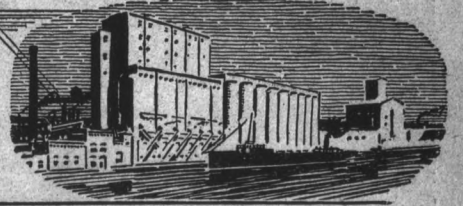


# *The Michigan* BUSINESS FARMER



An Independent  
Farmer's Weekly Owned and  
Edited in Michigan



VOL. IX., No. 36

MT. CLEMENS, SATURDAY, MAY 27, 1922

\$1 PER YEAR



## On Decoration Day

"Oh, mother of lost children! Sit not in darkness, nor sorrow, whom a nation honors. Oh, mourners of the early dead! They shall live again and live forever. Your sorrows are our gladness. The nation lives because you gave it men that loved it better than their lives."—Henry Ward Beecher.



# Current Agricultural News



## WOOL PRICES HIGHER

FIRST wool sold out of the Michigan State Farm Bureau's 1922 wool pool on May 18 shows a far different situation than has confronted the last two wool pools said the Farm Bureau, stating that on that date Michigan 3-8 clothing wool brought 37 cents, 1-4 clothing wool 35 cents and rejections 29 cents, f. o. b. the Lansing warehouse. One year ago the best Michigan delaines were quoted at 30 cents, 3-8 clothing at 19 cents, 1-4 clothing at 19.4 cents and rejections at 16 cents.

The world wool market is strong and getting stronger, according to advices to the bureau. A high emergency tariff on wool is giving additional strength to the American wool market in face of what appears to be a world scarcity of wool following the great slump of 1920 and the general reductions made in flocks. Today mills are reported resisting the market increase to the last ditch, but they can do naught but follow it.

The bureau on May 18 was dispatching cash and checks in final settlement of its 1921 pool at the rate of 500 payments daily. Most of the settlements are being made in cash through the same local banks which gave the wool poolers their pooling cash advance during the grading campaign of 1921. On May 20 final settlements had been sent the following pooling points and the county Farm Bureaus notified to that effect: Hillsdale, Coldwater, Albion, Clarksville, Marshall, Ionia, Union City, Battle Creek, Portland, Bronson, Climax, Pewamo, Colon, Schoolcraft, Fowler, Centerville, Kalamazoo, St. Johns, Owosso, Vernon, Perry, Marcellus, Jones, Mt. Pleasant, Cassopolis, St. Louis, Lansing.

## FARM BUREAU TAKES RATE STAND

THE State Farm Bureau has retained as its representative to State and Federal railroad commissions and to the railroads themselves Mr. E. L. Ewing, prominent Michigan traffic attorney of Grand Rapids who directed the Michigan Traffic League's recent rate reduction case before the above commissions at Lansing, says an announcement from the State Farm Bureau.

The Bureau intervened in the case in behalf of Michigan agriculture and assisted in the presentation of what is said to be one of the most complete cases ever presented at a Michigan rate hearing in behalf of Michigan agriculture. Forty farmer witnesses from nearly as many counties gave what was declared to be most convincing testimony that Michigan freight rates are so high that they are discriminatory upon the state's farmer shippers and that the step-ladder system of zone rates aggravates this matter as one goes north in the state.

Recently, upon reviewing the progress made in the Traffic League case, a committee from the State Farm Bureau board of directors decided that hereafter the bureau would take an increasingly active interest in Michigan traffic affairs as they relate to agriculture and retained Mr. Ewing as the bureau's representative in such affairs.

## PLANNING FOR WORLD DAIRY CONGRESS

INVITATIONS, asking 150 nations, colonies and commonwealths to send representatives to the World's Dairy Congress, which is to be held in one of the leading cities of the United States in October, 1923, left Washington on May 19 for every part of the globe. In issuing the invitations, President Harding acted under an authorization, contained in the Federal Agricultural Act which was approved March 3rd, 1921.

The World's Dairy Congress will be the first international dairy meeting ever held in the United States and the plans on foot will make it the biggest and broadest meeting of

the sort ever held anywhere. For the first time, the various branches of the American dairy industry, accounting for billions of dollars in investments, have got together in one effort and have made possible the formation of the World's Dairy Congress Association, which will manage the meeting and have the cooperation of the United States Department of Agriculture.

## SERIOUS SHORTAGE IN SPRING LAMBS

A MATERIAL shortage in spring lambs is indicated in advices received by the United States Department of Agriculture from the Western sheep country. Figures are not available, but trained observers say that the total lamb production in Montana, Wyoming, Washington, Oregon, Idaho and Nevada is only 70 per cent of a normal crop.

This also means a smaller supply of wool. Contracting of both wool and lambs has reached large dimensions during recent weeks. Numerous large western operators are reported to be scouring the west for new crop lambs and many sales at 9 to 10 cents a pound are reported, with the latter price being generally refused in Idaho, Washington and Oregon. The price last year was 5 to 7 cents. Fleeces on sheep's backs are selling as high as 35 to 38 cents a pound, with some clips including the Jericho pool clip selling up to 40 cents.

The situation is attributed to a shortage of ewes, the over age of many breeding flocks, and losses of early spring lambs on account of cold weather and the backward spring season. A winter lamb and sheep market higher than the trade anticipated, a shortage in the visible supply, and the recent sharp upturn in wool values have created bullish sentiment in the markets.

## EUROPEAN WINTER WHEAT CROP IN GOOD CONDITION

THE condition of the winter wheat crop is generally fair in Western Europe and good in Central Europe, according to advices received by the United States Department of Agriculture. Warmer weather is needed to aid growth in France and Great Britain. The area sown in Italy is 288,000 acres less than last year but 510,000 acres more than the last 5-year average. The crop is up to the average in Egypt but rain is needed in Algeria, Tunis and Morocco. Very little winter-killing is reported in Canada.

The first estimate of wheat production in British India is 365,235,000 bushels which is 140.4 per cent of the corresponding estimate for 1921, and also above the 5-year average (final estimates) which was 346,737,000 bushels. It is expected that the Argentine production will exceed the original official estimate of 154,873,000 bushels. Recent reports indicate that production in Australia will probably not equal the early official estimate of 134,184,000 bushels.

## FORECAST FOR EARLY POTATOES ABOVE 1921 HARVEST

EARLY Irish potatoes have a prospect of a production of 39,168 cars of 200 barrels each in the early producing states extending along the Atlantic coast from Virginia to Florida and thence along the Gulf coast to Texas, in the forecast made by the Department of Agriculture. This is a gain of 13 per cent over the 34,599 cars of the harvest of 1921. Production, expressed in carlots, usually exceeds the carlot movement.

Virginia has a forecast of about one-half of the crop of early Irish potatoes, or 19,640 cars, and Florida and South Carolina each of about one-eighth, or 4,935 and 4,725 cars respectively. The forecast for North Carolina is 3,520 cars, for Alabama 2,220 cars, Louisiana 1,856 cars, Texas 1,573 cars, Georgia 472 cars, and Mississippi 224 cars.

## STRAWBERRY CROP GAINS OVER LAST YEAR

FORECAST of a production of 15,217 cars of 450 crates each of commercial strawberries this year is made by the Department of Agriculture, a gain of 17 per cent over the harvested crop of 13,017 cars last year. This report covers substantially the whole commercial strawberry area of the United States. Production, expressed in carlots, usually exceeds carlot movements.

In the forecast for this year, Tennessee leads all states with an indicated production of 2,837 cars, and Arkansas closely follows with 2,791 cars. These two states have in prospect 37 per cent of the forecast crop. Three other states are prominent commercial strawberry producers: Louisiana with a forecast of 1,892 cars, Missouri with 1,181 cars and Maryland with 1,176 cars.

## FARM BUREAU SHOWS INFLUENCE OF WOOL POOLS

CHECKS in final settlement of the Michigan State Farm Bureau's 1921 wool pool on May 6 began going out to the 10,012 wool growers who are members of the pool. The pool marketed co-operatively on a graded basis 2,858,000 pounds of wool at an average gross price for all grades of 23.949 cents a pound, which netted the grower an average of 19.94 cents a pound for all grades. Delaines sold at 31.7 cents as an average for the entire pooling period and discounts sold at 17.8 cents with the other grades at intervening prices. The Michigan pool's marketing cost was 4.009 cents a pound. The average local price paid at shearing time in 1921 was 13.25 cents, according to the U. S. Bureau of Crop Estimates at Lansing, said the Farm Bureau. No radical change occurred in the 1921 wool market from shearing time until late fall, the bureau said. Accordingly Michigan wool poolers are figuring that the grading operations of the 1921 pool were worth an average of 1.69 cents a pound to them on all grades. The increased return to growers amounting to about \$48,000 on the 2,858,000 lbs. pooled.

Michigan stood second in 1921 in the number of wool poolers. Ohio with 12,000 poolers and a 5,798,000 pound pool had practically the same handling cost as the Michigan pool, according to the bureau. Iowa came third with 5,617 wool poolers. Twenty-two farm bureau states pooled wool last year. Michigan figures compared with the national average and with those of nearby states having large pools follow:

State	Lbs. Mk't'd.	No. Poolers
Michigan	2,858,347	10,012
Iowa	1,758,535	5,617
Ohio	5,798,390	12,000
22 pools	22,298,856	45,000

	Av. Gross Price	Mk'tg. Cost
Michigan	22.949c	4.009c
Iowa	21.3	5.550
Ohio	29.8	4.000*
Av. 22 pools	25.008	2.865!

	Net to Grower	Local price at Shearing 1921
Michigan	19.94c	18.25
Iowa	15.52	13
Ohio	27.00	20
Av. 22 pools	20.73	16.1

\*Estimated cost including freight, wool pooling, association charges. !Does not include freight or wool pooling association charges.

Continuation of the emergency tariff for the present and prospects of a strong tariff on wool, low supplies and a heavy demand for all wools has made a buyers market into a sellers market just recently, according to market advices to the State Farm Bureau. It is stated that there is every prospect for wool markets to continue their improvement and that 1922 promises to be a grower's year. Wool consumption thus far in 1922 is ahead of the corresponding period last year and if continued at the present rate will

run to 700,000,000 pounds for the year, it is reported. Estimates place the new clip of domestic wool at not more than 250,000,000 pounds grease weight.

Dealers are reported active in the west and mid-west producing sections and manufacturers are preparing to buy direct on a larger scale than they have heretofore. The growth of the farmers' pools has encouraged direct buying by the mills. Last year mills took practically all the 22,298,000 pounds in the pools and the growers by marketing their clips co-operatively and by grade found their grading to be worth about \$1,013,000 to them in extra returns over local prices where grading did not figure, said the American Farm Bureau in its recent survey of the wool pools.

Michigan farmers are pooling their 1922 clip. Three farm bureau grading teams are in the field, pooling locally and making a forty per cent cash advance to the growers.

## VALUE OF LAST SEASON'S FRUIT CROP LOWER

THE total value of fruit and fruit products on farms in 1921 was \$525,000,000, according to estimates made by the United States Department of Agriculture. This is a drop from \$744,000,000 in 1920 and from \$755,000,000 in 1919. The decline in 1921 is attributed to reduced production as a result of killing frosts early in the season and to lower prices of apples, peaches and other orchard fruits. Cheaper raisins was also an important factor. Production of apples in 1921 was only 96,831,000 bushels as compared with 223,677,000 bushels in 1920. Peaches dropped from 45,620,000 bushels in 1920 to 32,733,000 bushels in 1921. Pears dropped from 16,805,000 bushels to 10,705,000 bushels. There was a slight increase in production of oranges at 30,700,000 boxes.

## Values of Orchard Fruits

The estimated values of grapes and grape products on farms for the three years, 1919, 1920 and 1921, were \$102,500,000, \$105,000,000, and \$68,500,000; orchard fruits \$463,000,000, \$442,000,000, and \$271,000,000; small fruits, \$63,000,000, \$69,000,000, and \$74,500,000; and subtropical fruits, \$84,000,000, \$89,000,000, and \$87,000,000, respectively.

The fruit products of farms, for which estimates are made, are grape juice, raisins, apple cider, apple cider vinegar and dried fruits. Their total value fell from \$100,000,000 in 1919 to \$66,000,000 in 1921.

Orchard fruits dominate the other classes of fruits in value. These are chiefly apples, apricots, peaches, pears, plums and prunes. The estimated value of this class of fruits and products in 1921, was \$271,000,000, or 52 per cent of the value of all fruits and fruit products. The Subtropical fruits, chiefly oranges, follow in order of value with \$87,000,000, or 17 per cent of the fruit total; next are the small fruits, mostly strawberries and cranberries, the estimated value of which for 1921 is \$74,500,000, or 14 per cent of the fruit total; and grapes and grape products estimated at \$68,500,000, or 13 per cent of the fruit total.

## Apple Leads Other Fruits

"The king of fruits," as the apple has been called, is by far the leading single fruit in value. The fresh apple crop of 1921, a poor year for apples and some others of the orchard fruits, had an estimated value of \$163,000,000. Below this value is \$64,000,000 for oranges, and in declining order are peaches valued at \$52,000,000, strawberries \$41,000,000, grapes, excluding grapes used for juice and raisins, \$29,500,000, plums and prunes \$20,000,000, pears \$18,000,000, cranberries \$6,400,000, apricots \$5,400,000, figs \$1,400,000, and, at the foot of the list of individual fruits for which estimates of value are made, are olives valued at \$800,000.

## Entries Open for Great Horseshoe Tournament

*Business Farmer to Give Cup to Michigan Champion to Be Determined by Series of Pitching Contests*

By THE EDITOR

We are extremely modest, otherwise we would admit that we have the best in the state," and Mr. Knopf assures us that he will arrange for a county tournament in connection with the County Farm Bureau picnic.

Mr. McMurtry of Midland writes:

"I certainly appreciate your interest in this wholesome sport and shall do whatever is possible to popularize the game in Midland county. You please tell Spuds that we have some men here in his home county that will pack his farmers off into the mud when it comes to pitching horseshoes."

Mr. Roland of Calhoun is equally enthusiastic and writes:

"Thanks for your good letter of May 4th. A little something like a horseshoe thrown in with the things a county agent has thrown at him each day seems like being hit with a large feather pillow. It's delightful. I think your idea of a horseshoe pitching tournament is just fine. It certainly appeals to me and I will be glad to co-operate with you in making the thing a success. We will have a big joint picnic of the Grange and Farm Bureau on August 17, and it would be a fine time to hold a tournament of this kind. In the next issue of our bulletin, we will get the sentiment of our farmers and arrange for the tournament on the 17th of August."

Mr. Decker of Jackson county, which by the way is a regular "hot-bed" so to speak of horseshoe pitchers, pledges his support in the following words:

"I heartily approve of this form of recreation and believe we can arouse a great deal of interest here in the county. I will give this publicity in the papers and our Farm Bureau Bulletin and arrange for township or community tournaments wherever there is enough interest. I know in Illinois they make quite a project out of this horseshoe pitching game and your idea that the farm folks ought to have something to take their minds off the daily routine of work is certainly correct."

Mr. L. L. Drake, of Mancelona county, sounds his approval in this fashion:

"Believe the horseshoe pitching is a good stunt for

the summer gatherings, altho it might be just as appropriate in these modern times to have them ring 'em with discarded Ford tires. Beyond a doubt the skill of Antrim-Kalkaska county contestants will give rise to a lot of howl from the down-state folks about professionalism in amateur athletics but we will play fair by keeping our biggest boys out of it."

The Business Farmer certainly appreciates the fine spirit of co-operation manifested by the county agents and believes that the holding of these tournaments will bring us all into a better understanding and appreciation of each other.

### ENROLL NOW

Everyone between the ages of 1 and 100 years is eligible to take part in the tournaments. Use the coupon printed below and send direct to the Business Farmer or else enroll with your county agent. Lose no time as plans must be made at once for the county contests, all of which must be played off at least one week before the opening of the Michigan State Fair, on Sept. 1st.

Horseshoe pitching is a very old game. It resembles somewhat the old Greek game of discus-throwing, except that it is a test of skill rather than of strength. Since the 15th century and probably even earlier horseshoe pitching or quoits has been a very popular game in certain sections of Great Britain, especially Scotland, where some famous international games have been played. An old author says that "quoiting be too vile for scholars." Sure, it is no game for the weakling, but for the brawny armed son of the soil it is a fascinating and healthful pastime.

Horseshoe pitching is gaining considerable popularity in the United States and national rules for playing the game have been adopted. A number of spirited contests have been held in various states in recent years, notably Illinois, and there are a number of contenders for the honor of national championship. It is altogether probable that the winner of the Michigan state tournament will have an opportunity to meet the champions of other states and participate in a national tournament.

In the next issue will be published a picture of the big cup, the national horseshoe pitching rules and some interesting facts about horseshoe pitching tournaments.

### ENROLLMENT BLANK

Horseshoe Editor, Michigan Business Farmer,  
Mount Clemens, Mich.

Dear Editor: Please enroll my name in your horseshoe pitching tournament, and send me a copy of the national pitching rules.

Name \_\_\_\_\_

Town \_\_\_\_\_ R.F.D. \_\_\_\_\_

Township \_\_\_\_\_

County \_\_\_\_\_

## State Fair to Establish Tourist Camp

IN order to accommodate the thousands of farmers who will tour to the State Fair this year to witness the great horseshoe pitching tournament and other attractions Geo. W. Dickinson, secretary-manager of the Fair, has announced that the Board has decided to establish a tourist camp where all conveniences will be provided for those who wish to camp on the Fair Grounds. The camp will be in charge of Mr. J. H. Brown of Battle Creek, who has conducted a number of very successful farmer-tours. Each tourist will be allotted ample space to park an automobile and erect a tent. Police protection will be provided the campers and sanitary conditions will be carefully guarded. It is believed that the knowledge that these facilities will be provided will do much to increase farmer attendance at the Fair.

STEP right up, all you lovers of barn-yard golf! Your chance is here to prove your skill with the horseshoes! Entries are now open to the greatest series of horseshoe pitching tournaments ever held in the state of Michigan, to be conducted under the auspices of the Michigan Business Farmer, in co-operation with the county agricultural agents, county Farm Bureaus, Granges, Gleaner Arbors and Farmers' clubs.

The grand prize will be a beautiful loving cup, presented by courtesy of the Union Malleable Iron Company, of Moline, Ill., to the state champion. Additional prizes of nickel-plated horseshoes will be given to the winners in the local tournaments.

The plan is to hold county tournaments in conjunction with farmers' picnics. The winners of these tournaments will play in district contests and the winners of the district contests will meet in a grand state tournament to be held in conjunction with the Michigan State Fair.

### SEE YOUR COUNTY AGENT

Every county agent in the state has been asked to co-operate in making the tournaments a success. Those who have already promised their support are:

G. C. Nash, Branch county; M. W. Murphy, Macomb; Kris P. Bemis, Mason; Carl H. Knopf, Manistee; C. B. Cook, Oakland; R. E. Decker, Jackson; A. J. Patch, Lapeer; I. B. McMurtry, Midland; R. M. Tenny, Eaton; H. V. Kittle, Clinton; Dwight C. Long, Muskegon; R. M. Roland, Calhoun; I. T. Pickford, Oceana; L. L. Drake, Antrim; John M. Sims, Hillsdale; J. P. Houston, secretary Grand Traverse County Farm Bureau.

We are expecting to hear favorably from the rest of the county agents, but in cases where we do not or in counties where there is no Farm Bureau arrangements will be made to hold the county tournaments under the auspices of some other farm organization.

### COUNTY AGENTS ENTHUSIASTIC

The county agents we have heard from are greatly interested in the game and already a keen spirit of friendly rivalry is being shown. It all started when "Spuds" Murphy of Macomb county made the crack that there "warn't no horseshoe pitchers in Michigan that could hold a candle to the barnyard champions of Macomb." Mr. Patch of Lapeer took up the challenge and replied thuswise:

"I would hate to believe that there are any pitchers in Bill Murphy's territory that could defeat representatives from this county who have been trained from childhood in tossing potatoes into crates and thereby have special cunning developed in putting them where they count the most. In behalf of the county, I resent any implied superiority of residents of other counties, until the same has been demonstrated by actual contests."

Other county agents assert they have some good horseshoe pitchers in their midst but modestly forbids them making any extravagant claims. Mr. Knopf of Manistee says, "We have some real horseshoe pitchers in Manistee county.



Scene at Almost Any Country Cross-Roads When the Local "Champeens" Start Twirling the Quoits

# Shall One City Rule Entire State of Michigan?

## Proposal to Place Representation on Purely Population Basis Would Deprive Many Counties of Voice in State Affairs

(The following article is the substance of an address delivered by Mr. Lee Mighell, of Illinois, before the twenty-seventh annual meeting of the National Municipal League, held at Chicago, Nov. 18, 1921. The arguments presented apply with considerable force against the scheme of Detroit politicians to rob the rural communities of their representation in the state legislature.—Editor.)

**S**HALL one city rule a state? Many who have not thoroughly considered this question start with the false assumption that no city can control a state unless its delegation in the legislature is at least 51 per cent of each house. Nevertheless, it is a well recognized fact, among students of legislative methods, that the representatives of a metropolitan center have vastly greater power to control legislation than an equal number coming from the scattered rural sections.

The power of voters to express themselves through law is directly proportional to the strength and unity of their political organizations. The political machine of a big city has additional strength because it can distribute additional millions in official salaries, additional millions in profits on public contracts, additional millions in special privileges to public utility corporations, and additional millions to the vice lords through immunity from law. The office of mayor of a big city like Chicago or New York is more powerful and more to be sought after than the office of governor of the state. Small but ambitious politicians seeking places in the city council are often side-tracked by sending them to the state legislature.

### HOW A MINORITY CONTROLS

In Illinois the Chicago political machine controls the selection of a third of the members of the senate and the same proportion of the house of representatives. Seventeen or eighteen senators and from fifty to fifty-four representatives are controlled by one or two men, and it is through this centralized control that the city's state delegation acquires a substantial part of its excess of political strength.

It is claimed that the "gold coast" of the Lake Shore Drive and the foreign boroughs of the Stock Yards districts are not unified. They are not socially, but whether they enjoy it or not, they are together politically. The same boss rules them all and expresses alike for Jew and Gentile, Catholic and Protestant, Employer and Employee, Rich and Poor, Aristocrat and Hobo, their legislative desires. Because they live in the same community, the voters of a big city, although speaking different languages, embracing different religions and living by different financial and social standards, have common interests in streets, parks, amusements, business, taxation and hundreds of other matters.

The city political machine, with its numerous ward and precinct clubs, is not the only political organization that includes within its membership and dominates a large number of state legislators. In Chicago, and I presume in most large cities, other overlapping governments, such as drainage districts, park boards, forest preserves and county governments help to unify the various legislative districts.

In the country, the legislative district is the larger territory, and a city machine or even a

### A VICIOUS PROPOSITION

**T**HE Secretary of State has approved of the form of an amendment to the state constitution which, if adopted, will bring about a redistricting of the representative and senatorial districts upon a purely population basis. This would take representation away from the rural sections and add to the already dangerous power of the cities. It is a vicious proposal, and **MUST BE DEFEATED**. The issue has been fought out in New York and other states with large urban populations, and the rural communities have won the fight. Let us do as well here in Michigan and be prepared to crush the amendment when it is submitted. Some excellent arguments against the population theory of legislative representation are presented in the accompanying article which every reader should study.—Editor.

county machine can control only a portion of the members from one senatorial district.

Again, the press of a large city is one of the greatest influences to create a unity of ideas and of political action. Chicago and all other large cities have newspapers whose influence extends into many legislative districts. The Chicago Tribune and the Chicago Daily News have almost an hourly circulation and a direct political influence in about one-half the legislative districts of the state of Illinois. No country paper can be used to influence more than two or three members of the legislature. The hundreds of country newspapers in Illinois are each pulling in a different political direction.

And again, the legislative delegates from a large city through their proximity of residence and the ease with which each is notified, can be assembled for conference, or rather, instructions, within two or three hours. The representatives in the country are never assembled except as they are brought together at the sessions of the legislature.

Still again, the state executive officers, being selected from a single political unit, where the rule of numbers has no modifications, can be controlled by a single city when that city approaches a numerical majority of the voters of the state, and when that time arrives, the patronage of the state executives can and will be added to the patronage of the metropolitan center. This will be no small item in increasing the excess of political strength which the legislators of the city already possess.

### RURAL SECTIONS DIVIDED

With the interests of the rural sections divided, it is not necessary for the legislative delegation from a big city to have anywhere near a numerical majority to control the legislature. Harriman, the railroad manipulator, said that with 30 per cent of the stock of any railroad, he would control the action of the road, and any business man well knows that it is not necessary to have owner-

ship of 51 per cent of the stock of a corporation to have practical control of that corporation when the balance of the stock is well distributed.

Equally erroneous as the doctrine that a large city requires a numerical majority of the membership of the general assembly before it can control the state, is that other argument advanced by the opposition that if a large city like Chicago (or Detroit) is limited in both houses to any percentage less than 50 per cent it will be under the dictation and control of the rural communities. Let us examine for a moment the legislative history of Illinois:

When the present constitution of Illinois was adopted fifty-one years ago, Chicago, with one-eighth of the population of the state, had four senators out of fifty and twenty-two representatives out of one hundred and seventy-seven. She was not decidedly stifled in her growth by state control, for thirty years later in 1900, she had thirty-eight per cent of the state and was given nineteen out of fifty-one senators and fifty-seven out of one hundred fifty-three representatives, or approximately thirty-eight per cent of each house. For the past twenty years the downstate members of the legislature have, with some new precedent, interpreted the word "shall" in the constitution to mean "may" and refused to increase the size of the Chicago delegation although if represented on a population basis alone she would be entitled to approximately forty-eight per cent of both houses. During the last 20 years Chicago, limited in both houses to this thirty-eight per cent, has practically controlled both branches of the general assembly. For ten consecutive times the all-powerful speaker has either been a member of the Chicago delegation or one selected with the support and approval of that delegation. A large part of the time of each session is given to distinctively Chicago matters and no complaints have been heard from her that her special interests have been neglected or abused. It is true that attempts have been made by rural delegates to curtail board of trade operations, but never even with a membership downstate of sixty-two per cent could they carry out their program. What fear of rural control should Chicago have if for the future it is limited in its percentage of membership the same as it has been for the last twenty years?

### COUNTRY FEARS CORRUPT CITY CONTROL

The certainty that as its population reaches fifty-five, sixty, or sixty-five per cent of the population of the state, the governor who is elected by the entire state, on a strictly numerical basis, will be their friend. His veto, with thirty-three and a third per cent of the membership of the legislature, is a sure defense from the operations of the "so called downstate burglars."

Chicago's common citizen does not fear downstate and consequently shows no animosity toward the country, but the country does fear the control of the city's political machine. It does not greatly fear the control exercised at the present time, for that control is based on thirty-eight per cent and must necessarily be tempered with reason. What it does fear and has a right to fear is the arbitrary and dictatorial control which comes to a city with fifty-one per cent.

It is necessary in making an adjustment of excess of political strength to place an absolute maximum limit on the representation of a metropolitan center when that community approaches the numerical majority which carries with it absolute and dictatorial power. This limitation is not only necessary for the permanency of our representative form of government, but also fair to the voters of the big city, provided the maximum of representation is not placed at such a small percentage as to give to other sections of the state control of that city.

