a regular shipper and booster year after year like thousands of other trappers.

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New big price list sent free. Contains up-to-date e-minute quotations and valuable market information. Write for yours now before you forget.

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Hoosier
Glazed and Mat Face Building
Tile for All Permanent Buildings.
Standard clincher joint 5-wall glazed blocks. Cheap as lumber to use, proof against fire, frost, moisture and vermin. Practically indestructible. Building suggestions: Garages, store rooms, dwelling houses, barns, hog barns, poultry houses, etc. Estimates of cost gladly furnished. Write for free literature.
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Use Black Silk Air Drying Enamel to prevent rusting on grates, registers, stove pipes, etc.
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We guarantee satisfaction, or your money refunded. The adjustment feature places our phones on a par with the world's greatest makes. Our sales plan eliminates dealer's profits and losses from bad accounts, hence the low price. Better phones cannot be made. Immediate delivery! Double 3000 Ohm set, \$3.99; 1500 Ohm single set, \$2.50. Circular free.

Edeson Phone Co. 6 Beach St. Dept. F-18, Boston, Mass

FOR SALE. 7,200 egg Candee Incubator. Good condition. \$800.
TYRONE POULTRY FARM, Fenton, Mich.



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For fifty years, ever since Montgomery Ward & Co. was started, Mrs. Merrick has taken a keen interest in its development.

"I have been a customer from the first."

"I have always had the most courteous treatment from you," she said. "I believe that much of your success has been due to your unflinching policy of fair dealing."

Mrs. Emma E. Merrick, Malcolm, Iowa
A Customer Since 1872



with your customers as you have in the past you will surely prosper.

Mr. George Beatty, Winston, Montana
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"I received my first Montgomery Ward price list in 1872, and I became a customer almost immediately. The catalogue has been coming regularly ever since, and I have been doing business with Montgomery Ward & Co. practically all of that time."

"I wish to state, that in all of those years there has never been any occasion to make a complaint or to return any goods we have ordered from Montgomery Ward & Co."



Mr. Beatty is a real pioneer. He is the only man now doing business in Helena who came to Montana in 1862. He served under General Johnson in Utah (1857-8). He finally settled in Winston, Montana.

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Millions Buy from this Book on Faith in the Name "Montgomery Ward"

This book is saving many millions of dollars for the American people.

Is it saving money for *you* and for *your* family? Are you taking *full advantage* of your opportunity?

This book—our Golden Jubilee Catalogue—celebrates our 50th Anniversary by offering you the lowest prices possible on everything for the Home, the Farm and the Family.

It is filled with bargains—with merchandise of high quality. And every price is a Money-Saving price for you.

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To buy from this Golden Jubilee Catalogue is to be guaranteed a definite saving and entire satisfaction—and back of this guarantee is the reputation of Fifty Years of fair dealing.

Buy from this book. Fill all your needs from this book.
Consult it daily to find the right price, the lowest price
for dependable, reliable goods of standard quality.

The Oldest Mail Order House is Today the Most Progressive
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No. 72 NEW YORK *Nov. 1922*

I do hereby promise to pay
in sleepless nights

Mr. Coffee Drinker



**Why sign notes
at the dining
table?**

IF your mealtime cup of coffee leads you into midnight wakefulness and mid-afternoon drowsiness (as so often happens) why not stop giving the promise to pay?

It is so easy to keep out of debt by turning to Postum.

Postum is a satisfying, mealtime drink, rich in flavor and aroma—and with no regretful settlements, afterward.

Why not try Postum instead of coffee today, and pave the way to better health and happiness?

Sold by
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Postum comes in two forms: Instant Postum (in tins) prepared instantly in the cup by the addition of boiling water. Postum Cereal (in packages, for those who prefer to make the drink while the meal is being prepared) made by boiling fully 20 minutes.

Postum

—FOR HEALTH

"There's a Reason"

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

Farms and Farm Lands

240 Acre Farm FOR SALE



150 A. machine-worked land, 80 A. timber, very good fertile soil used as stock farm for 30 yrs. Well fenced woven wire, excellent top drainage. House 11 rooms and bath, modern to minute, cut accompanying, 22x40 tenant house, 44x64 basement barn, 28x28 frame barn, silo, power house, dairy room power equipped with equipment, 14x50 hog house with feed cook room, 20x34 implement shed and other out buildings. Gravity water system to house, barn and hog house. 75 fruit trees. State trunk line runs past farm, two miles from Bay Port summer resort, shipping point, junior high school and churches. 11-2 miles from state hunting grounds. Owner deceased, property must be sold at sacrifice. Price \$120 per acre. Write

MRS. G. W. BROWN

Bay Port, Mich.

160 A. res all fenced, 60 acres improved. House, stable, silo, etc. 5 acres bearing orchard. Trout stream across one corner. Gravel road, telephone and R. F. D. Good soil. Address, North-eastern Michigan Development Bureau, Bay City, Michigan.

Wh. Pay Rent, when you can buy a farm at you are now paying rent. **STAFFEED BROS.** (owners), 15 Merrill Building, Saginaw, Mich.

Poor Man's Chance \$5 down, \$5 monthly buys 40 acres productive land near town. Some timber. Price \$225. Other bargains. Box 425-Z, Carthage, Mo.

Said
the
Farmer:

**Brown's
Beach Jacket**

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"About one year ago I got one of your coats. The coat is good yet, and I have given it very hard wear such as any farmer would give a working coat in a country where it is needed some part of the day, almost every day in the year."

It is as warm as an overcoat, cheaper than a good sweater, wears like iron, can be washed, and keeps its shape. It comes coat without collar, coat with collar, and vest.

ASK YOUR DEALER
BROWN'S BEACH JACKET COMPANY
Worcester, Massachusetts

HERE'S YOUR CHANCE

Beautiful 225 Acre Gentlemen's Lake front modern farm. 2 miles from Belding State Road. Immediate possession. Real bargain. Box 715, Michigan Farmer.

Wanted To get in correspondence with party dealing in Farm and City property in Illinois, Ohio and Indiana and Michigan. Write or telegraph. **FRANK B. RAY**, Merrill, Mich.

For Sale or Trade, Farms and unimproved land any size, can start you on a good 40 acres for \$500.
J. H. STRANG, Lakeview, Mich.

Wanted Competent farmer to lease 225 acres land, to raise Black Angus Cattle, sheep and Alfalfa hay, married man not over 40 years of age with agricultural college training preferred. Answer **J. D. SWARTWOUT**, R. F. D. No 2, Otisville, Mich., giving experience and full particulars.

WANTED To hear from owner of land for sale.
O. K. HAWLEY, Baldwin, Wisconsin

Additional Farm ads. on Page 373

Opinions & Comments

From
Michigan Farmer Readers

To Restore Agriculture

Michigan Farmer Reader Suggests Plan.

What Do You Think of It?

A COMPOSITE made from the various price indices discloses that farm products in exchange for manufactured goods, transportation and ordinary services, is when measured by pre-war prices in the ratio of one to one and one-half.

In other words, equity would be as one to one while now one and one-half measures of farm products must be used in exchange and to pay debts, taxes, etc., when labor-manufactured goods and services contribute only one measure for these purposes.

The problem of the statesman and economist is to equitably balance these transactions. Financial writers urge a pre-war ratio, which would be equitable as regards daily transactions, but would add to the burden of taxation, interest and principal of debts public and private contracted during the period of war prices.

Deflation of wages for railway and coal mining operations has been indefinitely postponed. Resistance being too great by organized labor. Business in cities favors high wages which allows payments for high rent, fuel and family expenditures. In fact, the present scale of wages must be maintained or the standard of living reduced.

The adoption of the present tariff means added duties and a standard of prices distinctly American on goods which we import. While the farm schedule is satisfactory the grains, textiles and meat products are not visibly affected where the surplus is exported. A review of the whole situation leaves agricultural products at a European price reduced to our monetary value, while other products are accorded an American standard of price maintained by strong organizations and governmental action.

Deflation has been halted as to industries in general at one hundred and fifty per cent pre-war, while agriculture is quite nearly at pre-war levels, with no immediately feasible plans for its reestablishment on an equitable parity.

Waterways would be helpful, but these are remote. Credit plans merely defer the time of agriculture's breakdown if the present ratio of compensation for services continues. Since the war, crops have been abundant and the farmer's contribution to the world's wealth has increased beyond that of other industries, yet with diminished returns in money. Exports of farm products, while less than during the period of war, those for 1921 and thus far in 1922 exceeds the average of 1909 to 1913. Our export trade reached the peak in pre-war times at \$2,465,000,000 while 1921 exports were \$2,600,000,000.

It is, then, not to lack of foreign demand nor lack of products that can be ascribed our agricultural depression. One of the side lights on the export trade has been the adequate prices paid for pork products. Pork is largely a corn product and while the latter is low, pork has exceeded Hoover's price formula of thirteen to one by a safe margin. For the year ending June 30, 1922, we exported 165,000,000 bushels of corn. This was three times the volume of the previous year, but only twice the money return owing to lower prices.

The packers are strongly organized and financially able to secure fair prices for pork products which the corn grower is not. Gasoline as a whole was advanced about two cents a gal-

lon last year, but the export trade took 500,000,000 gallons as against approximately 600,000,000 in the same period of 1921. The point to these figures is that strongly held products are paid for in Europe at adequate prices to the great gain of the American producer. Those products equally or more essential to life are not paid for at the same rate, and they are not in strong hands. Volume, to the exporter and transporter, is of more importance and of greater gain when the reduced price is borne by the producer.

There is no need of argument to show that agriculture is depressed and with it other industries. The American Chamber of Commerce map shows an area of less than five per cent good business and in much of the United States genuinely unfavorable conditions exist. There is also a disposition to deal fairly with agriculture and restore the farmer's purchasing power if a way could be found.

Wheat, corn and meats are the key products of the middle west, while cotton and tobacco are those of the south. The United States exports the surplus of these products and these can receive little benefit from a tariff act. It is indisputable that as long as these key products are sold at a price below cost of production, basic industrial conditions cannot improve. There should not be forced on the farmer the necessity of curtailed production which will naturally come about without any organized effort, thus lessening products below an export basis.

A Suggestion.

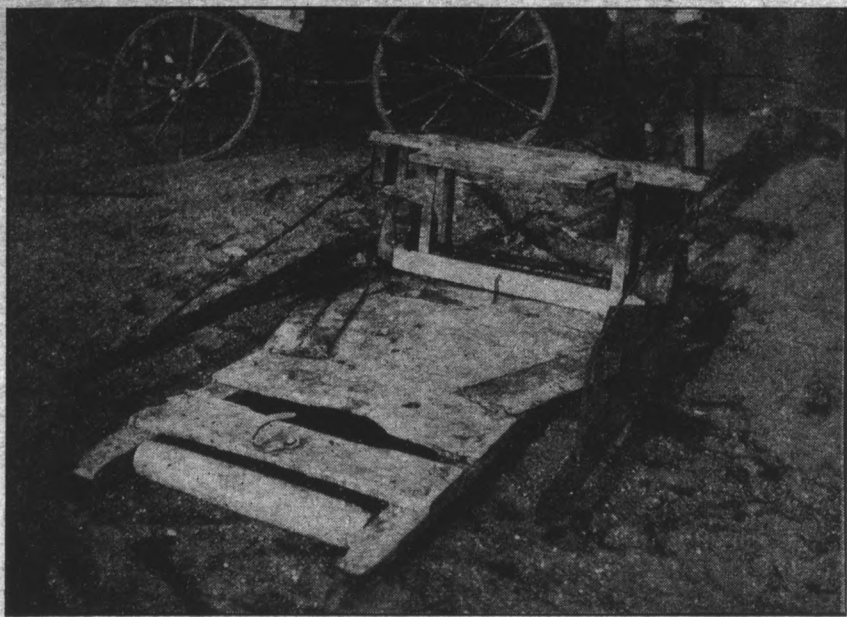
A proposed plan would be for the United States to organize an export corporation to ship mainly the key products, but not exclusively. The necessary capital to be loaned to this body by the United States, while contrary to general principles, the emergency is so great and there is no farm organization sufficiently strong that governmental action is at the present time imperative. Europe needs foodstuffs and raw material. The allied war debt to the United States is a doubtful asset and a cause of financial uncertainty and friction.

It is the varying and low rate of exchange with our late allies that renders trading uncertain and hazardous. Let the export corporation credit the difference in exchange on the various war debts and re-establish trade relations by what to the import nations would be a bounty. The export corporation would accept the English pound sterling at \$4.86, or par, while it is now worth about \$4.44, and credit the importer by giving him a certificate against his nation's debt to the United States government. This would be equivalent to an advance of around ten per cent. The French franc is worth only about eight cents and should be at par at nineteen cents.

There would be limitations in certain instances, but the United States would be converting a doubtful asset into a basis for a real business revival, and restore the lost purchasing power of the farmer.

England is on record in favor of forgiving its debtors as it is forgiven. The application of this trading plan would probably allow England and France to re-export into other countries at a good margin of profit. Our tariff is a vital necessity to America, (Continued on page 377).

Home-Made Corn Harvester

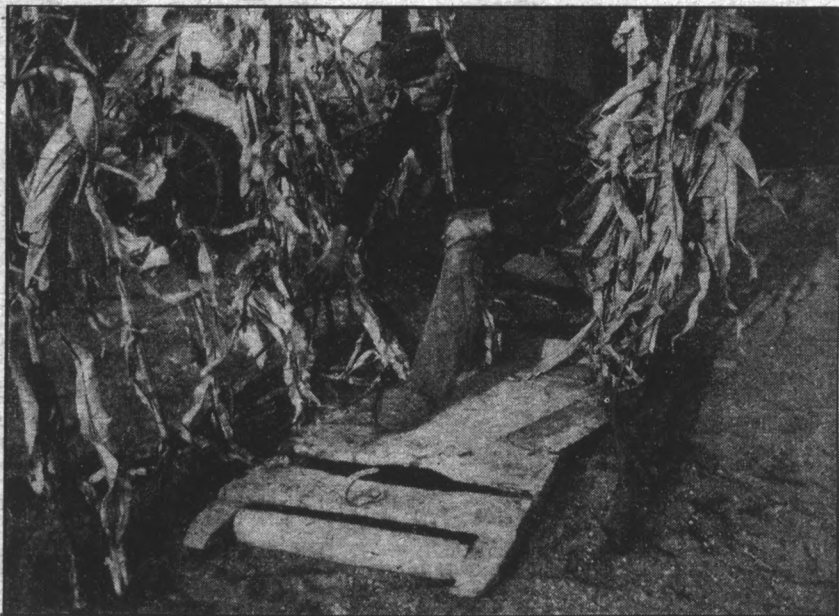


One Man and a Horse Cuts Two Rows of Corn at a Time.

THIS corn harvester is a great labor saver. It is pulled by one horse and runs on two wheels and one roller. The harvester is seven feet long and thirty-two inches wide. The knives, which are fastened on both sides, are made from an old cross-cut saw blade. They are thirty-two inches long and eight inches wide. In the pictures you will observe two six-foot lifters, with five-foot guards for raising up lodged stalks, attached to the ends of the shaft

on which the rear wheels revolve. These lifters run on shoes on the outside of the rows from the harvester.

There are also two guards made of wood that press the cut-off stalks over the knives. When turning around, we lift these guards up and fasten them to the seat. With this machine one man can cut two rows of standing corn at a time. The cut will give a fairly good idea of how the implement is made and operated.—J. Venhuizer.



Mr. Vanhuizer Gives a Demonstration.

Small Potatoes for Seed

THE potato specialist of the Geneva, New York, Experiment Station, says that small potatoes from healthy, vigorous stock are just as good for seed purposes as pieces of large tubers from the same plants. Careful tests have shown that the yield of marketable tubers from the small whole seed potatoes exceeded that from the pieces of larger potatoes from the same plant by almost seventeen bushels per acre. It seems, therefore, that the disadvantages of the whole small potato seed have been overestimated.

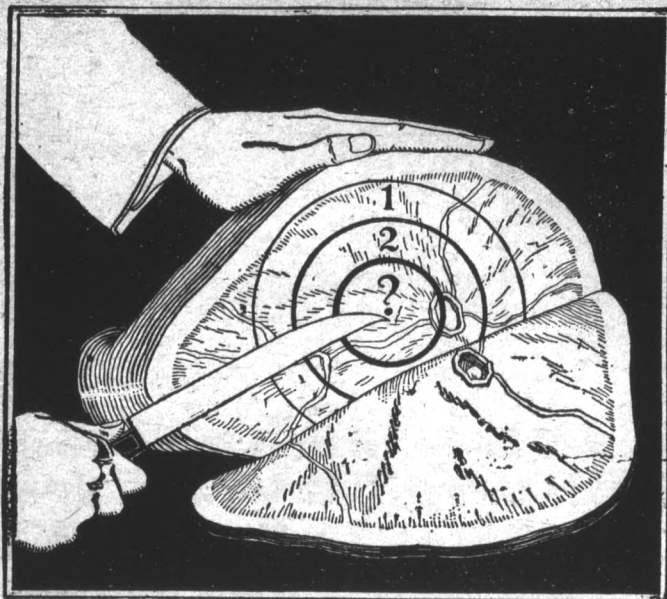
This potato expert says that when a special seed crop has been maintained and all the diseased plants carefully removed, there is no reason why the small potatoes in the plot will not give as good results as the pieces of the larger ones. Of course, the continued selection of small tubers year after year is not advisable, neither is it wise to select the small potatoes from a commercial crop from which the disease and weak plants have not been removed. Also, in buying seed potatoes from outside sources, it is always

best to demand medium sized tubers unless the potatoes come from a field which has been certified by an authorized inspector as being free from mosaic, leaf-roll, spindling sprout, etc.

TARIFF COST PER SUIT.

A MEMBER of the Missouri Agricultural College has investigated what effect the wool tariff should have on the increased cost of clothing. He found that it takes three and a half yards of all wool cloth to make a normal sized outfit. To make this cloth would require 9.8 pounds of half-blood wool in its original state. The net price to the grower for this amount of wool, according to the 1921 clip price, which was twenty cents per pound, would be \$1.96. Therefore, even if the ad valorem duty of fifty per cent was charged in tariff duty on the wool required, say on a \$40 suit, it would be less than a dollar.

Supplies of seed for next spring's planting should be secured now.



The supreme test of salt is in reaching this inner circle

There's the spot that tells the tale!

How every portion of the meat can have the same flavor—natural color and fine texture

Only with an instantly and completely dissolving salt can you cure meat perfectly. No other kind will go right to the heart of the meat and give the whole piece an even cure. Salt of hard granular crystals or flakes, is slow dissolving and forms a salt crust that is merely wasted and performs no work. With the cost of salt so small you can't afford to risk possible spoilage of your meat.

Colonial Special Farmers Salt is the only salt of soft, porous flaky texture that "melts like a flake of snow"—instantly and completely. It's this porous texture in these flakes that brings out all the meat flavor, preserves the natural color and keeps the meat firm and tender.

For Cooking, Baking—All Farm Uses

Put up in 70-lb. bags of lined material that makes fine toweling.



Tests prove that Colonial Special Farmers Salt dissolves three times as fast as ordinary salt.

A 70-lb. bag of Colonial Special Farmers Salt is as large as a 100-lb. bag of ordinary salt, because it is pure salt, all salt, in a lighter, fluffier form, with all moisture removed. Best for cooking, baking, meat curing, butter making, and table use.

Dealers who are anxious to give the best salt value for the money handle Colonial Special Farmers Salt. Ask for it by name. Let us send you our latest free booklet on "Meat Curing and Butter Making on the Farm."

The Colonial Salt Company
Akron, Ohio
CHICAGO BUFFALO ATLANTA

COLONIAL SPECIAL FARMERS SALT

For Stock Salt—Use Colonial Block Salt—Smooth—Hard—Lasting—Won't Chip
Made from Evaporated Salt

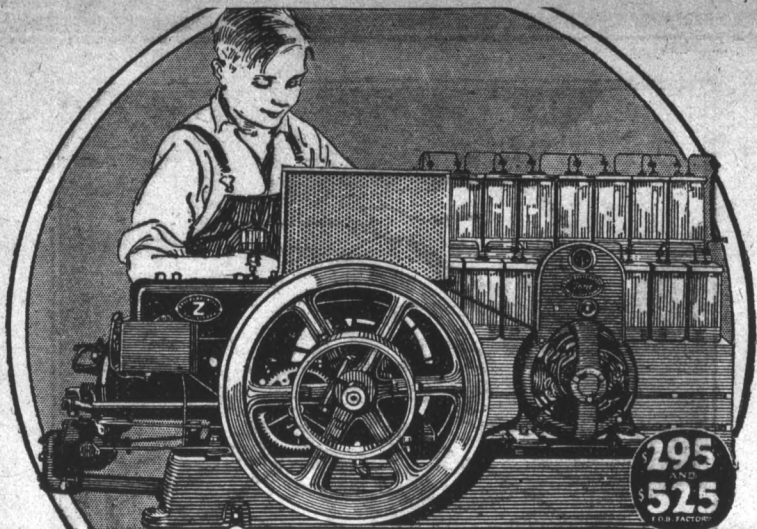
TROPHY of SUCCESS

—Nail it to the Barn Door

Soil kept rich and fertile

produces big harvests. Solvay sweetens the soil and brings all crops to quick, complete maturity. Highest test. Purest form. Easy to spread. Non-caustic—will not burn. Write for FREE Booklet.

THE SOLVAY PROCESS CO.
Sales Agent, WING & EVANS, Inc.
625 Bank Building, DETROIT, MICH.
and don't forget
It Makes Fertile Fields



DOUBLE SERVICE from this SIMPLER PLANT

Here, at last, is a Home Light Plant that gives double the usual service, yet is entirely free from intricate concealed mechanisms. It is not only more useful, but also more simple.

The Fairbanks-Morse Plant supplies electricity for lights and electrical conveniences and engine power for a line shaft or individual machines at the same time. Or you can use the plant for electricity alone or for engine power alone.

Famous "Z" Engine Used

This plant consists simply of a "Z" Engine and an equally dependable generator and battery. It starts at the touch of a button. Special features insure unusually long life.

A nation-wide dealer organization assures constant maintenance of satisfactory performance from any Fairbanks-Morse Product. Learn all about this simpler, more efficient Home Light Plant. Send for interesting new booklet.

FAIRBANKS, MORSE & CO.
Manufacturers Chicago

Also ask for Home Water Plant Book. See how easily you can have running water in your home.

Double Duty

FAIRBANKS-MORSE HOME LIGHT PLANT



Dependable
Champions
For Every Engine Everywhere

There is no
Substitute



Champion AB-44
For Dodge cars.
Now 75 cents.

If your dealer is interested in your getting maximum motor efficiency and increased gasoline mileage, he will sell you genuine CHAMPIONS.

Ask your dealer to sell you a full set.

CHAMPION SPARK PLUG CO.

TOLEDO, OHIO



TIME LIMIT FOR GASSING BORERS.

THE Pennsylvania Experiment Station issues a warning that paradi-chloro benzene should not be used on peach trees for borer control after October 15. The reason for this precaution is that after that date the weather is too cool to facilitate the turning into gas of this chemical product, and, therefore, the treatment would not be effective. September is the ideal month for this treatment.

HEAVY GRAPE CROP.

IT is estimated in the Paw Paw-Lawton grape district that Michigan's production of grapes this year will be five times greater than that of a year ago. It is expected that the yield this year will amount to 104,500,000 pounds, or about 5,500 carloads. The shipping season is in full swing with the Concord variety predominating. There are also quite a few Niagaras, the leading green variety, and Delewares the most popular red kind. Because of the heavy supplies, prices are considerably lower than last year. Five and a half pound baskets are retailing at twenty-seven to thirty cents; whereas the wholesale price last year was forty-five to forty-eight cents for the same size package.

FRUIT AND GARDEN NOTES.

THE Seckel pears are very fine this year and a very desirable variety for home use. All the trees in the home orchard prove their value, even in years when fruit is abundant. When peaches are rotting in the fruit belt we find them \$2.00 a bushel at the stores in our section. Other fruits are priced in proportion and it is a pleasure to fill up the bulk of the shelves with fruit from the small home orchard.

Our Chinese cabbage turned out very fine this year, and proved a great salad plant. We liked them better than the ordinary cabbage for fall use because of the mild flavor. Later the regular varieties of cabbage will come in handy as they are the best keepers.

Swiss Chard has been one of the standbys for salad during the summer and fall. During the last week of September it is still growing luxuriantly and the leaves are tender. We have canned two dozen pint cans of the chard in tin and believe it will prove of great value in the winter menu.

Our steam pressure cooker and can sealer have just about doubled the cash value of our vegetable garden this year. We have canned things we never canned before and saved other crops in a way that will make them quickly usable next winter. Nothing has gone to waste and canning has been much less work than with the old-fashioned equipment.

It pays to label a box "Garden Seed," and fill that box with labeled envelopes. Then save as much home-grown seed as you need when the various varieties mature. Dry the seed that needs drying on newspapers with the edge of the paper containing the name of the variety. Place the seed box where the seed will keep dry and away from mice. It will save several dollars next spring when it is time to place the garden seed order.

When saving home-grown seed it pays to select it from thrifty plants which have been allowed to grow for that purpose alone. Sometimes failures with home-grown seed may have been due to picking the seed from plants that were too poor to be used for other purposes. Allow a few of the best

plants in the row to make the seed crop.

Save a few of the best heads of sunflowers. We pick them from the tallest and stoutest stalks with the largest heads that are well filled with plump seed. The heads are thoroughly dried and then shelled out in a large box where they can be stirred occasionally to prevent mould.

OUTLOOK FOR CABBAGE, CELERY AND ONIONS.

(Continued from page 355).

980; Van Buren, 700; Kent, 600; Allegan, 170; Muskegon, 125; Cass, 118; Lenawee, 117 acres. In Muskegon county, the acreage is about the same as last year. There are fifty-four acres at Ryerson Creek, twenty-one acres at Four Mile Creek, twenty-three acres at North Muskegon, twelve acres at Bear Lake, and fifteen acres at Mona Lake. During the past week some fields have developed blight, and the present condition is about eighty per cent of normal. This section grows two crops, summer and fall. The early crop is White Plume and the late crop is mostly Golden Self-Blanching. It is estimated that from seventy to seventy-five per cent of the crop has been harvested.

Ottawa county has an increase of eighty acres over last year. The estimated acreages at various points are as follows: Hudsonville, 510; Vriesland, 175; Zeeland, 143; Grand Haven, 85; Holland, 36; Jenison, 31. A few fields are affected with blight, but no serious damage is apparent. The average condition for the county is 95 per cent.

The condition in Kent county is eighty per cent, considerable blight being present. About two-thirds of the acreage here is grown as a fall crop. The number of fields in Allegan county affected with blight is less than in Kent county. The condition is placed at ninety per cent.

The 1,040 acres in Kalamazoo county is located as follows: Kalamazoo, 600; Portage, 250; Comstock, 190. At Kalamazoo, the condition is seventy-five per cent of normal, being reduced by blight and insufficient moisture. At Portage and Comstock, there has been very little blight and ample moisture.

Kalamazoo county grows a summer and a fall crop. The Kalamazoo section has shipped about twenty-five per cent more to date than to the corresponding date last year.

Approximately two-thirds of the Van Buren county crop is shipped in the rough each year. The condition is ninety-five per cent of normal. A similar condition was found in Cass county.

Onions.—The four leading commercial producing counties are estimated to have a total acreage of 1,243 distributed as follows: Allegan, 600; Kent, 225; Ottawa, 213; Van Buren, 205. In Allegan county, 550 acres is in the Gun Swamp section. The Ottawa county acreage is distributed as follows: Hudsonville, 100; Zeeland, 65; Vriesland, 40; Holland, eight acres.

Excellent yields are promised in nearly all sections. The average for Ottawa county will be around 500 bushels per acre, and the other counties will produce about 475 bushels per acre. Yellow Globe is the principal variety grown, although some Yellow Prize Takers are raised in Ottawa county.

The day-old chick business will live longer if the chick has a pedigree worth certifying.

Mention The Michigan Farmer When Writing Advertisers

SOME LARGE CORN.

FRED KNIPERS, of Rothbury, in Oceana county, raised some tall corn this year. The record stalk was thirteen feet seven inches tall, and several others were thirteen feet tall.

William Barber, near Charlotte, specialized in ears. He produced an ear of corn that weighs two pounds and is thirteen inches long. It has eighteen rows with thirty kernels to the row.

TO FIGHT CORN BORER.

THE Canadian entomologists are importing certain species of ants and wasps from Austria to keep the European corn borer in control.

In its native land, the corn borer does little damage, because it has two hundred different species of natural enemies to contend with, while in Canada it has only nine enemies to combat. The wasps and ants which prey upon the corn borer in Austria are not common in this country, but the entomologists hope that by nursing them through the winter they will survive in sufficient numbers here to have considerable effect on the borer.

FREIGHT CUT AFFECTS MICHIGAN POTATO GROWERS.

MICHIGAN potato growers got a jolt when the Central Trade Association put into effect an emergency freight rate on potatoes from the Red River Valley district to Cincinnati and surrounding markets. This will enable shippers from Minnesota and Dakota to put their potatoes on the markets south of here at considerably less than the Michigan shippers can.

The reason why this big cut in rates was made was to give the farmers of the Red River district an opportunity to market their crop and thus avoid financial embarrassment. This reduced rate will dump a large crop from the Minnesota district on markets which were usually Michigan's, at prices which Michigan growers cannot compete with.

The rate from the Red River district to Cincinnati is still higher than that from the Michigan territory to that market, but the Red River farmers grow from four to five hundred bushels per acre on new land and can take twenty-five cents per hundredweight and still make money. Michigan growers producing a hundred bushels per acre cannot do this, but they must come down to meet prices on the Red River product, otherwise they will not be able to sell on these markets.

COUNTY PLANS REFORESTATION.

KENT county has a reforestation committee of the board of supervisors which with the county road commission is planning the first step in the reforestation in that county. The road commission will ask the board of supervisors for a thousand dollars to be expended for young trees to plant along the roadside. Five hundred dollars will also be asked for the purpose of establishing seedling beds on county-owned property.

There are some thoughts of compensating the farmer who sincerely attempts reforestation by reducing the tax assessment on his property, instead of increasing it as has commonly been the custom when a man had a good piece of timber on his farm.

Wouldn't it be a good thing for other counties to follow Kent county's lead?

Farm housewives last year either sold or put on their shelves 1,335,000 containers of jelly, 9,500,000 cans of fruit and vegetables, and 715,000 pounds of poultry and meat, canned according to methods demonstrated to them by agents of the department of agriculture and state agricultural colleges.

Now — BALL BEARINGS in the larger PRIMROSES!

The Highest Development in CREAM SEPARATOR Construction

For forty-five years dairymen have struggled with hard-turning cream separators. Excessive friction caused them much trouble in the hand operation of the machines. Now the cream separator engineers of the Harvester Company, with this problem constantly in mind, and the satisfaction of the operator at stake, have designed and constructed a Ball-Bearing Primrose Cream Separator which reduces the power required to operate by approximately 35%.

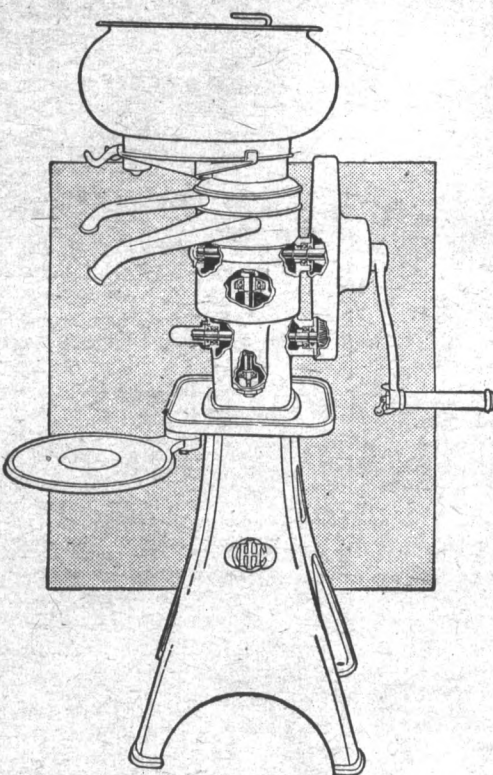
In this latest Primrose, the ball bearings are located at

points where the resistance is greatest in the operation of all makes of cream separators.

The Ball-Bearing Primrose is in no sense an experiment. It has been tested and proved a remarkable improvement in the hands of thousands of farmers and dairymen in New York, Wisconsin, California, Minnesota, and other dairy sections of the United States. The unanimous decision of all users is that it represents a development which has long been needed, especially in territory where large machines are in use, and where more would be profitably used were it not for the hard turning of the plain-bearing machines.

The International Harvester Company's broad and liberal guarantee stands solidly behind this product. Primrose deserves its high reputation, not only for its recovery of the greatest amount of butter fat when operated as instructed, but for its ability to do so with less labor.

The Ball-Bearing Primrose is one of the products in the McCormick-Deering line of farm operating equipment. It may be seen and studied at the store of your McCormick-Deering dealer. Write us for catalog if you prefer.



NEW PRIMROSE No. 5

BALL BEARINGS make it easy to operate this big 1,100-lb. capacity Primrose by hand. Cut out to show the six ball bearings on crankshaft, on pinion shaft and on spindle.

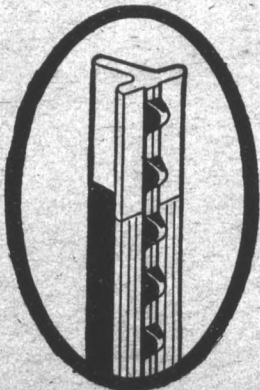
INTERNATIONAL HARVESTER COMPANY

CHICAGO OF AMERICA U S A
(INCORPORATED)

93 Branches and 15,000 Dealers in the United States

Fence With the Strongest and Most Durable Steel Post

THE new RED TOP Double Strength Studed Tee steel fence post gives you everything that the old RED TOPS gave you—and then some. Greater strength, longer life, easier stapling, firmer in the ground, better looking. Sounds like a regular post. That's what it is.



Whether you are repairing your old fences or building new ones, see this RED TOP Studed Tee at your dealer's. It talks for itself better than we can tell you about it on paper. Costs less than you'd think.

Red Top
GUARANTEED
Double Strength Studed Tee
Steel Fence Posts

Insist on the Original and Genuine RED TOP Double Strength Studed Tee. No holes. Circular on request.

THE RED TOP STEEL POST COMPANY
38-L South Dearborn Street, Chicago, Illinois

Why Not PUT THIS NEW MILL ON YOUR OLD TOWER

ALBION

Albion steel and wood mills are quiet and powerful. One-third the working parts of any other mill. Only main pinion bearing subject to wear. This is oilless, and easily replaceable. Govers by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chore hours now with a good Windmill? This is your chance—F. O. B. Albion. Erect it yourself. Ask your dealer, or write direct to Union Steel Products Co. Ltd. No. 528 N. Berrien Street, ALBION, MICHIGAN, U. S. A.

DO DITCHING THIS FALL

Prevent winter rains smothering the soil. Put land in shape for early spring work. Get your ditching and terracing done now with the **Marlin** Farm Ditcher and Grader.

Works in any soil. Makes "V"-shaped ditch or cleans ditches down 4 ft. deep. All steel; reversible; adjustable. Write for Special Fall Demonstration Offer. OWENSBORO DITCHER & GRADER CO., Inc. Box 315 Owensboro, Ky.

10 Days Free Trial

BOOK ON DOG DISEASES And How to Feed

Mailed free to any address by the Author

H. CLAY GLOVER CO., Inc.
129 West 24th Street, New York

America's Pioneer Dog Medicines

Radio Department

Conducted by Stuart Seeley

Results

QUITE often it happens that two similar sets working under almost identical conditions, give entirely different results. For instance, you and your neighbor have both purchased the same type of receiving set and installed them in your homes. You both put up aerials of about the same length and height and naturally expect that you will both get about the same results. But your neighbor hears some stations clearly that you have never been able to pick up, and you hear others that he has never heard.

Such peculiarities are strange indeed and often difficult to explain, though in such a case as this it is probably due to the so-called "directional effect" of the two aerials. An aerial run in one direction with just the right slant will receive best from one way, while if the slant is reversed it may receive best from just the other way. It is seldom that the "directional effect" of an aerial is sufficient to cause a noticeable difference in the strength of signals coming from different directions, although it has been found that sometimes an aerial may be so decidedly directional that it will not receive from one way at all.

In other cases your neighbor may hear everything within a radius of five hundred miles, while you have difficulty hearing stations seventy-five or one hundred miles away. If the aerials are nearly the same and equally free from surrounding trees and buildings, you will probably decide that your set is no good. But if the apparatus is of a standard make it is usually well tested and guaranteed to be O. K. before it leaves the factory. If you and your neighbor try interchanging your sets you can soon tell whether the trouble is in the set itself or in the aerial system. If the apparatus is at fault it should be returned to the manufacturer for adjustment and repairs. If the aerial system is at fault you will probably be able to remedy the difficulty yourself, although not necessarily so. If the whole aerial is well insulated, the joints well soldered, and the ground connection well made, you have done all you can to make it work properly and if you are still unable to hear all that you should it is possible that your aerial is located in a "dead hole."

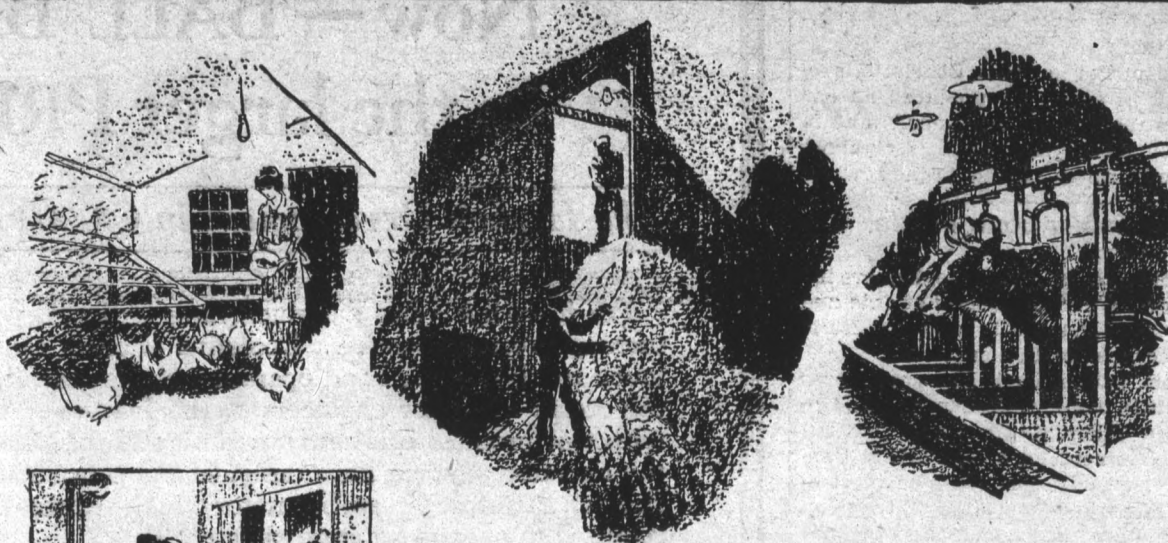
"Dead holes" are areas, widely scattered over the country, which vary in size from one or two square rods to fifty or sixty square miles, and which seem to be almost impenetrable by radio waves. Frequently such "holes" are found in the heart of a large city or near a mountain which contains large deposits of iron ore. A ship goes through a dead hole when it passes under Brooklyn bridge.

In these cases the "hole" is undoubtedly caused by the presence of huge masses of iron, but in other cases the cause is not at all apparent. There are several "dead spots" on the Great Lakes and a ship passing into one of these is temporarily cut off from communication with outsiders. Signals which came in with volume suddenly become unreadable, then as soon as the ship passes out of the area they come back loud again and communication can be resumed.

If it is your misfortune to be located in such a "hole" there is nothing you can do to remedy the trouble except move out. But make very certain that that is the trouble before giving it as the reason for poor results, for there are many other things which may cause the set to work poorly.

Sam Says: The slow-motion moving pictures remind me of the last hired man I had.

Certified Electric Service



Wilys Light Pays Its Way

Everywhere on the farm—wherever light and power are needed, WILLYS LIGHT Certified Electric Service is sure to return penny for penny and dollar for dollar, every cent of your original investment.

Besides for use in all the chores—pumping the water—running the separator—churning the butter—and operating the electric washer and iron—it floods the house, the barns, the sheds, the garage with bright, cheerful, safe light, at the touch of a button.

WILLYS LIGHT Certified Electric Service provides smooth, steady electric power whenever you need it. It is permanent, dependable, sure and lasting. Identically the same service as is provided to the city family.

You can't count the convenience in dollars and cents. Money won't buy mother's health and peace of mind, nor a contented family—a healthy, happy group enjoying the conveniences and pleasures city folks enjoy.

You can easily afford WILLYS LIGHT. You can't afford to be without it. The operating cost is a few cents a day, and it requires less attention than your automobile. You can buy WILLYS LIGHT Certified Electric Service and have it immediately—right now—on your own terms. Take as long as twelve months—a whole year—to pay if you wish. The terms cover all—complete installation—ready to use—even the freight.

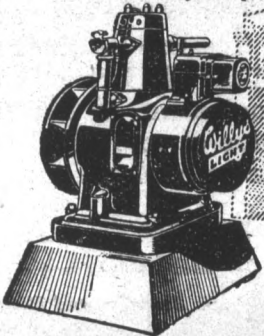
A remarkable organization of painstaking, conscientious dealers are at your service. One near you will be glad to give you Free Estimate of an outfit that will meet your requirements.

Write us for free catalog and complete information. Address Dept. 233

WILLYS LIGHT DIVISION
The Electric Auto-Lite Company
Toledo, Ohio

Builders of over 3,000,000 electric lighting systems

WILLYS LIGHT
Power and Light with the Quiet Knight



\$295
and Up

There is a size to fit your needs—as much or as little power as you may require and terms of payment you can afford.

Running water in kitchen and bath-room provided with power from Willys Light is a convenience that is considered indispensable by farm housewives.



Ample power for operating the separator, the churn and dairy equipment is provided by Willys Light. Handling the dozens of small chores with electricity are priceless advantages.



AMERICA'S
LEADING FUR HOUSE

TRAUGOTT
SCHMIDT
AND SONS

RAW FURS

Established 1853—our plant has grown to cover two city blocks—the greatest plant in the world devoted to the handling of furs.

Ship your Raw Furs to Traugott Schmidt & Sons—America's Leading Fur House. Why take chances when you can ship to this big, strong, dependable fur house with a record of over a half century of square dealing? For 69 years we have been the fur shippers' best friend. Our reputation for prompt remittance and our resources of over \$1,000,000 is your guarantee of satisfaction.

Get More Money

Our enormous foreign market with our own direct branches enables us to pay you MORE CASH. Ship to us for TOP PRICES. Fair, liberal assortment always by expert graders assures you big returns. Remember—nothing is deducted—we pay all shipping expense—charge no commission and send your money same day furs are received.

Valuable Book

Write for booklet. Tells how to get most money for furs. Also price list, market report and shipping tags all sent free. Write at once—NOW.

TRAUGOTT SCHMIDT & SONS.
515 Monroe Ave., Detroit, Mich.

WOOL

We buy wool—let us know what you have. We can get together.



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WORLD EVENTS IN PICTURES



Former Senator Sutherland, of Utah, has just been appointed by President Harding to the United States Supreme Court bench.



Bonnie Murray, Iowa's most beautiful girl, knows more about cooking than flappers.



Mme. Marguerite Matzenauer, famous contralto, with her little daughter and father, spent the summer at West End, New Jersey.