(This interesting article will be concluded in a later issue)

## Michigan Winter Wheat Conditions Well Above Average for Country

**O**NLY 2 per cent of fall-sown wheat was abandoned in Michigan as compared with 16 per cent in Wisconsin, 5 per cent in Illinois and Indiana, 27 per cent in Kansas, 41 per cent in Texas and 60 per cent in New Mexico. The condition of Michigan wheat on May 1st was 84, which was below the condition for Illinois, Indiana, Pennsylvania and certain other wheat growing states, but considerably above such high-producing states as Kansas, Texas and Oklahoma, and five tenths of one per cent above the estimated average for the entire country.

The May 1st forecast places the production in Michigan at 15,204,000 or nearly a million and a half more bushels than were produced in 1921. The estimated yield per acre is 17 bushels, or 1.7 more bushels than the estimated average for the entire country.

On May 1 the area of winter wheat to be harvested was about 38,131,000 acres, or 6,446,000 acres (14.5 per cent) less than the acreage planted last autumn and 4,571,000 acres (10.7 per cent) less than the acreage harvested last year, viz. 42,702,000 acres. The average of the past ten years was 36,789,000 acres. The 10-year

average per cent of abandonment of planted acreage is 10.4.

The average condition of winter wheat on May 1 was 83.5, compared with 78.4 on April 1, 88.8 on May 1, 1921, and 87.1, the average for the past ten years on May 1. A condition of 83.5 per cent on May 1 is indicative of a yield per acre of approximately 15.3 bushels, assuming average variations to prevail thereafter. On the estimated area to be harvested, 15.3 bushels per acre would produce 584,793,000 bushels or 0.4 per cent less than in 1921, 4.2 per cent less than in 1920, 23.1 per cent less than in 1919, and 9.0 per cent more than the average of the past ten years. The out-turn of the crop will probably be above or below the figures given above according as the change in conditions from May 1 to harvest is above or below the average change.

The average condition of rye on May 1 was 91.7 compared with 89.0 on April 1, 92.5 on May 1, 1921, and 90.2 the average for the past ten years on May 1. The condition on May 1 forecasts a production of about 79,152,000 bushels, compared with 57,918,000, last year's final estimate, 60,490,000 the 1920 final estimate, and

57,060,000 the average of the past ten years.

The average condition of meadow (hay) lands on May 1 was 90.1 compared with 91.5 on May 1, 1921, and a ten-year average on May 1 of 89.8. The expected hay acreage in 1922 is about 74,345,000 acres (58,753,000 tame and 15,592,000 wild). The May 1 production forecast is 103,579,000 tons, compared with an estimated production of 96,802,000 tons in 1921, and 105,315,000 in 1920. The ten-year average is 97,331,000 tons.

Stocks of hay on farms on May 1 are estimated as 10,792,000 tons (11.1 per cent of crop), against 18,771,000 tons (17.8 per cent) on May 1, 1921 and 12,417,000 tons (12.1 per cent), the five-year average on May 1.

The average condition of pastures on May 1 was 84.5 compared with 91.8 on May 1, 1921, and a ten-year average on May 1 of 85.6.

Of spring plowing 63.5 per cent was completed up to May 1, compared with 77.8 per cent on May 1, 1921, and a ten-year average on May 1 of 70.0.

Of spring planting 53.6 per cent was completed up to May 1, compared with 63.5 per cent on May 1, 1921, and a ten-year average on May 1 of 57.8.

# M. A. C. Concludes Valuable Feeding Tests

Animal Husbandry Division Determines Cost of Feed to Secure One Pound of Gain

By C. E. JOHNSON

M. A. C. Correspondent

CAN the farmer of Michigan get more for his grain when fed to steers and sold as beef than he can by selling it for cash soon after harvest? After he has fed it to cattle what should he get for his beef in order to break even on the deal?

These are some of the questions which the Animal Husbandry division of the Michigan Experiment Station has been trying to settle during the past winter. Three lots of 7 steers each were fed for a 140-day period which ended May 6. The first lot was fed normal silage, oilmeal, shelled corn and clover hay; the second lot, stover silage, oilmeal, shelled corn, and clover hay, while the third lot was given the same ration as number two in addition to an amount of shelled corn removed from the silage all during the experiment.

The steers were bought at the market price of \$6.40 per hundred last December. At that time the average weight of the steers was 793.3 pounds. At the end of the feeding period the average weight of the steers in lot 1 was 1135.5, in lot 2, 1040.3 pounds, and in lot 3, 1084 pounds. The average gain for the steers in lot one was 341.7 pounds, in lot 2, 246.6 pounds and in lot 3, 290.1 pounds. The cost of feed for lot 1 was \$219.05, of lot 2, \$162.42 and for lot 3, \$194.75. The feeds were figured at the following prices: Normal corn silage, \$4.00 per ton; corn stover silage, \$1.60 per ton; shelled corn, 56c per bushel; linseed meal, \$50 per ton and clover hay \$12 per ton.

The feed required by lot 1 to produce one pound of gain was: 18.68 pounds of normal corn silage, linseed meal, .39 pounds; shelled corn 2.34 pounds, and 1.42 pounds of clover hay. During the entire feeding period lot 1 received 44,688 pounds of silage, 2,131 pounds of linseed meal, 5,607 pounds of shelled corn and 3,388 pounds of clover hay. Lot 2 was fed the following

to make a pound of gain: 23.72 pounds of corn stover silage, 1.23 pounds of linseed meal, 3.25 pounds of shelled corn, and 1.96 pounds of clover hay. The total amounts of these feeds consumed was: corn stover silage, 40,943 pounds; linseed meal, 2,131 pounds; shelled corn, 5,607 pounds; clover hay, 3,388 pounds.

Lot 3 required 18.47 pounds of corn stover silage, 1.05 pounds of linseed meal, 4.49 pounds of shelled corn and 1.67 pounds of clover hay, to produce one pound of gain. During the five months of feeding this lot received 37,513 pounds of corn stover silage, 2,131 pounds of linseed meal, 9,114 pounds of shelled corn, and 3,388 pounds of clover hay.

Lot 1 produced the cheapest gains, the cost in this case being \$9.16 per hundred weight of gain, for lot 2 it was \$9.41 per hundred weight and for the third lot \$9.56 per hundred weight. Hogs were run with the steers and made substantial gains on what they were able to pick up. When the value of the pork thus produced was deducted from the costs, the cost of producing a hundred pounds gain was reduced to \$7.88 for lot 1, \$8.38 for lot 2 and \$8.23 for lot 3. Besides making more and better gains lot 1 had a higher finish and probably would command a higher price on the market today.

The necessary selling price in order to get the cost of feed at market prices for the stock was \$6.85 for lot 1, \$6.87 for lot 2 and \$6.89 for lot 3. The farmer who sold his cattle would have to figure in the cost of his labor and the wear and tear on buildings and equipment in addition to the above named figures in order to make anything by feeding his grain to livestock.

Similar tests were conducted with hogs to de-

termine the comparative value of home-grown grains as feeds for hogs. Seven lots of thirty hogs each were fed on the rations listed below. All the feeds were self-fed. It was found that corn was the most appetizing for the hogs and they thrived the best on it. In comparing barley and rye, the hogs chose rye in preference to the barley in most cases. Digester tankage and middlings were used to supplement the rations and give them the correct balance.

Returns received for home-grown grains fed in the tests after paying for tankage at \$60 per ton and middlings at \$30 per ton, hogs selling at from \$6.00 to \$10.00 per cwt:

Lot	Feeds	\$6.00 Hogs	\$7.00 Hogs	\$8.00 Hogs	\$9.00 Hogs	\$10.00 Hogs
1	(Corn ) (Rye ) (Barley ) per 100 lbs	\$1.18	\$1.41	\$1.64	\$1.87	\$2.10
2	(Supplemented by Tankage ) (Rye per 100 lbs. ) (Rye per bushel. )	1.14 .64	1.38 .78	1.63 .91	1.87 1.05	2.11 1.18
3	(Supplemented by Tankage ) (Barley per 100 lbs. ) (Barley per bushel. )	1.18 .56	1.39 .66	1.61 .77	1.84 .88	2.06 .99
4	(Supplemented by Tankage ) (Corn per 100 lbs. ) (Corn per bushel. )	1.21 .63	1.47 .82	1.72 .96	1.97 1.10	2.23 1.25
5	(Supplemented by Tankage ) (Rye per 100 lbs. ) (Barley )	1.16 1.39	1.62	1.85	2.08	
6	(Supplemented by Tankage ) (Barley per 100 lbs. ) (Barley per bushel. )	1.05 .51	1.43 .68	1.80 .86	2.05 .98	2.56 1.22
7	(Supplemented by Middlings and Tankage ) (Rye per 100 lbs. ) (Rye per bushel. )	.93 .52	1.44 .81	1.85 1.09	2.46 1.38	2.93 1.67

No attempt is made to give the per bushel value of the grains consumed by Lots 1 and 5, as two or more home-grown grains were used in the rations fed these two lots.

In Lots 6 and 7, it was unprofitable to feed middlings at \$30 per ton with barley and tankage or rye and tankage when hogs sold below \$7.00 per hundred pounds.

In Lots 6 and 7 the value of rye given is very high with hogs at \$9.00 and \$10 per hundred pounds and middlings at \$30 per ton owing to the small amount of rye consumed.

## Drop in Prices of Farm Products Must Be Met By Higher Acre Yield

FARMERS are showing a much greater interest in commercial fertilizers, if the large number of questions received by the M. B. B. Service Bureau upon the subject this spring are any indication. For three or four years almost any kind of a farmer could grow a fairly profitable crop on almost any kind of soil. The high prices made up for the poverty of the yield. But with most prices at half or less of those prevailing two years ago it takes a mighty good farmer on good soil to produce an equally profitable crop.

This the average intelligent farmer is beginning to realize. He knows that agriculture is now entering a period of the keenest competition in which as in other lines of business the man who produces the most at the lowest cost will be the winner and the man who is content to depend on exploded farming notions and does not employ modern scientific methods of production must inevitably lose out in the race.

A larger number of acres is not the solution of the problem agriculture is now facing. The real solution lies in fewer acres, more intensive and better cultivation, higher production per acre and consequently less cost per unit of crop.

Michigan farmers have never been backward in the use of fertilizers, but a comparison of the yield of some of the important crops with that of other states shows that we are a long ways from the front line in this respect.

We have a habit of referring to potatoes as a shining example of the possibilities of commercial fertilizers as demonstrated by certain other states, notably Maine. Nature endowed Michigan with exactly as good conditions for the growing of potatoes as she did Maine. Yet, Maine's five-year average acre yield was 199 bushels and Michigan's was only 90 bushels, although Michigan's total crop usually exceeds that of Maine. The reason? Commercial fertilizers. The Maine farmer would as soon think of planting potatoes on land that had not been enriched by commercial fertilizers as he would of planting seed of unknown pedigree.

When the M. B. F. editor was in Germany he saw potatoes growing

luxuriantly on what appeared to be common yellow sand. Moreover, the vines were so thick in the row that it looked as if the seed had been hand sown, and the rows could not have been more than twelve to fourteen inches apart. Another case of intensive cultivation made possible by the liberal use of fertilizers.

What commercial fertilizers will do for potatoes they will also do for other crops as Experiment Stations have demonstrated time and again. Some recent instances of this have come to our attention, among them the outcome of some experiments with wheat which have been in progress for several years at the Ohio Experiment Station.

In one of the experiments, begun in 1897, eight tons of fresh stable manure reinforced with forty pounds of acid phosphate per ton (equivalent to about 30 pounds each of ammonia, phosphoric acid and potash, annually) has been spread on clover sod in January to be turned under for corn in a 3-year rotation of corn, wheat and clover. Part of the field has been untreated for a liming on the corn over the entire field.

The average yield of wheat for 23 years on the unfertilized portion was 13.7 bushels per acre.

### Wonder What a Potato Plant Thinks About?



The average from the fertilized portion was 28.4 bushels, an increase of 10.7 per cent.

The other experiment began in 1904. Fresh phosphated manure had been spread on clover sod in the fall and plowed under the following spring for corn in a 4-year rotation of corn, oats, wheat and clover. The wheat crop received an application of complete fertilizer, the entire treatment being equivalent to about 30 pounds each of ammonia and potash and 40 pounds of phosphoric acid annually.

The 17-year average yield of wheat on this field was 34 bushels per acre, an increase of 148 per cent over that of the untreated field. In addition, this treatment has produced a 17-year average yield of 74 bushels of corn, 62 bushels of oats and three tons of hay per acre.

### Michigan to the Fore

Much educational work remains to be done in this state upon the possibilities of commercial fertilizers but it cannot be done all at once. By taking one crop at a time and showing by results obtained in other states how profits can be increased by the use of fertilizers it would be comparatively easy to jump the yield materially on such crop in a single year. If, for instance, the potato growers made up their minds to increase the average from 90 bushels to 150 bushels it could be done, not in one year perhaps but in five. With normal growing conditions Michigan could this year produce 110 bushels of potatoes to the acre, if her agricultural authorities simply made up their minds to see that it was done.

If we are to hold our place in the front rank of the farming states we must turn more and more to commercial fertilizers and improved methods of farming. Perhaps if we did not have so many things in our favor, such as ideal climatic conditions, proximity to market, etc., we would be obliged to increase our yield in order to stay in business. With these natural advantages, however, the opportunity is exceedingly bright to make this state pre-eminent in the nation's agriculture.

# Dairy Officers Deny Collusion with Distributors

Pres. Hull and Sec'y Reed Take Issue with Alleged Statement that they Own Stock in Detroit Creamery

THE May issue of the Michigan Milk Messenger contained the following article, relating to a meeting of the executive committee of the Milk Producers' Ass'n held in Detroit on April 28 and 29:

"President Campbell, of the National Federation said, 'There is no place in the United States where the milk producers have been better served by their organization than have the dairymen about Detroit by the Michigan Milk Producers' Association.'"

"This testimony from one who knows better than any other man in the United States, should be conclusive and convincing to those who have no opportunity to make comparison. This brought Secretary Reed to his feet and he made the following statements:

"Some think we are not so fortunate; that the Michigan Milk Producers' Association is not well managed, and that some connected with it have been disloyal. In that while holding office in this association they have held stock in the Detroit Creamery.

"Our books are always open for inspection and we invite any individual or committee to come to the office and inspect our books and methods. Our auditors make their quarterly inspection and audit the books of the Secretary and Treasurer and compare them with the records at the bank. There never has been a shortage of one dollar. The Secretary and Treasurer are both under bonds and everything is kept as near the order of the Board of Directors as is possible."

"I want to say still further that the report that I have stock in the Detroit Creamery Company, is absolutely false and is made for the same purpose as the report circulated last fall about George Burt. I want here to make this offer, and I want anyone to make the necessary investigation which will satisfy them and the public in this matter, so they will be able to state with certainty and know what they are talking about, namely, I will give anyone one thousand dollars who will prove that I ever held any stock in the Detroit Creamery Company or have been in any way employed by them or by any other creamery in Detroit. You can get the information needed from the Secretary of State at Lansing."

"As soon as Secretary Reed had made this statement, President Hull said: 'I, too, will give one thousand dollars to any person who will prove that I have held stock in, or have been employed by the Detroit Creamery or any other creamery concern in Detroit.'

"Then George Burt said, 'I want to put my pledge by Mr. Reed's and Mr. Hull's and if anyone can prove that I have ever held stock in the Detroit Creamery I will give them one thousand dollars.'"

FOR many months rumors have been floating about the state that certain officers and employees of the Michigan Milk Producers' Ass'n were financially interested in the Detroit Creamery Co. Scores of letters have been received by the Business Farmer from members of the association asking if any of the officers held stock in the concern. To all we have given the same reply that we did not know but that it was extremely improbable. At no time has there been so much as an intimation in these columns that any of the officers of the association were in any wise influenced in their policies by personal considerations. On the contrary we have avoided all mention of what appeared to be a most unpleasant subject.

Since, however, the Michigan Milk Messenger, official organ of the Association, continues to harp upon the subject and to publish repeated denials of any collusion, we know of no good reason why we should remain longer silent. A frank discussion of the matter at this time may help to clear the atmosphere and prove a benefit to all parties concerned.

It may be stated as a general rule that when two groups of people disagree with each other each begins to look for ulterior motives on the part of the other. Many milk producers have been unable to understand the position of their official heads in their negotiations with distributing concerns which has at times seemed to favor the distributors and have accordingly raised a question as to the judgment and motives of these officers.

It may also be stated that no charge of infidelity has ever been made publicly against any duly elected officers of the Association. Such charges as have been made involving the integrity of the association were against an individual employed by the Association. These charges finally became so serious that the board of directors ordered an investigation; the details of which have never been made public, but the expected result of which was complete exoneration of the party in question.

## DETECTIVE MAKES CHARGES

The detective who made the investigations into the Detroit milk situation during the war which resulted in the producers and distributors being haled into court and ordered to desist from their price-fixing methods, compiled a vast amount of information on both the producers' association and the Detroit milk combine. Upon the conclusion of the affair the papers in the case were all turned over to the United States district attorney in whose office it is supposed, they still repose. But the detective had a good memory and when a few months ago a number of producers became openly dissatisfied with the way things were going the detective was summoned from Chicago and made a report to the producers of such of his findings as he could remember.

The detective claimed that he found evidence of collusion between Mr. Burt, the Detroit representative of the Producers' Ass'n, and Mr. Watson, president of the Detroit Bottlers' Exchange which he said was nothing more nor less than a subsidiary organization of the Detroit Creamery Company. He charged that the object of Exchange was to steal or destroy the bottles of other distributors who might arouse the antagonism of the Detroit Creamery Company, and in this manner had put several small distributing companies out of business, conspicuous among whom was the man, Zimmer who opened up a creamery near the boulevard and immediately engaged in a price war with the bigger companies. The detective asserted that there were devious ways by which the Bottlers' Exchange served its master, the Detroit Creamery Co, to the disadvantage of other concerns and the milk producers.

It is noted that the new contract between the

## Producers' Dairy Co. to Soon Start Plant Construction

ONLY \$14,000 of the \$120,000 stock issue of the Michigan Producers' Dairy Company, remains unsold, according to Mr. Helmer Rabild, who has charge of the organization plans. This company is being organized by the Michigan Milk Producers' Ass'n for the purpose of establishing plants around the "rim" of the Detroit milk area to make up the surplus milk into cheese, butter and other products.

Just as soon as the balance of the stock has been disposed of ground will be broken at Adrian for the first plant, according to Mr. Rabild. This will probably be within the course of another month.

A good deal of difficulty has been experienced in selling the stock because of the financial condition of the farmers. Both Mr. Rabild and Mr. B. F. Beach have been devoting the better part of the past five months to the selling of the stock, and while, they claim, they found a good deal of interest among the farmers in the proposition, thousands of farmers who desired to take stock simply did not have the required funds or credit.

Mr. Rabild has requested the Business Farmer to announce that stock certificates will be sent to all farmers who have paid their subscription in full, within the next two or three weeks. All certificates will be dated from date of the final payment on the subscription. Mr. Rabild states that it has been impossible to send out the certificates up to this time owing to the lack of clerical help and his absence from the office.

## M. A. C. Asks State to Establish Radio Station

PROSPECTS for the state of Michigan owning and operating a wireless broadcasting station for the use of the different departments of the commonwealth are very bright at the present time.

A meeting of the heads of the state departments of agriculture, public health, conservation, and public safety was recently held to discuss and make such recommendations to the state administrative board in the near future. Mr. Verne H. Church, state crop reporter, C. L. Brody, secretary of the State Farm Bureau, represented their activities in the meeting. The Michigan Agricultural College was represented by President David Friday, Director of Extension, R. J. Baldwin and Prof. A. R. Sawyer, of the Electrical Engineering department. Representatives of the commercial wireless operators were present and gave figures as to the cost of the venture.

It was unanimously agreed that a wireless broadcasting service if maintained by the state would be of great value to the people and the execution of the state's business. The value of the wireless is beyond measurement to the department of public safety. Reports of thefts and other crimes could be immediately sent to the headquarters and this information would be immediately broadcasted to all sections of the state. Criminals could be apprehended before they had scarcely time to make their get-away. The health and agricultural departments will find the service of great value in sending out warnings and information to the people of the state.

Ass'n and the distributors adopted in April names the board of directors of the Bottle Exchange as mediators in the matter of price.

The detective at no time claimed that any officer of the Milk Producers' Ass'n "held stock" in the Detroit Creamery. Nevertheless the detective said he was convinced that "the Michigan Milk Producers' Ass'n and the Detroit milk situation were absolutely controlled by the Detroit Creamery Company," not, however, as a result of willing submission but of utter helplessness against the monopolistic power of the company.

Referring again to the alleged relations between Mr. Burt and representatives of the Creamery Co., a milk producer living at Rochester, testified at the meeting in question that for a long time the producers in his locality had been selling milk to the Oakland County Creamery. There came a time, he said, when this company's business expanded so rapidly that it could not pay its milk checks promptly, and asked the producers to give them more time. This the producers were inclined to do but one day Mr. Burt and Mr. Watson appeared in Rochester and urged the officers of the local to call a meeting of their members when they were warned by Mr. Burt not to ship any more milk to the Oakland county creamery, as it was on its last legs. He told the producers that if they would break with this concern he would see that the cans of another creamery company were on hand the next morning to take the milk. Some of the producers followed Burt's advice but the majority of them stuck by the old concern which shortly after paid up all its old accounts.

Some time prior to this incident, it was alleged, the Oakland County Creamery began to use the word, "velvet" in advertising a saltless butter for sale to the Jewish trade. As is well known, this is the trade name of the Detroit Creamery's ice cream and they did not approve of the Oakland County Creamery using the name to advertise its butter. Burt and Watson, it is said, accordingly approached the company and warned them against the further use of the word "velvet." The company paid no attention to the warning, the Detroit Creamery Company threatened to prosecute them for infringement on a trade-marked name, and the attempt of Burt and Watson to cut off the milk supply of the Oakland County Creamery was believed by the detective to be but a sequel to the "velvet brand" incident.

This is the story so far as we know it. With these facts in its possession the producers' committee made an investigation and reported that "the said charges were made without any foundation of fact; that in no instance have we found any disloyalty on the part of Mr. Burt; that Mr. Burt should be commended for his faithfulness and loyalty to the association."

To the crop reporting service wireless will add much to the service which it can render the people. Daily market reports and weather forecasts would be sent out. Then by simply calling the nearest wireless receiving station the exact condition of the weather and markets could be obtained each morning.

"This wireless broadcast service would mean one more method for giving the farmers the best of the college extension service," says R. J. Baldwin, director of extension at the M. A. C. Timely information about when to spray, what should be done to save the crops from disease and warnings about the encroachments of dangerous diseases could be immediately put in the hands of the rural population. It would not do away with the present methods but would tend to increase the efficiency of the extension service. A saving would be made in the other branches of the college extension service.

The committee appointed a sub-committee of wireless engineers to go over plans for such an equipment and report as to the probable cost. The plans is to have the broadcasting station located at Lansing, probably with the State Police, and a number of transmitting stations scattered over the state. These transmitting stations would aid handling the local news and would relay the state broadcasts. It is thought that the total cost would not exceed \$100,000. The central station will probably cost \$40,000 and the remainder would be needed to build the dozen or so sub-stations.—C. E. Johnson, M. A. C. Correspondent.



# Make Farming a Scientific Business

## Chart of Recommendations

Trade Name	Motor Oil	Trade Name	Motor Oil
Alford	H.	Magnet B.	H.
Allis-Chalmers—All Models	H.	Mark VI Once Over	H.
Allied	H.	Midwest	E. H.
All Work—Both Models	H.	Minneapolis, 12-25 and 17-30	H.
Andrews-Kinkade	E. H.	Minneapolis, 22-44 and 35-70	E. H.
Appleton	H.	Mogul	H.
Armington	H.	Mohawk	H.
Aultman-Taylor, 22-45	E. H.	Monarch-Industrial	H.
Aultman-Taylor, 30-60	E. H.	Nelson Junior & Senior	H.
Aultman-Taylor, 15-30	E. H.	Ohio	H.
Automotive	H.	Oil Gas, 20-42	E. H.
Avery Model C	H.	Oil Gas, 25-50	E. H.
Avery, 8-16, 12-25, 25-50	H.	Parrett	H.
14-28, 18-36, 40-65	E. H.	Peoria	E. H.
Avery Track Runner	H.	Pioneer, 18-36 and 30-60	E. H.
Bates	E. H.	Plow Man	H.
Bates Steel Mule—All Models	H.	Porter	H.
Bear	H.	Port Huron	H.
Best Tracklayer, 30	E. H.	Prairie Dog, 10-18 and 15-30	H.
Best Tracklayer, 60	E. H.	Quadpull	H.
Big Farmer	E. H.	Reed	H.
Big Four, E-B	E. H.	Reliable	E. H.
Biltwell	H.	Rex	H.
Boring	H.	Rumely Oil Pull, 12-20	E. H.
Burnoil	E. H.	Rumely Oil Pull, 16-30	E. H.
Capitol—All Models	E. H.	Rumely Oil Pull, 20-40	E. H.
Case, 10-18 and 15-27	H.	Rumely Oil Pull, 30-60	E. H.
Case, 22-40	E. H.	Russell "Big Bear" 20-35	E. H.
Case, 20-40	E. H.	Russell "Giant" 30-60	E. H.
Cletrac, 9-16 and 12-20	H.	Russell "Little Bear" 15-30	H.
Coleman	E. H.	Russell "Junior" 12-24	H.
Common Sense	H.	Samson Model M	H.
Dakota	H.	Savage A.	E. H.
Dart Blue "J"	H.	Shawnee, 6-12 and 9-18	H.
Depue	H.	Shelby Model C	H.
Dill Harvesting	M. H.	Shelby Model D	E. H.
Eagle, 12-22 and 16-30	E. H.	Square Turn	H.
E-B, 9-16 and 12-20	H.	Stinson Heavy Duty	H.
E-B, 16-32	H.	Titan	H.
Farm Horse	E. H.	Topp-Stewart	H.
Farquhar, 15-25	H.	Toro	H.
Farquhar, 18-35 and 25-50	H.	Townsend—All Models	E. H.
Fordson	H.	Traylor	H.
Flour City Junior, 20-35	H.	Triumph	E. H.
Flour City, 30-50 and 40-70	E. H.	Trundaar	H.
Fox	E. H.	Twin City, 12-20 and 20-35	H.
Four Wheel Drive Pitch	E. H.	Twin City, 40-45	E. H.
Frick, 12-20	E. H.	Twin City, 60-90	E. H.
Frick, 15-28	H.	Uncle Sam—All Models	H.
Good Field	H.	Vim	H.
Grain Belt	H.	Wallis	H.
Gray	H.	Wallis Cub	H.
Great Western	H.	Waterloo Boy N.	H.
Hart-Parr—All Models	E. H.	Wellington, 12-22 and 16-30	E. H.
Heider—Model "C"	H.	Westmore	H.
Heider—Model "D"	H.	Western	E. H.
Holt Caterpillar, T-35	H.	Whitney	E. H.
Holt Caterpillar (5 Ton)	H.	Wichita	H.
Holt Caterpillar (10 Ton)	E. H.	Wilson	H.
Holt Caterpillar (15 Ton)	E. H.	Wisconsin, 16-30 and 22-40	E. H.
Huber Light & Super Four	H.	Yuba Ball Tread—All Models	H.
Illinois Super Drive, 18-30 and 22-40	E. H.		
Indiana, 5-10	H.		
International, 8-16	H.		
International, 15-30	H.		
J. T.	E. H.		
Keck Gonnerman	E. H.		
Kinnard	H.		
La Cross	H.		
Lauson, 12-25 and 15-30	H.		
Leader, 18-36	H.		
Leader, 12-18 and 14-32	E. H.		
Leader, 18-35	E. H.		
Leonard Four Wheel Drive	H.		
Liberty	H.		
Little Giant A. & B.	H.		
London Model S, 12-25	H.		

N. B. For recommendations of grades to use in automobiles and trucks consult chart at any Standard Oil Co. (Indiana) station.

### KEY

M. L.—Polarine Medium  
Light.  
M. H.—Polarine Medium  
Heavy.  
H.—Polarine Heavy.  
E. H.—Polarine Extra Heavy.

Successful farming today calls for the same intensive merchandising methods as are necessary in other successful industries. The first essential is modern equipment properly maintained. The first maintenance requirement is correct lubrication.

For the tractor an oil must be used which will so thoroughly lubricate all frictional surfaces as to leave no chance of the machine being out of commission because of scored cylinders or burned-out bearings.

When the tractor is needed, nothing else can take its place. The planting and harvesting seasons are short at best. To insure against costly mid-season mishaps,

## Use Polarine

THE PERFECT MOTOR OIL

### Made in Four Grades

**Seals pistons against loss of power**

The Standard Oil Company (Indiana) staff of lubricating engineers recommend it as the correct oil for your tractor. They term Polarine the Perfect Motor Oil, and it is offered to you as such.

It is made in four grades, one of which will correctly lubricate your machine, seal your pistons against loss of power, and enable you to get a maximum of service from your fuel.

To determine which grade to use, consult the chart on the left. It represents the recommendations of the world's best automotive engineers.

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(Indiana)  
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## These free booklets on Farm Sanitation

tell you how to prevent disease among livestock and poultry and describe in detail the many uses of

## KRESO DIP No. 1

(STANDARDIZED)

### Parasiticide and Disinfectant

No. 151—**FARM SANITATION.** Describes and tells how to prevent diseases common to livestock.

No. 157—**DOG BOOKLET.** Tells how to rid the dog of fleas and to help prevent disease.

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## What the Neighbors Say



### SOME FACTS ON GRAND BLANC CONSOLIDATED SCHOOL

I THINK it is a shame what some of our neighbors say concerning the consolidation of schools, especially what was said about the system at Grand Blanc. When I read the statements that our visitor to this district wrote in the Michigan Business Farmer of April 29th, under "What neighbors say," I thought it was about time some one made a few corrections. I have my data from the secretary of the school board and from the records of my office.

One of the neighbor's objections was a burdensome tax. He then gave such statistics as follows: "The school at Grand Blanc when completed will cost around \$120,000 (Correction, building and equipment \$107,500) "Cost of busses \$15,500" (Correction \$12,838.50). "State aid \$5,500" (Correction, we expect state aid of \$4,800). The valuation of school district \$2,418,575" (Correction \$2,660,000). "Tax rate \$13.26 per \$1,000, and no money has been paid on the principal." (Correction, this statement is true as far as it goes, but he fails to state that beside paying interest for 18 months of \$9,000 over \$3,000 was raised for equipment which if raised next year will meet the allotment, which was determined by the board, to pay the necessary amount on the principal, without increasing the tax rate.) He also failed to compare the tax rate of Grand Blanc (\$13.26) with that of some other districts, such as Otisville (\$38.00) a district which is not consolidated.

This neighbor sends his children to the little red school house. He also makes this statement: "I have had to let necessary repairs go in order to pay my taxes." Apparently he is not satisfied with the little red school house system either. I think that the opinion of a good many kickers is that any system is better that doesn't cost much.

Our neighbor's next objection is the transportation problem. "He failed to find any parents who were far from school who were sending children under seven years of age." I found this data. Out of an enrollment of 59 in the first grade only 10 were seven or over when enrolled, and all of the 10 were pupils who failed to pass the last semester. Another statement, "Some of the children have to leave home in the morning at 7 o'clock." I have found this data. In the Junior and Senior High School of 105 pupils, only three live six miles from school and only one of them has to start before 8 o'clock in the morning. Only two in the high school (seventh graders) cared to go back to the old system. Out of 100 pupils in the fourth, fifth and sixth grades, only six cared to go back to the old system, and none of these six live more than four miles from school. I have been in the system for three years and there has been no serious trouble in the busses. Careful men are selected to drive the busses who have the children under their supervision. Can this compare with the system in which we used to go home in a bunch with no responsible person in charge? If anyone kicks on the transportation problem he is usually a tax kicker also.

Another statement, "I am for the little red school house and for the best education I can afford to give my children." I am not sure whether he can afford to send his children to high school. If he lived in a consolidated district I am sure he could, until the children were at least 16 years of age. Before Grand Blanc school became a township unit with twelve grades only eleven were enrolled in the freshman class. Now there is an enrollment of twenty-five in the ninth grade. Apparently more people can afford to send their children to high school than before.

Mr. Farmer, I wish you to hesitate before you let a petition for consolidation pass without signing it. Be sure you get reliable information. I notice that a great deal that is said against consolidation

comes from those people who have never lived in a consolidated district. I stand for better systems of education as other "educators" do and can see the problem solved for the rural districts in the up-to-date consolidated systems, and not in the little red school house of "twenty-five years ago."

If I had more time and the Business Farmer would print it I would now say something about the privileges of the consolidated school. However, I don't think that would be as necessary as correcting some of the statements other people make against consolidation.—G. W. Wakefield, Supt. Grand Blanc Township School.

What we want is facts on this subject. If you have any more to offer we'll gladly print them.—Editor.

### HALLADAY DISCUSSES M. A. C. FUNCTIONS

EDITOR Business Farmer: In reply to your request for a statement from me since accepting the secretaryship of the Michigan Agricultural College, I take pleasure in addressing a few words to the farmers of the state for whom I have labored for the past twelve years.

We have together faced problems, studied conditions, and, I feel, have made some progress. In working out the many problems that have confronted us, it has been the farmer's viewpoint that I have considered first and his welfare which was most vital. I have had splendid co-operation and support which invariably came to me and was very helpful, and I sincerely hope that this same interest and help will be accorded in my new position.

In the past, my efforts were aimed largely at Animal Husbandry—stamping out contagious diseases of live stock and helping build up the dairy industry—promoting agriculture generally, and all the time striving to raise the standard of the agricultural profession to a station it should occupy. These matters have been of consuming interest to me, are still, and always will remain so.

But running through these lines of work, I remember with much conviction that the best crops raised on our farms are the boys and girls and what we can do for them is our wisest investment. If we give them proper advantages and information, they will care for these problems of agriculture. I have felt honored with the position which I now occupy and hope that I may be able in some small way to assist the farmers of the next generation. If my experience and judgment and any other qualities are such that I may be of value in this position, I shall be gratified to serve with all the powers that I possess.

As I view it, one of the great needs of Michigan agriculture is a broader knowledge of scientific and practical facts for the farmer, and the Michigan Agricultural College and its achievements are fully needed to put Michigan high as a state.

President Friday with his wonderful economic ability and academic training, is surely going to put the college on a high plane of usefulness. It is one of my hopes that the bright, vigorous young man and young woman of our farms may be educated and interested thoroughly in the problems of agriculture and country life, and that their ability may be conserved to add to our forces for an agricultural development.

While having at this time served the college less than three weeks, I am more than interested and encouraged at the outlook. The possibilities are unlimited. With a plant worth three millions, a faculty force and helpers who are interested and loyal, there is bound to be a larger growth of usefulness going forth from the institution. Good work and sound judgment of past officials will go forward until all friends of the college will be justified in their faith in the institution.

Besides the ordinary agricultural and home economic lines of work, we note the fine courses in engineering, farm mechanics, veterinary

science and extension, which all come to the aid of the farmer and farm problems and help to bring the progressive ideas of the day close home to Michigan agriculture. Landscape gardening and music courses send back to the country home some of the interest and joys of life which help to make farm life more attractive.

These plans and hopes for the Michigan Agricultural College make the work rich with promise, and I hope we may claim your interest, suggestions and encouragement. Sincerely yours—H. H. Halladay, Secretary.

We are glad to have this expression of views from Mr. Halladay. By personal acquaintance of long standing and observation of his work we know him to be deeply and sincerely interested in agriculture. A practical farmer himself, Mr. Halladay has a long record of achievements for Michigan agriculture. As secretary of the M. A. C. he will undoubtedly continue to "carry on" for business farming in this state.—Editor.

### IN DEFENSE OF THE LITTLE RED SCHOOL HOUSE

THE first thing a man does who contemplates building a house is to count the cost. So with all this talk of consolidated schools, the cost ought to be the first consideration. "The country Gentleman" of November 19, gives the cost of such a school. The article is in favor of consolidated schools so the figures may be relied on. There are 390 pupils enrolled, and 15 teachers. It takes 14 trucks and wagons to carry the children. Cost of building \$200,000, insured for \$180,000. Transporting pupils \$7,904, total cost of operating for one year \$39,786; interest on bonds \$10,075, total cost \$49,861. This in one of the richest farming communities in Iowa, land is worth from \$200 to \$300 an acre. If the land were worth \$50 or \$100 an acre the cost of building and maintaining the school would be just the same. The school taxes in that district are estimated at \$140 on 120 acres or \$1.20 an acre, \$102 for each pupil.

Land agencies in their instructions to their sub-agents tell them never to leave their prospect for one minute in the company of any one living in the vicinity of the property they are showing, especially if it is farm land, fearing the prospect might learn a few facts. It is the same with consolidated schools. The good points only are shown, not one word is said about the time some children must get up to get the bus, how long they sometimes stand on corners in storm or rain, how often the bus breaks down or has to be pulled out, or how late the farthest ones get home at night.

It surely is enough to make farmers rage, when a lot of high paid, public officials, who would not pay one penny of the extra taxes talk of abolishing "The Little Red School House." People who have been working hard for thirty years on some of these Wayne county farms are wondering where their tax money is coming from this year.

The poor rubes of farmers have men to tell them how to run their farms, how much grain of each kind they must plant to balance production, etc.; their wives, many of whom have cooked three meals a day for years, have women to show them how to cook such vegetables as onions, and how to make over their old hats and clothes. There are club organizations for their children, nurses, lecturers, librarians, cars and gasoline provided to take these helpers from place to place. All these people getting salaries and expenses out of the taxes paid by the people without the consent of the voters. It certainly is a glorious feeling to be a spoon-fed farmer.

The farmers are paying rent or its equivalent in taxes now as high as \$175 on 65 acres. Add to this the cost of consolidated schools. The men who are agitating such things better take the farms. Plenty of them for sale.

Many of our finest and best men and women came out of this same "Little Red School House."

The greatest trouble with rural schools has been that anyone was considered to be good enough and to know enough to teach country children. Teachers of a few years ago boasting they never went to high school a day and many now teaching

who never graduated from a high school. Let the country teacher have the same equipment as the city teacher. Do anything to make the country school better. Every child should have the advantages of an education. Much can be done without adding to the burdens the farmers already have to bear. It was the last straw that broke the camel's back.—A Wayne Farmer, Willis, Mich.

#### A BACKSLIDER AND PROUD OF IT

THE school districts still continue to spend more money than their patrons can afford to pay.

The coming town meetings will vote more money than the citizens of the townships can afford to spend. The boards of supervisors will spend more money than the citizens of the county can afford to pay. And if we don't look sharp the income tax will be defeated next fall. But worst of all, because hogs went up almost to the cost of production after most of us had sold every four-footed hog except the old sow, we farmers are getting set to spend more than we can afford.

We are clubbed and punched by a hoard of salaried agents and extension workers to buy alfalfa seed at \$33 per bushel, pure bred sires, dairy cows and aristocratic hogs, vote for county nurses and a host of other things. Everybody that draws from the public purse is talking of the true economy of higher salaries and efficient organization that costs more than the old way but of course will be much better.

And, Oh! Dear! Dear! we can't borrow money fast enough from the banks, the local Shylock or the federal loan associations. Oh, Dear! No! Nor not half enough of it.

The debt factories we call banks grind out our promises to pay with their promises to pay till we have promised to pay five times as much as ever existed and still we hear little of anything but credits for us. Credits long and credits short. Credits at 5 per cent, credits at 7 per cent, credits plus taxes, credits plus commissions, credits with loan fees, appraisal fees, tital examination fees and so on,—credits without end.

I once was in favor of better schools. Once was in favor of better roads. Once was in favor of county agents. I worked like a beaver to form the Farm Loan Association that obtained the first loan in the state of Michigan.

Last fall I woke up to the fact that it was no use to even ask how much my taxes were. I didn't have a cent to pay them with so what was the use. I had favored better schools until the schools were costing more than I could afford. I had favored better roads until the roads were costing more than I could afford. I had favored agricultural extension until I had neither money nor credit to buy \$33 alfalfa seed.

I wonder if there are many fools like me in the state of Michigan.—John C. Stafford, Van Buren County, Mich.

You seem to be in a desperate frame of mind, my good friend Stafford. Knowing your usually progressive point of view, I can hardly understand the wave of reaction that has engulfed you. Discouraging as the outlook is I know you would not over-turn all the great agricultural reforms of recent years which have cost money and added to our burdens. Agriculture's head is still aching from the awful bump it got. Things look blue and hopeless. Still the farmers are really better off, financially, intellectually, economically than they used to be. They're getting more fun out of life. They live better. Their children are getting a better education than they got themselves. We are looking at things now thru colored glasses and they don't look just right. A little later, methinks, we'll have a better perspective.—Editor.

#### STANDS BY RHODA

I HAVE been an interested reader of your paper for several months and I think it is a grand paper. I enjoy Uncle Rube's talks, the woman's talks and in fact everything which is published.

Three cheers for "Rhoda." Your talk was fine, come again. I do not uphold the modern flapper but I think that some folks are too hard on the girls of today. Because some are not what they should be is no reason why they should condemn all of 'em. I wear short skirts and low necks but do not go to the extreme.

I wear 'em because they're more becoming to me. Who wants to see a girl with her dress touching the floor and the collar up to the chin? You must all admit that we would not look near so well. I'll admit tho that some girls wear their skirts too short and too low in the neck. I believe n being modest but some people are afraid to speak for fear there will be a talk.

If we have a clear conscience why worry about what others say. But girls always keep this in mind, never do anything which you would be ashamed for mother to know (or your own children should there be such). Do you not know that mother is our best friend here on earth. Always go to her for advice, she knows best.

Well, I do not wish to make my letter too long this time, but want to tell you that I always look forward to the coming of the M. B. F. Keep the good work going on. I will send some recipes to the woman's department in the near future. I live on a farm and am very fond of the country. I love the out doors especially now when everything is green and beautiful. I do housework and cook a great deal. Well I hear 'em saying "Time's up" so I'd better skidoo.—Trudie, of Kentucky.

We're glad to know, Trudie, how the folks down in "Old Kentucky" look upon this momentous question. Femininity is the same the world over. It likes to reveal its charms.—Editor.

#### STATE CLEARING ACT

I AM consumed with curiosity. The Detroit Real Estate Board announces their determination to sell Michigan stump land. Good! I wish them heaps of success, but real estate dealers depend entirely upon commissions to keep the home fires burning.

Of course they may interest land buyers with fat wallets. Something I have not succeeded in doing in my twenty strenuous years of effort, excepting a ranch sale to city parties.

The land-seeking farmer who has any means to speak of can be interested in improved farms only and I have long since concluded that to develop our idle agricultural areas. Michigan or any other stump ridden state must depend mainly upon the land hungry with very thin wallets. The class that tamed the wilds yesterday is doing it today and will be doing it tomorrow.

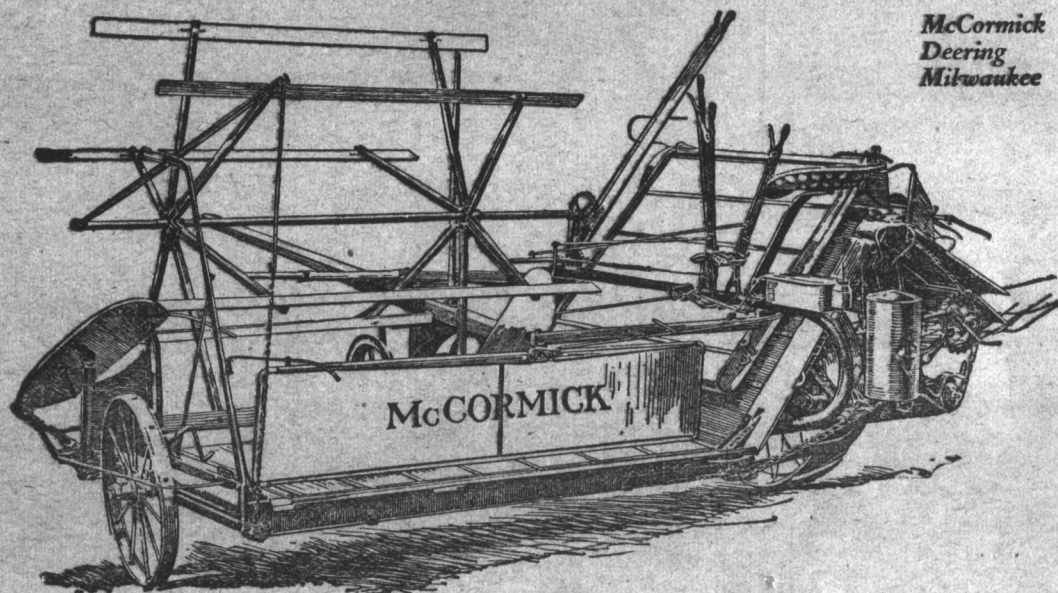
Unless the state awakens to the importance of a "State Aid Land Clearing Measure," available to the new settler in any section of the state, in his initial clearing operations, at no cost to the state, a measure casting no shadow resembling a paternalistic ghost to hound the privileged ridden public, all the fine oratory uncorked over banquet tables or in commercial halls for consumption by the real land hungry within our gates will be as a tinkling of cymbals, a pounding of brass.

In advocating my means to a desirable end, I realize that I am fully fifty years ahead of the bunch, because not a darn one of my Bolshevik ghost-fearing friends seem to openly agree with my remedy. It was the same way when some 22 years ago I purchased thousands of acres of Presque Isle land that nobody wanted. For doing this I was dubbed a nut—and finally my wife almost believed it—because so many said so.

When I advocated clover seed hullers in my vicinity, again I was dubbed a nut, but somehow or another I seemed to have hit the right trail in both instances, and I am just as firm in my convictions that Michigan's Idle Land Problem will never be settled until it is settled right.

It will go a long way with industrial owners and land dealers to be able to offer for sale, "Michigan Approved Farm Land subject to State Aid Clearing Act." I know it and every man of modest means pining for an independent farm fireside knows it. So why withhold the proper remedy? I am asking this question of the state, which means us all.—John G. Krauth.

Mr. Krauth has made a deep study of the problems confronting the average settler on new land, and his opinions are entitled to respect. We agree with him as to the need for some kind of aid for these new settlers, and believe that the state would do well to extend them a helping hand.—Editor.



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**FERTILIZER FOR SANDY SOIL**

I would like to ask what kind of fertilizer would be best to use on a sandy soil for garden truck. I would like only to use it in the hills of different vegetables. I am planning quite a large garden this year and need something to enrich the ground. I would thank you very much for information.—H. K., Pontiac, Mich.

The best fertilizer to use on a sandy soil for vegetable crops is well decomposed stable manure. This should be applied before plowing and well turned under or if it is very well decomposed, it may be used as a top dressing and well worked into the surface soil before the seeds are sown.

If a commercial or chemical fertilizer is to be used we recommend the use of a good high-grade complete fertilizer. This should contain about 4 per cent nitrogen in the form of nitrate of soda; 8 per cent phosphoric acid in the form of acid phosphate and 6 to 10 per cent potash in the form of potassium muriate or sulphate. This fertilizer may be applied broadcast before the seeds are planted using from 1000 to 3000 pounds per acre, depending upon the needs of the soil; or it may be applied directly in the hills or rows. For the leaf crops such as lettuce and spinach a light dressing of nitrate of soda after the plants are well started and a subsequent application about two weeks later will produce a very quick growth and give a very good quality product.—R. E. Loree, Dept. of Horticulture, M. A. C.

**TRANSPLANTING LARGE TREES**

I have in front of my residence a double row of hard maple trees and as the inside row is more obstructive than beneficial I had in mind to transfer four of them to my farm. The trees are about 19 inches in circumference and about 25 feet high. Please advise me if the transplanting of such kind and size of trees can be done successfully, the proper time of transplanting and the method of moving same.—C. S., Caro, Mich.

Trees six inches in diameter and even much larger can be and are transplanted successfully but the operation requires considerable care. Furthermore, the larger the tree the less are its chances of coming through satisfactorily. The main roots should be carefully excavated, disturbing the finer rootlets as little as possible, and each should be carefully wrapped in wet burlap to prevent their drying out. The new site should be prepared beforehand and the tree placed in this at about the same depth at which it formerly stood and the earth packed firmly around the roots so as to exclude excess air. The operation should be performed with as little delay as possible. It is also well to support the tree in its new site by guys until it has become established.

Probably the best method, but a more expensive one, is to make the transfer in winter when the ground is frozen so that the entire root system can be taken up intact with its native earth. By this method the roots are practically undisturbed.—Marcus Schoaf, State Forester.

**KEEPING STOCK AND POULTRY IN SAME BUILDING**

I wish to know if it is injurious to horses and cattle to house chickens in the basement of a barn where they both come in contact. Does a properly built chicken house require a stove in the winter to keep the hens laying?—B. F., Big Rapids, Mich.

There should be no injurious effect to horses or cattle if confined in the same building with the chickens. The only danger is, from the sanitary standpoint, that the fowls are liable to roost on the mangers and other places where the feed is liable to be soiled. It is almost impossible to obtain satisfactory results from the poultry under basement housing conditions.

It is not necessary to use artificial heat of any kind in the poultry house. The newly designed Michigan house which is now being advocated by this department has given excellent results. The modified King System of ventilation removes the cold vitiated air and retains the

warm pure air in the building. If hens are properly bred, cold weather really has a stimulating effect. The heaviest producers here at the College average the highest during the months of December and January so that if hens do not lay during the winter months they either lack breeding or this happy environmental condition that stimulates production.

We would be glad to furnish plans on request.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

**MUST ENGAGEMENT RING BE RETURNED?**

Can a girl be forced to give back her engagement ring and watch after a couple breaks up friendship?—Miss E. R. S., Watervliet, Mich.

Legally a young lady cannot be forced to return an engagement ring, or gifts from a gentleman friend. In a moral sense, however, there is an obligation to return the ring. An engagement ring is a seal of affection, and if there is any loss of affection and the ties are broken, the ring should be returned. As to the watch, I think you will be perfectly justified in keeping it.—Editor.

**PASTURE FOR HOGS**

What crop can be planted on a clay ditch bank which grew corn last season, that will furnish suitable green feed for eight growing pigs of about 100 lbs. each at the present time? Their usual pasture lot will have to be planted to some grain crop and seeded this year, which leaves me without pasture for them.—E. R. Monroe, Mich.

Rape is one of the best temporary pastures for hogs. If two sowings are made and these pastured alternately, rape usually provides pasture until heavy frosts in the fall. From 4 to 6 pounds of Dwarf Essex rape seed should be sown per acre. The imported Japanese seed does not produce as large a growth as Dwarf Essex. Feeding tests show that rape compares favorably with clover and blue grass as a pasture crop for hogs.—C. R. Megee, Associate in Farm Crops, M. A. C.

**SUDAN GRASS FOR HAY**

I am going to sow some Sudan grass for hay. How would you sow it, broadcast or in rows? I want to kill quack grass, and how much would you sow on an acre? It's a little sandy where I want to sow it, and when would you sow it?—H. B., Pigeon, Mich.

A finer quality of hay may be secured by sowing Sudan grass broadcast or drilling solid the same as oats or barley with an ordinary grain drill.

Sudan grass is usually sown in 32-inch rows when the crop is to be harvested for seed. Would recommend sowing from 20 to 25 pounds of seed per acre, on a well prepared seed bed, about the middle of May.

You state that the field is infested with quack grass, in which case would suggest frequent and thorough cultivation of the field with a spring tooth harrow until about the first of June in order that the quack grass may be checked and the conditions for quick growth of Sudan made more favorable.—C. R. Megee, Associate in Farm Crops, M. A. C.

**TAX ON LAND CONTRACTS**

A sold a two-family flat to B on contract. B sold contract to C without A's consent or knowledge. Who pays the land contract tax if there is any, A, B or C?—G. B., Vassar, Mich.

The present owner of the contract, C, must pay the tax.—Editor.

**DITCH CONTROVERSY**

I am asking information regarding to my neighbor who has an 80 acres along side of my 80 acres and he has dug a ditch across his 80, against our line fence and then runs the ditch as close as he can dig it on his side of the line fence and runs it along until it runs on top of the ground the way the land lays, it slopes toward my land. You understand it is down grade from where he runs the ditch along our line fence and runs it about 20 rods until it comes out on top of the ground as the land leans that way. The water all runs on my land. Has my neighbor a right to do that? If not what action would I take?—A. B., Muskegon, Mich.

You should institute proceedings to have the owner of the ditch com-

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pelled to block the same or you could bring proceedings for damages for each time the water is turned upon your premises in an increased quantity by reason of the construction of the drain. It would be advisable for you to take this matter up with your county drain commissioner who would undoubtedly afford you a remedy by way of a drain.—State Highway Department, Lansing.

#### BRITAIN HAS NO CLAIM ON U. S. CAPITOL

I would like to know whether or not the British government has any claim on the capitol of United States at Washington, D. C., or has it any claim whatever to any territory included in the District of Columbia? Also what is the correct date when Michigan was admitted into the union? Some books say January 26, 1837 and others say January 27, 1837.—N. D., Sand Lake, Mich.

Great Britain has no claim whatever upon the United States capitol or other property in the District of Columbia, except such as she may have purchased for the use of her envoys. Michigan was the 26th state admitted into the Union, date of admission being, according to official records at Washington, Jan. 26, 1837.—Editor.

#### FRANK SCOTT, CONGRESSMAN FROM ELEVENTH DISTRICT

What congressional district is Antrim county in, and who is senator from this district? Has he done any special work in congress? Has he been instrumental in putting through any bills or special measures, and what important committees is he on, if any? We think a great deal of our Business Farmer and would not be without it.—O. R. D., Mancelona, Mich.

Antrim county is in the eleventh congressional district which comprises the following counties: Alger, Alpena, Antrim, Charlevoix, Cheboygan, Chippewa, Delta, Emmet, Kalkaska, Luce, Mackinac, Menominee, Montgomery, Otsego, Presque Isle and Schoolcraft. Frank D. Scott, of Alpena, is the present congressman and has held the office for the past eight years. He is a member of the following committees: Banking and currency, election No. 3, merchant marine and fisheries. We know of no specially meritorious measures which Mr. Scott has introduced or actively supported during his entire term in congress.—Editor.