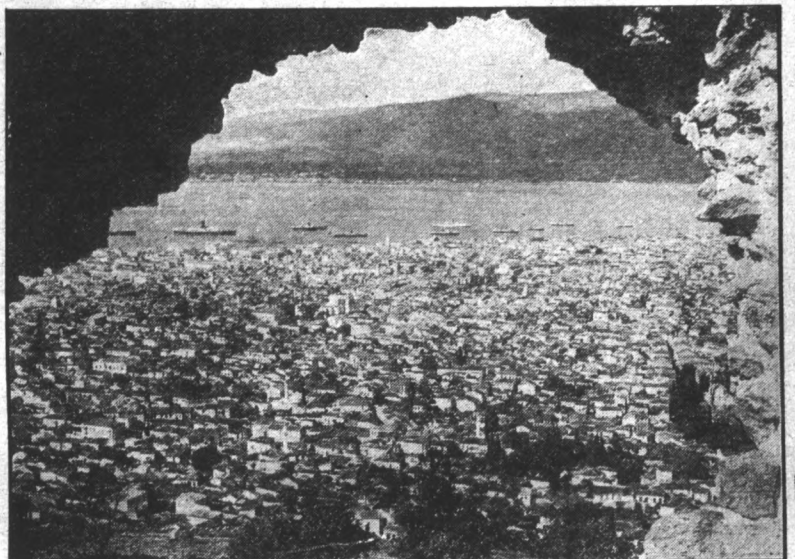
Mrs. Clare Sheridan, whose husband was an English captain killed during the World War, is famous for her busts of Lenin and Trotsky, the noted Soviet leaders.



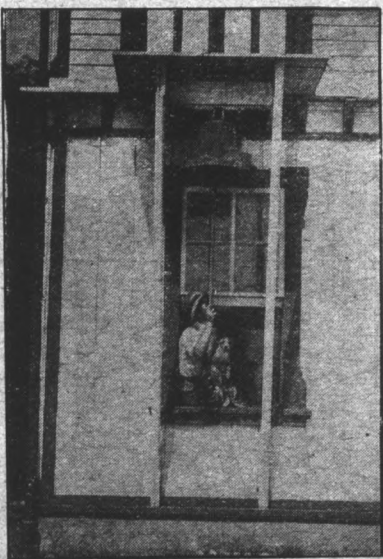
Eddie Rickenbacker, American ace and auto manufacturer, wears this happy smile because he is just leaving with his bride for their honeymoon abroad.



Joseph Cummings Chase, of New York, famous painter of portraits, making a painting of the most beautiful girl in America, Miss Katherine Campbell, of Columbus, Ohio.



One thousand persons were reported to have been massacred, and fourteen Americans were among the victims when the Turks set the city of Smyrna in Asiatic Turkey in flames.



This historic old bell calls the White House gardeners to work every day.



Taken when the atmosphere was unusually clear, this shows New York's skyline as it looks today, with the famous towers of American industry.



Aileen Ruggin, the Olympic diving champion, doing the remarkable jack-knife diving stunt.

THE CROSS-CUT —By Courtney Ryley Cooper

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What Has Happened So Far:

After the death of Thornton Fairchild, an aged miner of Cripple-creek district, Robert Fairchild, his son, reads a letter. From this he learns of the Blue Poppy mine coming into his possession, but nothing of the mystery and silence that surrounded his father's days. He interviews his attorney and leaves immediately for the west to claim the property. Upon arriving he cannot help but feel the mystery and illusive nature of the situation. Even Mother Howard, his father's old friend, seems to hold something back. Squint Rodaine and gang work against Fairchild. A strange friendship grows between Anita Richmond, whose father is in the clutches of Squint Rodaine, and Fairchild. Morrice Rodaine is in love with Anita Richmond. Harry Hawkins, an old friend of Fairchild's father, arrives to aid in the prospecting. By an extraordinary plan Harry manages to get the mine unwatered. At an old-fashioned dance Fairchild meets Anita Richmond again and they have several dances together, much to the annoyance of young Rodaine. A real hold-up is staged and one injured. Young Rodaine swears the guilty party to be Harry Hawkins. The date of the trial is set, with deeds of the Blue Poppy mine given as security. Fairchild receives an anonymous letter containing a bid of \$50,000 for the Blue Poppy mine. After consideration it is rejected and mining operations are put into full swing.

"But we can't take it, Harry. In my father's letter was the statement that he made only one mistake—that of fear. I'm going to believe him—and in spite of what I find here, I'm going to hold him innocent, and I'm going to be fair and square and aboveboard about it all. The world can think what it pleases—about him and about me. There's nothing on my conscience—and I know that if my father had not made the mistake of running away when he did, there would have been nothing on his."

Harry shook his head.

"I couldn't do much else, Roy. Rodaine was stronger in some ways than he is now. That was in different days. That was in times when Squint Rodaine could 'ave gotten a 'undred men together quicker'n a cat's wink and lynched a man without 'im 'aving a trial or anything. And if I'd been your father, I'd 'ave done the same as 'e did. I'd 'ave run too—'e'd 'ave paid for it with 'is life if 'e didn't, guilty or not guilty. And—" he looked sharply toward the younger man—"you say to go on?"

"Go on," said Fairchild, and he spoke the words between tightly clenched teeth. Harry turned his light before him, and once more shielded it with his big hand. A step—two, then:

"Look—there—over by the foot-wall!"

Fairchild forced his eyes in the direction designated and stared intently. At first it appeared only like a succession of disjointed, broken stones, lying in straggly fashion along the footwall of the drift where it widened into the stope, or upward slant on the vein. Then, it came forth clearer, the thin outlines of something which clutched at the heart of Robert Fairchild, which sickened him, which caused him to fight down a sudden, panicky desire to shield his eyes and to run—a heap of age-denuded bones, the scraps of a miner's costume still clinging to them, the heavy shoes protruding in comically tragic fashion over

son that a woman had played the part of a man singing in a maudlin fashion as they traveled down the center of the street at night to all appearances only three disappointed miners seeking a new field. And yet—

"I know what you're thinking." It was Harry's voice, strangely hoarse and weak. "I'm thinking the same thing. But it mustn't be. Dead men don't always mean they've died—in a wye to cast reflections on the man that was with 'em. Do you get what I mean? You've said—" and he looked hard into the cramped suffering face of Robert Fairchild—"that you were going to 'old your father innocent. So'm I. We

gone, Boy—your father—I mean. 'E can't defend 'imself. We've got to take 'is part."

"Maybe—" Fairchild was grasping at the final straw—"maybe it's not the person we believe it to be at all. It might be somebody else—who had come in here and set off a charge of powder by accident and—"

But the shaking of Harry's head stifled the momentary ray of hope.

"No. I looked. There was a watch—all covered with mold and mildew. I pried it open. It's got Larsen's name inside!"

CHAPTER XIV.

Court Action is Begun.

A GAIN there was a long moment of silence, while Harry stood pawing at his mustache and while Robert Fairchild sought to summon the strength to do the thing which was before him. It had been comparatively easy to make resolutions while there still was hope. It was a far different matter now. All the soddenness of the old days had come back to him, ghosts which would not be driven away; memories of a time when he was the grubbing, though willing slave of a victim of fear—of a man whose life had been wrecked through terror of the day when intruders would break their way through the debris, and when the discovery would be made. And it had remained for Robert Fairchild, the son, to find the hidden secret, for him to come upon the thing which had caused the agony of nearly thirty years of suffering, for him to face the alternative of again placing that gruesome find into hiding, or to square his shoulders before the world and take the consequences. Murder is not an easy word to hear, whether it rests upon one's own shoulders, or upon the memory of a person beloved. And right now Robert Fairchild felt himself sagging beneath the weight of the accusation.

But there was no time to lose in making his decision. Beside him stood Harry, silent, morose. Before him—Fairchild closed his eyes in an attempt to shut out the sight of it. But still it was there, the crumpled heap of tattered clothing and human remains, the awry, heavy shoes still shielding the fleshless bones of the feet. He turned blindly, his hands groping before him. "Harry," he called, "Harry! Get me out of here—I—can't stand it!"

Wordlessly the big man came to his side. Wordlessly they made the trip back to the hole in the cave-in and then followed the trail of new-laid track to the shaft. Up—up—the trip seemed endless as they jerked and

If the Farmer'd Quit Farmin'

[By Mrs. Nellie Fowler]

If the farmer'd quit his farmin',
Never plow the warm dark ground,
Where all them good pertaters
An' the 'baggies rich are found,

If the wheat would cease its wavin',
An' the corn would cease to grow,
Jest tell me what would happen,
I'd really like to know.

If the farmer'd go a-fishin'
Or some other pleasure seek,
Throwin' down his hoe an' shovel,
An' be gone off by the week;

If he'd say, "I'm done with farmin',
I'll not plant another seed.
I'm sick an' tired of the whole blamed
business,
I'll not pull another weed."

Let his hay, an' oats an' barley
All grow up to thistles tall,
An' the beets, an' beans, an' kaffir,
He'd not cultivate at all.

Now, be honest, could you blame him?
For his farm he's payin' twice;
For the suit he bought last winter
An' the shoes he's payin' thrice.

Taxes, clothin', flour, sugar,
Everything he has to buy—
Harness, wagon, gas and binders,
Are a'-most tremendous high.

But—when he takes his hogs to market
An' that splendid slick veal calf,
"Hogs are off today," they tell him,
"You're in luck," they guy and laugh.

But—oh, mister, that there same
feller
Wouldn't he cuss, an' kick his feet?
"I wonder what that crazy farmer
Thinks that we're a-goin' to eat."

Jest let the farmer quit his farmin',
Should he git that in his head—
I can tell you what would happen,
Everybody'd soon be—dead.

bony feet; a huddled, cramped skeleton of a human being!

They could only stand and stare at it—this reminder of a tragedy of a quarter of a century ago. Their lips refused to utter the words that strove to travel past them; they were two men dumb, dumb through a discovery which they had forced themselves to face, through a fact which they had hoped against, each more or less silently, yet felt sure must, sooner or later, come before them. And now it was here.

And this was the reason that twenty years before Thornton Fairchild, white, grim, had sought the aid of Harry and of Mother Howard. This was the rea-

don't know, Boy, what went on 'ere. And we've got to 'ope for the best."

Then, while Fairchild stood motionless and silent, the big Cornishman forced himself forward, to stoop by the side of the heap of bones which once had represented a man, to touch gingerly the clothing, and then to bend nearer and hold his carbide close to some object which Fairchild could not see. At last he rose and with old, white features, approached his partner.

"The appearances are against us," came quietly. "There's a 'ole in 'is skull that a jury'll say was made by a single jack. It'll seem like some one 'ad killed 'im, and then caved in the mine with a box of powder. But 'e's

AL ACRES—Al Attempts to Teach the Chicks to Produce Instead of Reduce to Music

—By Frank R. Leet.



pulled on the weighted rope, that their shaft bucket might travel to the surface. Then, at the mouth of the tunnel, Robert Fairchild stood for a long time staring out over the soft hills and the radiance of the snowy range, far away. It gave him a new strength, a new determination. The light, the sunshine, the soft outlines of the scrub pines in the distance, the freedom and openness of the mountains seemed to instill into him a courage he could not feel down there in the dampness and darkness of the tunnel. His shoulders surged, as though to shake off a great weight. His eyes brightened with resolution. Then he turned to the faithful Harry, waiting in the background.

"There's no use trying to evade anything, Harry. We've got to face the music. Will you go with me to notify the coroner—or would you rather stay here?"

"I'll go."

Silently they trudged into town and to the little undertaking shop which also served as the office of the coroner. They made their report, then accompanied the officer, together with the sheriff, back to the mine and into the drift. There once more they clambered through the hole in the cave-in and on toward the beginning of the stope. And there they pointed out their discovery.

A wait for the remainder of that day—a day that seemed ages long, a day in which Robert Fairchild found himself facing the editor of the Bugle, and telling his story, Harry beside him. But he told only what he had found, nothing of the past, nothing of the white-haired man who had waited by the window, cringing at the slightest sound on the old, vine-clad veranda, nothing of the letter which he had found in the dusty safe. Nothing was asked regarding that; nothing could be gained by telling it. In the heart of Robert Fairchild was the conviction that somehow, some way, his father was innocent, and in his brain was a determination to fight for that innocence as long as it was humanly possible. But gossip told what he did not.

There were those who remembered the departure of Thornton Fairchild from Ohadi. There were others who recollected perfectly that in the center of the rig was a singing, maudlin man, apparently "Sissie" Larsen. And they asked questions. They cornered Harry, they shot queries at him one after another. But Harry was adamant.

"I ain't got anything to say! And there's an end to it!"

Then, forcing his way past them, he crossed the street and went up the worn steps to the little office of Randolph P. Farrell, with his grinning smile and his horn-rimmed glasses, there to tell what he knew—and to ask advice. And with the information the happy-go-lucky look faded, while Fairchild, entering behind Harry, heard a verdict which momentarily seemed to stop his heart.

"It means, Harry, that you were accessory to a crime—if this was a murder. You knew that something had happened. You helped without asking questions. And if it can be proved a murder—well," and he drummed on his desk with the end of his pencil—"there's no statute of limitations when the end of a human life is concerned."

Only a moment Harry hesitated. Then:

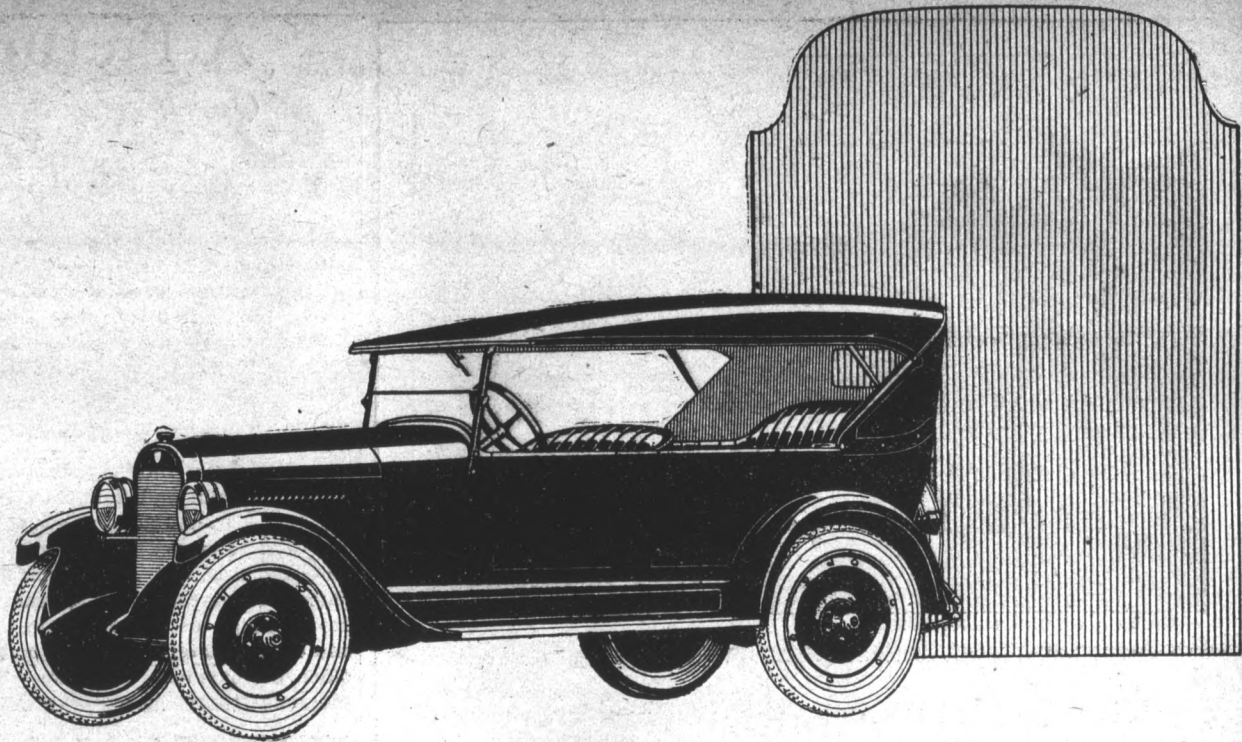
"I'll tell the truth—if they ask me."

"When?" The lawyer was bending forward.

"At the inquest. Ain't that what you call it?"

"You'll tell nothing. Understand? You'll tell nothing, other than that you, with Robert Fairchild, found that skeleton. And that can't come without knowledge and evidence that this man was murdered. So, remember—you

(Continued on page 371).



Such value as you will not find elsewhere—value that expresses itself in a new kind of beauty, in all-satisfying performance, in savings that make a motor car worth while on the farm.

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"Midget" Marvel Self-Contained Roller Flour Mill

Saves the high freights on wheat out and flour and feed in. The first eight months I made a net profit of over \$8000," says A. H. Ling, Jetmore, Kan.; "My profits from the 'Midget' Marvel average right around \$40 per day," Chas. M. McKinney, Cooper, Tex.; "Was \$8000 in debt when I bought my 25 barrel 'Midget,' and the little mill pulled me clean out of the hole long before I bought my 40 barrel mill from you," says M. A. Kamm, Oxford, Mich.

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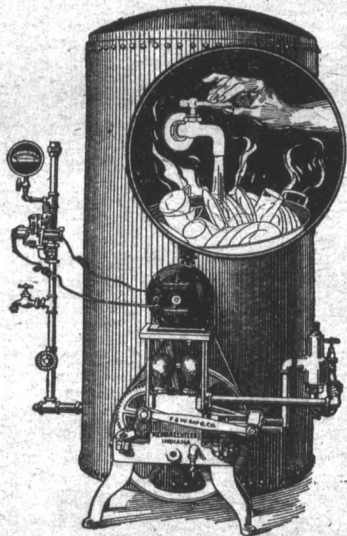
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equipment will enable you to have a modern home. It requires no expert knowledge to operate and needs but little attention. This equipment may be installed easily in your present home. Made in a variety of sizes and styles, so that no matter what your water supply problem may be, you can secure a Hoosier installation suitable for your needs.

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Before you plan your next building, write us for estimates on Kalamazoo Tile construction. The first cost is the only cost—need no paint; will not burn or decay; warm in winter; cool in summer; storm and vermin proof.



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A Picture of Boyhood

Our Weekly Sermon—By N. A. McCune

A GREAT story is told of Hofman's picture of Jesus in the temple, by Dr. R. E. Speer, in one of his books. You will remember that this painting shows the Boy Christ standing in the midst of a circle of old men, who are questioning him. One night a man was giving a stereopticon lecture on Hofman's pictures of our Lord. When he came to the last slide he threw on the screen the scene of the Boy Jesus in the temple. He then told how he came into possession of it. When Hofman had finished this painting, this man had gone to see the artist and was rewarded by being presented with the first copy. He took it to his office and placed it on an easel. One day a judge of the supreme court of one of the eastern states came into his office on business. All the while the judge sat there his eyes were fastened on the picture of the Boy Christ. Later in the morning he returned and said, "I want to see the Boy again." He was invited to sit down and feast his eyes on the famous painting. The purity of the face, the wonderful eyes, the look



of hope and good-will, sank into his soul. For almost an hour he sat and looked at it. He went away with moist eyes. In the afternoon he came back and said, "I want to see the Boy once more." The owner gave him the picture to take into the private office where he might look at it undisturbed. He came out with the tears on his cheeks and said, "The Boy has conquered me," and went out of the office a different man. The judge is now a very earnest Christian man, teaching a big Bible class of young men. It would be well if we all studied this picture. In fact, we ought to know something of the great paintings of our Lord, by our various artists.

ISN'T this gospel of Luke a wonderful book? It has been called "The most beautiful book ever written." A book may be had, with that title. It would be very useful for any one teaching a class of young people. And the second chapter of Luke sets off all that follows. Angels, shepherds, saints, prophets, all pass before us and make up the composite picture. It is all very simple, childlike, and very beautiful. If anybody is so sophisticated that he hasn't any room for angels in his theology, for heavenly singers and other wonders, let him not try to read Luke. Luke's is the joy gospel. He has much to say about happy people, though they may be poor or outcast.

It is a story of growth. The One whose "Name is the Name above every Name" began in a lowly way. He was once but a boy. He grew. He developed. He was wiser at the end of the month than at the beginning. Luke spends considerable time telling about childhood. No one else has anything to say about Jesus increasing in wisdom and in stature. No one else tells us about his getting lost in Jerusalem. No one else gives any of the details of the birth and upbringing of John the Baptist. Two other gospels describe how Jesus blessed the little children, but only Luke tells us these little ones were babes in arms.

GROWTH is the hope of your child and mine. Someone has said that the cooing of the baby is the most welcome sound to a mother's ear. But if at the end of ten years he still makes

that same sort of a sound, it is tragic, not beautiful. It shows there has been no growth. Now shall we produce the best kind of growth? The fact that thousands of children do not have enough attention paid to their training to produce growth in religious things is a fearful fact. But there are signs of hope in the sky. For instance, parents' groups are being formed here and there, to talk over the problems of growing children. There is the child with a violent temper, there is the boy that steals and lies. Now deal with these? And, there is the eternal question of sex. Ask any group of men how many of them had confidential talks with their dads about sex matters, and see how many will raise their hands. Very few. Fathers maintain a criminal silence on these things and do not give straight and simple answers, often, when their boys ask them questions. The boy is left to gather his information from vile-minded companions, or the conversation of undesirable men.

When Roosevelt was a boy a Mr. Davis was engaged to do some carpenter work in the Roosevelt home in New York. While at work, he noticed a small boy come in and pick up some of the tools. Fearing the youngster might cut himself, he told Theodore to put them down. In a few minutes the boy was at the tools again. "I want to see what they're for," he persisted. "You let those tools alone, or I'll send you out of here in a hurry." Young Theodore ran out of the room crying, and into the arms of his mother. It took some time to quiet him down, and then the mother asked what he had done. Mr. Davis told her that he was afraid the boy might hurt himself, with the tools. "But," said the future Rough Riders mother, "I wish he might learn how to use these tools. Whenever my boy has shown any special interest in things, or any curiosity as to how to use them, I have always made a special effort to satisfy that curiosity and teach him all he wished to learn about them and their use." The result was, that Mrs. Roosevelt engaged the carpenter to come every day for an hour or so, for a week, and teach the young man the elements of carpentry. He showed him how to make some toys for himself, and when the lessons were discontinued, little Teddy was so delighted that Davis was asked to buy a kit of tools for him, so that he might use them for himself.

GROWTH! If we older ones can only be a little wise and be blessed with a bit of foresight and a pinch of the wisdom from above, we will count as the happiest hours of our lives the times when we can be with our children as their companions. Stories are the natural medium through which children learn. The story-teller has the world of childhood at his feet. Good books of stories ought to be provided for those old enough to read. Many parents couldn't tell for the life of them what books their children are reading. But the literature that sinks into the imagination before one is fifteen is the stuff that makes or un-makes life. Don't forget that. The librarian at any school can give helpful hints on this, or the teacher, or the minister may be consulted.