#### HORSE-RADISH

Which is best for use with horse-radish, white or cider vinegar? What sometimes causes the bitter taste in canned horse-radish? Could horse-radish canned this spring be kept until next winter? Any information on the subject will be greatly appreciated. Mr. Editor, congratulations on your fine paper. I especially enjoy, "What the Neighbors Say," and aren't there some mighty interesting farm people to judge from their letters? May your good work continue and may you prosper.—R. A. C., Hartford, Mich.

The only data that we have on preserving horse-radish recommends merely grating the root and adding vinegar to cover.

I believe that commercially white vinegar is always used and probably gives a whiter product but doubtless cider vinegar is about as desirable except for color.

The bitter taste in canned horse-radish might be due to the use of old, strong horse-radish of inferior flavor to start with or might be due to a kind of spoilage. Canned horse-radish which stands for some time tends to discolor at the top of the jar, otherwise the product should keep indefinitely if sealed air tight as it is preserved in vinegar. The top discolored layer may be removed when the jar is opened.—Osee Hughes, Assistant Professor of Home Economics, M. A. C.

#### COUNTY DRAIN DISPUTE

I wish to ask your advice on a county drain which was put across seven or eight farms. All the farmers signed the petition for the drain. One farmer having only forty acres and those tiled signed to help the others. We will call the forty-acre farmer No. 1. A neighbor, just purchased 120 acres joining No. 1, did not sign the petition but at the sale of the drain he promised to pay for the right of way across No. 1's farm. The surveyor made an item of it. But No. 1 was taxed \$1,100 for the drain on his forty and nothing was said about paying for the right of way. No. 1 paid a drain tax for two years on another drain on his forty. Can the farmer be taxed twice on his forty?—C. M., Portland, Mich.

The supreme court has held that the land may be used for a drain even if another drain has been laid and assessed against the same property. The theory of this being that

the farm may receive benefits from the two drains.—Harry H. Partlow, Legal Adviser, State Highway Dept.

#### SON IS MISSING

I would like to find my son who left home with his father in November, 1915. His name is George Perry Thomas, last heard of at Munising Alger county, through Charlie McKenzie, who kept a boarding house there about 5 years ago. Have wanted to know of his whereabouts but have not much money to spend to look him up.—Mrs. A. T., Nester, Mich.

#### DRAINAGE ON HIGHWAY

Will you please tell me through the Farmers' Service Bureau what is the law governing the draining of water along a highway that is being constructed? Should it be allowed to go out of its natural course, if there be one, or could it be changed to run through where it would be a detriment or damage to the owner or occupant of lands adjacent thereto without the knowledge and consent of the owner or occupant and who would be the one responsible? Should it be the overseer or commissioner if being built by the township or would it be the board of county commissioners, or would it be the county manager if built under the county road system?—W. B., Kingsley, Mich.

The highway authorities have a

right to provide such drainage as may be required for the proper construction of the highway in question there being no limitation as to the direction in which they shall take the surface water, the only limitation being that they have no legal right to dump the surface water on to the abutting property owner, the statute giving them full and complete authority to purchase the drainage right of way for the purpose of taking care of the surface water and if they cannot obtain by purchase or otherwise an outlet the highway commissioner of the township is empowered under the statute to petition the county drain commissioner for the construction of an outlet drain for the drainage of the highway in the course of construction.

As to whom you should look for damages, please be advised that you should take this matter up with the township board in case the commissioner or overseer have caused the water to be placed on his premises and perhaps he would be justified in filing a claim against the township for the damages to his property. This of course is impossible for the writer to give an opinion on without knowing more

of the facts and circumstances in connection with the matter. You should, however, take the matter up at once with the highway commissioner and township board to get the relief you require.—Harry H. Partlow, Legal Adviser State Highway Department.

#### POSTING PREMISES

I write to ask you if the State Highway Department has any right to order me to take down the signs "Keep Out" and "No Trespassing" which I have on gates to my fields. One of the highway maintenance employees has ordered me to do so, saying it is instructions from headquarters. You understand the signs are on my own gates and do not obstruct the road in any possible way.—E. M. R., Brooklyn, Mich.

Any property owner is at perfect liberty to post his premises in accordance with the provisions of the law, these not being in any way considered as advertising signs. The law only specifies advertising signs, hence, would not apply to signs such as you mention.

If any representative from this department has maintained that the department desired the removal of such signs, they have been misinformed.—State Highway Department, Lansing, Mich.



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# The Michigan BUSINESS FARMER



An Independent  
Farmer's Weekly Owned and  
Edited in Michigan

SATURDAY, MAY 27, 1922

Published every Saturday by  
THE RURAL PUBLISHING COMPANY, Inc.  
Mt. Clemens, Michigan

Represented in New York, Chicago, St. Louis and Minneapolis by  
the Associated Farm Papers, Incorporated  
Member Audit Bureau of Circulations

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer." It will guarantee honest dealing.

## "The Farm Paper of Service"

### Wanted—A People's Candidate

FROM the weary ranks of a politically nauseated electorate comes the call for a people's candidate who will sound a smashing dictum against Newberryism, special privilege, reaction and hypocrisy, and comes forth on a platform of true progressiveness.

The people have tired of thread-worn issues and machine politicians. In Indiana, they turned from New, regular as the sun and popular with the Harding administration,—to Beveridge, the shooting star who has more than once cut a brilliant path across Indiana's political ether. In Pennsylvania they repudiated the Penrose machine and nominated progressive Pinchot as Governor. Three years ago Pinchot was in Michigan trying to line up the Grange for a political coalition with labor.

There is one man in Michigan who can fill every requirement of a "people's candidate" for United States senator. He is a man of strong convictions, progressive viewpoint, and great ability as a legislator and debater. As a member of both houses of the Michigan legislature he established a record for square dealing and pugnacious adherence to his principles even to the point of fighting single-handed for what he believed was right that won for him the cognomen of "bear-cat of the north." His entire legislative record is one to admire and emulate.

That man is Herbert F. Baker, of Cheboygan county, State Senator from the 29th district.

The people are calling Baker to become a candidate for the United States senate. Several bodies of men representing labor organizations have pleaded with him to become a candidate, and there is no doubt but what the sentiment of the farmers would be for Baker should he enter the race, as he has been an acknowledged leader in agricultural affairs and commands a large following among tillers of the soil.

The time is psychological for a man of Baker's type to become a contender for the United States senatorship. It is almost certain that he would win in the present line-up. The Business Farmer believes that it bespeaks the sentiment of the majority of the farmers of the state when it expresses the hope that Baker may be induced to enter the race.

### "The Farm Paper of Service"

WE are pleased to christen the Michigan Business Farmer a "farm paper of service." It is our constant aim and endeavor to serve our subscribers. Not only do we serve them when we publish editorial matter which contains information of value to them, but we serve them when they ask us for information,

advice and assistance. We have learned that the old adage, "he profits most who serves best" is literally true. We know that if we serve the farmers of Michigan constantly and faithfully the profits of service will take care of themselves. But whether they do or not we believe that the highest duty of a man is to serve,—his family, his neighbor, his community, his state, his nation, his God. When every man, woman and child gets this vision of the function of life and consecrates themselves to never-ending service to humanity, the glory of the millenium will be full upon us.

The many ways in which the Business Farmer has sought to serve its readers would make an interesting story. The thousands upon thousands of letters which we receive every year from our subscribers cover almost the entire gamut of human problems. The expert advice and information which we endeavor to give costs us many hours of painstaking investigation and considerable money, but its value to those who are groping in the dark is inestimable. Some day we shall write a story about it, and tell our readers all about the men here at our office, at the M. A. C., in the state departments and elsewhere who are helping us to help the farmers.

Every reader should remember that a subscription to this paper not only brings it weekly to their door but also secures a personal service which has placed the Michigan Business Farmer head and shoulders above other farm papers of the country as "the farm paper of service."

### Cover Them Over

"Cover them over with beautiful flowers;  
Deck them with garlands, these brothers of ours;  
Lying so silent, by night and by day,  
Sleeping the years of their manhood away;  
Years they had marked for the joys of the brave,  
Years they must waste in the sloth of the grave.  
All the bright laurels that promised to bloom  
Fell to the earth when they went to the tomb.  
Give them the meed they have won in the past;  
Give them the honors their merits forecast;  
Give them the chaplets they won in the strife;  
Give them the laurels they lost with their life.  
Cover them over—yes, cover them over—  
Parent and husband and brother and lover;  
Crown in your heart these dead heroes of ours,  
And cover them over with beautiful flowers!"

SO reads the first verse of Will Carleton's beautiful tribute to the soldier dead. It expresses a sentiment which once burned brightly in the hearts of all, but which time and forgetfulness have dulled almost to the point of extinction.

It will not matter to those who have gone before if we forget to make our annual offering of praise and flowers. They will not know. But a people who can so soon forget the sacrifices of those who have died in defense of the nation's honor may well look forward to a day when patriotism shall become an empty phrase and love of country a shallow pretense. It is bad enough to forget our duty to our national heroes in the daily routine of life but to neglect them upon the day especially reserved to do them honor is an unpardonable omission.

"Cover them over—yes, cover them over—  
Parent and husband and brother and lover;  
Clasp in your hearts these dead heroes of ours,  
And cover them over with beautiful flowers."

### No Crop Failures in Michigan

DESPITE their recent hardships our farmers of Michigan may well congratulate themselves that they have not had to suffer the misfortune of crop failure as so many farmers of the Northwest have suffered.

Information comes that the federal appropriation of \$1,500,000 provided in the Seed Loan Act for the benefit of these farmers has already become exhausted and pleas for assistance continue to pile up at Washington. The afflicted area comprises North Dakota, Northwest counties of South Dakota, Montana, several counties in Idaho and Washington. For a number of years droughts have worked severe hardships with the farmers of this region, "many of whom have no seed and no credit or money with which to buy seed for planting this year."

Michigan has passed through many periods of dry weather, early frosts and other unfavor-

able crop conditions, but she has never suffered the total or semi-total failure of any one of the many crops she produces.

Farmers to whom distant pastures occasionally look green should carefully investigate before leaving the favored fields of Michigan.

### Beans and Babies

ATTEMPTS to regulate the wheat and potato crops are receiving almost as much criticism as the proposal to regulate the baby crop. Since Adam began the culture of beans and babies in the garden of Eden the world has moved steadily onward through alternating periods of starvation and plenty in both commodities, and whether or no the schemes at regulation succeed or fail we shall probably always have periods when there will be more beans than babies and more babies than beans.

Intelligent parents are regulating the size of their families and restricting the output to the bounds of their financial circumstances. Parents who are not able to raise more than three children as they ought to be raised are under no divine compunction to bring six or more into the world and thereby consign the whole family to a life-time of hard labor, want and worry.

Intelligent manufacturers limit their output to fit the market. They have no faith that Providence will intervene to destroy a surplus or create a miraculous demand. They prefer to be guided by the known and let others, like the farmers, for instance, gamble with the unknown.

Appropos the suggestion that acreage be limited, the Country Gentleman owlishly asks, "Did you ever make any money out of a crop you didn't raise?" Farm, Stock and Home replies with another question, "How much money did the middle west farmers make out of the oats and corn they did raise last year?" and this editor concludes by saying that the same set of economic laws which apply to factory production, apply also to agricultural production, whilst Mr. Pickell of Chicago snoops into the farmers' business by warning them to "mind their own business" and hearken not to those who are talking regulation of acreage.

Meanwhile a New York co-operative marketing association is actually carrying on a campaign of education to discourage farmers from planting more potatoes and cabbage than the country can use, and its influence will undoubtedly be seen when the seed and plants are actually put into the ground. The adjustment between supply and demand in farm products will never be fine, but it will be a lot closer than it is today. Farmers may never sign an agreement to cultivate a certain number of acres but if they are educated to the results of over and under-production, being intelligent men, they will be guided accordingly.

### The Spotlight

"IN Australia," says the Oregon Producer, official organ of the Northwest Wheat Growers Ass'n, "the farmers are taking a keen interest in politics. They have what is called a 'veter's handbook,' giving the record, vote and speeches of persons elected to public office. Every time a candidate for re-election appears in his district some farmer in the audience invariably will pull out a dog-eared copy of the handbook and say:

"Senator Blank, on such and such a day you voted thus on such and such measure. Now will you be good enough to explain?"

An excellent idea. Most people think that their political responsibility ends when they go to the polls and vote for their representatives. The politicians encourage them in this belief. But that is actually the least important of their duties as citizens. Their higher duty is to supervise the acts of their representatives and see that the public business is well administered.

The purposes of the Spotlight Column beginning in this issue is to acquaint Business Farmer readers with the records of men in office and the records of men seeking office. It will, in fact, constitute a "hand-book" which the reader will find of great value in placing a proper estimate on political candidates and legislative measures.

## Uncle Rube Spinach Says

### WHY ALWAYS WOMEN?

IN weeks an' months past we've been discussin' women—their dress, morals, virtues—everything that pertains to woman has been hit on in the articles we have written.

But why always pick on women? Are our women so bad that there's nothing else to think of? Or are our men so good we can find no fault with them? Why should the woman always be damned and the men go free?

Of course now this is not in answer to any letters that have been written to the M. B. F. or to me—it's just a little thought that seems to come creepin' in—what are we (men) that we should or even could condemn women for the things WE lead them to do?

A man may, and often does, go on the primrose path—whatever that is—no matter about the meanin' of it, he's only sowin' his wild oats don'tcha know—he'll be young only once—he's jest a boy! Let him have his swing, he's a good fellow, jest a little wild now but he'll come alright! Great heavens, friends, what kind of a doctrin is that?

Why should a woman be condemned for a thing that a man can do without question?

Time was when woman wuz jest a chattel, she wuz made so by laws framed by men! Man, an' when I say man I mean the he male of the species—the thing that can wear whiskers an' often has to on 'count of shortage of finances—the biped of bifurcated garments, the would-be ruler of the earth—the thing that walks on two legs an' wants to be king! It's of HE I speak an' of he I write.

What are we—we who happened to be created in the male form—what are we anyway that we should tell the other half—our mothers—every female woman is a potential mother—what are we I say? Male though we may be, not in the majority in 'mothers, with no more brain than our sisters, brought into the world by a woman, all our early life taught by a woman—what are we? To say—what are we to criticize, what women does, what they wear or what they don't wear?

Somehow I can't jest get it through my noodle why we should always condemn women for the foolish things that's bein' pulled off right at the present time. 'An when I mention present time I might say that times ain't much diff'rent 'en they were a hundred years ago when I wuz quite a small boy.

An yet things are diff'runt—in my younger days—when, to me at least the world wuz young, no young man smoked in the presence of ladies—it wuz improper an' we didn't do it. We sowed our wild oats jest as the young men of today are sowin' them—we were gay young fellows then—our boys, our young men, are gay young fellers now! Nothin' goes wrong with the boys—it's only the girls that're bad—who among us fellers, who among all the fellers or the ol' maids or otherwise, that are findin' so much fault with our girls, flappers though they may be, who I'm askin' you, is without sin? Remember what our Saviour said, "Let him that is without sin, let him cast the first stone."

Now to all my critics, who are also my good friends, I want to say to you—an' what I am sayin' comes straight from the heart! Our women—our good American women—an' I mean our girls jest comin' into womanhood, are not our equals, they are our superiors. They are ahead of us both mentally an' morally. We have no right to criticize 'em—not 'til we make our own lives clean.

Why should a man, young or old, who makes a delinquent of a young girl, be looked upon as a "sower of wild oats," and the girl be disgraced for life?

Why should we tolerate a double standard of morals? Why should we curse the woman an' let the men go free?

Now in closin', I want to say to all my friends who have criticized—I have sure enjoyed your letters. You have said many true things, but knowing something of life myself,

knowing men, realizing their passionate nature I am jest askin' you now—who of us—an' I'm askin' critics same as others—who of us are without sin? If we are free from sin we have a right to point it out to others—but—ARE we free to do it? cordially yours.—UNCLE RUBE.

### MUSINGS OF A PLAIN FARMER

AROSE very late. Being in a lethargy since my attack of the flu. To the stable and made at doing the chores. But done them poorly, lacking strength.

Released the cows from the stanchions. Then set for one full hour on an empty nail keg in the south stable door.

The sun's rays seemed to strengthen me and I arose and started to clean the stables with great gusto. But soon found myself getting faint, and very near a collapse so I resolved to let the stables go until dooms-day. Or longer, if necessary.

To the house and made a pretence at eating some dinner, but had no appetite, so I smoked a cigar which was given me by a young man nearly steeped in matrimony. Poor fellow!

It being the Sabbath I read the fifth chapter of St. Matthew, and found again great wisdom therein.

There is hub-bub among my daughters about some play that is to be given at the school.

If the evening chores were done, I would hie me to bed. I am getting tired of work. I have done nothing else all my life, so it's natural that I should welcome a change.—A. P. Ballard.

### GOVERNMENT BULLETINS OF INTEREST IN JUNE

The following list of Farmers' Bulletins and Circulars of general interest during June is of value to our readers. Copies may be obtained free by addressing the Division of Publications, United States Department of Agriculture, Washington, D. C. Specify number and name and whether Farmers' Bulletin or Department Circular.

Farmers' Bulletin 444, Mosquitoes, Remedies and Preventives; 691, Grasshoppers, Sugar Beets and Truck Crops; 838, Harvesting Hay with the Sweep Rake; 872, the Bollworm or Corn Earworm; 876, Making Butter on the Farm; 903, Evaporation and Drying of Fruits; 943, Haymaking; 956, Curing Hay on Trucks; 975, The Control of European Foulbrood; 984, Farm and Home Drying of Fruits and Vegetables; 1225, The Potato Leafhopper and Its Control.

Department Circular 35, Home Garden Diseases and Insects, How to Control Them, Boys and Girls Club Work; 96, United States Grades for Potatoes; 98, The Installation of Dust Collecting Fans on Thrashing Machines for Prevention of Explosions and Fires and Grain Cleaning.

### EXPERIMENT STATION BULLETINS

THE Michigan Agricultural Experiment Station has just issued several highly instructive bulletins of interest to the general farmer. Special Bulletin No. 113 is a comprehensive study of sweet clover by C. R. Megee of the Farm Crops Section. Special bulletin No. 114 is a spray and practice outline for apples, peaches, pears, plums, cherries, grapes and small fruits. It was compiled under the direction of Messrs. C. P. Halligan, R. H. Pettit and G. H. Coons. Special Bulletin No. 115 is a review by W. C. Dutton and Stanley Johnston of dusting and spraying experiments of 1920 and 1921. Fruit growers will find this bulletin of special interest.

### ODDS AND ENDS

All weather, crop and market reports broadcast by radio by private broadcasting stations including stations operated by State Agricultural colleges and State Bureaus of Markets are now broadcast on a wave length of 485 meters. The United States Department of Commerce, which is charged with licensing operators and stations and with assigning wave lengths, believes that the exclusive use of 485 meters wave length for broadcasting weather, crop and market reports will eliminate much of the interference heretofore encountered by persons receiving the reports. The wave length of 360 meters for general broadcasting of entertainment programs and the like has not been changed.

Potato chips are becoming a popular article of diet in this country. Certain varieties of potatoes make better chips than others and the Department of Agriculture has issued a bulletin describing these varieties and the methods of preparing the chips. Copies of the bulletin, Department Bulletin No. 1055 on "Methods of Manufacturing Potato Chips" may be had upon application to the department at Washington, D. C.

A total of 4,855,664 bibles were circulated in 1921, according to the annual report of the American Bible Society. The largest increase was shown in China, where 2,362,730 were circulated. The society has reorganized its manufacturing program and expects to increase circulation.

Chicago safe blowers blasted the door of the safe in the L. Kauffman State bank, across the street from the city hall and No. 1 police station and detective bureau. They escaped with \$30,000.

# SAVE

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Colorado	Lafayette, Ind.	Salina, Kan.	York, Neb.
Lamar, Colo.	Plainfield, Ind.	Topeka, Kan.	
Illinois	Iowa	Wichita, Kan.	
Aurora, Ill.	Clinton, Iowa	Michigan	Ashtabula, Ohio
Chicago, Ill.	Council Bluffs, Iowa	Kalamazoo, Mich.	Bowling Green, Ohio
Decatur, Ill.	Dubuque, Iowa	Minnesota	Canton, Ohio
East St. Louis, Ill.	Elkader, Iowa	Mankato, Minn.	Cleveland, Ohio
Joliet, Ill.	Grundy Center, Iowa	Missouri	Columbus, Ohio
Marseilles, Ill.	Iowa City, Iowa	Hayti, Missouri	Findlay, Ohio
Monmouth, Ill.	Iowa Falls, Iowa	Hannibal, Mo.	Fostoria, Ohio
Peoria, Ill.	Keokuk, Iowa	Independence, Mo.	Marion, Ohio
Rockford, Ill.	Keosauqua, Iowa	Jefferson City, Mo.	Massillon, Ohio
Springfield, Ill.	Red Oak, Iowa	Kansas City, Mo.	Marion, Ohio
Indiana	Shenandoah, Iowa	Moberly, Mo.	Painesville, Ohio
Attica, Ind.	Sioux City, Iowa	Poplar Bluff, Mo.	Ohio
Evansville, Ind.	St. Louis, Mo.	Sedalia, Mo.	Bartlesville, Okla.
Franklin, Ind.	Coffeyville, Kan.	Mississippi	Blackwell, Okla.
Frankfort, Ind.	Great Bend, Kan.	Nebraska	Canton, Okla.
Indianapolis, Ind.	Holton, Kansas	Amory, Neb.	Drumright, Okla.
	Hutchinson, Kan.	Beatrice, Neb.	Enid, Okla.
		Falls City, Neb.	Headton, Okla.
		Florence, Neb.	Okla. City, Okla.
		Geneva, Neb.	Tulsa, Okla.
		Hastings, Neb.	South Dakota
		Kimball, Neb.	Aberdeen, S. Dak.
		North Platte, Neb.	Huron, S. Dak.
		Omaha, Neb.	Mitchell, S. Dak.
		Stromberg, Neb.	Yankton, S. Dak.
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## MEMORIAL DAY

MANY beautiful thoughts and aspirations blossom in the valley of the shadow of death and there is nothing more wholesome to us as a nation than the observance of Memorial Day.

An hour spent in decorating the graves of our soldiers, whether from one war or another, gives us a feeling of gratitude to those who heroically gave their lives that we might enjoy a united country and one free from the dread hand of invasion.

Each and every set of wholesome emotions has its value and we lose much if we do not celebrate Decoration Day as was originally intended by those who first instituted it.

A picnic, a boat-ride or an excursion into city or country make the day one of just ordinary value. To those of us who have a grave out there in the quiet cemetery, nothing satisfies us, but a loving and patriotic duty performed, that we may be reminded of the sacrifice made by those who are gone and of our duty and privilege "to carry on."

## THE ONE-ROOM SCHOOL

The school question is a very much discussed subject today and any light we can get is surely welcome and of interest. I have received a very comprehensive book on the rural school conditions in Ohio and will publish in several editions excerpts from it that I believe you will find interesting reading. I will also answer if possible any questions that come to the mind of any reader. I am entirely open to conviction myself and am simply quoting opinions of others who have made a study of conditions.

First comes an interesting resume of the old conditions:

In pioneer days the industrial and social activities needful to the simple life of the community took place within the scope of the observation of the child. There was no material division of labor and each family was almost self-sustaining. They cleared the ground, prepared the soil with a wooden-share plow, sowed and reaped the crops, spun and knit and wove. The children observed all these industrial activities and were required to take part in them to the extent of their ability and strength. They learned to do by doing and by this participation they received an industrial training of real educational value. It was education through life in the fullest measure. In like manner the social values of education were secured in many ways outside of school. By the time these boys and girls reached maturity they could do almost everything that anybody else in the community could do; they could perform their part in the social and industrial activities of the community and were relatively efficient citizens.

Nevertheless, these hardy pioneers who so courageously braved the dangers and privations of the western wilderness brought with them certain educational and cultural ideals that could not be attained by participation in home and community activities. The school with its fundamentals of reading, writing and arithmetic was a necessary supplementary agency in the training of the children. Our forefathers realized this and wherever they advanced to occupy new territory they always took the school with them and almost contemporaneously with the erection of the cabin home was the appearance of the rural school house. The curriculum of this little district school was narrow and the methods of instruction were poor as compared with our modern conceptions but it served its day. Formal instruction was not so needful to the frontiersman because his children were obtaining a practical education by participation and strong self-reliant men and women were produced with but a few months of school attendance.

Furthermore, the old time district school occupied an important place in the social life of the community and it was the center of the entire community of much truly educational activity. Then, too, there were few opportunities for entertainment and recreation so the people of a community naturally turned toward the school for amusement. Here were held the neighborhood spelling school, the debating club, the literary society, the singing school.



Edited by MRS. GRACE NELLIS JENNEY

But conditions have changed. The old time plow with its wooden share has been replaced by the tractor; the ox cart has, through the course of evolution, given way to the automobile. There has been a marvelous social and industrial change in our nation and life has become more complex in all its phases. New industries have sprung up on every hand with a consequent division of labor. Production and preparation of the things necessary to the convenience, comfort and life of the home and community are far removed beyond the limitations of the child's observation. With the multiplying and growth of cities came many artificial attractions and interests, and the daily paper made the youth familiar with city life. He read and heard of the great rewards of commercial enterprises. The district school failed to attract longer as a center for the social and intellectual life of the community and its usefulness as an institution was hampered.

(To be continued)

## WARM WEATHER FOODS

AS the warm summer days come on, a change in our diet is healthful and also grateful to the palate. The heavy dinners of beef, pork and veal can well be changed to some lighter of nutritious food. I have some recipes—easy to prepare and cheap. I will print these recipes if there are ladies who would like them. Will you just send me a postcard?

There is a new salad dressing that ought to be always on hand in our refrigerators. It is splendid on lettuce, tomatoes, onions and for deviling eggs for the summer lunch basket.

Beat one egg-yolk and add slowly 1 cup of Mazola oil, a teaspoonful at a time; then add mustard, 1-2 teaspoonful salt and 1 tablespoonful of vinegar. You will like it I am sure.

## SOMETHING OF A PHILOSOPHER

In the March issue, Mrs. W. M. asked about a valance, I am sending directions and picture of a very pretty one to you. She can

easily get it from you if she wants it.

I want to tell you how much good I have received from reading your pages especially the past year. At times I was in such despair it seemed no human being could be so unhappy as I. When one of these, spells I call them, came upon me I would read and read the letters over and over again. It helped me to come to the conclusion that I had much to be happy about.

No man could be more faithful than mine and no man could be more thoughtful of his wife and children. Our children are bright and healthy. Money is a mighty scarce article in our household but it won't buy smiles or chase tears away, so why worry so much?

We seem to have lots of friends. In fact I know they are friends. When they come to see us we know its our company they wish, instead of our financial influence.

We try to be neat to be honest, we read some, plan lots and quarrel none. Things are getting to run real smooth. Yes and we did lots of adjusting. It was done on both sides, and it was hard, too.

I believe if the husband of the "old, old story" is really sincere and tries hard enough, he can win back his wife's affection. It probably put him out some. I really believe if the wife likes to read and was all the friend in "The Old, Old Story" claimed of her, reading of "Mary Marie" by Eleanor H. Porter would do her a lot of good. She wouldn't want her children to suffer as "Mary Marie's" did and I believe nothing could be much worse than to go as a bride into a big house, be bossed by another woman and a man so neglectful or so engrossed in his affairs as to see nothing. Its a novel but the characters are very real.

"Equality of Sex" was good, and I feel C. E. B. never need be "shocked" if one of those boys should marry a girl that "slung pots" in some one's kitchen as long as she was pure, good and true and could carry her share of the "load," or her marrying a man that had little of this world's goods as long as he stood for pure clean manhood.

## AIDS TO GOOD DRESSING

For Service, Simplicity and Style

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Please notice the cape suit below. The cape is the thing this spring. They are graceful, comfortable and easy for the amateur to make.



A Very Popular Combination 3978-3993-3986. Cape suits are much in vogue this season in cloth, linen, silk and also in pongee and gingham. In this illustration we have a smart blouse style pattern 3978, a new and practical skirt, pattern 3986 and a very pleasing youthful cape pattern 3993. Kiltie plaid suiting was used for cape and skirt, and canton crepe for the blouse.

The blouse is cut in 6 sizes: 34, 36, 38, 40, 42 and 44 in bust measure. It requires 2 3-8 yards of 36 inch material. The cape is cut in 4 sizes: 14 and 16 years for misses and medium, (38-40 bust); large (42-44 bust) for ladies. The skirt is cut in 6 sizes: 25, 27, 29, 31, 33 and 35 inches waist measure. Cape and skirt will require 6 yards of 40 inch material for a medium size. The width of the skirt at the foot with plaits extended is about 2 yards.

Three separate patterns mailed to any address on receipt of 12c FOR EACH pattern in silver or stamps.

A New Version of a Popular Style

4004. Smart plaits lend graceful fullness to this charming one piece model. It will develop well in taffeta, linen, crepe, ratine or spongine. The sleeve may be in wrist or elbow length. The pattern is out in 3 sizes: 16, 18 and 20 years. A 16 year size requires 4 5-8 yards of 36 inch material. The width at the foot with plaits extended is about 2 1-4 yards. As here illustrated white flannel was used, with embroidery in yellow yarn.



A Neat and Practical Apron Frock

4003. It will take but a few moments to adjust this trim and comfortable garment. One could make it of figured percale with a finish of rick rack—or feather edge—braid. The closing is at the side under the facing. In black sateen with cretonne for trimming, or in crepe in a pretty shade of yellow with bands of white, it makes a smart tea frock.

The pattern is cut in 4 sizes: small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 4 1-4 yards of 36 inch material. The width at the foot is about 2 1-8 yards.



I'd like to read a letter from her to the department on an inexpensive graduation outfit for girls and how to make girls feel satisfied when they are in a class with girls who have never been restricted about clothes or anything else.

I've canned corn by this method: 13 cups of corn, 1 cup sugar, 1-2 cup salt, 1 pint of boiling water. Boil hard for 20 minutes. Add more water as necessary. See that the cans are not too full. Seal while hot.

The cold pack is the best. But sometimes it might not be convenient. There is a method to can peas the same way and I would like it, not so much salt used but that they are ready for the table at once.—Mrs. B.

## BREAK THE NEWS TO MOTHER

(Printed by request)

While shot and shell were screaming Upon the battle field, The boys in blue were fighting Their noble flag to shield, Came a cry from their brave captain, "Look, boys, our flag is down, Who'll volunteer to save it from disgrace?"

"I will," a young voice shouted, "I'll bring it back or die." Then sprang into the thickest of the fray, Saved the flag but gave his young life, All for his country's sake. They brought him back and heard him softly say:

Chorus:

"Just break the news to mother She knows how dear I love her And tell her not to wait for me, For I'm not coming home. Just say there is no other Can take the place of mother. Then kiss her dear sweet lips for me. And break the news to her."

From afar a noted general Had witnessed this brave deed, "Who saved our flag, speak up, lads, 'Twas noble, brave, indeed." "There he lies, sir," said the captain, "He's sinking very fast." Then slowly turned away to hide a tear.

The general in a moment knelt down beside the boy, Then gave a cry that touched all hearts that day: "Tis my son, my brave young hero, I thought you safe at home." "Forgive me, father, for I ran away."

## CORRESPONDENT'S COLUMN

Mrs. Rudolph Hansen, McBride, Mich., R. F. D. 1, will send directions for infant's sweater and booties but wishes to have them returned to her.

Two ladies who wrote to the Art Goods Co., think that their terms are unreasonable. The work they wish done is hemstitching handkerchiefs, made of nainsook, and the price they pay per dozen is very low.

Mrs. G. E. and others—The prices of the oil-cloth table-sets are \$1.50 for set of 13 pieces. If you wish me to choose them for you I will gladly do so.

I would like to know why four of my six children were not put on record. I have birth certificates for only two.—Mrs. R. A. P.

Go to your county clerk, he will provide them.

I am sending out price lists to those wanting seconds in dishes. I know the firm personally and can speak for its honesty.

The music for "Break the News to Mother" may be had from any mail order catalog.

Who can furnish the words to the poem "When a boy I used to dwell in a home I loved so well."

## THE DRESS FORM

I noticed in the M. B. F. about some one being interested in dress forms. Now I have one and all of the women in the neighborhood have. We sent for tape which costs 35 cents (that is the total cost). You need a vest, an old one does just as well as new as it has to be cut. Now we had a club to make them as it takes too long for two to do it. We have six or eight. It takes an hour or an hour and a half and we have paper all cut ahead. One to paste on and two to wet the tape.

They are fine. Put a stand under it the same height as the person for whom it is made and no form is worth more. We just love the M. B. F. and don't want to be without it. If anyone wants to know more of these forms they may write to me.—Mrs. Mary F. Newhouse, McBain, R. 1, Mich.

If you do not care to go to the trouble of making these dress-forms, there are adjustable dress forms made by a very reliable company whose name I will give if you write for it. We can entirely recommend them.



## HOW I GREW MY POTATOES

By Ted Stenson, Covington, Baraga County

This is my fourth and last year in club work. Next year I will be 19 years old, so I must drop out to make room for some younger boy. I am sorry that I must drop out of this work as I am more interested this year than ever before and I regret that I could not have started when I was younger. It has been a great help to the growing generations and will help to make many good farmers, which is very much needed. These potatoes have a very interesting history behind them. About twenty-five years ago Mr. Longyear came to Covington to hunt deer. The pioneer that he stayed with complained that his potatoes were very poor. Mr. Longyear then told him that he had some very good potatoes that he would send him for seed next spring. An Irishman, Mr. Longyear said, had brought these potatoes from Ireland. A potato in each pocket and an ornamental vine in his hat. This pioneer gave dad seed and by years of hill and seed selection, we have made a fairly good potato as a yielder and eater.

For four years I have raised a quarter of an acre of potatoes and on this one acre I have raised over four hundred bushels of salable potatoes. The first year I sold my potatoes at one dollar a bushel which left me a net gain of about sixty dollars. The second year I sold twenty bushels in the fall at a dollar and a half and kept the rest until spring and received three and one-half for them. So then I had enough to buy a calf and go to the Agricultural school. I went to school at the Menominee Agricultural school. I paid \$109.93 for my heifer, a pure bred Holstein bought at the Newberry State Fair. Her name is Princess Longfield. Segriss Longfield, her sire, took first place at the International Livestock Show at Chicago two years ago. Princess is now the mother of my club calf.

My third year of club work I did not sell any of my potatoes. I could have sold them for seventy-five cents a bushel but thought I would hold them until spring and get more. I was fooled. I need not mention what I have in my patch this year because that is in my report. During the four years that I have been in club work I have taken first place in our county on spuds and story. I have also taken prizes at the four county fairs at Houghton, competing not in club, but with the rest of the farmers. I also have taken the State Championship on spuds for two years in succession; it is a silver loving cup, but I must win it one more year to have it for keepsake. I also have received a scholarship which will be paid on my fees at the M. A. C. if I go there, which I hope to do.

Does anyone think I was a loser or foolish to join the potato club? No, I was not. I have a cow and a calf, a loving cup, a scholarship at M. A. C. and my spuds to sell this year, and besides all this I have learned a great deal about good farming that I could not have learned any other way. So at the end of my last year of club work I wish to thank all the extension workers, and although I can no longer be a member, I shall always be in the side lines and boost. Three cheers for club work. May the good work go on!

## Polly Parrot

Polly Parrot belonged to a French lady who also owned a millinery store in a small town. Polly was petted and admired by all who knew her and whenever anybody would pass by the sunny window she liked to be noticed. She would jump upon her swing and sometimes she talked to them. The milliner had crossed the sea when she was a little girl and always used good taste when she trimmed hats. She fed Polly birdseed, crackers and sometimes a lump of sugar. When customers came into the store the milliner was very nice. She would put a hat on the customer and say in a pleased way, "Sweet thing, latest style." If the lady bought a hat the milliner would say, "Sweet thing, latest style, pretty, pretty, pretty; you've got the prettiest hat in town." When the lady would buy no hat but make an excuse and walk out of the store the milliner would say, "Oh Lor' what a lie." One day the milliner went away to get some hats and trimmings; being in a hurry she left Polly in her cage all alone in the shop instead of taking her along. While the milliner was away an old woman came to scrub the floor and wash the windows (as she had been told.) This woman was an old blue calico dress, a green plaid shawl and an old bonnet. She knew that her clothes were out of style and didn't want anybody to say anything unkind about her. She hung the shawl and bonnet on the back of a chair and was soon scrubbing the floor. After she finished her work she put on her bonnet and shawl. Just as she was tying the strings of her bonnet Polly cried out, "Sweet thing, latest style, pretty, pretty, pretty; you've got the prettiest hat in town; oh Lor' what a lie!" The old woman was so angry that she picked up a pail of soapy water and threw it over Polly's cage. When the milliner came home Polly was a sight; all her red and green feathers had fallen out. Polly squawked, "We had an awful time." Now Polly's feathers have grown back in and she knows better than some people do that too much talking gets us into trouble.—Frederick Reynold, Waldron, Mich.

Dear Uncle Ned—I am 11 years old and am in the fifth grade. I am going to hang some May baskets today. We have seven acres of woods on one side of the road and three acres on the other side. The three acres on the north side

of the road is a hickory grove. We gathered five or six bushels of hickory nuts last year. There are some woods that belong to some other people besides our seven acres on the south side and the little May flowers are thick as they can stand. There are also many Addar Tongues blooming. The blue violets are also blooming. I have been flowering three times now. I am your friend.—Jeannette Worden, R. 4, Box 18, Ionia, Mich.

Dear Uncle Ned—How are you today? We have just 12 more days of school. Our school lets out the 19th of May. There are two in my class. I think I will pass. I have a great many pets. One is a little kitten. Some of the others are horses and cows.—Willie Minier, Mason, Mich., Route No. 2.

Dear Uncle Ned—We are going to have tests in arithmetic tomorrow over all we have had. We have two and a half more weeks of school yet. We are going to have tests the last week of school and I hope to pass. We are going to have a picnic the last day of school. Each family is going to bring something. Wilber Minier is to bring potatoes and he said he had just as soon bring raw potatoes and then I said to bring potatoes that are cooked. I have four pets. They are a cat, a horse, a cow and a bird. I like them all. We saw a bluebird last night and it has made a nest in a post in our backyard. We watched the bluebird and it flew right down on its eggs. There are five little blue eggs.—Winifred Foote, Mason, Mich.

Dear Uncle Ned—I am eight years old and am in the third grade. I live on a seventy-acre farm. I have three sisters. Father bought a car last summer; it is a Ford. We have three-quarters of a mile to walk to school. We have one horse and one cow. The cow is brown Swiss and her name is May. For pets I have two cats and one dog. My father takes the M. B. F. and likes it real well and so do I. I like to read the letters in it. Your friend.—Margaret Worden, Route 4 Ionia Mich.

Dear Uncle Ned—I have been reading the letters in the M. B. F. and I thought I would write one too. I am a girl 13 years old and in the tenth grade. I have about two miles and a half to walk to school but it is good exercise. I will be glad when we have nice weather as I want to play base ball. We girls have a base ball team and play other teams. I think that base ball is a very good form of sport. About three or four weeks ago we had an ice storm and as there was good sleighing we had a number of sleigh rides.

We live on a sixty-acre farm, two and one-half miles south of Alabaster, Alabama. It is not very large but is quite important for a place of its size. It has a quarry and a mill owned by the U. S. Gypsum Company. It exports rock, crushed rock, and different brands of plaster. My birthday is June 13.—Dorothy Louise Anderson, Tawas City, R. 3, Mich.

Dear Uncle Ned—As I have not written to your circle for so long I thought I would write today. Last week we had a county mental arithmetic and spelling contest. My brother got first prize in arithmetic and I got third prize. I am 12 years old and am in the seventh grade at school. My favorite studies are arithmetic, physiology, grammar and spelling. But I like arithmetic best though. I am sending in some riddles.

Where were the first doughnuts fried? Answer: Greece. Why is a minister like a brakeman? Answer: Because he does a lot of coupling. Why is a washer-woman like Saturday? Answer: Because she brings in the clothes (close) of the week. What goes all the way from here to the coast without moving? Answer: Railroad tracks. Good-bye Uncle Ned and cousins. Ruth Coselman, R. 1, Bancroft, Mich.

Dear Uncle Ned—May I join your merry circle? I am a girl 12 years old, my birthday is the first of July. I am in the sixth and seventh grade. I have been reading the Children's Hour and think it is nice to read warm afternoons. I go to Bancroft high school and like it fine. I have one sister. We both can drive our car, it is a Ford. About every Friday we have a ball game. It is real interesting. I would like to have all the other boys and girls write and see if we couldn't have a contest. Who could write the best story or something like that. Hoping many of the boys and girls will write to me, love to Uncle Ned and cousins.—Ruth Coselman, R. 1, Bancroft, Mich.

Dear Uncle Ned—It is very beautiful now in northern Michigan. Wild flowers are in bloom, the trailing Arbutus came in bloom nearly three weeks ago. We have a creek on our farm. I have caught one fish this spring. I have 40 little ducklings and more eggs ready to hatch. I want to raise about one hundred ducks this year. I have some garden seed to plant. Last year I raised popcorn and squashes, and a few flowers. Probably by the time I get large enough to farm other fellows will be raising Petoskey potatoes where trees now stand. I will be seven years old June 8th. Come and go with our school to gather flowers. Uncle Ned. Good-bye.—Arthur Sturgis, Onaway, Mich.

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Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 508 E. Olive St., B-363, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely out this notice, mail it to her with your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.



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## THE SPOTLIGHT

"Let the light of publicity shine full upon the acts of those to whom we delegate the making of our laws. Thus shall the temptation to turn aside from duty be thwarted, and public servants encouraged to remain always responsive to the wishes of the people."

### FOREWORD

THE above quotation suggests the purpose of the Spotlight Column. Its penetrating rays will be thrown upon all things pertaining to state and national legislation. The records of political candidates will stand revealed in its broad light; legislative measures will be analyzed and the jokers brought to public view. Men, issues, campaign expenditures, appropriations, appointments—all will be frankly and fearlessly discussed in this column. Questions concerning the record of any candidate for a state or national office, proposed legislation or anything else relating to government are invited. Let's turn on the spotlight and illuminate the way to better government.—Editor.

### FRANKLIN MOORE

Can you tell us something about Franklin Moore? He is a candidate for the state senate and the farmers in these parts don't know much about him.—W. B., Romeo, Mich.

Franklin Moore is secretary and treasurer of the Diamond Crystal Salt Co. of St. Clair. He is forty-five years of age. He was a member of the lower house of both the 1919 and 1921 legislatures where he became quite proficient in the art of flipping coins and other pastimes. On occasions when he was puzzled to know which way to vote he would decide by the flip of the coin. The Detroit News once took his hide off for this brand of statesmanship.

Moore was the gentleman who made the motion to table the warehouse amendment in the 1919 session and such feeble influence as he possessed was directed toward the defeat of the measure. His record consistently shows that he "can't trust the people." Moore is opposed to the income tax and the corporation tax. Indeed, he is unfriendly to any measure of taxation which levies against corporation profits. Moore appeared before the George Lord tax inquisition at Lansing a few months back and argued against the income tax on the grounds that it was "passed on to the consumer." A. B. Williams of the Postum corporation at Battle Creek, who is a real man from the ground up, denied this.

Mr. Moore is greatly alarmed over the influence of the farmers in the state legislature. On May 4th he gave a speech before the Ypsilanti Rotary Club in which he rapped the farmers soundly for their demand for an income tax. "The farmers have too much representation," he said, "the business men should get together and elect candidates of their own."

The legislative handbook for 1921-22 lists thirty-eight members of the lower house and eight members of the senate as "farmers." Brought under the Spotlight a number of these are found to have other interests more important than farming. But using these figures we find that the rural communities having 39 per cent of the population hold 38 per cent of the seats in the lower house and 25 per cent in the upper house, which may or may not be "too much representation" depending upon the point of view.

In view of Mr. Moore's unfriendly attitude toward the farmers' interests it is not likely that he will expect the support of the farmers of Macomb and St. Clair counties in his race for the senatorship.

### THE AMENDMENTS

Will you kindly publish a list of the amendments to the state constitution which will be submitted to the electors this fall?—H. P., Bath, Mich.

The list is too long to publish in one issue. Each proposed amendment will, however, be published and discussed in a separate issue. The income tax amendment is probably of the most concern to the farmer. This proposed amendment reads as follows:

"The legislature shall provide by law a uniform rule of taxation, except on property paying specific taxes, and taxes shall be levied on such property as shall be prescribed by law. Provision may be made by law for a tax not to exceed four

per cent upon or with respect to the net gains, profits and incomes, from whatever source derived, which tax may be graduated and progressive and which may provide for reasonable exemptions. For the purposes of such tax, property and persons, firms and corporations, upon which such tax may operate may be classified; Provided, that the legislature shall provide by law a uniform rule of taxation for such property as shall be assessed by the state board of assessors and the rate of taxation on such property shall be the rate which the state board of assessors shall ascertain and determine is the average rate levied upon other property upon which ad valorem taxes are assessed for state, county, township, school and municipal purposes."

The effect of this amendment will be to put a tax on net income, subject to certain exemptions. The aim of the amendment is to relieve real estate of the burden of taxation now imposed upon it and compel net profits and income to bear a portion of it.

The income tax is the most equitable form of taxation ever devised. By it the nation has derived its major source of revenue. By it scores of states have equalized the burden of taxation. By it no single class is made to bear the burden while others escape scot-free. By it each and every individual pays a tax according to his ability to pay. Every farmer should work and vote for this amendment.

### A LETTER ON POULTRY RAISING

I BELIEVE I am safe in saying that poultry raising is the most profitable form of agricultural specialization at the present time. Throughout the entire period of the war a farm flock continued to return a satisfactory income. There are a large number of poultrymen in Michigan paying heavy income taxes—some incomes running as high as \$15,000. At ordinary market prices, a well bred flock of hens should make a net profit of \$3.00 per bird.

It requires approximately 80 pounds of feed a year to maintain a bird so that it could be estimated quite accurately the cost of maintenance per individual. Last year New York paid as high as \$1.08 a dozen for white eggs which was a premium of 14¢ a dozen over browns. Two dozen eggs produced at this season of the year would pay for the entire maintenance of the bird for the balance of the laying season. The greater amount of money is made by selling market eggs or day old chicks. I would never advise taking up poultry raising from the standpoint of producing meat alone. The early broiler is a good investment but it should be considered only as incidental to the production of eggs. We would not advise going into the poultry business unless they have had some practical experience or have taken the poultry short course at some recognized college. Methods have changed so rapidly during recent years that equipment ten years ago is now obsolete in practical poultry work.

We strongly advise the maintenance of White Leghorns for the white egg breed because of the uniformity of the product and of the premium that can be secured when shipping them to New York or other eastern markets other than Boston. The Barred Rocks would possibly be the most profitable of the heavier breeds although closely rivalled by Rhode Island Reds and White Wyandottes. They require ten pounds of feed more a year than do the lighter breeds and ordinarily the eggs do not run so high in fertility and hatchability. The choice of breed is largely a personal matter because highly productive strains can be developed in almost any breed.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

### SHARE OF CHICKENS

My uncle brought to our farm three hens and one rooster Jan. 25. I have one hen. I am to give him a share of the chickens I raise from these four hens in the fall. What would you consider would be a fair share for him?—Mrs. W. C., Mikado, Mich.

I do not think the party who loaned the Buff Orpington could expect more than one pair of birds for each individual loaned. Supplying the three females and one male seems to me that 3 or 10 birds in return for the original pen would be sufficient compensation for the use of the stock.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

## White Diarrhea

### Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 687, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

### Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

### Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

### Never Lost One After First Dose

Mrs. Ethel Rhodes, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

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We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for package of Walko—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk if you don't find it the greatest little chick saver you ever used, your money will be instantly refunded.

WALKER REMEDY CO., Dept. 687, Waterloo, Iowa.

Send me the ( ) 50c regular size (or ( ) \$1 economical large size) package of Walko White Diarrhea Remedy to try at your risk. Send it on your positive guarantee to instantly refund my money if not satisfied in every way. I am enclosing 50c (or \$1). (P. O. money order, check or currency acceptable.)

Name .....

Town .....

State ..... Mark (X) in square indicating size package wanted. Large package contains nearly three times as much as small. No war tax.

## FRUIT and ORCHARD

EDITED BY FRANK T. WELLS

### GROWING HUCKLEBERRIES

THE inquiries in regard to huckleberries have brought us the following interesting letter:

"It is easy to prepare the ground for huckleberries. You should have low land or muck. Just plant the roots and the second or third year each bush will bear from one-half to one and one-half bushels of fruit, which sells for \$10 to \$15 per bushel."

"All there is to it is to get the roots and plant them, but get the right kind. There are four kinds of huckleberries. You want the 'highbush,' which grows from three to four feet high. They need no attention after they are planted. All there is to do is to pick the berries. They may be set in either spring or fall."

"If people do not set out huckleberries there will soon be none left in the country."—John Brambler, Van Buren County, Mich.

### PLANTED TOO DEEP

Some of my apple trees from 1 to 4 inches in diameter have the bark split from three inches to the length of the trunk. What would cause it?

Several of the trees are dying. They were set deep, some of them 16 inches below the graft. Would that cause them to die?—R. P. Greenbush, Mich.

Usually the severe winter is called upon to take the blame for split bark. This may be in the main correct, but a tree that is underfed is more liable to injury than one well cared for. But a tree that is overfed on nitrogenous manures is in no less danger of injury. Trees should not be forced into growing late in the season. Unless the wood and bark can be ripened before winter it can endure little cold weather. Cultivate trees 'till about the middle of July, then sow a cover crop.

In referring to the graft on the tree you perhaps mean the base of the bud, or where the tree was budded in the nursery. This should be about an inch or two below the surface. If the trees were planted ten inches deep it's not much wonder that they are dying. The roots are down where the earth is cold. They cannot supply the nourishment necessary to the tree, so the result is starvation.

Improperly planted trees and shrubs are not uncommon. In one instance a Detroit nurseryman found a customer who had planted roses upside down. It is hardly to be wondered at that nurserymen are either gray-headed or bald.

### SEEDLINGS

Where can I obtain seedlings 3 or 4 inches high, of Arbor Vitae, pine, spruce and cedar? How much would they cost?—F. A. S. Hemlock, Mich.

Write to the Hill Nursery Company, Dundee, Illinois, or the Sherman Nurseries, Charles City, Iowa. The latter are the cheaper. We have no price list.

### PLUM POCKET

I have some wild plum trees that I have tried in three places. When they grow up they blossom profusely but never bear fruit, the plums turn to big blobs. Can you tell me the cause?—G. H. Delta County.

The following quotation from Prof. Waugh's book, Plums and Plum Culture, apparently fits the case:

"The various troubles going under the names of plum pockets, bladders, leaf curl, etc., are mostly very closely allied. They are caused by fungi."

"The fruit, the leaves and the young shoots are attacked. Diseased fruits turn yellow, later grayish and finally brown or black. At the same time the fruit swells, becomes puffed up and hollow, and often rattles when shaken. These are the plum bladders."

"The leaves when attacked become curled, distorted and strangely misshapen. They also assume a more or less yellow color. The shoots are also attacked in frequent instances. They usually become swollen, puffed up, hollow and turn a light greenish-yellow. Sometimes they are twisted, curled and greatly distorted. Growth is stopped and the deformed shoot with its distorted leaves forms a characteristic and unsightly rosette."

The fungus is perennial, living over in the tissues of the plant, this

circumstance adds to the difficulty of treatment. All species of plums are attacked and probably all species of cherries. The peach is subject to the same trouble also."

Such a disease, living over in the plant, is difficult to control. If trees are thoroughly sprayed from the beginning the disease may be prevented from getting a start. Picking diseased fruit as soon as it is noticed, also infected stems and leaves, will help to keep the fungi from spreading. But if a tree is badly infected it is best to use an axe.

### PLANTING BLACK WALNUTS

How is the best way to plant black walnuts? Would you plant in the spring or fall?—A. J. C. Oscoda County.

The best way we know of is to plant the nut where the tree is to stand. If it is in a sod, cut a hole with a spade, put in a nut, crush the outer covering, then cover with the sod turned upside down. If on cultivated ground, plant two or three inches deep. Plant in the fall, using fresh nuts. Will someone suggest a better way?

### NOTES AND COMMENTS

The oyster-shell scale attacks the apple, but is worse on Hiac and poplar, often killing them in a short time. It is larger than the San Jose scale, large enough to be seen easily without a microscope. In shape it resembles a considerably elongated oyster-shell. Spray early and thoroughly. One of the oil sprays is preferred to lime sulphur. The trunks and large limbs may be washed with a brush, using a strong solution.

An eastern nursery has been advertising a peach that weighs two pounds. Too big, too big! Afraid it won't stay on the tree.

Some twenty-five years ago there was considerable interest taken in winter pears. Many trees were set and it was expected by some that the fruit would soon be taking the place of the apple as a dessert fruit. It has not done so. The pear is still of little importance as a winter fruit, while the demand for the apple is still growing and there is at present no prospect that anything will take its place.

### THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by few, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

Have any of the M. B. F. readers had experience in teaching puppies not to suck eggs? I have a valuable Collie 3 months old that persists in so doing. A neighbor's dog taught her the trick.—A. V. S., Atkins, Mich.

### MY EXPERIENCE WITH CUT WORMS

FOR the benefit of L. M. F., Colma, Mich., for treatment to prevent cut-worms. Soak seed corn in a tub of warm water in which a small can of pine tar has been dissolved. Mix the tar thoroughly and soak corn for about a half-hour, then drain off water and mix land plaster or some similar substance to absorb the moisture and then plant as usual.

This will prevent cut-worms working when the ground is literally covered with them, as I have experienced this result.—Elman Price, Cheboygan County, Mich.