SUNDAY SCHOOL LESSON FOR
OCTOBER 8.

SUBJECT:—The Birth and Childhood of Jesus.

LESSON:—Luke 2.

GOLDEN TEXT:—"And Jesus advanced in wisdom and stature, and in favor with God and men."

THE CROSS-CUT.

(Continued from page 369).
tell the coroner's jury that you found this body and nothing more!"

"But—"

"It's a case for the grand jury after that, to study the findings of the coroner's jury and to sift out what evidence comes to it."

"You mean—" This time it was Fairchild cutting in—"that if the coroner's jury cannot find evidence that this man was murdered, or something more than mere supposition to base a charge on—there'll be no trouble for Harry?"

"It's very improbable. So tell what happened on this day of this year of our Lord and nothing more! You people almost had me scared myself for a minute. Now, get out of here and let a legal light shine without any more clouds for a few minutes."

They departed then and traveled down the stairs with far more spring in their step than when they had entered. Late that night, as they were engaged at their usual occupation of relating the varied happenings of the day to Mother Howard, there came a knock at the door. Instinctively, Fairchild bent toward her:

"Your name's out of this—as long as possible."

She smiled in her mothering, knowing way. Then she opened the door, there to find a deputy from the sheriff's office.

"They've impaneled a jury up at the courthouse," he announced. "The coroner wants Mr. Fairchild and Mr. Harkins to come up there and tell what they know about this here skeleton they found."

It was the expected. The two men went forth, to find the street about the courthouse thronged, for already the news of the finding of the skeleton had traveled far, even into the little mining camps which skirted the town. It was a mystery of years long ago, and as such it fascinated and lured, in far greater measure perhaps, than some murder of the present day. Everywhere were black crowds under the faint street lamps. The basement of the courthouse was illuminated; and there were clusters of curious persons about the stairways. Through the throngs started Harry and Fairchild, only to be drawn aside by Farrell, the attorney.

"I'm not going to take part in this unless I have to," he told them. "It will look better for you if it isn't necessary for me to make an appearance. Whatever you do," and he addressed Harry, "say nothing about what you were telling me this afternoon. In the first place, you yourself have no actual knowledge of what happened. How do you know but what Thornton Fairchild was attacked by this man and forced to kill in self-defense? It's a penitentiary offense for a man to strike another, without sufficient justification, beneath ground. And had Sissie Larsen even so much as slapped Thornton Fairchild, that man would have been perfectly justified in killing him to protect himself. I'm simply telling you that so that you will have no qualms in keeping concealed facts which, at this time, have no bearing. Guide yourselves accordingly—and as I say, I will be there only as a spectator, unless events should necessitate something else."

They promised and went on, somewhat calmer in mind, to edge their way to the steps and to enter the basement of the courthouse. The coroner and his jury, composed of six miners picked up haphazard along the street—according to the custom of coroners in general—were already present. So was every person who could possibly cram through the doors. To them Fairchild paid little attention—all but three.

(Continued next week).



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Write for Catalogue



Happy Faces at Every Meal

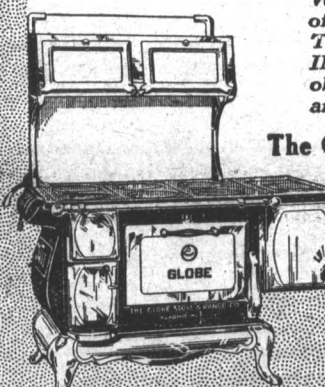
The real test of a range is the food it cooks—the kind of food that makes happy faces at every meal.

Globe Ranges are excellent bakers because of the roomy, airtight oven that distributes the heat evenly and thoroughly and cooks the food alike on top, sides and bottom.

They are convenient, clean, efficient and economical. All of them have the GLOBE fire-box which insures perfect combustion and which converts into heat most of the soot, smoke and gas that ordinarily passes out of the chimney as black smoke.

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Wonderful carburetor. Reduces gasoline bills one-half to one-third. Increases power of motors 30% to 50%. Starts easy in coldest weather.

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Fits any car. Attach yourself. Fords make as high as 34 miles to gallon. Other cars show proportionate saving. Send make of car. Special 30-day trial offer. Agents Wanted.

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Girl
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Burns 94% Air

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TWO in ONE Lighting And Cooking Service For the FARM HOME

Write for Actual Estimate of cost in your home.

Night Commander Lighting Co.
Jackson, Michigan



Woman's Interests



Combination Suits for Home and School

By J. Leland Fowler

THESE little combinations are convenient and comfortable. Daughter likes them because they button down the front so she can button herself up, and because being all in one piece it only takes a minute to dress. Mother likes them because she does not have to stop her work to button up little underwaists and petticoats.

They can be made of any fine material for the best suit but for every day and even common school wear I have found that sugar sacks do very well. Using this material and some coarse crochet lace I made dainty little suits for less than thirty cents; of course, not counting the labor. Two sugar sacks, two spools of No. 40 crochet thread, some buttons and a little sewing machine thread are the materials needed.

First cut a band or strip twelve inches wide and long enough to go around the child's body comfortably and lap over enough to make an inch hem at each end. For my seven-year-

two plain bands over the shoulders and a hem on the bottom of the skirt, bringing the cost down to about fifteen cents.

One suit was made from the bottom of a lace trimmed pillowslip which was worn in the center. Another was from

sister's worn petticoat. One for best was made of fine white linen and trimmed with a fine crochet lace. The coarse lace usually sold for pillowslips makes a satisfactory substitute for the crocheting if one has no time to make trimming.

Try these and see how well sister will like them.

New Ideas of Modern Dress

"Solemn Warning."

"Last Sabbath evening Miss Ann Jones met with a terrible accident as she was returning from church. As she was walking along the embankment the high wind caught in the many yards of dry-goods in her dress and blew her over the railing, down the twenty-foot bank where she landed on a pile of broken rocks. She was terribly injured, and was rescued with great difficulty. The writer sees in this a solemn warning to those who are inclined to follow the new styles. Females who hang bales of dress goods and yards of wire on their persons are inviting death of the elements—wind, fire and flood. Modern dress is a snare of the devil."

We smiled when we read the above item in an old newspaper printed in 1857. We can imagine how others, in as many years in the future, will smile when they read some of the earnest warnings in print in the year 1922. In the article contributed by Mrs. B. O. R. there is much of truth. There is a great lack of modesty everywhere and a very low moral tone. No thoughtful person can fail to be concerned about it. But is it now, or has it ever been, that such a state of affairs is due to the yardage of dress cloth used by the fair sex? Go through the files of old papers and you will find a never-ending cry of complaint about women's clothes. Ever since the adoption of the fig-leaf all sorts of evils have been laid at the door of modern dress. Change has always been greeted by remonstrance. Can this be because the men just naturally hate to change their clothes while we women just as naturally love to?

Now, I, like the Psalmist, "have been young, but now I am old," my locks bleached with the cares and toils of many seasons, but it is my consolation to have accumulated a small stock of plain common sense. In its light I am led to certain conclusions, among them I find the conviction that much of this criticism is not worth worrying about. It is constitutional.

Honestly, in what other age has there been so much for sensible women to rejoice in? To have one's avoirdupois unfettered, what joy! One's step unhampered, what freedom! How the one-piece dress brings relief from those old moments of apprehension as to the state of our back view.

No, it is not true that the present state of low morals is due to the clothes some folks are wearing. Vice and wickedness flourished when women swaddled themselves in stays and bandages and yards of cloth.

The trouble is, in this age as in all others, some women have used apparel to attract attention of men. Other women use it as clothing.

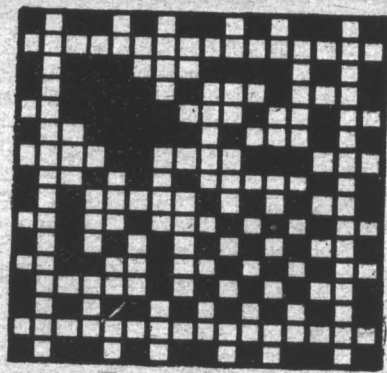
The principle of suitability rightly applied would help matters. Furs and warm clothing for cold weather. Light and cool things for summer. Bathing suits for the water. Riding outfits for horseback, and pajamas for sleeping. Loveliness in color and texture for parties. But the age-old passion for

making a display leads to the use of furs in summer, silk stockings in winter, bathing suits for strolling on the beach. There is no particular advantage in bare knees or riding breeches in the shopping districts of the city. A little different expression of an old, old sin.

And, of course, the great problem has always been, is now, and will be, what to do about it. Discussion, condemnation and even legislation may help some. It is my private view that good men, as good men are not so fervently interested in all they see, and are not quite so playful and flip-pant in denouncing what they gaze at, would help some, too. Possibly, if modest women, decently clad, could feel as many admiring male glances in their wake, modest attire would become more the rage. But even if all good women were to adopt as a sign of their chastity a non-transparent-up-to-the-ears, down-to-the-heels uniform, and all men gave them the tribute of their admiration, so that all women were forced to adopt it, if they wished to be noticed at all, would all women be good? Well, I wonder.—Mrs. I. K.

FILET DESIGN FOR HOUSEHOLD LINEN.

THE little filet design given here is suitable to decorate different pieces of household linen. It is inserted into an edge cut in points as shown in the sketch. It may be used for the end of a towel, the ends of a bureau



scarf, or along the open end of pillowslips. Make as many squares as will be necessary to fit into the pointed scallops along the edge of the article you are making. Lay the filet squares in place along the edge of the linen, and with a pencil mark off the outline for the pointed scallops. Be sure each triangle is an exact right angle. Have machine hemstitching done on these lines. Cut off the material close to the hemstitching, and then sew the filet squares in their places, whipping them into the meshes of the hemstitching. Finish the entire edge with a simple picot.



Combination Suit for the School Girl

old daughter this strip was twenty-seven inches long. Make an inch hem in the top of this and a narrow one in the bottom. Also an inch hem in each end.

Cut two pieces for the bloomers from your regular bloomer pattern. Do not sew all the way up the front of the bloomers but finish about three inches of top for center front closing. Make four-inch slashes at center top for seat opening. Sew up back of bloomers.

Join under parts of the legs and put on bands long enough to go around leg well above the knee so they will not be too tight if crowded up when playing. Place a band at top of back for top of seat. For average size this will be about twelve inches long and three inches wide before finishing. Sew the bloomers to bottom of underwaist on each side of front and about one inch up on the underwaist.

Make a skirt of the required depth and sew onto waist at a point about one inch above the bloomers. This one was twelve inches deep and had three-inch lace, making fifteen inches in all, but it is deeper than you will want if you wish to expose the bare knee. Sew on lace yoke and you are ready for the buttons and button holes. This requires about four down the front and three for the back.

The crochet lace used was an easy pattern and quickly made but any kind may be used or it may be finished with

Household Service

TO MAKE IRON KETTLES SMOOTH.

My iron kitchen utensils have become rough. Is there anything I can do to make them smooth?—Mrs. S. R.

First rub the utensil with fat and bake, and afterwards rub with steel wool (coarse) or a tensil scrub brush. This process may have to be repeated if the utensils have become quite rough.

STAINED ZINC TOP KITCHEN TABLE.

My zinc-top kitchen table has become badly stained. I am wondering if you can tell me something that will remove these stains.—Mrs. F. O.

Rub with an acid, such as vinegar or lemon juice, and then wash thoroughly with a weak solution of soap.

STAINED LIBRARY SCARF.

I have a library scarf that became badly stained with chocolate. This is on white material. Can you tell me something that will remove the stain?—Mrs. S. O.

Soak the scarf in a cold strong borax water for half an hour. Pour boiling water through this and wash in the usual manner. For similar stains for silks and unwashable fabrics, sponging with chloroform will remove the stain.

HOW TO REMOVE STICKY FLY PAPER.

My children are always getting into the flypaper and making a sticky mess. Can you tell me something that will remove this from their clothing?—Mrs. H. R.

If you will saturate with alcohol, turpentine or kerosene the stickiness will be removed, then wash in the usual manner.

THE FALL CARE OF CYCLAMENS.

Is it necessary to repot my cyclamen if I want it to bloom this winter. When should I do it, and when should it be watered?—Mrs. S. C. S.

You should re-pot your cyclamen any time this month, using the same kind of soil and always taking care to leave the top of the bulb free. A week or two after re-potting, the plant may be brought into a sunny window where it should soon begin to show signs of growth. It will bloom freely through the winter.

Cyclamen leaves should be washed frequently with a damp cloth and all red spiders destroyed as soon as they appear. Greenhouse plants often have the tiny white millers which are very bad for cyclamen. Put some ammonia in a saucer and set plant in that if it is troubled with millers.

Begin to water them as soon as brought to the sunlight, but do not keep them wet. Water them frequently and let them be quite dry before watering again. The amount of water used will depend greatly upon the humidity of the room.

REDECORATING THE LIVING-ROOM.

My living-room is painted white. What will I have to do to grain it? The woodwork is not dented or marred?—Mrs. M. G.

Would advise that you do not grain your living-room, as that looks very ordinary and is about obsolete. It would be much better to enamel this in gray, ivory, cream or white, rather than grain the finish. Use a neutral color and then use a varnish stain of the color you want and if you do not like a high gloss it may be taken off with a slight rub with pumice stone and water. If you would like your home to be thoroughly modern, give the finish you now have a light sanding and then put on a coat or two of a good undercoat for an enamel, and

then follow this coat with one or two coats of a good top enamel, either in gloss or egg shell. This will give a thoroughly modern finish which will be easily kept clean, as it is washable. This can be done by yourself with a little care and pains exerted.

FRAUDS OF THE HEAVY FRUIT SEASON.

WITH the bumper fruit crop of this season and past seasons and the large increase in home-canning, induced by further instruction in the art, an extensive advertising campaign has been put on by manufacturers of so-called canning compounds. The United States Department of Agriculture has recently issued a circular with reference to certain highly advertised and widely distributed canning powders, which contain ninety-five per cent boric acid and five per cent salt. By experiments it has been shown these powders to be unnecessary in the case of acid fruits and vegetables, to have only a slight effect on the microorganisms and molds which cause spoilage in improperly sealed jars and to have no effect whatever to control the growth of two of the most dangerous and common bacilli, B. botulinus and B. sporogenes.

B. botulinus is the bacilli responsible for so many deaths in recent years. Tests have been made on various molds that are often found in canned goods and while the number of species which would germinate were reduced to some extent, spoilage from the common species of molds was not entirely eliminated. The result of these experiments showed that these powders do not insure safety from food poisoning and that dependence on them become a source of danger. Boric acid has no food value and its antiseptic value is not great. It is classed under the food law as harmful to health as well as deleterious to chickens, and by all means should be avoided.

This bumper fruit crop is also responsible for the shortage in the glass fruit jar supply, particularly in the popular pint and quart sizes. Jobbers refuse to order additional stock as they would arrive too late for sale. It has been estimated that the demand for fruit jars this season has been fifty per cent greater this year than last.

"PASS IT ON."

THE following suggestions have been sent into this department with the idea of helping others in our little perplexing everyday problems. Many times the lack of little suggestions to a tired mind has been the cause of much work and many a failure.—Eds.

One always has trouble in keeping cauliflower any length of time, so, as we are fond of creamed cauliflower, I studied out a way of canning my late crop for winter use. I cook and can it in a strong salt brine. After it is canned it will turn brown and you may think it is spoiled, but it is not. When wanted for use, open, drain, place in saucepan, cover well with water, bring to a boil and drain again. This removes the surplus salt and restores it to its natural color. It is now ready to prepare for the table.—Mrs. E. T.

I find sticky flypapers to be a great value in destroying flies. Below I give my method for preparing fly paper, which is as good as store fly papers, and much cheaper:

Heat together two pounds of resin and one pint of castor oil until it looks like molasses. Spread while hot on an old newspaper.—Anon.

Three old broomsticks can be made into the best kind of tripod support for a home-made dress form.

Lily White

"The Flour the Best Cooks Use"



A GOOD RECIPE FOR NUT BREAD

1 egg, 1 cup sugar, 1 cup sweet milk, 1 teaspoon salt, 1 cup nuts, 4 1/2 cups Lily White Flour, 4 level teaspoons baking powder. Mix well and let stand twenty minutes in two pans nine inches long, four and three-quarters inches wide, three inches deep. This amount just fills these two pans. Grease pans and over top of loaves with melted butter; bake in moderate oven until done. (Use one-half cup of flour to knead in soft dough.)

Our Guarantee

We Guarantee you will like Lily White Flour, "the flour the best cooks use" better than any flour you ever used for every requirement of home baking.

If for any reason whatsoever you do not, your dealer will refund the purchase price.—He's so instructed.

Bakes So Evenly

Everything baked with Lily White Flour has an even, firm texture. Loaves of bread are good looking, light, flavory and tender. Biscuits and rolls are delicious—the kind you will enjoy making and everyone enjoys eating. The reason for this is the perfectly uniform granulation and the absolute cleanliness of Lily White.

Why You Should Use Lily White

REASON No. 6

Scientifically Milled from the Best Wheat

Sixty years of milling experience stand behind Lily White Flour. It is milled of the finest wheat grown in America. The grain is cleaned, washed and scoured eight times. It is milled by the six-break system. It is untouched by human hands. Every process to produce a better flour is employed by the Lily White millers and a better flour is the result.

One Sack Will Convince You

VALLEY CITY MILLING COMPANY

GRAND RAPIDS, MICHIGAN

"Millers for Sixty Years"

\$1.00 PRIZE FOR YOU!

We will give \$1.00 to any woman who receives first prize for the best loaf of bread baked with Lily White Flour at any County or District Fair this fall. Simply write us about your winning.

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Just send me your name and I will send you Free and without obligation the pattern for this exquisite, one-piece slip-on dress. A regular 22 pattern, with full instructions for making absolutely FREE! May be made up of ging-ham, serge, taffeta, poplin or silk. Would cost ready made from \$5.00 to \$10.00. Make it yourself in 2 to 3 hours and save two-thirds! Popular model with large stylish surplice. Neat vest extending around waist with wide sash bow tie. Charming square collar, cuffs and and large attractive pockets to be trimmed with contrasting material. Easy to make.

Book of Patterns FREE!

I will also send FREE and without obligation, my latest book of patterns, just out, showing 100 newest fall fashions. Also hundreds of smashing bargains for fall. Don't miss this book if you like to sew. It is absolutely FREE.

Hurry! Only a limited number of patterns on this offer. Send the coupon below today. Ask for pattern No. 1301 and be sure to give your size. Sizes 34 to 44. I pay the postage.

MARY ALLEN, Dept. 4707
900 W. Jackson Blvd., Chicago, Ill.

Please send me absolutely free and prepaid, the pattern for No. 1301 Slip-On Afternoon Dress. Also send me your latest book of patterns.

Bust measure

Name

Address

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For Sale, near Ann Arbor, six room semi-bungalow, garden, lot 60x140, in a new subdivision. Write F. P. ARTHUR, 207 Observatory, Ann Arbor, Mich.

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100% PURE WOOL

Save 2/3 by making sweaters, scarfs, caps, shawls and other knitted things from this warm, long wearing, pure wool yarn. Send for Free color card of stylish, attractive shades—also money saving catalog of many other Home-wool products. Founded 1876. HOME WOOLEN MILLS, 204 Main St., Eaton Rapids, Mich.

"HOMEWOOL"

Diana Yarns 13c per ounce

Send for free samples. Soft and lustrous for hand knitting. Save money—buy direct—parcel post prepaid. Money refunded if not satisfied. ROSLYN WORSTED YARN CO. Desk F, Roslyn, Penna.

FARMS & FARM LANDS

200-Acre Lakeside Farm 4 Horses, 12 Cattle, Crops

Poultry, implements, tools, etc., included to settle now; schools, stores, churches, good roads, splendid neighbors; 117 acres heavy-cropping fields, muck land for truck; big pasture, woodland; 160 apple trees, 134 acres berries; excellent 5-room house overlooking lake, burn with frost-proof basement, silo, poultry houses. Because family reasons \$7000 takes all, part cash. Details this and 40 acre Michigan farm equipped \$1650, page 65 New Illus. Catalog 1200 Bargains FREE. STROUT FARM AGENCY, 814 BO Ford Bldg., Detroit, Mich.

For Sale, 88 acre farm level, all tiled, fenced in ten acre lots, 3 miles from Clare, Mich., country store 1/4 mile, church and school half mile, best of Sugar beet land, only 1/4 mile haul to R. R. Barn round roof 18-ft. on foundation size 36x72, silo 12x30, good sized house, all buildings wired for electricity, this farm should be seen to be appreciated, price if sold at once \$12,000, half cash balance any terms to suit purchaser. Address JAMES S. BICKNELL, Clare, Mich.

Three Missouri River Second Bottom Farms well improved. 200, 300 and 343 acres. Producing 65 to 100 bushels corn per acre. Will sell separately or together. Good neighborhood, all on Santa Fe trail Kansas City to St. Louis. Will sell on reasonable cash payment, balance easy terms. H. L. RILEY, 1019 Powell, St. Joseph, Mo.

Additional Farm Ads. on Page 383

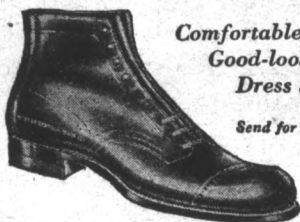
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Worn by 3 generations of Michigan families---

Herold-Bertsch is a household word for shoe quality in thousands of Michigan farm homes. Father, son and grandson have found the famous H-B Hard Pan a shoe that will wear like iron and keep feet comfortable and dry during a hard fall and winter. Herold-Bertsch line of dress shoes are comfortable, stylish and moderately priced.

In almost every Michigan village and town you will find a reliable shoe store featuring the Herold-Bertsch service shoe line at \$3 up, and dress shoes at \$5 up.

HEROLD-BERTSCH SHOE CO.
Grand Rapids, Michigan.



Comfortable,
Good-looking
Dress Shoes

Send for Booklet

Our Boys' and Girls' Department

Achievements Build Character

Club Work Aids to Induce the Higher Things of Life

By Johnny

IT is from a sense of duty to the equalization between the sexes and giving of credit where credit is due, that I will attempt to tell you about the work of a progressive young lady of Ohio.