### HOW WE GOT RID OF MOLES

In answer to Mrs. C. S. Hesperia, Mich., inquiry how to rid the garden and lawn of moles and such, we were troubled for years with moles in lawn and garden. Time and traps failed to exterminate them. Finally a friend gave us a full-bred Cocker Spaniel dog. In one month's time there was not a mole track to be found in lawn or garden. Dog also went into the fields digging them out. Rat terrier dogs are just as good and are worth a dozen good cats to catch rats and mice around the buildings. You will find them advertised for sale in Hunters & Trappers magazines.—Mrs. J. C. L., Kalamazoo County.

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Bull calf last advertised sold but have 2 more that are mostly white. They are nice straight fellows, sired by a son of King Ona. One is from a 17 lb. 2 yr. old dam and the other is from a 20 lb. Jr. 3 yr. old dam, she is by a son of Friend Hengerfeld De Kol Butter Boy, one of the great bulls.  
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## MILKING STRAIN SHORTHORNS

Registered stock of all ages and both sex. Herd headed by the imported bull, Kalmiscot Viscount 25th, 848,568. Prices reasonable.  
**LUNDY BROS.**, R4, Davison, Mich.

**FOR SALE SHORTHORNS—BOTH MALE AND** Female. 2 nice young cows. 2 young bulls fit for service. Best of breeding.  
**JOHN SCHANNENK, Jr.**, Cheboygan, Mich.

**FOR SALE—TWO REG. SHORTHORN BULLS** one year old. Ready for service. Tuberculin tested. Sired by Orange Goods (795761). Dams giving 40 and 45 lbs. of milk per day.  
**M. B. HALLSTED**, Orion, Mich. (P)

## REGISTERED MILKING SHORTHORNS

For sale heifers and cows, attractive individuals and heavy milkers. Prices reasonable. Under federal test. Owner at farm Mondays and Wednesdays; 2 miles west of Lakeland.  
**GEO. VAN HORN**, Pinckney, Mich.

## RED POLLED

**TWO YOUNG RED POLLED BULLS FOR** sale. Sired by Cossy Ellis Laddie. He took the prize at six State Fairs.  
**PIERCE BROS.**, Eaton Rapids, Mich., R 1

**RED POLLED CATTLE BOTH SEX.** ALL AGES.  
**E. S. CARR**, Homer, Mich.

## GUERNSEYS

## GUERNSEYS

**OF MAY ROSE AND GLENWOOD BREEDING.** No abortion, clean federal inspected. Their sire's dam made 19,400.20 milk, 909.05 fat. Their mother's sire's dam made 15,109.10 milk 778.80 fat. Can spare 3 cows, 2 heifers and a beautiful lot of young bulls.  
**T. V. HICKS**, R 1, Battle Creek, Mich.

**FOR SALE GUERNSEY BULLS READY FOR** service and bull calves carrying % of blood of my heifer Norman's Milwaukee Red Rose, World Champion G. G. Sired by her sire. Dams finishing splendid A. B. Records.  
**A. M. SMITH**, Lake City, Mich.

**REGISTERED GUERNSEY BULLS** ready for service. Also yearling heifers. Farmers prices.  
**Dr. W. B. Baker**, 4800 Fort St. W. Detroit, Mich.

## STATES HIGH IN PUREBRED BULLS ALSO HIGH IN MILK PRODUCTION

**S**TATES that have the highest percentage of purebred dairy bulls on the average have the highest-producing dairy cows, according to an analysis of census figures made by the United States Department of Agriculture. The 48 states were arranged in the order of percentage of purebred sires, ranging from 91 per cent for Arizona down to 8 per cent for North Dakota. By dividing the list into four groups of 12 states each and averaging the purebred-sire percentages and the figures on milk production per cow, it was found that the top group on the purebred-sire basis was also the leading group in average milk yield. On through the classification, the average milk production for the groups fell off as the percentage of purebred bulls decreased. This is evidence that it pays to keep animals of improved blood, the department believes.

In the first group the average percentage of purebred dairy bulls for the 12 states was 51, and the average yearly milk production per cow was 4,068 pounds; for the second group the figures were 30 per cent and 3,375 pounds; for the third group, 19 per cent and 2,761 pounds and for the last, 12 per cent and 2,087 pounds.

Michigan is in the second group with 34 per cent of her bulls purebred and her average milk yield per cow 3,965 pounds.

## TUBERCULAR CATTLE ON HIGHWAY

Can a farmers neighbor who has had his herd of cattle tested for tuberculosis prevent him from driving his cows on the public highway to pasture? Said cows have not been tested. My neighbors cows are pastured in a field bordering the highway and there is a ditch which crosses the road but we do not intend to let our cows drink there. Now is there any law to prevent this?—**F. P.**, Plymouth, Mich.

There is no general compulsory tuberculin testing law in this state at the present time. Therefore, it would not be possible for you to compel a test of your neighbor's cattle unless reasonable evidence could be produced to indicate that the animals were diseased, in which event the matter could be taken up by this department and a test required.—**B. J. Killham**, Chief Veterinarian.

**BRANDING CATTLE WITH IRON** Is there a law against branding cattle with a hot iron in this state?—**E. G.**, Onaway, Mich.

We know of no law in this state which prohibits the use of a branding iron on cattle. It is possible that if branding were not done in a humane manner that the laws or regulations relating to the humane treatment of animals might be violated.—**B. J. Killham**, Chief Veterinarian, Bureau of Animal Industry.

## VETERINARY DEPARTMENT

**DR. W. AUSTIN EWALT, EDITOR**

## LYMPHANGITIS

I would very much like to know what could be done for lymphangitis. My 13-year-old mare has it in both hind legs. She has been this way for nearly a year. At times her legs are swollen quite bad and when she has considerable exercise they are not swollen so bad; mostly when standing in the barn, they are swollen. Is there any cure at all for this disease?—**W. M.**, Ionia, Mich.

No, there is no complete cure for chronic lymphangitis, although a great deal can be done to relieve the swollen condition of the legs. It should always be remembered after a horse has had an attack of lymphangitis, he is more predisposed to future attacks, and these should be avoided if possible for each attack leaves the glands and legs more swollen. When you are not working this animal give her all the exercise possible, and when standing in the stable, keep the legs bandaged as tightly as possible. An animal that has suffered from this disease should have the freedom of a box stall for two reasons, first, he will move around and thus get some exercise, and also avoid the danger of slipping and straining these glands in getting up, when confined in close quarters. Any strain to the lymphatic glands after

## WEST MICHIGAN HOLSTEIN BREEDERS' ANNUAL SPRING CONSIGNMENT SALE

AT THE  
WEST MICHIGAN STATE FAIR GROUNDS  
Grand Rapids, Michigan

Friday, June 2, 1922

**48** Head of Good Registered Holstein Cattle **48**  
Including two Thirty Pound Bulls, and A.R.O.  
Cows with records up to 28 pounds

### HERE ARE A FEW OF THE GOOD THINGS WE WILL HAVE IN THE SALE

A five months old grandson of the famous King of the Pontiacs, whose dam and sire's dam are both thirty pound Cows.  
A yearling son of Veeman Pontiac Lake Side Lad, a \$4.71 pound Bull whose first 4 daughters to freshen have junior two year old records averaging 21.63 pounds butter in 7 days, and out of a 29.75 pound five year old dam. The dam and sire's dam of this young Bull average 162 lbs. of milk per day and 82.24 lbs. of butter for 7 days.  
A yearling son of the \$4.63 pound Bull Judge John Lyons and out of a 27.44 lb. Cow.  
A yearling son of a 27.59 lb. Cow and two Bull Calves out of good A. R. O. dams and thirty pound Bulls.  
A yearling grand-daughter of King Of The Pontiac, out of a 30 lb. sire and a \$1.62 pound dam.  
A 24.35 lb. Daughter of a 31 lb. Bull.  
A 23 lb. daughter of Sir Korndyke Veeman Hengerfeld, Michigan's greatest sire of 30 lb. Cows.  
Two half sisters with A. R. O. records of 27.92 lbs. and 27.47 lbs.  
A 21 lb. junior three year old Daughter of a 30 lb. Bull.  
A 19.26 lb. junior three year old Daughter of a 30 lb. Bull.  
A yearling Daughter of the \$4.71 lb. Bull Veeman Pontiac Lake Side Lad, whose first 4 daughters to freshen have junior two year old records averaging 21.63 lbs.  
A two year old Daughter of the \$2.46 lb. Bull, King Lansing.  
A two year old Daughter of the 32 lb. Bull, Utility Segis Hengerfeld Lad.  
We have a number of other Daughters of 30 lb. Bulls and good A. R. O. Cows that space does not permit us to mention.

A considerable number of the Cows in the Sale will be fresh at the time of Sale, or nearly due to freshen.

Why not attend this Sale and buy your next Herd Sire from among these Good Bulls described above, or if you are looking for Foundation Females, where will you find a better lot to choose from.

The most of the Cattle come from "Fully State and Government Accredited Herds" and are sold subject to a 60 Day Tuberculin Re-test, if kept properly isolated where they will not be exposed by other Cattle.

IF INTERESTED, WRITE FOR SALE CATALOG

**COL. D. L. PERRY**  
Auctioneer

**W. R. HARPER**, Sales Manager  
Middleville, Michigan

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## ACHIEVEMENT

The reward of pure breeding; the accomplishment of quality. Success has again contributed more laurels to the already remarkable record of

## EDGAR OF DALMENY

THE SIRE SUPREME

At the International Live Stock Exposition, where gathers each year the elite of the North American Cattleman to compete for the coveted awards, five more honors have been bestowed upon the "get" of Edgar of Dalmeny.

You too may share these honors. A bull by this world famous sire will prove a most valuable asset to your herd. Write us today.

WILDWOOD FARMS  
ORION, MICHIGAN

W. E. Scripps, Prop. Sidney Smith, Mgr.

**DODDIE FARMS ANGUS** of both sex for sale. Herd headed by Bardell 31910. 1920 International Jr. Champion.  
Dr. G. R. Martin & Son, North Street, Mich.

**REGISTERED ABERDEEN-ANGUS-BULLS**, Heifers and cows for sale. Priced to move. Inspection invited.  
**RUSSELL BROS.**, Merrill, Michigan

## AYRSHIRES

**FOR SALE—REGISTERED AYRSHIRE** bulls and bull calves, heifers and heifer calves. Also some choice cows.  
**FINDLAY BROS.**, R 5, Vassar, Mich.

## HEREFORDS

**50 Head**  
**INAUGURAL**  
**HEREFORD**  
**AUCTION**  
P.M. 1922

ST. CLAIR, MICH., WEDNESDAY JUNE 14TH  
10 YOUNG BULLS (Most of them ready for service)  
40 OPEN & BRED HEIFERS

(Some have calves at side)  
T. B. TEST AND REGISTRATION PAPERS

WITH EACH ANIMAL  
Consigned by up-to-date MICHIGAN BREEDERS that under direction of T. F. B. Sotham & Sons produce peerless Hereford Baby Beef to melt in one mouth of delighted consumers patronizing butchers who buy of Detroit Packing Co.

Every progressive farmer who understands will attend hike and sale to wise-up on this movement.  
**HEREFORD HIKE, JUNE 13TH**

**HELP BUILD THIS SOLID FOUNDATION. GIVE THE NEW PLAN FAIR TRIAL. NO FOOL PADS OR FAKES. NO AVERAGE TO BEAT. IS IT?**

Just prime cattle, true Herefords, of the best bloods of Earth's best beef breed; Fairfaxes, Disturbers, Line-bred Anxieties, etc.; topped from herds of honest breeders to sell honestly to honest buyers, and benefit all concerned.

**THE SALE MANAGERS WILL BE GLAD TO SEND YOU CATALOG AND FULL PARTICULARS. WRITE RIGHT NOW. ADDRESS**

**T. F. B. SOTHAM & SONS**  
ST. CLAIR MICHIGAN

**FOR SALE, Choice Hereford Bulls, bargain prices.** A. L. SMITH, Eckford, Mich. Farm eight miles south of Marshall, Mich. (P)

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**GLADWIN COUNTY PURE BRED LIVESTOCK ASSOCIATION**, Hereford, Shorthorn, Jersey and Holstein cattle; Duroc-Jersey, Poland China and Hampshire hogs; Oxford, Shropshire and Hampshire sheep.

A place to buy good breeding stock at reasonable prices.

**FRED B. SWINEHART**, President  
**O. E. ATWATER**, Secretary  
Gladwin, Mich.

## SWINE

## POLAND CHINA

**FOR SALE, REGISTERED BIG TYPE POLAND CHINA** Spring pigs. Sired by Pankow's Monster, the offspring of Disher's Monster and named by Defender's and Master's offspring. Can furnish trios. Order early, prices reasonable.  
Chestnut Dale Jersey Farm, Edward Pankow, Montague, Mich., R 1. (P)

## L. T. P. C. \$15-\$20-\$25

Spring pigs at above prices. Top fall gilts bred for summer farrow, priced right.

**HART & CLINE**  
Address F. T. Hart, St. Louis, Mich

**Big Type F. C. Boar Pigs**, they can't be beat in Michigan. Sired by Big Bob Mastodon and Peter A. Pan a son 1,075 Peter Pan. C. E. GARNANT, Eaton Rapids, Mich.

## FOR SALE, LARGE TYPE

## POLAND CHINA

boar pigs. Sired by F's Clansman 891211, Michigan's 1920 Gr. Champion boar, and by Smooth Buster 895823, Michigan's 1920 1st Jr. Yearling Boar. Immune by double treatment. Priced to sell. Write or see them. Free livery to visitors.  
**A. A. FELDKAMP**  
Manchester, R. R. No. 2, Mich.

they have been subjected to this disease, has its influence in bringing on another attack. As far as any medicinal treatment is concerned in chronic cases, to stimulate the function of the lymphatic glands will give some relief. One tablespoonful of powdered potassium nitrate in the grain or on the tongue morning and night.

## RUNNING SORE ON COLT'S LEG

I have a four-year-old colt that has a running sore on his left front leg. It has been there for over a year. He got it while in pasture. I don't know the cause. The sore is about 8 inches above the knee on outside of leg. He has never been lame owing to it. It will swell and go down. Have taken two pipes out of it. It will look healed up and then swell and break again. I cannot keep a bandage on it. Please advise and oblige.—C. E. G., Harvard, Mich.

Some foreign substance which is no doubt lodged at the bottom of this wound is the cause of the trouble. The wound should be probed to the bottom and the cause removed and the wound will heal readily by using one tablespoonful creolin to one pint of water and the wound syringed thoroughly morning and night.

## LAMB SEEMS BLIND

I have purchased some sheep, and among them is a last year's lamb that appears to be partially blind. She runs with the rest and eats good, but often runs into the fence or things that happen to be in front of her. Is there anything I can do for her?—A Subscriber, Whittemore, Mich.

In sending inquiries to this department, it is absolutely necessary that, so far as possible, a complete history, including all symptoms of the case is given. There are a number of diseases affecting the eyes of sheep as well as other animals, and you have given no symptoms other than that the animal is partially blind; this may be caused by cataract, ophthalmia or any one of several other diseases. If you will state the actual condition of the eyes we will try and advise you as best we can. In the meantime I would suggest you use a few drops of a five per cent solution of argrol morning and night and keep this animal in good clean quarters inside for two or three weeks.

## GID IN SHEEP

I am writing to see if you can tell us what ails or what to do for our sheep. First they refuse to eat also act dizzy and blind, do not seem to have any cold. Have lost one ewe and have another sick. They are in good condition, have been fed hay, corn fodder and ensilage.—H. R., Bentley, Mich.

This ailment is due to the larva of the tapeworm. The eggs of this tapeworm are distributed around the pens or corrals by carnivorous animals, chiefly dogs. Other animals, such as the coyote, wolf or fox, may also be the host of this tapeworm. After the eggs are ingested by the sheep, it is supposed that they hatch and the embryos gain entrance to the circulatory system by piercing the walls of the stomach, although our knowledge of their life history is incomplete. Those that reach the brain or spinal cord develop into large cysts, and cause this fatal malady among sheep. The manifestations of GID are general in character, and at first, in some cases, one may suspect rabies, or some form of poison, but the coma that soon follows, and a postmortem will reveal the true cause. The animal becomes dull, with loss of appetite. Later, it begins to stagger around in more or less of a circle, and finally it falls down and dies in a convulsion. No treatment is possible for this disease.

## ONE QUARTER UDDER DOESN'T FILL

We have two cows fresh and their udders are not right. There is one quarter that does not fill up like the other three quarters do. There is just a little in this one quarter. What can we do for it?—H. S. G., Onaway, Mich.

Provided there are no fibrous growths in the udder, I would advise that you massage the udder with hot water, twice daily at milking time and give one tablespoonful equal parts of powdered gentian and potassium nitrate morning and night.

**Combine Rail and Water Travel**—For an economical summer trip to points East. D. & C. Steamers leave Detroit daily at 5:30 p. m. for Cleveland, Eastern time. 15 to 25 per cent reduction on auto rates.

You Don't Pay For a De Laval  
It Pays For Itself

A truer statement was never made. Ask any one of the millions of De Laval users and they will invariably reply, "My De Laval doesn't owe me a cent. It paid for itself in less than a year, and ever since has been making me money."

Why? Because the minute you start using a De Laval you get something to sell for cash—cream; and in addition you get skim-milk to grow into another crop of calves, pigs and chickens. Two sources of profit, and a steady cash income every day.

Even if you don't own a De Laval you are probably paying for one anyway—especially if you are using a cheap, inferior or badly worn separator, or are skimming by hand—in the cream that is being lost. No other method of separating cream from milk is so efficient, easy and economical in the long run as the De Laval.

There is a De Laval Separator just right for you, no matter if you have one or a thousand cows. Furnished with hand, power, electric or steam turbine drive. See your De Laval Agent now or write us about getting one.

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Sooner or later you will use a  
**De Laval**  
Cream Separator and Milker



**CLANSMAN** BIG TYPE POLAND CHINAS ready to ship. \$10 and \$15, either sex.  
**H. W. GARMAN & SONS**, Mendon, Mich., R. 3.

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**DUROC JERSEYS**—Bred Sows and Gilts Bred for Aug. and Sept. farrow. A few choice ready for service. Shipped on approval. Satisfaction guaranteed. F. J. Dredt, Monroe, Mich. R1

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**DUROC JERSEY WEANLING BOAR PIG** weighing 40 pounds, from large litter. \$12 to \$15.  
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**AM SELLING A GREAT OFFERING OF DUROC BRED SOWS AND GILTS** March 4th, mostly mated to Orion Giant Col., a son of Ohio Grand Champion. Get on mailing list for catalog.  
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**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, Michigan.

**BRED GILTS ALL SOLD—BOOKING ORDERS** for spring pigs sired by Fannie's Joe Orion and Pathfinder Orion. Farmers' prices. H. E. LIVERMORE & SON, Romeo, Mich.

**WE OFFER A FEW WELL-BRED SELECTED** spring Duroc Boars, also bred sows and gilts in season. Call or write.  
**MCAUGHTON & FORDYCE**, St. Louis, Mich.

**HILL CREST DUROCS—BRED SOWS ALL** sold. A fine line of boars, weighing from 150 pounds up. Farm 4 miles south of Middleton, Gratiot Co. **NEWTON & BLANK**, Perrinton, Mich.

**FOR SALE—SEPTEMBER GILTS—OPEN OR** bred, sired by A. Model Orion King. Call or write. **CHAS. F. RICHARDSON**, Blanchard, Mich.

**DUROCS** AM BOOKING ORDERS FOR March pigs, for May delivery. 12 to 15 dollars, registered. Satisfaction or money back.  
**B. E. KIES**, Hillsdale, Mich.

**THE FINEST DUROC JERSEY HOGS** in Michigan. Nearly 100 to choose from. Bred Sows, Gilts, Fall pigs, either sex. Write us your wants. Farmer prices.  
**SCHAEFFER BROS.**, Oxford, Mich., R 4.

**FOR SALE: ONE DUROC BOAR FROM** Brookwater breeding stock. Choice spring pigs.  
**JOHN CRONENWETT**, Carleton, Mich.

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**HAMPSHIRE, A FEW GILTS TO OFFER.** Place your order for spring pigs.  
**J. W. SNYDER**, St. Johns, Mich.

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**O. I. C. SWINE—MY HERD CONTAINS THE** blood lines of the most noted herd. Can furnish you stock at "live and let live" prices.  
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**O. I. C.'s. LARGE WHITE, QUIET, PROLIFIC,** easy feeders. Ours will please you. Choice Sow or Boar Pigs, wt. 50 lbs. \$15. Registered. Order at once. **MAPLE VALLEY STOCK FARM**, North Adams, Mich. (P)

**BIG TYPE O I C PIGS** 8 WEEKS OLD  
**E. V. BILYEU**, Powhatan, Ohio

**SHEEP**

**HAMPSHIRE SHEEP**

A few good yearling rams and some ram lambs left to offer. 25 ewes all ages for sale for fall delivery. Everything guaranteed as represented.

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For ten days, beginning with this issue, we will sell thoroughbred, pedigreed, Collie puppies for fifteen dollars, spayed females three months old, bred from farm trained stock that are natural heelers with plenty of grit. Send check in first letter or you will be too late, all puppies guaranteed.

**DR. EWALT'S COLLIE FARMS**  
Mt. Clemens, Michigan

**SILVERCREST KENNELS** offer For Sale Pure-bred Collie puppies; white and sable and white. Natural heelers. **W. S. HUBER**, Gladwin, Mich.

**FIRST DETROIT POLICE DOG TRAINING SCHOOL**

A wonderful opportunity to get into an uncrowded field. Raise German Police Dogs. For information write to  
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We have a few good Shetland Ponies for sale; prices ranging from \$75.00 to \$100. Write  
**JOHN FARMER**, R 2, Stockbridge, Mich.

**SHEPHERD PONY, 8 MONTHS OLD, \$50.**  
**H. W. GARMAN & SONS**, Mendon, Mich., R. 3.

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**FOR SALE STATE FAIR WINNER PERCHERON** Stallion Pershing 142420. Dam Platine, twice champion of state. June Elletts, River Jet., Mich.

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## POULTRY

### DAY OLD CHICKS



**HOMESTEAD FARMS**  
Michigan people: Here is something in your own state to interest you. Let us send you a description of our

#### PURE BREED PRACTICAL POULTRY

Here is an egg producing poultry stock such as the farmer poultry woman wants. It is proving out in actual use in the hands of the farmer poultry people who buy it.

White, Brown, and Buff Leghorns; Anconas; Black Minorcas; Barred, Buff and White Rocks; Rhode Island Reds; Wyandottes; Orpingtons.

This stock is culled and bred on the plan of the state Agricultural College, and all the Hens in the Breeding Colonies are practical egg-producing Hens.

If you will send for a description and egg record of this Pure Breed Practical Poultry, you will find stock that it will pay you to buy. Buy Day Old Chicks this year and see the results you will get.

**EIGHT WEEKS OLD PULLETS**  
We shall have 5000 Eight-weeks and Three-months Pullets to sell in May, June and July in all our breeds. Orders can be placed now for these Pullets. We will send you description and Price List.

**STATE FARMS ASSOCIATION**  
Box B47, Kalamazoo, Mich.

Top Quality Chicks, Spanish, Minorcas, Rocks, Reds, Wyandottes and Orpingtons.  
**TYRONE POULTRY FARM**, Fenton, Mich.

**R. C. BR. LEHORN EGGS \$1.50 for 15; \$8.00 per 100.** Pekin duck \$1.50 for 8. W. Chinese goose eggs 40c each. **MRS. CLAUDIA BETTS**, Hillsdale, Mich.

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**BARRED ROCK EGGS** for hatching. Norman heavy laying, prize winning strain. **MRS. JESSIE B. DEAN**, Mason, Mich., R. 1.

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Baby Chicks \$20 per 100; Eggs \$1.50 per 15; \$8.00 per 100. Bred to lay.  
**ROBERT E. KNIGHT**, New Baltimore Mich. (P)

**WHITE ROCKS. VERY HEAVY LAYERS.** Quality that wins. Hatchable eggs, 15, \$1.50; 50, \$3.75; 100, \$7.00. Satisfaction guaranteed. **MRS. FLORENCE HOWARD**, Petersburg, Mich. (P)

**JOHN'S BIG BEAUTIFUL BARRED ROCKS** are hen hatched, hen raised 80 eggs \$3.50; 50 for \$5.00 (light or dark matings) postage paid. Caroulers. **JOHN NORTON**, Clare, Mich.

**BUFF ROCKS—Bronze Turkeys—For 20 years** by J. O. Clipp & Sons, Bx. M, Sault Ste. Marie, Mich.

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**S. C. BUFF LEHORN BABY CHICKS.** We have just the one breed.  
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**PURE BRED S. C. WHITE LEGHORNS** eggs for hatching at \$7 per 100; \$4 per 50 or \$1.50 per 15 postpaid.  
**MRS. N. MORAN**, Rapid City, R. 1, Mich. (P)

**LEGHORNS**  
Single Comb Buff Leghorns, 1000 Chicks for April first delivery. It will cost you just 2 cents to find out my plan how to get 10 Baby Chicks FREE.  
**LAPHAM FARMS**, Pinckney, Mich.

## AMERICAN ROSE COMB WHITE LEGHORNS

Cockerels and eggs. Reasonable.  
**FRANK KORCAL**, Pilsen, Mich.

**POUND PULLETS (S. C. W. L.) HATCHED MARCH 20th.** \$1.20 for May 15th delivery. Finest lot we ever raised. No sickness. No crowding. Satisfaction or money back. Will lay in August and all through the fall season when eggs are the highest.  
**MORSE LEHORN FARM**, Belding, Michigan

**WYANDOTTE**  
Heimbach's White Wyandottes. Exhibition and utility Heavy layers. R. C. Rhode Island Reds, Baby Chicks, Hatching eggs. Catalog. C. W. Heimbach, Big Rapids, Mich.

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**WHITTAKER'S RED CHICKS** Both Combs. Blood tested for white diarrhoea. Michigan's greatest color and egg strain. Catalog free. Interlakes Farm, Box 4, Lawrence, Mich.

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**S. C. ANCONAS—SELECTED PEN HEADED** By cockerels brought direct from H. Cecil Sheppard. Eggs, \$2.00 per 15.  
**MRS. GILBERT BROWN**, Wheeler, Mich. (P)

**3000 EARLY APRIL HATCHED FULLY MATURED ANCONAS. BUCKEYE ANCONA FARM**  
NEW LONDON, OHIO.

Heavy layers and show birds, none better. Reasonable prices and quality stock is our motto. Can furnish winners for any show. Ask for our late winnings at Columbus, O., Louisville, Ky., Cleveland, O., Pittsburg, Pa., Hagerstown and Cumberland, Md. Oka. Hens, Chks. Pul. and Mated Pens always for sale. Eggs and Baby Chicks in season. 100,000 Incubator capacity. Write us and get the best.

**ORPINGTONS**  
**ORPINGTONS** BUFF, WHITE, BLACK Hatching eggs in season.  
**AUGUST GRABOWSKIE**  
Merrill, Mich., Route 4, Box 41.

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**EGGS FOR HATCHING—BARRON STRAIN.** S. C. White Leghorns, bred-to-lay. \$1.50 for 15; \$6.50 for 100; prepaid.  
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**EGGS \$1 SETTING, Parcel Post Paid.** Thoroughebreeds, Barred Rocks, White Rocks, Buff Rocks, White Wyandottes, Anconas, Buff Minorcas, White Leghorns, Brown Leghorns, Rhode Island Reds, Buff Orpingtons. **PHILIP CONDON**, West Chester, Ohio.

**SICILIAN BUTTERCUP EGGS—\$1.25 for 15.** Good layers, of large white eggs, good table fowl. Also R. I. Red's eggs for sale, same price. **L. K. PRAUSE**, Maple City, R. 3, Mich. (P)

**QUALITY BARRED ROCK EGGS—15, \$1.50; 50, \$4.00.** Park Strain. Postpaid; guaranteed. **W. J. & R. A. WILSON**, R. 2, Kingsley, Mich.

## WHITE ROCK EGGS FOR HATCHING

Blue Ribbon winners. Write for prices and information. **Mrs. Roy Oakes**, Hartford, Mich.

**Silver Spangled Hamburg** Eggs \$2.00 per 15, prepaid.  
**EVERETT ROWE**, R. 2, Grass Lake, Mich. (P)

**GOLDEN LACED WYANDOTTE EGGS** for hatching from prize winning stock, \$2.50 per 15. **FRANK J. NIQUE**, Thomas, Mich.

**SILVER SPANGLED HAMBURG EGGS** by the 100 \$8.00; one setting \$1.75. Wonderful layers; won first money at State Fair, 1919, and second money at State Fair, 1921. Great foragers and very handsome. **MRS. G. A. PROCTOR**, Vassar, Mich.

**BABY CHICKS**  
If you want chicks that pay you we have them. Ours have the egg-laying habit. From show winning strains and egg strains as high as 295. Leghorns, Rocks, Reds, Anconas, Wyandottes, Minorcas, Orpingtons. Safe delivery. Prepaid. Prices right. Free catalog.  
**HOLGATE CHICK HATCHERY**, Box B, Holgate, Ohio.

**CHICKS WITH PEP**  
If you want chicks that pay you we have them. Ours have the egg-laying habit. From show winning strains and egg strains as high as 295. Leghorns, Rocks, Reds, Anconas, Wyandottes, Minorcas, Orpingtons. Safe delivery. Prepaid. Prices right. Free catalog.  
**HOLGATE CHICK HATCHERY**, Box B, Holgate, Ohio.

**CHICKS**  
Thorough-bred varieties of Tom Barron English White Leghorns, S. C. R. I. Reds, Parks Barred Rocks. Strong and healthy chicks from tested heavy producing stock, correct in plumage and color as well as being excellent layers. 100 per cent live delivery guaranteed. Order your May and June chicks now at my new low prices. interesting catalogue free. Importer.

**BRUMMER'S POULTRY FARM**  
Box 28 Holland, Mich.

**CHIX** FROM TWELVE LEADING VARIETIES of heavy layers on free range. Reasonable prices Get catalog and order NOW.  
**SUNBEAM HATCHERY**, H. B. Tipping, Box 303, Findlay, Ohio.

**BABY CHICKS. ALL STANDARD VARIETIES** at reduced prices for June delivery. Satisfaction guaranteed. 100 per cent live delivery. Send for prices. **HOMER HATCHERY**, Homer, Mich. (P)

**BABY CHICKS, 20 breeds, 11c up.** Pure bred stock. Prices on request. English Leghorns too. **MIDLAND HATCHERY**, Midland, Mich. (P)

**WHY NOT**  
buy your chicks from egg-bred stock?  
**ANCONAS & WHITE LEGHORNS**  
Come and see our stock if you can or send for full description and prices.  
**QUALITY HATCHERY**, Box A11, Zeeland, Mich.

**BABY CHICKS**  
S. C. Buff Leghorns, one of the largest flocks in Michigan. My price is in reach of all, only \$15.00 per hundred. Detroit winners, none better.  
**LAPHAM FARMS**, Pinckney, Mich.

## BABY CHIX

The Old Reliable Breeds  
**S. B. White Leghorns**  
English and American Strains

**Barred Rocks Anconas**  
**S. C. Brown Leghorns**

Here we are, just a few hours from your door, with baby chicks from the best breeds. Our growth from one small incubator to 22,000 egg capacity has been steady, and denotes honest dealing. Get our prices on chicks from our healthy, free range, heavy laying stock. Send today for handsome catalog in colors.

**CITY LIMITS HATCHERY & POULTRY YARD**, Route 5, Box 11, Holland, Mich.

**Baby Chicks**  
Build up your flock with pure bred chicks that lay early and often, best quality, Leghorns, Rocks, Reds, Wyandottes, Anconas, Minorcas, Orpingtons. Silver Spangled Hamburg Eggs \$2.00 per setting. We deliver at your door. Get our price list and free catalog.

**J. G. PHILPOTT**  
R. 1, Box 74 Port Huron, Mich.

**BABY CHICK PRICES SMASHED**  
ENGLISH AND AMERICAN LEGHORNS new \$12.50 delivered. Anconas \$15.00. Special prices on larger shipments. Not ordinary stock but genuine egg pedigree stock. Our quality can't be beat at twice the price. Our free catalog will prove it.

**PROGRESSIVE POULTRY FARM**  
HOLLAND : BOX 1 : MICHIGAN

**DAY OLD CHICKS**  
Now is the time to order your chicks. You want the best and at the right price. We supply "efficiency chicks"—Reds, Rocks, Wyandottes, Leghorns, and at pre-war prices. Quality can't be beat. We ship them by parcel post, prepaid, and guarantee delivery. You take no chance. Send for our catalogue for full information.

**CLYDE CHICK HATCHERY**, Box 5M, Clyde, O.

**EXTRA GOOD CHICKS**  
Plan now on more eggs next winter. Order chicks from pure bred record layers. Tom Barron White Leghorns, Brown Leghorns, and Anconas. Postpaid anywhere. Catalog free. Ask for May and June prices.

**QUEEN HATCHERY**  
ZEELAND, MICHIGAN

**NABOB JUST-RITE Baby Chicks**  
1 1/2 MILLION CHICKS Postage PAID 95 per cent live arrival guaranteed. MONTHS FREE with each order. A hatch every week all year. 40 breeds chicks 4 Breeds Ducklings Select and Exhibition Grades. Catalogue Free, stamps appreciated.  
**NABOB HATCHERIES**, Dept. 30, Gambler, O.

**BABY CHICKS**  
200,000 for 1922. Shepards Anconas, English type White Leghorns and Brown Leghorns and Barred Rocks. Why pay two prices when you can buy direct? Our chicks are from strong vigorous flocks of fine quality and excellent layers. Chicks are sent prepaid with 100 per cent live arrival guaranteed. Order now or send for free catalogue.  
**KNOLLS HATCHERY**, Holland Mich R12

**Crystal Poultry Farms Cholo Baby Chicks.** From best heavy laying, standard bred stock. 30 leading breeds. Thousands of satisfied customers. Reasonable prices. Circular free.  
**CRYSTAL POULTRY FARMS**  
7910 W. Franklin Ave., Cleveland, O.

**CHICKS FROM MICHIGANS OLD RELIABLE HATCHERY**  
White Leghorns, Anconas, Barred and White Rocks and R. I. Reds, the popular laying strains. High record, expert Hogan tested flocks only. Preference given early orders. Chicks delivered by insured Parcel Post, and full cost strong live chicks guaranteed. 14th season. Fine instructive poultry catalog and price list free. Place your orders now for May and June delivery. We want to show you what we deserve your business. Write  
**HOLLAND HATCHERY**, R. 7, Holland, Mich.

**DAY OLD CHICKS**  
Order your Baby Chicks now from selected heavy laying strain single comb White Leghorns, English strain Brown Leghorns, Anconas and Reds. Send for price list.  
**HILLGREST HATCHERY**, R. 2, Holland, Mich.

**BABY CHICKS**  
FULL LIVE COUNT GUARANTEED  
From hens of Heavy Laying Strains S. C. White and Brown Leghorns and Anconas, 50 for \$6.00; 100 for \$12; 500 for \$57.50. Barred Rocks and S. C. R. I. Reds, 50 for \$7.50; 100 for \$15; 500 for \$72.50. Prepaid Parcel Post right to your door. Order now from this ad.  
**WINSTROM POULTRY FARM & HATCHERY**  
Zeeland, Mich.

**BABY CHIX, MAY AND JUNE DELIVERY.** Prices: Barred Plymouth Rocks, R. I. Reds, Black Minorcas, White Leghorns or Anconas, 25 for \$5.50; 50 for \$10.00 or 100 for \$18.00 prepaid. 100 per cent live delivery guaranteed. Cut 12th year producing chick that please. July price 2c per chick less. **GREEN LAWN POULTRY FARM**, R. 3, Fenton, Mich.



BLOOD WILL TELL

Eleven years of hatching and shipping chicks assures you good first class chicks. We guarantee safe arrival and satisfaction, or your money back.

**17,000 Chicks Every Week Till August 15th**

S. C. English type White Leghorns are good and profitable layers, and our extra selected are of the very best layers.

It has never been our aim to put out cheap chicks, but to give our customers chicks that will be good layers and bring our customers a good profit.

We have been in the poultry business eleven years and are offering you chicks of the best layers at a very reasonable price.

PRICES FOR JUNE AND JULY, 1922

	Per 25	Per 50	Per 100	Per 500	Per 1000
S. C. English type White Leghorns, extra selected	\$3.00	\$6.00	\$12.00	\$57.50	\$115.00
S. C. English type White Leghorns	2.50	5.00	10.00	50.00	100.00
S. C. Brown Leghorns, extra selected	3.00	6.00	12.00	57.50	115.00
S. C. Brown Leghorns, Standard	2.50	5.00	10.00	50.00	100.00

We ship chicks by parcel post and pay the postage up to your door, and guarantee safe arrival. Our terms are cash with order, but we will book your order if you send one-fourth of the amount with the order, and the balance just before chicks are to be shipped.

**PROMPT SHIPMENT**—Order from this adv. to save time, and we will write you at once when to look for the chicks and also will mail you our instructive catalogue, or write for catalogue before ordering.

**THE WOLVERINE HATCHERY**

**H. P. Wiersma, Proprietor**

**ZEELAND, Mich.**

# DAY OLD CHICKS

Special for June and July

**\$10.00 AND \$12.00 PER 100**

Our English Type White Leghorns and Brown Leghorns are the greatest laying strain of today

Eleven years of breeding has made this stock good.

With long deep bodies and the large combs, they have the egg producing qualities in them.

Eleven years of hatching and shipping chicks assures you good first class chicks. We guarantee safe arrival and satisfaction, or your money back.

**17,000 Chicks Every Week Till August 15th**

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We ship chicks by parcel post and pay the postage up to your door, and guarantee safe arrival. Our terms are cash with order, but we will book your order if you send one-fourth of the amount with the order, and the balance just before chicks are to be shipped.

**PROMPT SHIPMENT**—Order from this adv. to save time, and we will write you at once when to look for the chicks and also will mail you our instructive catalogue, or write for catalogue before ordering.

**THE WOLVERINE HATCHERY**

**H. P. Wiersma, Proprietor**

**ZEELAND, Mich.**

# RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

## GRAND RAPIDS BROADCASTING STATION

I see by the paper that Grand Rapids is to have a station. Will you please advise me full details about the receiving sets, what the cost of these are, also what they consist of? Do these sets require outside construction to any great extent? What would be the cost? We are a little off the map up here but we demand the best there is. Grand Rapids broadcasting outfit says that 50 miles is the distance they can take in—we are 60 miles from the Rapids. What would you advise.—M. S., Hesperia, Mich.

A recent article gave the outside construction required and its expense. There are plenty of agencies that will sell complete sets. They are advertised in the Radio magazines, a list of which are published in this issue of the M. B. F. If the Grand Rapids broadcasting station tells you that they can be only heard at 50 miles, they will be mistaken as they will be heard hundreds of miles away by those that have good sets. Follow all our articles, and be patient, as this is something that you should go into slowly so as not to waste good money. The cost of sets varies from \$20, sometimes less, to several hundred dollars.

## UNABLE TO GET PITTSBURG

I have a radio receiving set made up of 2 variometers, a variocoupler and a detector bulb. I have no trouble in getting Detroit in any kind of weather, but have been unsuccessful in getting Chicago or Pittsburgh. Do I need a one-step amplifier to get these stations? When I have my receiver adjusted for Detroit at 360 meters, and I wish to get Pittsburgh, also 360 meters, is it necessary to alter all adjustments on both variometers and on variocoupler? Or is it only necessary to change the adjustment on the wing variometer? The primary of variocoupler is controlled by 2 seven-point switches. When changing from Detroit to Pittsburgh is it necessary to alter the adjustment of these two switches? Receiving the weather and market reports each day—keeps the farmer posted at all times what his products are bringing.—C. E. J., Rochester, Mich.

If you are using a gas content detector bulb, you should be able to hear Pittsburgh now and then, but with a one step amplifier you would be sure to hear both Pittsburgh and Chicago.

It is not necessary to change both variometers usually, but by changing the wing variometer and varying the coupling of the variocoupler secondary you can get the other stations that are on the same wave length.

You will not need to change your switches on the variocoupler.

Yes, the weather and market reports are necessary to the farmer if he wishes to be up to date.

## HIGH SCHOOL BOY GETS GOOD RESULTS

We take the Business Farmer and like it better than any other paper. It is always a welcome visitor here. Your paper was the only paper that did not raise in price during the war while other papers doubled their price. I saw in your paper a few weeks ago that you would like to know of all the people who had radio-sets. I have a receiving set which is all home made. My set is a short wave regenerative receiver. My aerial is 32 feet high and 100 feet long, and I use the counterpoise ground. My mother is nearly as good an operator as I am. When I am not at home she gets the music as good as I can. I have a transmitting set also. I go to the Sherwood High School and I am in the eleventh grade. I put my radiophone up in the spare time I had left after I had finished my chores. I will give you the wiring diagram of my receiver. With this set I hear nearly all the radio stations.—P. B., Sherwood, Mich.

You are doing well to receive all the radiophone stations with just one bulb, it shows what good workmanship and care to details will do for you.

Your hook-up is good, and should you get another pair of telephones and put them in series with the present ones both you and your mother could listen at the same time. It seems that many mothers are getting interested in the radio telephone now days.

Send along the photograph, we will be glad to have it.

## RANGE OF CRYSTAL SET ABOUT 25 MILES

What instruments would be necessary to hear Radio music from Detroit? I live about 65 miles from there. I bought an outfit with a crystal detector and it will not produce any results at all. What would be the cost barring head set.

aerial and tuning coil? Yours for better Radio.—H. R., Flint, Mich.

A crystal detector will only receive, with satisfaction, up to about 25 miles from a radio broadcasting station.

You will need a "bulb" or vacuum tube detector, and a storage battery of 6 volts (dry cells can be used, but do not last long, and are very expensive in the long run) and a "B" battery of dry cells of 18 to 22 1-2 volts. The detector panel and bulb will cost you from \$12 to \$18 and even more for fancy ones. Storage batteries cost from \$15 up. A second hand one will do and can be bought for about \$10. The "B" batteries cost from \$1 up.

## RADIOGRAPHS

Radio is declared by spiritualists to be the "missing link" between the living and dead. They predict that we will soon be able to converse with the departed over the radiophone.

In a recent issue mention was made of locating aerial wires inside. This can safely be done by those located within 20 miles of a broadcasting station and by others farther removed who have powerful machines. A Mount Clemens boy has perfected an outfit which will receive News radio programs for a distance of several miles without any aerial wires at all. The little binding post about one inch long to which the aerial wires are ordinarily attached, receives the messages very satisfactorily.

Overlooking the city of Washington, D. C., lies the beautiful Arlington cemetery where thousands of our national heroes lie sleeping. Not far from the tombs of these departed heroes the government has erected one of the most powerful broadcasting stations in the world from which time signals are dispatched hourly to every atom of space within a radius of several thousand miles. The station is destined to play an important part in the commercial and political destinies of the nation.

Radio waves will pass through almost any substance. Wood, brick, stone or other building material seem to offer little if any resistance. I have stood listening to a wireless announcement with my receiving set attached to aerial wires outside, and could detect no difference in either the strength or clarity of the tone when the outside wires were detached and a piece of looped copper wire three feet long put in its place, although the receiving set and wire were surrounded on all sides by thick walls and shelves laden with merchandise.

The Detroit News has been broadcasting for over two years. Its daily program of news, weather, crop and market reports, of practical talks by business men, ministers of the gospel, educators, etc., and its musical numbers rendered by the best resident and transient artists who visit the city, is not surpassed anywhere. For five or six hours of the day anyone with a proper receiving set can hear all these features without a cent of cost. The Detroit Free Press has just installed another powerful broadcasting station which, with the Detroit News station, gives the residents of Michigan and adjoining states a wireless service unexcelled in any other part of the country.

## TURKEYS YIELD GOOD PROFIT IN SPITE OF HEAVY LOSSES

A RETURN of \$1,525 from turkeys in 2 seasons was obtained by an Oklahoma woman in spite of heavy losses in her flock, due to conditions that might not occur elsewhere. The Greer County extension agent convinced her that it would pay to follow the advice of the United States Department of Agriculture and the State Agricultural college and substitute purebreds for her scrub stock. He also gave her information on the management of her flock.

She started with 10 hens and 1 tom of the Mammoth Bronze variety. From these she raised 122 young turkeys, but lost 50 of them in a sudden hail storm. The rest she sold as breeders, advertising them in a farm journal. They netted her \$900, or an average of \$12.50 each.

This year she started with the same number of breeders and obtained 145 young poults. Unfortunately one of the farm hogs was fond of turkey, and destroyed all but 51 of the flock before the depredations were traced to him. At about \$12 apiece, however, the remaining 51 brought \$625.

Michigan farmers are taking a much larger interest in turkeys, both as a side-crop and a means of eradicating grasshoppers. That there is money in turkeys has been demonstrated by many breeders in this state.



## Baby Chicks

TEN WEEK OLD BULLETS  
BEST LAYING BREEDS ON EARTH

25,000 large, strong, super hatched chicks every week from Hogan tested flocks culled out semi-annually by our Poultry experts.

### PRICES FOR JUNE AND JULY

	Per 50	Per 100	Per 500	Per 1000
S. C. WHITE LEGHORNS.....				
ENGLISH WHITE LEGHORNS.....				
S. C. BROWN LEGHORNS.....				
S. C. MOTTLED ANCONAS.....	\$5.25	\$10.00	\$47.50	\$95.00
BROILERS (Odds and Ends).....	\$4.00	\$7.00	\$35.00	

EXTRA SELECTED STOCK AT \$2.00 PER 100 HIGHER

Thousands of Satisfied Customers Make Big Money

Mr. F. L. Hess, Chicago, Ill., writes:  
"I averaged 112 eggs a day from 140 of your pullets and sold, \$158.00 worth of eggs in February."

Mrs. Wyttenbach, Amherst, Ohio, writes:  
"I sold \$357.30 of eggs in two months from 200 pullets of your stock."

### Raise Good Stock and Reap a Golden Harvest

Intelligent chick buyers of today do not take chances with ordinary stock. Our enormous output enables us to sell these money makers at a price that positively cannot be equalled.

### We Ship Thousands of Chicks Each Year

Every shipment is sent by Prepaid Parcel Post and we guarantee 100% live delivery. Order direct from ad. or send for illustrated catalogue.

WRITE FOR PRICES ON PULLETS

Wingarden Hatchery, Box B, Zeeland, Mich.



## BABY CHICKS

FROM  
PURE TOM BARRON  
English White Leghorns

### PEDIGREED MALES HEAD OUR FLOCKS

Greatest layers known—All on free range—Bred for heavy egg production. Buy the best and make a success—Write today.

Also heavy laying Brown Leghorns and Anconas—All chicks sent P. P. Prepaid and Live Arrival guaranteed—SEND FOR OUR FREE CATALOGUE TODAY

SUPERIOR FARMS AND HATCHERY, Box 2052, Zeeland, Mich.



## BABY CHICKS

BARRON STRAIN

SINGLE COMB WHITE LEGHORNS. ALSO HEAVY LAYING S. C. BROWN LEGHORNS, ANCONAS AND RHODE ISLAND REDS

### REDUCED PRICES FOR JUNE

S. C. English White Leghorns and S. C. Brown Leghorns, 50 for \$5.25; 100 for \$10.00; 500 for \$47.50; 1000 for \$95.00. Anconas, 50 for \$5.75; 100 for \$11.00; 500 for \$52.50; 1000 for \$105.00. Rhode Island Reds, 50 for \$6.50; 100 for \$12.00; 500 for \$57.50.

LIVE DELIVERY GUARANTEED BY INSURED AND PREPAID PARCEL POST

Order direct from this ad. and save time. Circular free

BOX 500

STAR HATCHERY

HOLLAND, MICH.

## PULLETS 20,000 FOR COCKERELS 1922

8 WEEK OLD S. C. WHITE LEGHORNS

Holton, Mich.  
Gentlemen: The pullets arrived yesterday all O.K. I got them last night and this morning they were all as lively as can be. I thank you.  
Yours truly,  
Mrs. M. R. Dayton

CHICKS RAISED FROM THE BEST FLOCKS IN THE STATE. ALL FLOCKS ARE CULLED BY EXPERTS FROM THE M. A. O. SATISFACTION GUARANTEED. SEND FOR OUR CIRCULAR. SELECTED STOCK AT \$1.00 EACH. LET US BOOK YOUR ORDER TODAY.

Owosso, Mich.  
Gentlemen: I received the pullets you sent me in fine condition. I am well pleased with them.  
Yours truly,  
Wm. Kinn

ZEELAND CHICK COMPANY :: :: Zeeland, Michigan

## DAY OLD CHICKS

From the heart of Michigan's Baby Chick Industry section. The two heaviest egg breeds. Leghorns and Anconas. Send for catalog.

JAMESTOWN HATCHERY  
JAMESTOWN, MICHIGAN



The 'Old Reliable' OHIO HATCHERY  
which has been in the business TWENTY-TWO YEARS can supply you with the best chicks from all leading varieties and at reasonable prices. Get our Free Catalog NOW. REDUCED PRICES FOR JUNE. To your door by Prepaid Parcel Post.  
THE UHL HATCHERY, Box 502  
New Washington, Ohio

Day Old Chicks. Standard Varieties. Make your selections. Catalogue and price list now ready.  
H. H. PIERCE, Jerome, Mich.

Please Mention the M. B. F.  
When writing to Advertisers

## TOBACCO

TOBACCO HOME SPUN—EXTRA FINE  
Chewing, 10 lbs. \$3.00; Smoking 10 lbs. \$2.00.  
20 lbs. \$3.50. PRODUCERS EXCHANGE  
Mayfield, Ky. (P)

KENTUCKY TOBACCO—DON'T SEND ONE penny, pay for tobacco and postage on arrival. Extra fine quality leaf, 8 years old, nature cured. Chewing 10 lbs. \$3.00; smoking 10 lbs. \$2.50. FARMERS' UNION, D123, Hawesville, Ky.

TOBACCO; KENTUCKY'S PRIDE. RICH mellow chewing or smoking 10 lbs. \$3.00. Mild smoking 10 lbs. \$2.00; 20 lbs. \$3.50. FARMERS CLUB, Mayfield, Ky.

TOBACCO, KENTUCKY'S NATURAL LEAF. Mild, Mellow smoking 10 lbs. \$2.25; Hand selected chewing 3 lbs. \$1.00. Free receipt for preparing. WALDROP BROTHERS, Murray, Ky.

TOBACCO, SPECIAL SWEATED LEAF. Chewing, select, 8 lbs. \$1.10; 10 lbs. \$1.20; 20 lbs. \$2.50. Good smoking 10 lbs. \$2.00; 20 lbs. \$4.00. CO-OPERATORS, Murray, Ky. (P)

HOMESPUN SMOKING OR CHEWING TOBACCO. Collect on delivery. 5 lbs. \$1.50; 10 lbs. \$2.50; 20 lbs. \$4.00. FARMERS ASSOCIATION, Paducah, Kentucky. (P)

KENTUCKY TOBACCO—"SPECIAL BARGAINS." Send no money, pay for tobacco and postage when received. 10 lbs. 8 year old smoking, \$1.00. FARMERS' GRANGE, Hawesville, Ky. (P)

# MARKET FLASHES

## WEEKLY TRADE AND MARKET REVIEW

**I**NDUSTRY is again jubilant. Business is reviving by leaps and bounds. The public is buying again. Henry Ford is turning out the largest number of automobiles and tractors in his history, and his great plants are running night and day. Chevrolet and Dort companies claim they are so far over-sold that they do not know when they will catch up on their orders.

Demand for steel is increasing rapidly and lumber concerns report the biggest business in over two years. Building operations are being renewed in all principal cities.

This revival in industrial occupations will have its effect upon agriculture. Not only will it give the consumer more money with which to buy but it has an important psychological effect upon the markets. If it will only continue until this year's crops are ready for the market then the farmer, too, will derive some benefit from the revival.

Following the heavy rains of last week the soil is in good condition for working and farmers are as busy as beavers in their fields. If all the old saws prove true concerning the effect of the kind of spring we have had upon the field and orchard crops we may expect a season of plenty in all farm crops produced in Michigan.

### WHEAT

May 24—Wheat has suffered serious reverses the last few days dropping from a high on the Detroit market of \$1.45 to \$1.37. A number of causes are assigned to the decline, chief among which are the liberal offerings of old wheat which most of the trade has thought could not be produced. It is said that more wheat has already been shipped out of the country than was estimated possible a few months ago, and the ease with which supplies continue to pop up when prices are satisfactory has been a discouraging factor to the bulls. Then, too, the condition of the crop in the southwest shows improvement as was to be expected. It won't be many weeks now before some of the new crop will be on the market, although it is said that already over 40,000,000 bushels have been sold in advance of the harvest for shipment abroad. This fact plainly shows that we are mortgaging our future wheat crop a long way ahead for the sake of present needs. We can continue to do this about so long and then the penalty must be paid in scarcity and high prices.

It is thought that farmers will be ready sellers of new wheat this year providing prices remain anywhere near their present level, though there are excellent reasons for believing that very much higher prices may be seen within a few months following harvest than will be paid at that time.

### Prices

Detroit—No. 2 red, \$1.37; No. 2 white, \$1.35; No. 2 mixed, \$1.35.  
Chicago—No. 3 red, \$1.33@1.35.  
New York—No. 2 red, \$1.40 1-2.  
One year ago—Detroit, No. 2 red, \$1.67; No. 2 white, \$1.62; No. 2 white, \$1.62; No. 2 mixed, \$1.62.

### CORN

May 24—Corn is firm and has been the greater part of the time since our last issue. The late season and the fact that the public is learning that supplies throughout the country are not as large as they have been led to believe accounts for considerable of the strength shown by this grain and helps explain why the market was not in sympathy with any breaks made in wheat prices during the past fortnight. A fair export business is being reported and receipts from the country are only moderate. Last week Chicago received 1,490,000 bushels and shipments amounted to 1,883,000 bushels. The opening of the present week saw corn higher in price on

Edited by H. H. MACK

## MARKET SUMMARY

Reports of crop damage coming from Kansas lends strength to all grains. Good prospect for higher prices in near future. Beans firm after recent advance. Poultry slow. Butter and eggs firm. Hay steady. Cattle active and higher.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

several of the large markets. Exports of corn during April amounted to 18,000,000 bushels this year, compared with 10,000,000 bushels last year.