In 1918 Doris Beck, of Ohio, decided to join the calf club which was being started in her county, now widely known, as the Rosenberger and Edwards Calf Club, and try her hand at developing a winner. During the first three years of the club two of the first prize winners were fitted by her. Her winner in 1920 was Clear Diamond 8th. This heifer stood at the head of a strong class of twenty-one calves shown by other boys and girls, and also at the head of a line of twenty-seven junior yearlings in the open classes.

After the show the calves were put up at auction and sold, with the understanding that each member might buy back his or her animal. Clear Diamond 8th was the top of the sale

not a dealer in mere animal flesh but a lover of improved Shorthorns. If the calf had been sold for the high dollar, the money would have soon been re-invested in commerce and the days of Clear Diamond forgotten, but no, she goes back home to establish and lay the foundation for the building of a still more efficient animal to aid in the turning of farm grains and roughages into a marketable product.

It shows the strong appeal for something higher and better in life which the care of good animals develops for club members and this, after all, is the

true value and meaning of the work. Without competition and a means of instituting some advancement we can no longer claim for ourselves a place among people.

In this girl's work rings a true tune of a lover of not only high-class live stock, but for the better things of life. It is a living story to the importance of club work, in that it teaches true devotion, strong character, perseverance, and the knack of putting to a useful practice the ideas of youth. What stronger proof of the good the work can do than this, which provides for the moulding of broad and useful citizens, can one demand?

Our Letter Box

THIS letter box will be where the boys and girls can express their views, tell of themselves and things about the farm, or ask advice. The most interesting letters each week will appear here. Address your letters to me.—Uncle Frank.



Doris Beck and Her Prize Calf.

at \$1,400, but did not change ownership. Since this time the heifer which has now grown to be a cow, has given birth to two calves for her owner, at the present time nursing a white heifer calf sired by Village Royal, the sire of the grand champion bull at the last International.

Her calf was fed feed grown on the farm, being kept in the barn during the day and turned out to pasture with another calf in the evening. Received a bath about every ten days, and frequent grooming.

Miss Beck not only made good financial returns upon her investment in a good calf, but has also had the pleasure of watching her pet round out into prize winning form under the skillful guidance of her own hands. For it can be no chance of luck that she should fit and show two first prize winners in three years. She says that the three most essential things to success as she has found them in club work are: First, to get a calf that pleases, (one with which you enjoy to associate); second, for parents to get behind the work and boost; third, that ways and means be provided so that the child can keep the calf for a breeding cow and reach the object for which the calf club was started.

But there is a bigger result here than the financial returns, although they were great, even greater than the winning of the blue ribbon. In the work of Doris Beck when she said, speaking with reference to the sale of her calf, "I am glad to say that Clear Diamond 8th goes back to Pleasant View Stock Farm," rings a meaning of greater importance than the winning of a dozen first prizes. Miss Beck is

Dear Uncle Frank:

When I came home from school and found a check for one dollar waiting for me, it seemed almost too good to be true. When I wrote the essay I thought how nice it would be if I should be one of the five to win; but then I thought how many others there would be with essays as good as mine, and I didn't think that I would be one. But I thank you very much for it. I am going to save half of it for Sunday School, because I think everyone should spend part of their money for religious purposes.

I am driving four and one-half miles morning and night to go to high school. I am a junior this year and I think I will like my work real well, although I think it will keep me busy. But work is good for everyone, I think.

A few years ago we went to Grand Ledge and there we saw the clay pit and went through the tile factories. It was very interesting. After the tile are made they are put into furnaces and heated for a few days and then are left to cool. There were surely a large number of tile there.

Again I thank you very much for the dollar. I am your grateful niece, Luella Wilmarth.

You certainly are sensible in the investment of your prize money, and also in thinking that work is good for everyone. One never can tell when he is going to win, that's the reason it pays to try.

Dear Uncle Frank:

I am going to tell you about our one-year-old calf. Her name is Susie, and she is sort of wild-like. The other morning my brother Robert—who is eight years old—came in the house crying and quite frightened. He said while he was getting the cows out to pasture, Susie began to chase him, and that she chased him clear back to the barn. So I went out with him, and sure enough, there she was, standing in the barnyard, just as if she was waiting for Robert to come back so she could chase him some more. We both got after her and finally persuaded her to go to pasture.

We do not know what makes her want to chase him, unless it is because he is little and she takes advantage of him.

Ever since, I usually go with Robert

to take the cows to pasture. Your niece, Pauline Laughlin.

Calves, like folks, do get funny notions sometimes, don't they? I wonder if Robert teased her any.

Dear Uncle Frank:

Tap, Tap, Tap, may I come in? I hope I can, as I would like to be one of the "Happy Circle." I have been a reader of the Michigan Farmer, but never have tried my luck at it yet. I will tell you how I spent my vacation this summer.

I went picking berries most every day, which I don't mind very much. Some days I and my girl friends would go in swimming. I cannot swim very well yet, but I think I will be able to swim good by next summer. Uncle Frank, can you swim? We girls have some good times, I'm telling you.

I am a girl of thirteen years of age. I am five feet tall, have blue eyes, light curly bobbed hair, and weigh ninety-five pounds.

I wish some of the boys and girls from thirteen years to sixteen years would correspond with me. I would be very glad to hear from them, also you, Uncle Frank. I think I have written enough now, I want to leave room for some other cousins. May I come again? Miss Agnes Hampel, Mayville, Michigan, RR. 4, box 58.

Welcome to our Circle, Agnes. The next time don't wait to tap, just walk in. Yes, I can swim but have not broken any speed or distance records in that line of endeavor.

Dear Uncle Frank:

We had a good county fair last week. My father took the sweepstakes on a peck of Rural-Petoskey potatoes. One of our horses took the blue ribbon and one of our lambs also. We got prizes on our apples and grain, too.

This is the first time I have entered a contest. Hoping to win a prize, I am, your nephew, Ralph Herrion.

Your father's winning at the fair tells better than several written pages, the kind of farmer he is. I hope you were not discouraged because you did not win. I am sure your father had to try several times before he was able to win such things as sweepstakes prizes.



Drawn by Harold Coles, Montgomery, Michigan.

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Mother's Work-Saving Desire

The Device She Thinks Will Help Her the Most

By the Prize Winners

I AM very glad to print these expressions regarding the labor-saving methods mother would like the best because, it seems to me, a consideration of mother's work is too often neglected. So often mother overdoes in her work and does it uncomplainingly because she is doing it in the service of her family. All of us should do what we can to lighten her burdens and to help her get the labor-saving devices which would take so much drudgery out of her life and put a lot of enjoyment in it. Her greater enjoyment of life will also add to ours. We can help her to attain this enjoyment by our cooperation and appreciation.—Uncle Frank.

By Ida Cryderman, Twining, Mich.

The labor-saving device my mother most desires is a power washing machine, run either by gas or electricity, preferably the latter.

Below is a brief summary of her reasons:

With a power washer the washing could be done with much greater ease; a neater washroom kept during the process; and it could be done in approximately half the time taken by the old washboard method.

In repayment of the slight expense incidental to running the machine, mother would have better health, consequently better spirits and more time to accomplish the hundred and one little things always for her to do. She would be a better wife and mother. Is it worth it?

Let's all boost to get our mothers "heart's desire" in a labor-saver for a wornout mother is something that cannot be replaced. I will try to make "blue" Monday "sunny" for my mother.

By Gertrude McKibbin, Cloverdale, Mich.

The labor-saving device my mother most desires is an electric washing machine and mangle to do her washing and ironing, because it saves the strength, health, nerves and labor. It does the work as well as she can and she is getting too old and her health isn't good enough to do such hard work any more. It does the work much quicker and so the house can be put in order sooner than if it had waited until the washing had been done by hand. Then you have the afternoon for visiting or resting, whichever you wish. Altogether, we think the electric washer is very nice.

By Vera Stoudinger, Sherwood, Mich.

My mother thinks water piped into the kitchen is a labor-saving device. We have a large family, and it takes lots of water to do the weekly washing, mopping and scrubbing, and various other uses. We have only rain water piped to our kitchen. My mother says it would still be more handy if we had well water piped into our kitchen also, as our well is quite a distance from the house. But when one has plenty of clean rain water they do not use so much well water. This summer we had quite a long drouth in our locality. We had no rain for over five weeks.

During that time our cistern went dry and we had to use well water for all purposes. It made lots of work to carry so much water. My mother said then she knew water piped in the house would save many steps.

By Isabell Mahony, St. Charles, Mich.

The labor-saving system or piece of machinery my mother thinks, to her, is the most important labor-saver, is the water system.

The water is supplied from a large

well, which is drilled over one hundred feet deep. The windmill does the pumping when the wind permits and water is then carried to the house by means of a pipe, which empties into a large tank for the cold water and a smaller one which is attached to the kitchen stove, so there is always cold or hot water handy. Where there are little folks, this saves many steps, as water is needed for washing and to keep hands and faces clean, and help it gives during long canning season.

For older members it is a great help also, as no one enjoys carrying water, and especially when it is cold and slippery, or when the snow has covered the ground.

By Verda Cole, Mt. Pleasant, Mich.

When I asked my mother what labor-saving device she most desired, she said above all things she would like a furnace. Then all the dust, dirt and

For Riddle Writers

IN the past I have given you some riddles to solve, but now I ask you to send me the ten you like the best. After each riddle write the answer, as I will not have time to try to solve all I will get. Besides, I may want to pick out some for a future riddle contest and I want to be sure to have the answers right.

To the ten boys or girls writing the ten most interesting riddles in the neatest manner, we will give prizes as follows: The first two a handy school pencil box; the next three a handsome clutch pencil, and the next five, five maps of the world and New Europe.

Please send your riddles to Uncle Frank, Michigan Farmer, Detroit, Michigan, before October 13.

chips would go to the basement in one room and if it were cleaned up once a day that would do. But when there are three or four stoves to be kept running all day during the winter months, if the house is kept anyways clean it just makes a continual merry-go-round for a woman, only one where she walks instead of riding, to keep the litter cleaned up. Besides, there is the fine dust and soot which adheres to the walls and carpets and makes everything grimy looking. A furnace in the basement would eliminate at least ninety per cent of work for a woman in the winter, according to her theory.

WANT TO CORRESPOND.

THE following boys and girls would like to correspond with some of the other young folks in this department:

Irene Middleton, Whittemore, Mich.
Evelyn Hansen, Powers, Mich.
Esther M. Taylor, Ellsworth, Mich.
Mary Whitley, Acme, Mich.
Gertrude Mahony, Vicksburg, Mich., R. 2.
Helen Coverly, Fremont, Mich., R. 6.
Alta Van Order, Shaftsbury, Mich., R. 1.
Dorothy Lundquist, 442 Hall Street, S. E., Grand Rapids, Mich.
Margaret Willing, Saginaw, W. S., Mich., R. 2.
Marie Drashill, Owendale, Mich.
Robt. Van Tyne, Doster, Mich., R. 2.
Edith Van Tyne, Doster, Mich.
Esther Temple, care A. Zuyddy, of Grand Rapids, Mich., R. 7.
Birdie Curren, Ashley Mich.
Editha Engwall, Eastlake, Mich.



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October Poultry Items

By R. G. Kirby

IT pays to store up a bushel of dry sand in the fall before the freezing weather. This will serve as fine grit for the baby chicks that are hatched next spring before the ground has thawed.

The use of green feed in the winter ration not only helps to keep the birds healthy, but it seems to influence the fertility of the eggs produced the following spring. The most vigorous chicks seem to come from hens that have had plenty of green feed in the winter. Now is the time to store mangels, cabbages and all the cull vegetables available for poultry feed. At the present low price of oats, more sprouted oats will probably be used in the laying houses this winter.

Patch the leaky poultry house roofs. This will improve the condition of the litter in the houses and help to prevent colds and roup. Hens can stand cold weather but dampness will soon undermine their vigor.

Isolate the first hen that shows signs of a cold and it will help to prevent other cases. Place the sick bird where she will not be forgotten and neglected at feeding time. Remove the mucous from the nostrils and rub the swollen part of the head with camphorated vaseline. When a hen has a lump near the eye it seems largely due to the clogging of the nostril because of the cold. Prompt attention is necessary to avoid the loss of the bird.

Dry Mash Essential.

The full dry mash hopper in the laying house takes a lot of worry out of poultry management in stormy weather. Then you know that the hens will be properly fed for health and egg production even if they cannot use the range. Hens do not gorge on mash to the exclusion of other feeds. It looks expensive to keep feed before them at all times. Experience proves that it is the most economical method. It is not just the cost of feed but the difference between the production costs and the returns that determines the profits.

The farmer with a small flock can often use commercial mash to good advantage. Others raise part of the ingredients of the mash. Then it pays to buy other necessary materials and make the mixtures at home. You know what is in the home-mixed mash and I think that home-grown grains can be sold quite profitably in the form of eggs if you have the right kind of egg-making machines.

Be careful not to feed mouldy corn to hens. Spoiled wheat is another cause of sickness. When cleaning out all bins it is best to burn or bury any spoiled grain before the poultry finds it. If mixed ashes become wet and then sour and mould, they are a source of danger.

If you have immature pullets I think it pays to force them now and place as much growth and fat on them as possible before winter weather. The pullets that go into winter in fine condition will naturally prove the best layers

and the most desirable breeders. Pullets that are in poor condition when winter begins are seldom profitable.

Anchor Poultry Houses.

It pays to have permanent poultry houses firmly bolted to the stone wall. This can be done by setting eight-inch bolts in the cement and securely fastening them to the sills. Small colony houses can be partially protected by driving a two-by-four post at each corner and spiking it to the house. Dangerous windstorms seem more prevalent than in the past and the small buildings of the poultry keeper are in particular danger.

Old stone piles which are a breeding place for weasels are dangerous to the poultryman's profit. The stone is fine to help make the fill for the foundation of a laying-house. The wall can be left partially unfinished, leaving an opening in which the stone can be dragged on a stoneboat. This saves the heavy work of dumping stone over the wall and the possible damaging of the wall.

Here is a good plan for nests that can be used where the uprights are not in the way. Build the section without backs to the nests. The side wall furnishes the backs. Then hinge the section to the wall. By raising the nests toward you, all of the old litter can be drummed out at the back. This saves time in cleaning nests when new nesting material is needed.

Feeding Sunflower Seed.

Sunflower seed contain a lot of indigestible fiber and are not in a class with corn and wheat for poultry feed. I believe it pays to feed the sunflowers in the fall when the hens are moulting and the pullets need a little extra fat and a little gloss on their feathers. The heads can be thrown on the ground on the range and the hens will soon thresh them out. Unless there is a very large surplus of sunflower seed I believe it is best to save work and let the birds consume all the seed in the fall.

If sunflower seed is stored for winter use the heads must be gathered before the wild birds attack them. Hang the heads where they will dry thoroughly or shell out the seed and spread it out in very shallow heaps. It is quite moist and may mould if the heaps are not stirred occasionally. It is too much work to save much sunflower seed for winter use, as corn is of greater value at that time.

Last night's paper reported that potatoes sold on our city market at forty cents per bushel, while eggs were thirty-two cents per dozen. There has been a surplus of cabbages, tomatoes and other truck while the supply of fresh eggs has been limited. I am not personally acquainted with any wealthy egg producers but do feel that a lot of the cabbages and vegetables which some farmers are selling at give-away prices might better be saved to keep the poultry flock healthy during the coming winter.



Rural Health

By Dr. C. H. Lerrigo

THE SANITARY CLOSET.

ONE of the vexing domestic problems of those who live in small villages is the disposal of human excreta. Many subscribers ask for information on this very important question. The common earth closet is always unsatisfactory; disposal of the contents is a repulsive job that becomes almost impossible to care for properly under complications such as frozen ground, excessive rainfall, and other disturbances.

We cannot give space to lengthy descriptions of how to construct closets, but are glad to set forth a few suggestions. The concrete pit privy is a very valuable and practical type of closet. The receptacle may be made fly-tight, and being of concrete allows no leakage. The pit is divided into two compartments, on the principle that if one compartment is used alone until filled, and then left undisturbed during the months that the other is in process of filling, the fecal matter will have become so dried and decomposed that it may be removed to land remote from wells and springs and applied as fertilizer with little difficulty and slight offensive odor. This is made an easier matter if a little dry, loamy earth is shoveled in from time to time as the pit is filling.

A community able to arrange for regular scavenger service may make use of fly-tight closets with removable receptacles such as buckets, to be taken away weekly. A tank privy in which enough water is used to allow the development of bacterial action similar to that taking place in a cesspool is among the possibilities. The solids disintegrate and then pass off through the overflow. Odors are kept down by maintaining a film of kerosene on the surface.

Recently the chemical toilet has become developed in such a manner that its operation may be considered quite successful. The general plan of operation is for the deposits of excreta to be received into receptacles containing a powerful chemical solution. Upon falling into this solution the waste products are deodorized, disinfected and more or less disintegrated. Local vents leading outside of the building are provided to care for odors in the closet bowl and the parts of the apparatus above the chemical tank. An apparatus of this kind makes it possible, at a cost of about one dollar per year per person to have indoor closet facilities where no water or sewer systems are available, thus adding greatly to the comforts of the home.

BABY'S FEEDING PERIOD.

I am advised by a friend who is a nurse that I should nurse my baby every three hours, but my mother says that is not often enough—she always nursed her babies two hours apart.—Mrs. L. S. W.

Modern practice is to allow the longer interval between nursing periods. The babies get as much food and their rest is not so often interrupted. It is good practice to be very regular about this and even to wake the baby at the nursing time. Now and then we find a sub-standard baby who must be nursed more frequently for a time, until she becomes strong enough to take a greater amount of food. The index lies in the baby's weight. Have good scales and weigh the little one every week, being particular to observe the same conditions at each weighing—the same amount of clothing, same time after nursing, etc. If the baby is gaining

steadily you know you are on the right track. A steady gain in weight is the most important index to a child's proper development.

EFFECTS OF DIPHTHERIA.

I am a woman thirty-four years old. I had a case of diphtheria a few months ago. I got to feeling pretty well and was up for a few weeks. Then my heart went back on me and I have had trouble with it ever since. What can I do?—T. K.

Diphtheria is always hard on the heart. You will have to take a long period of complete rest to allow the balance of the heart to be reestablished. Don't do any work until this matter is straightened out, even if it takes a year, which it probably will. At thirty-four you should have a good many fruitful years yet to go, but they will be spoiled if you have to get along with a weak heart.

TO RESTORE AGRICULTURE.

(Continued from page 362).

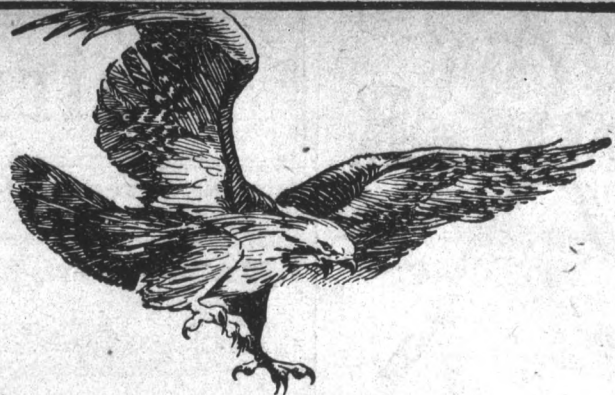
yet it works certain hardships against trade in Europe or the repayment of debts. Such a plan as proposed would mitigate the evils and restore normalcy of trade.

The problem has many details, yet American genius has always found a way to do economic justice which the farmer must have. The confiscation of the products of the farm at the present ratio against him cannot long continue. The stabilization of farm products at one hundred and fifty per cent of pre-war values is necessary. This is nothing more than has been done for transportation and railway wages and acquiescence in coal mining costs and also in a large way for manufacturers by the tariff. A European standard of living for agriculture and an American standard for other industries is as impossible as a country "half slave and half free."

If there are objections to the plan so outlined and a desire to avoid international problems, then the export corporation might restore equity of exchange by giving certificates of purchase direct to grain growers for the exchange difference to be redeemed by the United States out of the allied indebtedness in small denomination, low rate interest bonds. This would produce a mild inflation as these bonds would be largely like Liberty Bonds, easily disposed of.

The question of special privilege may be easily answered, that the United States government held down prices for the farmer during the war, while wages and other products were allowed to soar. The United States also made large profits out of the grain export company. As already pointed out, the United States government has made, or attempted to determine, an American standard of business directly to the railways and railway workers, and also by the very liberal tariff schedules to manufacturers, but to the key products of the farm no provision has been made which is effective. The imposition of the European standard of living by reducing agriculture to the position of the European peasant is monstrously unjust, and red-blooded Americanism can well be appealed to, to do economic justice to agriculture.—J. N. McBride, Shiawassee County.

It's far better to have the cement floor of a henhouse set on a six to ten inch layer of coarse stones. Dampness is fatal to hens.



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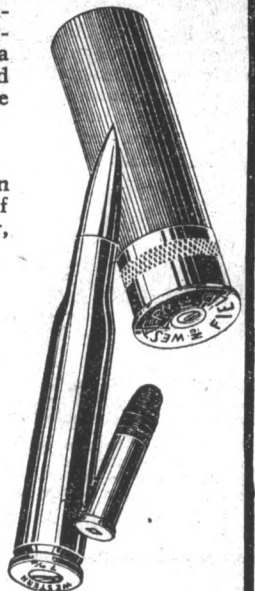
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Barred Rocks egg contest winners, eggs from a rain with records to 290 a year. \$2.00 per setting prepaid by P. P. Circular free. FRED ASTLING, Constantine, Mich.

Single Comb White Leghorn Cockerels, English strain, \$3.00 each. DURAND HATCHERY, Fenton, Mich.

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win over all breeds at the egg laying contest. 30 eggs \$5.50 \$8; 100 \$15 order from this ad. Some chicks H. H. JUMP, R. 5, Jackson, Mich.

R. C. Br. Leghorns, Pekin Ducks, W. Chinese birds. Mrs. Claudia Betts, Hillsdale, Mich.

WHITE WYANDOTTES

207 egg average. Eggs all matings, \$2.00 per 15, \$10.00 per 100. Cockerels, hens and pullets \$5.00 each. FRANK DELONG, R. 3, Three Rivers, Mich.

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Dairy Farming

DAIRYING A PERMANENT INDUSTRY.

NO matter what trials beset agriculture, dairying is and will always continue to be one of its profitable and its most secure ventures. The reasons are not far to seek. Ever since the days of primitive man the human race has used large proportions of animal food. As population presses, meat is partially replaced by vegetables in the diet. Nowhere, however, has animal food been entirely abandoned. Since the dairy cow is the most economical producer of human food from the grain and roughages of the farm, the increas-

imals. With the exception of Antrim county, the northern half of the southern peninsula carries the same amount of infection. "The Thumb" and the south central and southern counties, with the exception of Van Buren, Berrien and Hillsdale counties, carry more than three per cent and not more than seven per cent, but Wayne is reported as having from seven to fifteen per cent. Antrim carries the honors, being the only county reported as having only one per cent or less.

Michigan stands well up among the leaders in the work of testing for tuberculosis. During July of this year there were only four states which sur-



Experienced Dairymen Have Learned the Value of an Abundant Supply of Clean, Pure Water for their Cows.

ed consumption of dairy products is coincident with the increase of human population. This is one vital reason why dairying must continue.

Of all the enterprises in which men engage, live stock husbandry is the most alluring and the most enjoyable. But live stock husbandry rests wholly upon mammalian life—life that depends upon mother's milk. In ordinary farming the milk of the cow is freely substituted for that of other animals in the nurture of the growing young. But this reason, important as it must be, is one of the least of the reasons why dairying must continue.

The cow has been most appropriately designated "the foster mother of the human race." Childhood's dependence upon milk for its normal growth and healthy development is so absolute and so vital to our national welfare that dairy farming is rapidly coming to be the one indispensable industry. Textiles may be "fabricated," foods produced by "synthetic processes," building materials "substituted," but "there are no substitutes for milk. It is the one protective food in the human dietary."

Hence, dairying cannot be overdone and the dairy cow will never be replaced, neither in the nurture of the race nor the fundamental economics of the farm.—K. L. Hatch.

BOVINE TUBERCULOSIS SITUATION IN MICHIGAN.

A CLOSE study of the results of testing three million cattle for tuberculosis has been made by Dr. J. A. Kiernan, of the United States Department of Agriculture. From the information gathered he has prepared a map indicating the percentage of cattle that are tubercular in each county of the country.

In Michigan the map shows that all of the northern peninsula counties with the exception of Menominee carry more than one per cent and not more than three per cent of tuberculous an-

imals. With the exception of Antrim county, the northern half of the southern peninsula carries the same amount of infection. "The Thumb" and the south central and southern counties, with the exception of Van Buren, Berrien and Hillsdale counties, carry more than three per cent and not more than seven per cent, but Wayne is reported as having from seven to fifteen per cent. Antrim carries the honors, being the only county reported as having only one per cent or less.

Michigan stands well up among the leaders in the work of testing for tuberculosis. During July of this year there were only four states which surpassed Michigan in the number of cattle tested, the total number for the state being 16,040. The total number of cattle which had been tested once and found to be free is 123,256, and the total number of cattle in which the tests have been completed and which are free and accredited is 7,744. The total number of cattle under supervision is 162,045. The testers have as much work ahead of them as they are now doing for, according to T. S. Rich, of Lansing, the inspector in charge of the work, there are 166,131 animals now on the waiting list.

These figures show that while Michigan has a big problem in eradicating tuberculosis, particularly in the lower half of the state, she acknowledges this problem and is going about its solution in a business-like way. In the number of animals waiting for test, with the exception of Missouri, where there are 200,000, Michigan stands at the head of the list.—E. B. Reid.

FORMS ANOTHER COW-TESTING ASSOCIATION.

EATON county has formed its second cow-testing association, with a membership of twenty-seven. This association is for the northern part of the county, while Association No. 1 is operating in the southern part. Both of these associations were organized by County Agent R. W. Tenny, assisted by Mr. Brownell, of the Agricultural College.

PROFITS INCREASE IN PROPORTION TO YIELD OF BUTTER-FAT.

THE records of 18,014 individual cows were recently tabulated by the United States Department of Agriculture with the resultant showing that wherever butter-fat production increased from 100 to 400 pounds there was a regular increase of \$16 in income over the cost of feed for every fifty pounds of increase in production of butter-fat.—M.



The Tester Knows

The only sure and accurate way to determine just how close your separator is skimming is by means of the Babcock Test, and the most accurate operators of the Babcock Test are the cow testers employed by the various cow testing associations. The following statements from cow testers are interesting:

"The closest skimming of milk I have in this association is done with a De Laval. Of the 29 separators in this association 16 are De Laval."—Tester for the second largest association in Minnesota.

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Grand Rapids Fair

(Continued from page 358).

this question and the great majority of people, both on the farm and in the towns and cities, approve of his action. He has established a precedent that will undoubtedly be followed hereafter, not only by his fair but by fairs in general. Everybody knew this practice was being carried to an extreme and all it wanted was someone strong enough in moral convictions to put a stop to it.

Space will not permit a detailed description of each department, let alone details about individual exhibits; neither would this be interesting to the general reader. Perhaps the above references to the horticultural and poultry exhibit is sufficient for them and all that will be interesting, except to those particularly interested in these departments and they must go to special descriptions for what they want.

Horses are of especial interest nowadays, from the fact that many think this breed of animal is liable to become extinct. But the horse is still with us and always will be. Of course, no one expects to see light harness horses exhibited at a fair nowadays. The oceans of automobiles parked stolidly in every conceivable nook and corner available on the grounds gives the reason. The auto has taken the place of the light harness horse, but the draft or work horse and the race horse remain and can never be replaced by the tractor, the auto, or the airplane.

As the country becomes more densely populated, the dairy cow gradually takes the place of the purely beef animal, because she produces human food at less cost. The purely beef animal will probably never be entirely eliminated, but the dairy cow keeps increasing in number. It is said there are nearly a million milch cows in Michigan, and the exclusive dairy breeds were well represented—Holsteins, Jerseys, Guernseys and Ayrshires—and in numbers about in the order named. There were many superior animals in each breed. The dual-purpose animals displayed by the Red Polled and dairy Shorthorns were well represented and there were beef types of Shorthorns and Herefords and Polled Angus, showing that there is still a place for purely beef animals in Michigan yet.

It is next to impossible to convert the American farmer to the bacon type of hog. He sticks to the American, or lard type and he must find this type the most profitable or he would change. The market is always a little higher for bacon hogs than for large fat hogs, but the farmer seems to think he can produce the fat so cheaply that he can afford to sell at the lower price. It is true that if the American type is sold at real light weight they produce very good bacon, but never the choicest kind. There were as fine herds of O. I. C., Poland-China, Duroc Jersey and Hampshires as one would find anywhere, and there were also some good herds of Yorkshire and Tamworths.

Sheep made a good showing. The middle wools predominated, the long wools next, and then the fine wools. There were many very superior animals in all breeds. There were a few Persians whose pelts are prized as furs, and whose owners think they are more profitable from this fact.

The exhibition of poultry was unusual, not only in numbers but in quality. The hen has demonstrated her worth as a producer of cheap and palatable food, and the demonstration at Grand Rapids seemed to indicate that everybody knew it.

The display of farm machinery was full and complete, equal to displays before the war. Exhibitors seem to think that the farmer is again coming back to normalcy in so far as the use

and purchase of machinery is concerned.

There were many special and educational exhibits that were worthy of extensive write-ups.

Our neighboring country, Canada, had an exhibit showing the agricultural resources of that great country that was indeed wonderful.

Our State Department of Agriculture made a showing that all Michiganders might well be proud of, and is deserving of a much more extensive notice than time and space will warrant here.

One very noticeable thing to an observer is the attitude people assume now with reference to the airplane. A few years ago people stood and looked in astonishment at the huge machine going through the air over their heads, but now, although it carried people to and fro and its whirr could be heard constantly, only occasionally would a person glance upward at it. It has become an every-day affair and its great wonders no longer attract attention. People now take it as a matter of fact.

Another noticeable thing was that people seemed to enjoy themselves as usual, the old and the young alike, the horse races, the auto races, the midway. The fact that there were no games of chance was forgotten and the people found enjoyment in other and more wholesome things.

THE CHESTER WHITE BREEDERS FORM STATE ORGANIZATION.

A NUMBER of breeders of Chester White swine held a meeting on the State Fair grounds September 7 and organized an association to be known as the Michigan Chester White Swine Breeders' Association and elected officers as follows: A. J. Hawkins, of Coldwater, president; Fred L. Bodimer, of Reese, vice-president; F. W. Alexander, of Vassar, secretary-treasurer; Andy Adams, of Litchfield, Lucian Hill, of Tekonsha, and Norman Weber, of Royal Oak, executive committee.

It is the purpose of the organization to promote the interests of the breed through holding public sales, also in giving support to Boys' and Girls Pig Club work throughout the state.

Membership is open to all breeders of Chester Whites in the state and the dues are only \$1.00 per year; all money after paying the small office expenses, will be used to promote the breed in this state.

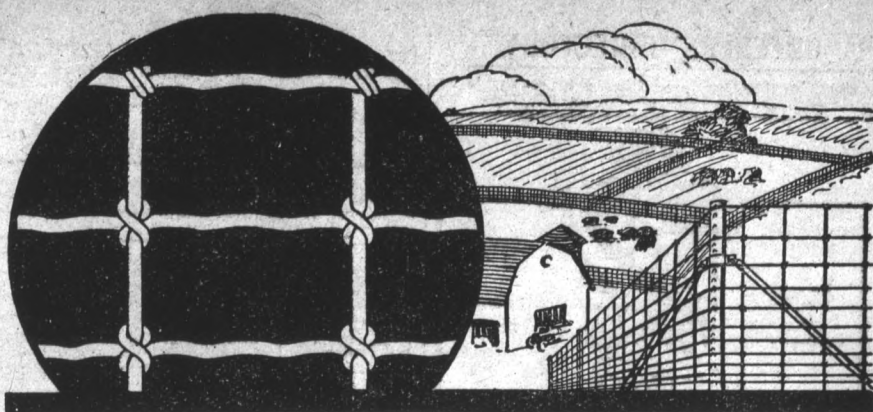
It is requested that all breeders of the Chesters who believe in boosting the breed, communicate with Secretary Alexander at once.

PRAIRIE FARM WINS NEW YORK STATE AWARDS.

HIGH honors were won at the New York State Fair at Syracuse, known widely for its excellent horse show, by horses from the Prairie Farm near Saginaw, according to Jacob DeGeus, manager of the farm, who returned September 23 from the fair.

Mr. DeGeus said that the Belgian horses from the local farm won some of the highest awards. Garibaldi, one of the farm's finest specimens of heavy draft horses, won both the senior and grand championships at the fair, and Sans Peur, Garibaldi's companion, was awarded the union and reserve championships, while the first team prize was won by these two champions.—M.

American farm women remodeled 7,000 kitchens last year as a result of home demonstration work through the State Extension Service.



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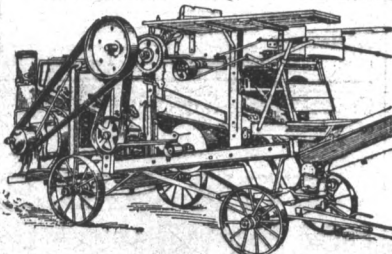
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Dam, Bonnie's Bloom 530 lbs. B. P. Price \$175. Fall
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Yearling heifer. Adv. Reg. breeding.
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Bulls of show type that are out of
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Priced to sell quickly. Pedigree on request.
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Reg. and high grade Holstein cows and heifers due to
freshen this fall, priced reasonable. Bulls all
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Holstein-Friesian pure-bred bull calves,
tuberculin tested
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Holstein Bull calf, nearly white, 30 lb. sire. Dam by
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For Sale a semi-official daughter of Maple
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Jersey Bull Calves 7 mos. to near yearlings strong
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Aged cows with calf at side—1st,
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gusta and Richland's Kate.

Senior yearlings—1st, Buckland Hall
Farm, Inc., on Vint Hill Mina; 2nd and
3rd, Maryvale Farms on Cloverleaf
Gem 2d and Lavender's Princess 2d.

Junior yearlings—1st, Buckland Hall
Farm, Inc., on Lovely of Vint Hill; 2d,
Pangborns on Scottish Primrose 10th;
3rd, Wagner on Lovely's Pet 3rd.

Senior calves—1st, Maryvale Farms
on Maryvale Missie (junior champion)
and Maryvale Pride; 2nd and 3rd,
Prescotts on Richland Claret 2d and
Scottish Maid 2d.

Graded herd—1st and 3rd, Maryvale
Farms; 2nd, Buckland Hall Farms Inc.

Yearling herd—1st, Buckland Hall
Farm, Inc.; 2nd, Pangborns; 3rd, Pres-
cotts.

Calf herd—1st, Prescotts; 2nd, Mary-
vale Farms; 3d, Buckland Hall Farms,
Inc.

Get of sire—1st, Buckland Hall
Farms, Inc.; 2nd, Prescotts; 3rd, Pang-
borns.

Aberdeen-Angus.

Judge—H. O. Moxley, Shelbyville,
Kentucky.

Three bulls owned by exhibitor—1st,
W. E. Scripps, Orion; 2nd, J. Tudor &
Son, Iowa City, Iowa; 3rd, Woodcote
Stock Farm, Ionia.

Two bulls bred and owned by ex-
hibitor—1st, Woodcote Stock Farm;
2nd, J. Tudor & Son; 3rd, Scripps.

Aged bulls—1st, J. Tudor & Son on
Erwin Bocas; 2nd, Thomas Barnett &
Son, Pontiac, on Balatum of Glen Car-
nock 2d; 3rd, Scripps on Carl of Rose-
burg.

Two-year-olds—1st, Scripps on Eirre-
boll of Bleaton (senior and grand
champion); 2nd, M. A. C., East Lan-
sing, on Plumb Square and Level; 3rd,
Marshall Kelly, Charlotte, on Lapeer
of Longwood.

Senior yearlings—1st, Woodcote
Stock Farm on Edge of Woodcote (jun-
ior champion); 2nd, Tudors on Bur-
gess; 3rd, Scripps on Boxer of Wild-
wood.

Junior yearlings—1st, Woodcote
Stock Farm on Blandin of Woodcote;
2nd, Hogles on Dave of Parma.

Senior calves—1st, Tudors on Eglam-
mour; 2nd, Woodcote Stock Farm on
Evren of Woodcote; 3rd, Scripps.

Junior calves—1st, Tudors on Ban-
del 2d; 2nd, Scripps on Prince of
Wildwood; 3rd, Woodcote Stock Farm
on Espiegle of Woodcote.

Aged cows—1st, Scripps on Pridista
of Glen Carnock; 2nd, Martins on El-
leen of Wildwood; 3rd, Hillsdale Boys'
and Girls' Club.

Aged dry cows—1st, Scripps on Elec-
tra of Hatton (senior and grand cham-
pion); 2nd and 3rd, Tudors on Black
Petal 2nd and Cottage Lawn Pride 2d.

Two-year-olds—1st, Woodcote Stock
Farm on Edista of Woodcote; 2nd,
Tudors on Elba B; 3rd, Scripps on
Wildwood Pretty Rose.

Senior yearlings—1st, Tudors on
Blackbird of Glyn Mawr 5th; 2nd,
Woodcote Stock Farm on Evasion of
Woodcote; 3rd, Scripps on Queen Mary
Ann.

Junior yearlings—1st, Woodcote
Stock Farm on Exact of Woodcote;
2nd, Scripps on Electra of Halton 2d;
3rd, Tudors on Enigma of Glyn Mawr.

Senior calves—1st and 3rd, Tudors
on Miss Burgess 4th (junior cham-
pion), and Blackbird of Glyn Mawr
6th; 2nd, Scripps on Queen Wildwood.

Graded herd—1st, Scripps; 2nd, Tu-
dors; 3rd, Woodcote Stock Farm.

Yearling herd—1st, Woodcote Stock
Farm; 2nd, Tudors; 3rd, Scripps.

Calf herd—1st, Tudors; 2nd, Scripps.
Get of sire—1st, Scripps; 2nd, Tu-
dors on Bilxom; 3rd, Woodcote Stock
Farm.

Galloways.

Judge—H. O. Moxley, Shelbyville,
Kentucky.

Wm. Vines, Howell, and Frantz
Bros., Ohio, were the only exhibitors
of Galloways.

Frantz Bros. won senior and grand
champion on Scottish Standard, junior
champion on Beauthello 5th, senior and
grand champion on Lillian 8th, and
Junior champion on Scottish Dainty,
and a larger share of the money.

Red Polled.

Judge—W. R. Montgomery, of Hills-
dale, Mich.

There were but three Red Polled ex-
hibitors, Stump & Etzler, Ohio, Herbi-
son Bros., Birmingham, and Westbrook
Bros., Ionia. Stump & Etzler won all
the first but in junior heifer calf and
four get of sire classes, both of these
being won by Herbison Bros. Stump
& Etzler also had the grand champion
cow. Westbrook Bros. had first aged
bull, which was later made the grand
ehampion.

THE SWINE SHOW.

More than 900 hogs were shown in
the different classes. The show was
particularly well balanced in both num-
bers and quality, large classes and
keen competition being the order in
all the leading breeds. The Duroc-Jer-
seys, Poland-Chinas and Chester
Whites made the best showing a few
outstanding entries of each of these
breeds being brought out.

Duroc-Jersey.

Judge—Ira Jackson, Ohio.

Aged boar—1st, F. Heims & Son, of
Davidson; 2nd, Michigana Farm, Pavil-
ion; 3rd, Godfrey & LaFever, Jones-
ville.

Senior yearling—Michigana Farm.

Junior yearling—1st, (senior cham-
pion and grand champion), Godfrey &
LaFever; 2nd, Michigana Farm; 3rd,
Detroit Creamery.

Senior pig—1st, (junior champion)
Michigana Farm; 2nd, Godfrey & La-
Fever; 3rd, Heims & Son.

Junior boar pig—1st, Heims & Son;
2nd, Loeb Farms, Charlevoix; 3rd, De-
troit Creamery Company.

Aged sows—1st, (senior champion
and grand champion), and 3rd, Loeb
Farms; 2nd, Heims & Son.

Senior yearling—1st and 2nd, Loeb
Farms; 3rd, Michigana Farm.

Junior yearling—1st, (junior cham-
pion), and 2nd, Loeb Farms; 3rd, De-
troit Creamery Company.

Senior pig—1st, Loeb Farms; 2nd
and 3rd, Detroit Creamery.

Junior pig—1st and 2nd, Godfrey &
LaFever; 3rd, Heims & Son.

Exhibitor's herd—1st, Loeb Farms;
2nd, Heims & Son; 3rd, Michigana
Farm.

Breeder's young herd—1st, Heims &
Son; 2nd, Detroit Creamery; 3rd,
Michigana Farm.

Get of boar—1st, Loeb Farms; 2nd,
Heims & Son; 3rd, Michigana Farm.

Produce of sow—1st, Heims & Son;
2nd, Detroit Creamery; 3rd, Godfrey
& LaFever.

Chester Whites.

Judge—Prof. W. E. J. Edwards, of
Michigan Agricultural College.

Aged boar—1st, Fred L. Bodimer, of
Reese.

Senior yearling—1st, Oscar Fate &
Son, Ohio.

Junior yearling—1st, (senior cham-
pion), and 2nd, J. T. Hickman & Son,
Ohio; 3rd, Lucian Hill, Tekonsha.

Senior pig—1st, Fate & Son; 2nd,
Nick Hile, Jr., Caro; 3rd, Hickman &
Son.

Junior pig—1st, (junior champion
and grand champion), Fate & Son;
2nd, Thomas Hile, Caro; 3rd, Alexand-
er & Bodimer, Vassar.

Aged sow—1st, Alexander & Bodi-
mer; 2nd, Hickman & Son; 3rd, F. L.
Bodimer, Reese.

Senior yearling—1st, Fate & Son;
2nd, Alexander & Bodimer.

Junior yearling—1st, (senior cham-
pion and grand champion), and 2nd,
Hickman & Son; 3rd, Fate & Son.

Senior pig—1st and 3rd, Fate & Son;
2nd, Hickman & Son.

Junior pig—1st, Hickman & Son; 2d,
F. W. Alexander; 3rd, Fate & Son.

Exhibitor's herd—1st, Hickman &
Son; 2nd, Alexander & Bodimer; 3rd,
F. L. Bodimer.

Breeder's young herd—1st, Hickman
& Son; 2nd, Fate & Son; 3rd, F. W.
Alexander.

Get of boar—1st, Hickman & Son;
2nd, Fate & Son; 3rd, F. W. Alexander.

Produce of sow—1st, F. L. Bodimer;
2nd, F. W. Alexander.

Poland-Chinas.

Judge—Charles Wellington, Indiana.

Aged boar—1st, (senior champion
and grand champion), A. A. Feldkamp,
Manchester; 2nd, W. B. Ramsdell, Han-
over; 3rd, N. Fay Borne, Parma.

Senior yearling—1st, Ramsdell; 2nd,
Charles Wetzel & Son, Ithaca.

Junior yearling—1st, Erwin R.
Moore, Osseo; 2nd, Ramsdell; 3rd,
Haynes.

Senior pig—1st, (junior champion),
Hillsdale Pig Club; 2nd, Feldkamp; 3d,
N. Fay Borne.

Shorthorn Sale

30---HEAD---30

**GOOD, HIGH CLASS REGISTERED
COWS, HEIFERS AND BULLS**

Including a Few Cows of the Dual Purpose or Milking Strain

This sale will be held under the auspices
of the Southern Michigan Short-
horn Breeders' Association

All stock is sold on consignment from members of this
Association and is of quality which commands attention

Hillsdale, Mich.
Fair Grounds
Wednes. Oct. 18, 1922

For Particulars and Catalog, address
W. C. OSIUS, Secy., Hillsdale, Michigan
ANDY ADAMS, Sale Manager

Fourth Annual Sale BIG TYPE POLAND CHINAS WED. OCT. 18, 1922

Each of our three preceding Annual Sales have been among the top sales of the state. We have been proud of the hogs we have been able to offer you in those sales. This year we have a better offering than any in the past, better backs and feet, stretchier individuals; more all around excellence and more size for age. We have found a great boar, both as an individual and as a sire in

EMANCIPATOR 2d

We are featuring his sons and daughters in this sale. We have reserved all the tops of spring farrow for this offering. The culls went to market; the tops were immured, put on plenty of range and grown with the idea of future usefulness as breeders.

To make this sale even more attractive we are consigning a summer yearling gilt by Checkers and dam by The Clansman. She is one of the best and most extreme type Polands I have ever seen. We are also consigning several choice boars and gilts by Chess, the boar at the head of the Jim Blomendail herd, Alton, Iowa; likewise a grandson of The Clansman and two grandsons of Checkers that are real prospects.

As usual the offering represents the best and most up-to-date bloodlines of the breed! Remember everything has been treated with Serum and Virus and should be immune to cholera for life.

We will be glad to send you the catalog fully describing the offering.

Wesley Hile, Ionia, Mich.
Auctioneers: Waffle & Hoffman

Sale At the Farm, 8 Miles Due N. of Lake Odessa, 8 Miles Southwest of Ionia

Saginaw Community Sale OCTOBER 17th, 1922

50 Registered Holstein-Friesian Cattle 50

10 Cows of Maple Crest breeding bred to a 36 lb. Sire.
5 Cows and Heifers bred to a 32 lb. Sire.
1 28 lb. Cow bred to a 34 lb. Grand Son of May Echo Sylvia.
1 25 lb. Cow bred to a 27 lb. Sire.
20 Cows and Heifers by 30 lb. Sires bred to Sire from 28 lb. to 36 lb. Cows.
10 Cows will be fresh at Sale time.
1 3-yr. old Herd Bull from 31.13 lb. dam by a 25 lb. 4-yr. old with two 30 lb. daughters.
2 Yearling Herd Sires from dams that have 28 lb. records.

Sale at Saginaw County Fair Grounds under cover.
Interurban Cars stop at Fair Grounds. Sale begins 12:00 o'clock noon.
Catalogues of Sale may be obtained from M. J. Volz, R. 3, Saginaw, Mich.
All cattle tuberculin tested and guaranteed healthy.

William Roenicke, Manager. **M. J. Volz, Sec'y & Treas.**

AUCTIONEERS:
D. T. Packer, Saginaw.
F. H. Cotton, Bay City.

R. Austin Backus, Mexico
New York Box Expert

PUBLIC SALE

of purer bred and grade

HOLSTEIN CATTLE

The undersigned will offer at public auction one mile west and one-half mile north of Angola, Ind. at 12:30 p. m.

MONDAY, OCTOBER, 9

the following property.

5 PURE-BRED HOLSTEINS

1 registered cow 8 yrs. old, bred to freshen Nov. 3; 1 registered bull 2 yrs. old; 1 heifer two yrs. old due to freshen Oct. 27 (registry papers on the way) 2 bulls old enough for service (can be registered).

11 GRADE HOLSTEINS

5 cows ranging from 3 to 7 yrs. old, three of which freshen in a few weeks; 3 two yr. old heifers pasture bred; 2 yearling heifers, and 1 heifer calf 4 mos. old.

1 Shorthorn cow with young calf; 2 Jersey cows to freshen next spring and Jersey heifer calf 5 mos. old.

5 DUROC HOGS—4 sows and 1 boar.

A. M. GRADY, Auctioneer

WM. A. SNIFF

Jotta, #426657, sold for \$1200, Sept 2nd,
Her half brother—Same Sire:

Spermfield Jap Owl, 190793

Sells At

AUCTION

Thursday, Oct. 12, 1922

What Will He Bring?

50--Cows--Heifers--Calves--50

In Same Sale.

Dispersed Owing to Death of
Geo. A. Waterman. At the

Waterman & Waterman Farm,
Ann Arbor, Mich.

On Interurban—35 Miles West of
Detroit—Paved and State Roads.

Col. D. L. Perry, Auctioneer

CATTLE

RICHLAND SHORTHORNS

We are offering two splendid white yearling bulls by Imp. Newton Champion and a few extra good heifers and young cows at very attractive prices. For full particulars write to

C. H. PRESCOTT & SON,

Herd at Prescott, Mich.
Office at Tawas City, Mich.

Milkin' Shorthorns Bull calves for sale. Also 2 cows.
ROSEMARY FARMS, Williamston, Mich.

Clayton Unit Shorthorn Breeders' Assn. Scotch. Scotch Top and Milking Shorthorns for sale all ages. W. J. Hinkley, Sec'y, Flushing, Mich.

HOGS

Blue Hogs Actually BLUE in color. Large, hog. All stock pedigreed. Registered in purchasers' name. Blue Hog Breeding Co., Wilmington, Mass.

Big Type Berkshires. Pigs sired by Type, son of Real Type, and out of Miss Wondress; a sow from Parker Bros head. Prices reasonable. Lawrence A. Velte, R. 2, Box 41, Woodland, Mich.

Additional Stock Ads. on Page 383

CLASSIFIED ADVERTISING

This classified advertising department is established for the convenience of Michigan farmers. Small advertisements bring best results under classified headings. Try it for want ads and for advertising miscellaneous articles for sale or exchange. Poultry advertising will be run in this department at classified rates, or in display columns at commercial rates.
Rates 5 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 6 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order.
Real estate and live stock advertising have separate departments and are not accepted as classified. Minimum charge, 10 words.

Rates in Effect October 7, 1922

Words	One time	Four times	Words	One time	Four times
10.....	\$0.80	\$2.40	26.....	\$2.08	\$6.24
11.....	.88	2.64	27.....	2.16	6.48
12.....	.96	2.88	28.....	2.24	6.72
13.....	1.04	3.12	29.....	2.32	6.96
14.....	1.12	3.36	30.....	2.40	7.20
15.....	1.20	3.60	31.....	2.48	7.44
16.....	1.28	3.84	32.....	2.56	7.68
17.....	1.36	4.08	33.....	2.64	7.92
18.....	1.44	4.32	34.....	2.72	8.16
19.....	1.52	4.56	35.....	2.80	8.40
20.....	1.60	4.80	36.....	2.88	8.64
21.....	1.68	5.04	37.....	2.96	8.88
22.....	1.76	5.28	38.....	3.04	9.12
23.....	1.84	5.52	39.....	3.12	9.36
24.....	1.92	5.76	40.....	3.20	9.60
25.....	2.00	6.00	41.....	3.28	9.84

Special Notice

All advertising copy discontinuance orders or change of copy intended for the Classified Department must reach this office ten days in advance of publication date.

MISCELLANEOUS

IMPLEMENT STORE FOR SALE Established 38 years. Town of 5000 in thriving farming community, central Michigan. Splendid opportunity for live man to get into business. Address Box 107, Michigan Farmer.

WANTED—Carload either sugar or mangel wurtzle beets—Also old fashioned tread power for exercising bull. "The Oaklands", R. F. D. No. 5, Ann Arbor.

Write Your Advertisement Here

Mail To

THE MICHIGAN FARMER

1632 Lafayette Boulevard

Detroit, Mich.

Rate: 8 cents a word on single insertion; 6 cents a word if ordered 4 or more consecutive issues.

Count initial or abbreviations as words

USE THIS FORM---IT SAVES DELAY

Your Name

Route

Town

State

NOTE: Count every word in the above spaces except printed words in heavy type

FILL THIS, PLEASE

Your Count of Ad..... Words

No. Times to Run.....

Amount Enclosed.....

Classification.....

LATEST MARKET REPORTS

GRAIN QUOTATIONS

Tuesday, October 3.

Wheat.

Detroit.—No. 2 red at \$1.15; No. 2 mixed \$1.13; No. 2 white \$1.13.
Chicago.—No. 2 hard at \$1.07½; December \$1.06.
Toledo.—Cash \$1.14½; December at \$1.18.

Corn.

Detroit.—Cash No. 2, 70½c; No. 3 yellow 69½c.
Chicago.—No. 2 mixed 66¢@67c; No. 2 yellow 66¢@67½c.

Oats.

Detroit.—Cash No. 2 white 44c; No. 3, 42½c.
Chicago.—No. 2 white 41¢@43c; No. 3 white 40¢@41½c.

Beans

Detroit.—Immediate and prompt shipment \$5; November \$4.50 per cwt.
New York.—Michigan and New York red kidney \$6.
Chicago.—Michigan choice hand-picked \$5.50; red kidneys \$5.50@6.

Rye

Detroit.—Cash No. 3, 76c.
Chicago.—70½¢@71½c.
Toledo.—74c.

Seeds

Detroit.—Prime red clover cash at \$11; alsike \$10.25; timothy \$3.30.
Toledo.—Prime red clover at \$11.10; alsike \$10.20; timothy \$3.20.

Feeds

Detroit.—Bran \$27.50; standard middlings \$28.50; fine do at \$30; cracked corn \$31.50; coarse cornmeal at \$30; chop \$25 per ton in 100-lb sacks.

Hay

Detroit.—No. 1 timothy \$16.50@17; standard and light mixed \$15.50@16; No. 2 timothy \$14.50; No. 1 clover \$14@14.50; rye straw at \$11.50@12; wheat and oat straw \$10.50@11 per ton in carlots.

Fruit.

Chicago.—Peaches, Elbertas \$1.25@1.50 per bu; pears, Bartletts, Michigan standard packed \$2.50@3 per bushel; plums per 16-qt case 50¢@75c; grapes, baskets 5@5½ lbs 27c; Climax baskets 75c; apples, No. 2 all varieties at \$2 per bbl; Wealthies \$3.50@3.75 per bbl; cranberries \$4.75@5 a box.

WHEAT

Wheat prices failed to maintain the advance the Near East situation developed but the seriousness of the latter undoubtedly prevented as much of a decline as would have occurred otherwise. Receipts in the United States have been only slightly above normal but as this is the season during which the supply generally is heaviest, the markets have been called upon to absorb large amounts in the last few weeks. Statistically the wheat situation is not strong. While importing countries harvested 160,000,000 bushels less than last year, there is a large rye crop and a generous potato crop in Europe to help make up the deficiency.

CORN

Clearances of corn for export have fallen off in the last few weeks but sales are being made right along. The domestic demand from the southwest where drouth prevailed is highly satisfactory and more could be sold were cars available for transporting it. Industrial demand also has improved during the last few weeks.

OATS

Oats prices have advanced about 30 per cent from the low point of the season. Stocks at terminals are only half as large as a year ago and they are strongly held. Additional receipts each week are below normal for the season and the demand has been broad.

SEEDS

The department of agriculture reports that fully two-thirds of the timothy seed crop had already left the hands of growers by September 12. The market is firm at present. Clover seed prices lost part of the smart advance of last week. Reports of yields are below the expectancy of a month ago and farmers are selling less freely than when prices were \$2 lower.

FEEDS

Sharply higher prices for feeds resulting from the war scare and car shortage have restricted the demand.

Eastern buyers are indifferent and the southwest which has been the most active section has slowed down perceptibly. Some Canadian millfeeds are coming into New England.

HAY

Hay markets are generally reported as firm, with receipts light. Demand is limited also but may improve with colder weather. Pastures in most sections are in good condition. Prices seem more likely to go higher than lower.

POULTRY AND EGGS

Strictly fresh eggs are extremely scarce and are selling at a big margin over the doubtful kinds. They are almost sure to become much more scarce in the next sixty days so that there is no reason to look for a lower price range. Storage eggs are being moved out rapidly, but such a movement must continue right along to dispose of the enormous stocks. Poultry prices are weakening but are still comparatively high. Receipts are expanding gradually.

Chicago.—Eggs miscellaneous 27¢@28c; dirties 19¢@23c; checks 18¢@21c; fresh firsts 28¢@35c; ordinary firsts 25¢@26c. Live poultry, hens 17¢@22c.

Detroit.—Eggs fresh candled and graded 30¢@31c; storage 26½¢@28½c. Live poultry, heavy springers 22¢@23c; light springers 19¢@20c, heavy hens at 24c per pound.

BUTTER

Receipts of butter at the four leading markets are running slightly below normal. The supply in the fresh arrivals has been insufficient and storage butter has been drawn upon freely so that storage stocks at the four leading cities are now smaller than they were last year. Lower grades are easier to obtain and prices thereon have not been maintained in all cases while higher scores advanced during the past week.

Prices for 92-score fresh butter were as follows: Chicago 42c; New York

44c. In Detroit fresh creamery in tubs sells for 36¢@37c.

BEANS

The bean markets are receiving increased supplies and as a result the trade is broadening. This is evident mostly in mid-western markets, the change not yet being felt in eastern districts. The New York jobbing price for pea-beans is nominal at \$6.50@6.75. Chicago trading is expanding with Michigan peas at \$5.50@6 per cwt. In Detroit dealers are quoting \$5 in Saginaw \$4.75 and at Grand Rapids farmers are receiving \$4@4.25.

POTATOES

Carlot shipments of potatoes are the heaviest of the year and are still increasing. The total last week appeared to be about 8,500 cars, compared with an average of 6,468 cars in the corresponding week during the three preceding years. Prices were weak at Chicago but steady at other points. Northern round whites are quoted at \$1@1.10 in carlots at Chicago and at \$1.25@1.55 at other midwestern markets.

APPLES

The carlot apple movement is expanding steadily each week but at present is below last year at this time although larger than in 1920 and 1919. Prices upon A-2½ Jonathans are \$3.25@4.50 per barrel in the central west.

WOOL

Wool trade has broadened since the new tariff went into effect, as manufacturers feel more certain over the outlook. Practically all grades of wool have changed hands at firm prices, with evidence of an advancing tendency. The Boston market is quoted as follows:

Michigan and New York fleeces, delaine unwashed 52¢@54c; fine unwashed 43¢@45c; half-blood unwashed 47¢@48c; three-eighths blood unwashed 46¢@47c; quarter-blood unwashed 44¢@45c.

Live Stock Market Service

Wednesday, October 4.

DETROIT

Cattle.

Market is strong on good grades; steady on others.

Best heavy str., dry-fed..	8.25@9.00
Handyweight bu., dry-fed	7.25@8.00
Mixed str., hfrs, dry-fed	6.00@6.75
Handy light bu., dry-fed..	5.00@5.75
Light butchers	4.25@5.00
Best cows	4.75@5.25
Butcher cows	3.75@4.50
Common cows	3.00
Canners	2.50@2.75
Choice bulls	4.50@5.00
Bologna bulls	3.75@4.50
Stock bulls	3.00@3.50
Feeders	5.50@6.75
Stockers	4.00@6.00
Milkers and springers...	40.00@75.00

Veal Calves.

Market slow and steady.
Best \$13.00@14.00
Others 5.00@10.75

Sheep and Lambs.

Market steady.
Best lambs \$12.75@13.00
Fair lambs 10.00@11.50
Light to common 5.00@8.50
Fair to good sheep 4.50@6.00
Culls and common 1.00@2.00

Hogs.

Market prospects steady.
Mixed hogs 10.00
Heavies 220 lbs up..... 8.50@9.40
Roughs 7.50
Pigs 9.50
Stags 4.00@4.50

CHICAGO

Hogs

Estimated receipts today are 16,000; holdover 12,342. Market slow, around 10¢@15c lower. Bulk of sales \$7.75@9.85; tops \$9.90; heavy 250 lbs up \$8.65@9.85; medium 200 to 250 lbs \$9.65@9.90; light 150 to 200 lbs \$9.60@9.85; light lights 130 to 150 lbs \$9.30@9.60; heavy packing sows 250 lbs up \$7.50@8.20; packing sows 200 lbs up at \$7@7.60; pigs 130 lbs down \$8.50@9.25.

Cattle.

Estimated receipts today are 13,000. Finished native beef steers are strong to higher; others generally steady. Beef steers medium and heavy weight 1100 lbs up \$11.25@12.65; do medium and good \$7.50@11.25; do common \$6@7.50; light weight 1100 lbs down at \$9.10@12.25; do common and medium \$5.85@9.10; butcher cattle heifers at \$4.75@9.25; cows at \$3.75@8.25; bulls bologna and beef \$3.50@6.40; canners and cutters cows and heifers \$2.90@3.75; do canner steers at \$3.50@4.50; veal calves light and handyweight at \$9.25@12.25; feeder steers \$5.75@8.25; stocker steers at \$4.25@7.50; stocker cows and heifers \$3.50@5.25.

Sheep and Lambs.

Estimated receipts today are 18,000. Market steady. Lambs 84 lbs down \$12.50@14.40; do culls and common at \$8.50@12.25; spring lambs at \$8.75@12.25; ewes \$3.50@6.75; ewes culls and common \$2@3.75; breeding ewes full mouths to yearlings \$4.50@11.50; yearling wethers \$13.50@14.75.

BUFFALO

Cattle

Receipts 10 cars. Market is slow. Prime steers at \$8.50@9.75; shipping steers \$8.50@9.75; butcher grades at \$7.25@8.75; heifers \$5.50@8; cows \$2@6.50; bulls \$3@5.25; feeders at \$5@6.25; milk cows and springers at \$25@115.
Calves at \$13.50.

Hogs.

Receipts 30 cars. Market is lower. Heavy and yorkers \$10.25@10.35; pigs \$9.75@10; mixed \$10.80@10.90; roughs \$8.25@8.50; stags \$5@6.

Sheep and Lambs.

Receipts eight cars. Market steady. Choice lambs \$14; cull to fair \$7.50@13; wethers at \$7.50@8; ewes \$6@7; yearlings \$8@10; sheep \$2.50@8.

DETROIT CITY MARKET

This market was active with a good demand for peaches and grapes. Such vegetables as beets, lettuce, beans, corn, and celery were also selling well. Potatoes, carrots and cabbage were in good supply and not in very great demand. Apples sold for 60¢@2.25 per bu; crab apples \$1@2; butter beans \$2@2.50; local celery 35¢@75c; cabbage 40¢@75c; grapes \$2@3.50; green corn 15¢@25c per dozen; dry onions 85¢@1.50; potatoes 60¢@1; peaches \$1@2.50; pears 50¢@3; plums \$3.25; tomatoes 60¢@1.75; pumpkins 50¢@1 per bu; eggs 45¢@55c dozen.

GRAND RAPIDS

The markets in Grand Rapids early this week were fairly active on all kinds of farm produce except potatoes, cabbage and head lettuce. Supplies of everything except peaches were liberal. Prices ranged as follows: Apples 50¢@1.50 per bu; potatoes 50¢@60c a bu; onions 50c bu; leaf lettuce, scarce at \$1.50 bu; celery 10¢@35c a bunch; peaches \$1@2 bu; pears 50¢@75c a bu; grapes \$1.50@1.65 bu; sweet corn 10¢@20c dozen; pickles \$2@4 bu; tomatoes 70¢@1.50 bu; spinach \$1.50 bu; peppers \$1@2 bu; poultry steady; fowls 16¢@23c lb; springers and broilers at 16¢@22c; lbff turkeys 25c lb; eggs 37¢@38c; live stock is steady.

COMING LIVE STOCK SALES.

Holsteins.—October 18, A. W. Copeland, Birmingham, Mich.
Holsteins.—October 19, Howell Sales Company, Howell Mich.
Shorthorns.—October 18, Southern Michigan Shorthorn Breeders' Association, Fair Grounds, Hillsdale, Mich.
Poland-Chinas.—October 18, Wesley Hile, Ionia, Mich.
Holsteins.—October 17, Saginaw Community Sale. Mr. J. Volz, secretary-treasurer, R. 3, Saginaw, Mich. Sale at Saginaw County Fair Ground, Saginaw, Mich.
Jerseys.—October 12, Waterman & Waterman, Ann Arbor, Mich.

FARM MEETINGS.

National Dairy Exposition St. Paul—Minneapolis October 7-14.
American Pomological Society Convention, Council Bluffs, Iowa, November 15-17.
Michigan State Apple and Potato Show, Grand Rapids, December 5-8.

A NEW RECORD.

Traverse Hengerveld Walker, owned by the State Hospital at Traverse City, recently made 1,123.3 pounds of butter in 365 days. This record makes her the champion senior four-year-old for Michigan in the 365-day butter-fat production.



No scars—no blemishes

GOMBAULT'S CAUSTIC BALM does the work better than firing. Hair positively grows back natural color.

A reliable remedy for Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Windpuff, Skin Diseases, Thrush, Spavin, Ringbone, Throat or Bronchial Troubles. Will not scar or blemish. Supercedes all firing and cautery.

As a human liniment it is unsurpassed. \$1.50 per bottle at druggists or by parcel post.

The LAWRENCE-WILLIAMS CO. Cleveland, Ohio

GOMBAULT'S
Caustic
BALSAM

A MESSAGE To The Farmers of Michigan from Detroit Beef Company

Thirty-three years ago in November, 1889, the Detroit Beef Co. opened its doors for business. Its particular business was selling dressed beef on commission. In a few years, in response to numerous requests from farmers and other shippers, we began selling dressed calves on commission. This part of our business has been very successful for the shippers and for ourselves. During the past year we sold ten thousand calves for our friends in the state. Our results were 99½ per cent. satisfactory to these shippers.

For the following reasons: We have the best facilities in Detroit for handling dressed calves. We sell each calf as though it were our own and get as much for it as the market will allow.

We sell to the very best trade in Detroit and more meat dealers visit our coolers than any other in Detroit.

It cost us last year 6½ per cent to sell our products. We charge you 7½ per cent to sell your calves. This allows us one per cent net profit for the use of our facilities and capital or a net profit of about 15 cents on each calf.

We are honest with you in every transaction. We are looking to future business and we want every shipper satisfied.

Write us for instructions how to dress calves and prepare for shipment.

Quotations and shipping tags sent on request.

Detroit Beef Co.
Detroit, Mich.

Reference First Nat'l. Bank

Aspirin

Say "Bayer" and Insist!



Genuine

Unless you see the name "Bayer" on package or on tablets you are not getting the genuine Bayer product prescribed by physicians over twenty-two years and proved safe by millions.

Accept "Bayer Tablets of Aspirin" only. Each unbroken package contains proper directions. Handy boxes of twelve tablets cost few cents. Drug-gists also sell bottles of 24 and 100. Aspirin is the trade mark of Bayer Manufacture of Monoaceticacidester of Salicylicacid.

SPOHN'S DISTEMPER COMPOUND

Is indispensable in all cases of Distemper, Influenza, Coughs, Colds, Heaves and Worms among horses and mules. Used and endorsed by leading stock farms and veteran drivers of U. S. and Canada for 30 years. Sold in two sizes at all drug stores.

SPOHN MEDICAL CO. GOSHEN, IND. U.S.A.

Mention The Michigan Farmer When Writing Advertisers

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.

Cough.—While eating, my two pigs cough, they also breathe rapidly part of the time. They seldom stand up. C. J. Munger, Mich.—Give chloride of ammonia in soft feed three times a day—one dram is a dose for a 100-pound hog.

Soft-shelled Eggs, Dog Eats Eggs.—Lice and Fleas on Cats and Dogs.—My ducks and some of my geese lay soft-shelled eggs. They are out every day where they have access to plenty of water. I don't feed the geese anything but the ducks have some grain. My dog eats eggs, so does some of the hens. What will kill fleas and lice on cats and dogs? Mrs. R. R. M., Sandusky, Mich.—The immediate cause lies in failure of the uterus to function. Feed plenty of crushed "fresh" oyster shells. Keep the dog and egg-eating birds away from the fresh eggs. Sprinkle of camphor sprinkled on a towel in which the cat is rolled will kill the fleas. Put one ounce of stavesacre (seeds) in one quart of water, boil down to one and one-half pints, add half pint of water, apply, and it will kill the lice.

Don't Wear a Truss



MR. C. E. BROOKS Beware of imitations. Look for trademark bearing portrait and signature of C. E. Brooks which appears on every appliance. None other genuine. **BROOKS APPLIANCE CO.** 392 State St., Marshall, Mich.

Be Comfortable—wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plasters. Durable. Cheap. Sent on trial to prove its worth. Never on sale in stores as every appliance is made to order, the proper size and shape of Air Cushion depending on the nature of each case.

Fleece Wool Wanted

Traugott Schmidt & Sons
Detroit, Mich.

Are paying the following prices f. o. b. cars Detroit.

Delaine	44c
Fine Clothing	34c
Half-blood Combing	40c
Three-eighths Combing	38c
Quarter-blood Combing	37c
Rejections	30c

Traugott Schmidt & Sons
508 Monroe Ave., Detroit, Mich.

A BETTER COMMISSION SERVICE

If you appreciate honest returns, quick service, and courteous treatment you will consign your poultry, dressed veal and hogs and eggs to **Gunsberg Packing Co., Inc.** 2460 Riopelle Street, Detroit, Mich. Write for tags and quotations.

FRUIT SHIPPERS FOR HIGHEST PRICES

Quick Return—Consign to The E. L. Richmond Co., Detroit, Est. 1893.

Natural Leaf Tobacco—Chewing, 5 lb., \$1.75; 15 lb., \$3.00. Smoking, 5 lb., \$1.25; 15 lb., \$2.00. Send no money, pay when received. **FARMER'S TOBACCO ASS'N.** Paducah, Ky.

NATURAL LEAF TOBACCO, CHEWING, 5 lb., \$1.75; 15 lb., \$3.00. Smoking, 5 lb., \$1.25; 15 lb., \$2.00. Send no money, pay when received. TOBACCO GROWERS' UNION, Paducah, Ky.

FARMS AND FARM LANDS

Farm For Sale—90 acres, good land, good buildings in Hillsdale Co. one mile from market, 5 miles west of Hudson on state road, milk and mail route and telephone line for further particulars, write VICTOR L. GILBERT, Route No. 2, Box 143, Belleville, Mich.

92 ACRES. One of the best farms in the state for location, improvements and production. For particulars address, **RAY O. TUTTLE,** Creston, Ohio.

HOGS

Collinsdale Duroc Farm, Lyons, Mich., 1.1. Greatest Blood Lines in Duroc Hogs

Herd Boars by Great Orion Sensation, Pathfinder, Duration and Great Wonder I Am. Now have for sale three yearling boars by Wolverine Sensation. For sale at all times, sows, gilts or boars registered. Sold under a positive guarantee and worth the money. Write for prices.

L. A. BURHANS, OWNER

PUBLIC SALE of

BIG TYPE CHOLERA IMMUNED POLAND CHINA SWINE

At the J. W. Loughlin farm one mile south of Caledonia, Mich., on Route M 37.
TUESDAY, OCT. 17th, 1922
60—HEAD—60

1 Yearling Boar. 11 Yearling Tried Sows. 35 Spring Gilts. 14 Spring Boars. We have selected this offering from over 200 head. The offering is sired mainly by our 1000 lb. son of The Clansman.

Write for Catalog

Auctioneers: Waffle, Hoffman, and Thomas

LOUGHLIN, SHERK & ADAMS and W. I. WOOD

MICHIGAN SALES CIRCUIT

Oct. 17th Loughlin, Sherk & Adams and W. I. Wood, Caledonia, Mich. Oct. 18th Wesley Hile, Ionia, Mich. Oct. 19th W. Brewbaker & Sons, Elsie, Mich. Oct. 20th Eldred A. Clark, St. Louis, Mich.

Woodlawn Farm Duroc Hogs

A well kept herd, best of blood lines, with size and breeding qualities, stock of all ages for sale at reasonable prices. **W. E. BARTLEY,** Alma, Mich.

AM SELLING

a great offering of bred Duroc sows and gilts. Arch 4th. They are mostly bred to Orion Giant Col., son of Ohio Grand Champion. Get on mailing list for catalog. **W. C. TAYLOR,** Milan, Mich.

Pure-Bred Duroc Jersey Hogs: We usually have good boars and sows of all ages for sale. Reasonable prices. Larro Research Farm, Box A, North End, Detroit, Mich.

Westvie / Duroc Bred So s

all sold. Have two spring boars left at a reasonable price. Will book orders for April & May Pigs. **ALBERT EBERSOLE,** Plymouth, Mich.

Oakwood Farm offers choice gilts of Orion Cherry King and Walt's Top Col. breeding bred to Pathfinder Orion for Aug. and Sept. farrow. **RUSH BROS.,** Romeo, Mich.

Duroc Jerseys We have a choice lot of spring boars ready for service. Will ship on approval. Satisfaction guaranteed. **F. J. DRODT,** R. 1, Monroe, Mich.

Thoroughbred Durocs: Brookwater strain gilts bred to son of Panama Special 55th for September, October farrow spring pigs of both sexes. **F. S. WEIS,** Brighton, Michigan

DUROCS of Sensation and Pathfinder blood lines. We guarantee satisfaction. **MICHIGANA FARM,** Pavilion, Mich.

Priced For Sale

Two yearling boars by Meadows Lad. Also pigs and breeding stock of all ages. **THE MEADOWS,** R. 5, Ann Arbor, Mich.

FOR SALE: 20 extra good spring boars, Hastings, Mich. **CARY U. EDMONDS,**

Durocs—choice lot spring boars, sired by Great Duration, Brookwater Satisfaction 8th and Greater Orion King. **Norris Stock Farm,** Casnovia, Mich.

DUROC-JERSEYS Do you want a good Pathfinder boar pig? **E. D. HEYDENBERG,** Wayland, Mich.

Big Type Chester White March boars. Sired by Model's Giant and Hill's Big Buster. Out of granddaughters of Alfalfa Wonder. **LUCIAN HILL,** Tekonsha, Mich.

BIG TYPE CHESTER WHITES

The prize winner kind, from the best prize winner bloodlines. Early developers, ready for market at six months old. I have started more breeders on the road to success than any man living. I want to place one hog in each community to advertise my herd. Write for agency and my plan. **G. S. BENJAMIN,** R. F. D. 10, Portland, Mich.

Chesters—We won a large percent of the blue and championships at four of the largest fairs in the state this fall, including Detroit. Our herd is headed by The Monster, one of the greatest big type boars of the breed and we have several spring boars from these prize winners for sale at reasonable prices. **F. W. Alexander,** Vassar, Mich.

CHESTER WHITES Start right with a Boar Pig from **MONSTER** No. 10735. They are hard to beat. **FRED L. BODIMER,** Reese, Mich.

Chesters We are sold out of Boars. Choice of spring pigs. For immediate shipment of spring pigs, write VYREY BROS., Royal Oak, Mich., 10 mi. and Ridge Rds., Phone 408.

O. I. C. and Chester White's. Strictly big type with quality. I have nothing to offer at present, as I have sold my largest herd and entire herd I was fitting for the large shows. To Earle Morrish, of Flint, Mich. I am confident Mr. Morrish now has one of the very best herds in the State. **ALBERT NEWMAN,** R. 4, Marlette, Mich.

Registered O. I. C. Boars

J. CARL JEWETT, Mason, Mich.

O. I. C. Gilts to farrow in Aug. and Sept. and March boar pigs. **CLOVERLEAF STOCK FARM,** Monroe, Mich.

O. I. C's. Spring gilts and service boars for sale. Prices right. **A. J. BARKER & SON,** Belmont, Mich.

O. I. C's. last fall gilts due Aug. and Sept. Spring pigs not akin. Big Type. 1-2 mile west of Depot. **Citizen Phone.** **OTTO B. SCHULZE,** Nashville, Mich.

O. I. C's. Special prices on fall pigs for Oct. 15th delivery. Also spring boars for immediate shipment. I can save you money. Write, **Clare V. Dorman,** Snover, Mich.

O. I. C's Spring pigs. Pairs not akin. Also July, August, and Sept. pigs. **MILLO H. PETERSON,** Elmhurst Farm, Ionia, Mich. City Phone

L. T. P. C. Fall Boars

at bargain prices. Fall gilts open or with breeding privilege. Write or see them. **A. A. FELDKAMP,** R. 2, Manchester, Mich.

LARGE TYPE POLANDCHINAS

Boars and gilts for sale from one of the best herds in Mich. Sired by B's Clansman Mich. 1921 Grand Champion. Alasha, M and W's Orange and Daddy Long Legs 2nd. Give us a visit and look them over if not write to **N. F. BORNOR,** Parma, 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.

Francisco Farm Poland Chinas

Big, stretchy Spring Boars as good as grow. Pairs and Trios not akin. Can spare two or three of our good herd sows bred for Sept. **P. F. POPE,** Mt. Pleasant, Mich.

L.T.P.C. \$15, \$20 & \$25

Spring pigs with real breeding at the above prices. We are also offering a few choice fall gilts bred for summer farrow. **Hart & Cline.** Address **F. T. HART,** St. Louis, Mich.

LARGE TYPE P. C.

Largest in Mich. Pig ready to ship, why not order from the herd that has given so many their start in the hog business, the kind that makes good, they have quality as well as size. **W. E. LIVINGSTON,** Parma, Mich.

Prosperity Have you seen it? No! Why? May be you have been throwing away 40% of your grain by feeding it to scrub hogs. We have some Big Type Poland Chinas that will bring you prosperity. Why not give them a chance? We can furnish anything you want. **JNO. C. BUTLER,** Portland, Mich.

Big Type Poland China

Spring boars now ready for service weighing 200 lbs. Sired by Clansman, Buster and Hovers Liberator 600 lb. Jr. yearling. Come and see them or write **DORUS HOVER,** Akron, Mich.

Big Type Polands We have a fine bunch of spring pigs representing the best blood lines and all cholera immune. We raise them to sell. If in need of a real herd boar prospect, come over. Visitors are always welcome. **WESLEY HILE,** Ionia, Mich.

L. T. P. C. Spring boars and gilts now being shipped, at farmer prices. They never last long. There's a reason. They talk for themselves. Call or write **M. M. PATRICK,** Grand Ledge, Mich.

Big Type P. C. Boar Pigs. Sows and Fall Gilts bred for Sept. to Big Bob Mastodon and Peter A. Pan, son of \$1075 Boar. **C. E. Garnant,** Eaton Rapids, Mich.

BIG TYPE Poland Chinas, leading strains at lowest prices. Both sex, all ages, and bred sows and gilts. **G. A. BAUMGARDNER,** R. 2, Middleville, Mich.

LEONARD'S B. T. P. C. Herd headed by Leonard's Liberator. Orders booked for boar pigs at weaning time. Call or write **E. H. LEONARD,** St. Louis, Mich.

Large Type P. C. A few spring yr. gilts bred for Aug. and Sept. farrow. **H. O. SWARTZ,** Schoolcraft, Mich.

P. C. Swine. Sows and pigs, sows bred for Aug. and Sept. farrow, spring and fall boars, best of breeding, satisfaction guaranteed **R. W. Mills,** Saline, Mich.

Walnut Alley, Big Type, Poland China, the kind that makes good Boars and gilts ready to go. **A. D. GREGORY,** R. 3, Ionia, Mich.

Lone Maple Farm L. T. P. C. March Boars and gilts ready. Prices reasonable, stock as represented. **F. R. Davis & Son,** R. 3, Belding, Mich.

Big Type P. C. Spring boars and gilts ready for new homes, also sows and pigs. **CLYDE FISHER,** St. Louis, Mich.

Hampshires book your order for spring boar pigs now. A few gilts, now ready for summer farrow. **JOHN W. SYNDER,** R. 4, St. Johns, Mich.

SHEEP

Kope-Kon Farms

Offers the best in yearling Shropshires of course. Also choice of the best lot of Ram Lambs you will see this year. Follow M 29.

S. L. Wing, Coldwater, Mich.

Large, Well Covered Registered yearling Shropshire Rams. Priced right. Flock Established 1890. **C. LEMEN,** Dexter, Mich.

FOR SHROPSHIRE yearling rams. Write or call on **ARMSTRONG BROS.,** R. 3, Fowlerville, Mich.

SHROPSHIRE RAMS Come to the farm or write **Dan Bocher,** R. 4, Ewart, Mich.

Shropshire Rams fit to head registered or best grade flocks at right prices. **O. J. THOMPSON,** Rockford, Mich.

Strong robust one and two yr. old Wool-Mutton Shropshire Rams priced right. Tell us what you want. **Maplewood Stock Farm,** Allegan, Mich.

REG. DELAINE RAMS

At Farmer Prices. Write or Come. **CALHOUN BROS.,** Bronson, Mich.

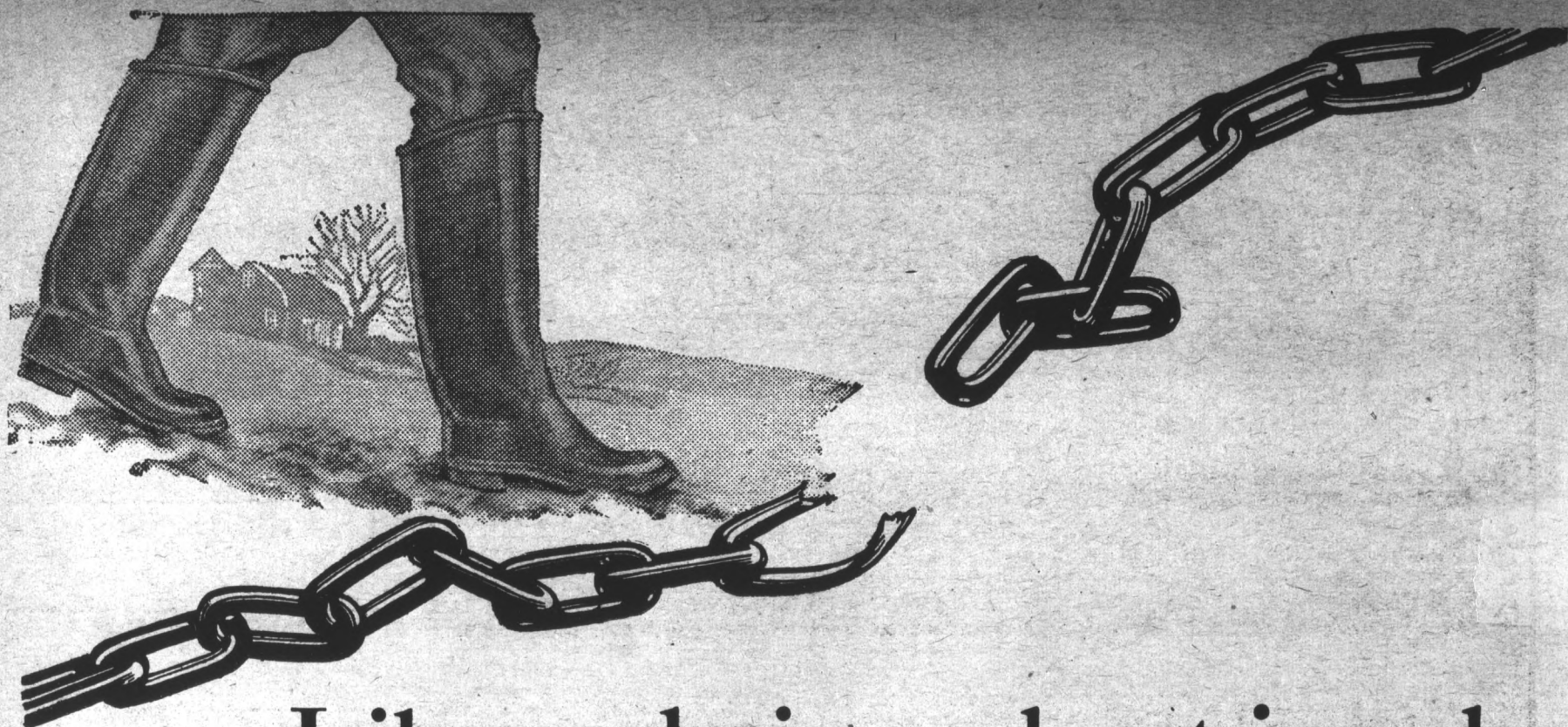
Delaine Rams, extra fine ones bred for wool and mutton. Photos free. **F. H. Russell,** Box 41, Wakarusa, Ohio.

Registered Hampshire Rams all ages. Best of breeding. Prices right. **W. W. CASLER,** Ovid, Mich.

Rambouillet Rams registered yearlings and two year olds, good ones, heavy sheeters, best of breeding, priced right. **H. W. HART,** R. 2, Greenville, Mich. Gratton Phone.

Reg. Oxfords For Sale Entire flock, rams, ewes and lambs. Also Reg. Hereford Cattle, any age. **EARL O. McCARTY,** Bad Axe, Huron Co., Mich.

For Sale Oxford rams and ewes all ages, guaranteed breeders. Write or call at farm. **Geo. T. Abbott,** Palms, Mich., Tel. Deckerville 73-3.



Like a chain—a boot is only as strong as its weakest point

Months of wear can be built into the ankle, the heel, the leg—

And a crack across the instep makes three-quarters of this wear wasted!

One break in a vital spot and your boots are ready for the junk pile before the other parts have really begun to wear!

There are four points where the strain is hardest—ankle, back of heel, instep, and sole. Unless the boot is properly constructed at these points it wears out quickly.

How "U. S." reinforcements insure against breaks

Into every pair of "U. S." Boots at each of these four points is built the strongest kind of reinforcements—from 7 to 11 layers of fabric and tough rubber reinforce these boots at the very places that are generally the "weak spots."

No wonder they give long wear—and *uniform* wear.

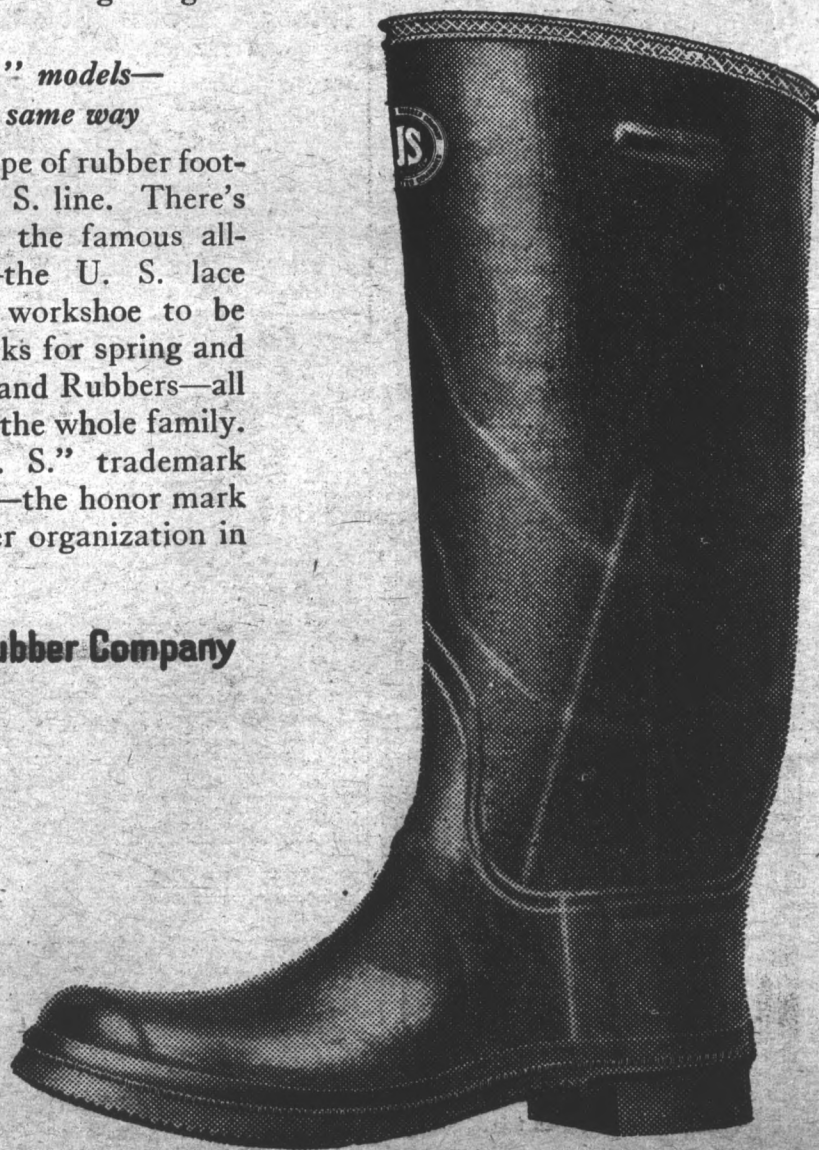
We've been making rubber foot-

wear for 75 years. We don't just "buy" rubber—we actually produce on our own plantations the finest grade that can be grown. Our factories are manned by the most experienced boot makers in the country—craftsmen who know the value of painstaking care. And we're proud of the results—and of the satisfaction U. S. Boots are giving to farmers.

Other "U. S." models— all built the same way

You'll find every type of rubber footwear in the big U. S. line. There's the U. S. Walrus, the famous all-rubber overshoe—the U. S. lace Bootee, a rubber workshoe to be worn over your socks for spring and fall—U. S. Arctics and Rubbers—all styles and sizes for the whole family. Look for the "U. S." trademark whenever you buy—the honor mark of the oldest rubber organization in the world.

United States Rubber Company



Ask for
"U.S." Boots