### Prices

Detroit—No. 3 yellow, 65 1-2c.  
Chicago—No. 3 yellow, 61 1-2@ 62c.  
New York—No. 2 yellow, 80c.  
One year ago—Detroit, No. 3 yellow, 63 1-2c; No. 4 yellow, 60 1-2c.

### OATS

May 24—Oats have weakened slightly in sympathy with wheat but there has been no important price changes. The fact that the old crop is getting pretty well cleaned up and the new crop will not be large is having a beneficial effect upon the market. Oat prices are quite likely to continue their slow advance.

### Prices

Detroit—No. 2 white, 45c.  
Chicago—No. 2 white, 38 3-4c.  
New York—No. 2 white, 50c.  
One year ago—Detroit, No. 2 white, 43 1-2c; No. 3 white, 42c; No. 4 white, 39c.

### RYE

May 24—In accordance with the general belief that prices in the rye market were too low advances were made the country over during the past two weeks ranging from 1 1-2c at Detroit to 4 1-2c at Chicago. On the opening day of the current week there was a slight decline although the market remained firm.

### Prices

Detroit—Cash, No. 2, \$1.09.  
Chicago—Cash, No. 2, \$1.05.  
One year ago—Detroit, No. 2, \$1.52.

### BEANS

May 24—The bean market may be expected to remain comparatively quiet for a long time after its spurt of the last ten days when Detroit quotations advanced from \$7.20 to \$8.50 per cwt. Wholesale purchasers have shown their disapproval of sharp advances in prices by withdrawing entirely from the market which has caused supplies to accumulate and brought about temporarily lower prices. Beans at \$8.25 are getting very close to a parity with other like foods and with the hot weather coming on consumption is quite likely to take a sharp drop. We look for no important price declines in this market, and \$10 beans are not out of reason before the next crop, but we are certain that future price advances will be slow in coming.

### Prices

Detroit—Choice hand picked, \$8.50 per cwt.  
Chicago—Michigan C. H. P., \$7.50@7.75 per cwt.; red kidneys, \$8@8.25 per cwt.  
One year ago—Detroit, C. H. P., \$4.00.

### POTATOES

May 24—The potato market is weakening under the burden of increasing supplies of both old and new stock. The Detroit market is amply provided and prices have taken a drop of ten cents a bushel in the last few days. We still expect to see a slight spurt in prices before the wind up but the season is getting pretty far advanced for any farmer to expect to receive any material advantage from higher prices. Efforts of the Business Farmer to induce the U. S. Bureau of Markets

to send out a statement which might counteract the effect of their March 1st estimate of potatoes remaining in hands of farmers were useless. The department maintained that it gave all the facts and that it was not its fault if newspapers distorted the facts in their head-lines which many of them most assuredly did. The Business Farmer takes the position that the government should have so worded its report as to admit of no misinterpretation. We are convinced that it was the publication of this report which knocked the pins from under the potato market the first of March from which blow it has not yet recovered. It is impossible to understand why, with a total production of less than 350 million bushels prices should not have ruled much higher than they have.

### Prices

Detroit—\$1.92 per cwt., sacked.  
Chicago—\$1.50@1.60 per cwt., Michigan, sacked.  
One year ago—Detroit, \$1.15 per cwt., sacked.

### HAY

This market continues firm and higher price levels have been made at some points. Receipts remain small while demand is fairly active.

### Prices

Detroit—Standard timothy, \$21@22; light mixed, \$21@22; No. 2 timothy, \$20@21; No. 1 clover, \$16@17.  
Chicago—No. 1 light clover mixed, \$24@25; No. 2 timothy, \$23@25; No. 1 clover mixed and No. 1 mixed, \$21@23.50; No. 1 clover, \$20@21.  
One year ago—Detroit, standard timothy, \$19@20; No. 2 timothy, \$18@19; No. 1 light mixed, \$19@20; No. 1 clover, \$15@16.

## MISCELLANEOUS MARKET QUOTATIONS

Detroit, Wednesday, May 24th  
BUTTER—Best creamery, in tubs, 33 1-2@34c per lb.  
Eggs—Fresh, current receipts, 24@25c; fancy storage packed, 27@27 1-2c per doz.  
APPLES—Steel's Red, \$3.25@3.75; Baldwin, \$2.75@3; western, boxes, \$3.50@4.50.  
STRAWBERRIES—Good fruit, \$4.50@4.75 per 24-quart case.  
HONEY—Comb, 22@25c per lb.  
POPCORN—4 1-2@5c; Little Buster, 10c per pound.  
DRESSED HOGS—Small to medium, 12@13c; heavy, 10@11c per lb.  
DRESSED CALVES—Choice, 13@14c; medium, 11@12c; large coarse, 8@10c per lb.  
LIVE POULTRY—Broilers, 1 1-2 lb. and up, 47@52c; leghorns and small broilers, 42@44c; large fat hens, 27@28c; medium hens, 27@28c; small hens, 27@28c; old roosters, 16c; geese, 13c; ducks, 25c; turkeys, 30c per lb.

## EAST BUFFALO LIVESTOCK MARKET

The receipts of cattle Monday were 90 cars. Our market opened 15 to 25c higher on medium weight and weighty steer cattle, which were in light supply; butcher steers and handy weight steers were in light supply, sold 15 to 25c higher; heifers were in very light supply, sold 25c higher; bulls were in moderate supply, sold steady; all grades of cows were in heavy supply, sold 25c higher; stockers and feeders were in very light supply, sold strong; yearlings were in light supply, sold steady.

Top on heavy cattle was \$8.75 for two loads of good quality, fat, Michigan steers, averaging around 1,350 pounds.

Top on yearlings was \$8.85 for one load of good quality, 2-3 fat, yearling steers, averaging 612 lbs.

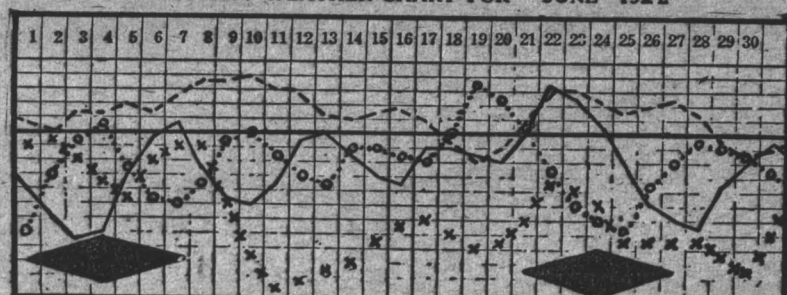
### Hog Prices Drop

A big bulge in hog receipts at all markets May 22 broke prices 15 to 25c, compared with Saturday's close. Buffalo receipts totaled 15,200 head.

## THE WEATHER FOR NEXT WEEK

As Forecasted by W. T. Foster for The Michigan Business Farmer

### FOSTER'S WEATHER CHART FOR JUNE 1922



Straight, heavy horizontal line is for normal temperatures; crooked lines, temperature forecasts; where they go above normal line means warmer, below means cooler; diamonds are for severe storms and rain increase; solid, crooked line for all north of latitude 35 between meridian 90 and Rockies crest; broken line for south of 35, between meridian 90 and Rockies crest, also Louisiana and Mississippi; X line, east of meridian 90, north of 35; O line, north of 35 and west of Rockies crest.

WASHINGTON, D. C., May 27.—Severe storms are expected on the continent during the week centering on June 4. For their locations see divisions. These severe storms will bring an increase of rain where rain has been predicted and following will occur the northern frosts that are expected during the week centering on June 10. These storms will be unusually severe and I advise to be on the outlook for tornadoes. Some destructive hail storms are expected. But it is quite difficult to locate hail, tornadoes and thunder storms. These all come from the same causes exactly. Tornadoes are of electro-magnetic origin, hence lightning and thunder. Hail comes from tornadoes that are so high that they do not touch the earth and they throw the moisture so high that it freezes into small round ice balls, gathering and freezing more moisture as they fall, therefore the rough forms of hail. When the hail does not fall thru a cloud, the hail stones are smooth and round. Crops should be insured for the first ten days of June. The storms of first week in June impress me to again warn you of their danger.

Northeast—East of 90, north of 35. Temperatures below normal during week centering on June 5; only a little higher for week centering on June 8. Severe storms near 5, great fall in temperatures from 5 to 11. Good cropweather during first ten days of month. Frosts north of lakes near June 11.

At least average crops will be produced by North America this year and market values of grain and cotton have been too high because of a great battle between the bulls and bears in which the former have been the masters. That battle is about completed and I believe the markets will go much lower before middle of June. Conditions, supply and demand have not warranted the recent high markets of these staples and I advise those who are on the long side of future deliveries to get out.

Chicago reported 62,000 and a 25 to 35c lower market. The sellers here were forced to make concessions of 15 to 25c before the packers would buy as they were the main outlet for the good hogs, with the bulk going to their quarters at \$11.15, with a few decks of light mixed going to outside buyers at \$11.25. Yorkers and pigs sold at \$11.25; roughs, \$9; stags, \$5.50 to \$6.

The receipts of sheep and lambs today were 5,000 head. The market opened steady on yearling lambs with last week's close, tops selling from \$13 to \$13.50; culls, \$10 to \$11; yearlings, \$9 to \$10; wethers, \$8 to \$8.75; ewes, \$5.50 to \$6.50. Best spring lambs sold from \$16.50 to \$17, with one bunch of ewe and wethers up to \$18. From all inquiry we think lambs will sell a little better the latter part of the week.

The receipts of calves today were estimated at 3,500 head. Choice calves sold 25c lower than last week's close, best selling from \$10.75 to \$11; throwouts, 120 to 140 lbs., \$8 to \$8.50; with a few state culls selling up to \$9; heavy throwouts, 160 to 190 lbs., \$6.50 to \$7; heavy fat veal calves, \$7 to \$8, as to weight and quality.

#### LIVE STOCK QUOTATIONS

The following prices were paid at Detroit on Tuesday, May 23rd:

Cattle	
Best heavy steers.....	\$7.50 @ 8.50
Best handy wt. butcher steers.....	7.75 @ 9.00
Mixed steers and heifers.....	7.50 @ 8.00
Handy light butchers.....	7.00 @ 7.75
Light butchers.....	6.00 @ 7.00
Best cows.....	5.50 @ 6.25
Butcher cows.....	5.00 @ 5.75
Bologna bulls.....	4.50 @ 5.50
Cutters.....	3.75 @ 4.50
Canners.....	2.50 @ 3.75
Choice bulls, light.....	6.00 @ 6.50
Feeders.....	6.00 @ 7.25
Stockers.....	5.50 @ 6.50
Milkers and springers.....	45.00 @ 75.00

Calves	
Best grades.....	\$11.50 @ 12.00
Others.....	5.50 @ 11.00

Sheep and Lambs	
Best lambs.....	\$13.00
Fair lambs.....	10.00 @ 11.00
Light to common lambs.....	5.00 @ 8.00
Fair to good sheep.....	7.00 @ 7.50
Culls and common.....	1.50 @ 3.00

Hogs	
Mixed hogs.....	\$11.00
Pigs.....	10.25
Roughs.....	8.75 @ 8.85
Extreme heavy.....	10.00 @ 10.25
Stags.....	5.00 @ 5.50
Boars.....	3.00

#### WEEKLY MARKETGRAM

U. S. Bureau of Markets and Crop Estimates

**FEED**—Wheat mill feed slightly firmer after severe decline. Eastern demand improved for spot feed, but offerings are accumulating in south western markets. Spring bran, \$20; Standard middlings, \$20.50; Minneapolis winter bran, Kansas City, \$19; cottonseed meal dull; 36 per cent meal, \$43.50, Memphis; linseed meal, \$49.50, Minneapolis. Crushers operating better but demand for meal slow. Gluten meal, \$32.85, Chicago. Good demand for hominy feed but supply limited. Quotations higher at \$23.50, Chicago. Beet pulp \$44, New York.

**LIVE STOCK AND MEATS**—Chicago prices of medium and heavy weight hogs advanced ranged from 20 to 40 cents. Beef steers up 10 to 15 cents, butcher cows and heifers practically steady; veal calves 25 cents higher, stockers and feeders unchanged. Fat sheep mostly 75 cents to \$1 lower; spring lambs 50 to 75 cents lower; yearlings 75 cents to \$1.25 and ewes 75 cents to \$1 down. May 20 Chicago prices: Hogs, top \$11; bulk of sales \$10.50 @ 10.95; medium and good beef steers, \$7.75 @ 8.85; butcher cows and heifers, \$4.85 @ 5.50; feeder steers, \$6.25 @ 7.85; light and medium weight veal calves, \$7.50 @ 10; fat lambs, \$10 @ 12.75; spring lambs \$13.25 @ 15; yearlings, \$8.25 @ 10.50; fat ewes, \$4 @ 7.25. Stocker and feeder shipments from 12 important live stock markets during the week ending May 12 were: Cattle and calves, 55,192; hogs, 10,885; sheep, 16,604. Eastern wholesale fresh meat prices continued on their downward course. Beef weak to 50 cents lower; veal and mutton weak to \$4 lower; lambs steady to \$1 lower; light pork loins weak to \$3 lower; heavy loins down \$1. May 19 prices good grade meats: Beef, \$13 @ 14.50; veal \$13 @ 14; lamb, \$25 @ 28; mutton, \$17 @ 20; light pork loins, \$21 @ 23; heavy loins, \$16 @ 20.

**DAIRY PRODUCTS**—Butter markets easy at close. The tone is very sensitive on account of seasonal influences. Receipts including increased quantities strong grass flavor. Closing prices \$2 score: New York, 36 1-2 cents; Philadelphia and Boston, 37 cents; Chicago, 34 cents. Cheese market firm. Prices on Wisconsin cheese board Monday averaged 1 cent advance and this week's business in producing section is on the higher basis. Prices at Wisconsin primary markets May 19: Twins, 17c; daisies, 17 1-4; double daisies, 17; young Americans, 17 1-4; square prints, 13 1-4 cents. Longhorns, 17 cents.

#### CROP REPORTS

**MIDLAND**—We have been having rain for the past week, but not enough to hold up farm work. Everybody working to get corn in. Oats are coming along well. Roads are in pretty good condition.—C. L. H.

**MISSAUKKEE**—We are having finest rain of the season. Came in due time. Meadows looking the best in some time and some rye is good, but the most of it is small. Fruit trees blossoming full.

Some corn and potatoes are planted and some will not plant for a week or ten days yet. Cream, 32c; eggs, 20c. Potato market flat.—H. E. Nowlin, May 19.

**WEXFORD**—Crops are growing nicely. Lots of seeding being done. Corn is nearly planted. C. H. Bostick of Manton has a new tractor. Everything is blooming and looks like lots of fruit. It has rained every day this week so far. Last fall's seeding of sweet clover and alfalfa are coming great.—W. A. J., May 19.

**ST. CLAIR**—All farm work at a standstill just now on account of almost continuous 3-days rain. The soil is very wet at this writing and will take a number of days before farming operations can be resumed. Meadows are looking good. Clover came through the winter with a perfect stand. As a whole wheat and rye are looking good although some fields are looking poor, probably due to condition of the soil. Quite a lot of building this year, notably barns. Some wheat in farmers' hands yet, other crops about all gone to market.—L. J., May 20.

#### DYNAMITE IN THE ORCHARD

**R** dynamite is being used more extensively than ever this year in the rejuvenation of old orchards and the planting of new ones throughout Oregon, Washington, Idaho, New York and the New England states. Experiments show that blasting can be used effectively both in restoring vigor to old orchards and in stimulating the growth of trees planted in unfavorable locations.

Most satisfactory results are obtained by loosening the earth around the tree as close to the roots as possible. In orchards already established, the method of loosening the earth is to fire small charges of farm dynamite (about one-fourth pound) in holes punched about four feet deep and close to the outer circumference of the roots. In the case of small trees, these holes should be blasted about six feet from the trunk; for larger trees, just beyond the spread of the branches. Where trees have been growing for several years and are set thirty or more feet apart, an excellent practice is to place the blasts midway between the rows.

Through the loosened soil the fine roots can more easily penetrate and draw sustenance from a wider area and rain water can seep down into the soil and form a reservoir of moisture upon which the tree can draw in times of drought. If the earth is in need of enriching, the holes so blasted can be filled with alternate layers of manure and any suitable fertilizer.

The idea of blasting holes for orchard cultivation is credited to an ingenious orchardist in California who found digging in rocky soil very difficult. Nearly forty years ago he made his experiment and other fruit growers, inspired by the rapid growth of trees so planted, followed his example. After years of experimentation, the opinion of orchardists is that trees planted in blasted holes develop more quickly and bear more fruit.

#### HOW TO TAN HIDES

**I**n response to many requests from farmers for explicit and dependable directions for tanning sole, harness or belting leather, the Bureau of Chemistry of the United States Department of Agriculture has prepared a leaflet containing for the treatment of a single cow, steer, or bull hide from the time it is taken from the animal until it is finished ready for one of these purposes. The equipment and methods have been modified from those that are in use where large numbers of hides are handled, but when the work is done with care as to materials and time for the various stages a good quality of leather may be produced from good, sound hides.

The method for which directions are given is for making what is known as oak-tanned leather, though either ground oak or hemlock bark can be used. The process involves thorough washing, softening and scraping of the hide, liming to take off the hair, deliming, tanning with the bark infusion, and finishing.

This leaflet may be obtained free from the Bureau of Chemistry, U. S. Department of Agriculture, Washington, D. C.

**Take Your Automobile Along**—Automobile rates reduced from 15 per cent to 25 per cent on D. & C. Steamers leaving Detroit daily 5:30 p. m., for Buffalo; 11 p. m. for Cleveland, on Eastern time.

## BUSINESS FARMERS' EXCHANGE

**50 A WORD PER ISSUE**—3 insertions for 10c per word. Farm for sale ads. not accepted for less than 3 times. Twenty words is the minimum accepted for any ad. in this department. Cash should accompany all orders. Count as one word each initial and each group of figures, both in body of ad. and in address. Copy must be in our hands before Saturday for issue dated following week. The Business Farmer Adv. Dept., Mt. Clemens, Michigan.

### FARMS & LANDS

**68 ACRE FARM FOR SALE.** MARTIN SMITH, Rhodes, Mich.

**\$1200 SECURE EQUIPPED FARM** Between Detroit and Chicago; owner unable to operate longer reduces price this fertile 120 acres over 30000; a big bargain at former figure now a knockout; all advantages handy; 85 acres rich loam tillage, 15-cow pasture, woodlot; orchard, good 2-story house, 76-ft. basement barn, poultry house, etc. Per quick sale horses, cows, poultry, tools, crops included, only \$7800, with \$1200 cash. Details page 92 Illus. Catalog 1200 Bargains FREE. STROUT FARM AGENCY, 814 B2, Ford Bldg., Detroit, Mich.

**LAKEVIEW FARM, HANDY CITY, 40 acres;** horses, hog, 4 cows, poultry, vehicles, tools included; close RR. town; all rich tillage; 40 fruit trees; attractive house, barn, garage, poultry house, etc. To close out \$5500, only \$2000 cash. GEO. R. ROSE, 326 M. A. C. Ave., East Lansing, Mich.

**40 ACRE FARM FOR SALE. LARGE OR-**chards of all kinds of fruit. Up-to-date 10-room house, large barn and silo. All other buildings good. 1 mile from town. Price right. Write to GUST. DRAHEIM, R. 1, Bloomington, Mich. (P)

**FOR SALE—100 ACRE FARM 50 ACRES** in city limits. Fruit, pasture. MRS. J. R. SAILOR, 114 Irwin Ave., Albion, Mich. (P)

**IF YOUR FARM OR COUNTRY HOME IS** for sale. Write us. No commission charged. CLOVERLAND FARM AGENCY, Powers, Mich.

**BUY SLOCUM FARMS. SIZE 40 TO 4600** acres. Price \$20.00 per acre and up. Terms 10 per cent down. Interest, 1st year 3 per cent, 2nd year 4 per cent, 3rd year 5 per cent, balance 6 per cent. Apply SAMUEL BUTLER, Slocum, Michigan.

**LANDSEEKERS AVAIL YOURSELVES OF** opportunity; locate in "Best of Western Michigan Fruit Belt." All sized tracts, fruit and general farming, sells \$6 to \$100 acres. Write J. W. SAUNDERS, Beulah, Mich. (P)

**FOR SALE ONE OF THE BEST 225 ACRE,** black top, clay bottom, level and fertile farms in Michigan. \$125 per acre. Terms. Owner, M. A. SAMS, Coleman, Mich.

**SOLDIER—640 ACRE HOMESTEADS, 7** month residence. DUFF, Casper, Wyoming. (P)

**140 ACRES, BEST SOIL, LARGE HOUSE** and barn. All buildings good. 1 mile from town on hard road. Write RUDOLPH HASSLER, R. 4, Sandusky, Mich.

**SEE THIS—CHOICE SECTION MICHIGAN** farm land; 740 acres hardwood land 12 miles from city on gravel road; natural clover soil; all fenced (125 acres cleared); some saw timber, cedar and large quantity fuel wood; new ten room house, brick first story; water, light, heat, telephone; barn 40 feet by 80 feet, truss roof; other buildings, implements, stock, young orchard, 1200 trees just coming into bearing, best varieties, mostly apple. If interested for business, send for complete description. BOX 7, Alpena, Mich.

**80-ACRE FARM. CLAY LOAM SOIL. FAIR** buildings. Half improved. Tiled. Deep well. Orchard. Write owner, KENNETH MARSHALL, Coleman, R. 2, Mich.

### MISCELLANEOUS

#### NURSERY STOCK AND SEED

**NEW STRAIN YELLOW SEED CORN FOI** crib or silo. Greater food value. Shells 58 1/2 pound. FRANK WOODWARD, Clinton, Mich. (P)

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**300 BUSHELS PETOSKEY RUSSET POTATOES** at \$1.25 per bu., sacks included. 250 bu. Carmen at \$1.10 per bu., sacks included. Also 75 bu. Carmen seed potatoes at 60c per bu. ARTHUR CHURCH, Bad Axe, Mich., R. 4.

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**FOR SALE—LITTLE JAP BUCKWHEAT.** A-No. 1 quality. \$2.00 per hundredweight. C. G. KETCHAM, R. F. D. 1, Mt. Clemens, Mich. (P)

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**STRAWBERRY PLANTS—SPECIAL OFFER.** 150 Senator Dunlap, 150 Warfields, \$2.00; postpaid. Senator Dunlap \$4.00 per 1,000; \$2.25 per 500; not prepaid. Satisfaction guaranteed. Catalog free. Write today. HAMPTON & SONS, Bangor, Michigan.

**STRAWBERRY PLANTS FOR SALE. SEN-**ator Dunlap, Gibson and Dr. Burrill. 40c per hundred, \$3.00 per thousand. Progressive Everbearers \$1.00 per hundred, \$10.00 per thousand. ROBT. DE GURSE, Ovid, Mich.

**STRAWBERRIES, 2 LEADING VARIETIES,** 1000 Dunlap Plants \$3.25; 1000 Gibson Plants \$3.75; 1000 Raspberry Plants \$12.00. FRED STANLEY, 124 Main St., Bangor, Mich. (P)

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**I WANT TO BUY GOOD SECOND-HAND** child press. Write me full particulars. ROBERT H. WOLCOTT, Mt. Morris, R. 2, Mich.

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**RELIABLE MIDDLE AGED LADY WANTS** position as house keeper, where there is no other woman, am also pianist, for good dancing or pictures. M. SMITH, Salem Hotel, Salem, Mich.

**HELLO GIRLS! AM A YOUNG MAN OF 29** I wish to correspond with some nice lady. ARTHUR THOMPSON, Johnsonburg, N. Y.

**GOVERNMENT NEEDS RAILWAY MAIL** clerks, \$133 to \$192 month. Write for free specimen questions. COLUMBUS INSTITUTE, 0-4, Columbus, Ohio. (P)

**WANTED—MAN WITH TEAM OR AUTO** to handle S. M. Co. Products in some choice vacant territory. For particular address, SAGINAW MEDICINE CO., Saginaw, Mich. (P)

**SIDE LINE SALESMAN WANTED TO SELL** coal to your trade in carload lots. Earn a week's pay in an hour. For particulars write, WASHINGTON COAL CO., 3535 So. Racine, Chicago.

**LIGHTING PLANT FOR SALE. J. E.** Colt acetylene gas plant in No. 1 condition. Pipe and fixtures for the house and barn. Used two years. Store for cooking. Will sell cheap. Write WILBUR LUND, Waukegan, Mich. (P)

**FOR SALE, BUCKEYE TRACTOR DITCHER,** caterpillar type wheels. Digging wheel nearly new. Machine in good running order. Other interests for sale. ORVILLE ELDRED, Farmington, Mich. (P)

**BARREL LOTS SLIGHTLY DAMAGED** crockery, hotel chinaware, cookingware, aluminumware, etc. Shipped direct from factory to consumer. Write for particulars. E. SWASEY & CO., Portland, Maine.

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COLUMBIAVILLE WOOLEN COMPANY,

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**\$2.98**



No. 210

LADIES' ONE-STRAP Handsome soft kid-finished slippers. New and stylish one-strap model with two buttons, rubber heels and medium round toe. Why pay \$2.50 or \$3.00? Get this bargain quick. Sizes 2 1/2 to 8. Pay only \$1.49 plus postage on arrival. Order by No. 210.

**\$1.49**

**Send No Money**

## Latest Sport Oxford

Yes—the very latest—and city stores get \$4 and \$5 a pair for these Ladies' Sport Oxfords. White canvas, trimmed with either black or brown leather (be sure and state choice). You'll be surprised at this value. Only \$1.98 plus postage on arrival. Sizes 2 1/2 to 8. Mention size, color of leather and order by No. 1214.

**\$1.98**



No. 1214



No. 1208

## Save One Half!

Greatest work shoe bargain ever offered anywhere. We're now getting a thousand orders a day for them. They're Genuine Munson last Army work shoes. Made of best grade wax veal leather, soft and pliable, yet guaranteed manure and acid proof. Double leather insoles. Double sewed seams. Soles of selected best wearing leather stock. Guaranteed counters. In dark brown color. Formerly sold at \$3.95. Now only \$1.97 plus postage on arrival. Sizes 6 to 12. Order by No. 181.

**\$1.97**



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## Patent Leather One Strap

A slipper that is pretty enough for a Queen. Rich in quality—rich in style—rich in comfort—unmatchable in value. Selected black patent leather. Newest style broad two-button one strap. Ball strap perforation. Military walking rubber heels. Best wearing leather soles. The greatest slipper offer of the year. Order No. 1252. Sizes 2 1/2 to 8. And pay only \$2.98 plus postage on arrival.

**\$2.98**



No. 1252

**30 x 3 \$7.45 Plus Postage**

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Guaranteed 6000 Miles Biggest tire bargains ever advertised. Brand new high-grade non-skid, made generously oversize, and guaranteed 6,000 miles or adjustment made on basis of mileage given. Many give 8,000 and 10,000 miles. We do not sell seconds or rebuilt tires. Send no money—just pay postman our cut price, plus postage.

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30x3 1/2 . . . 8.45	33x4 . . . 15.95
32x3 1/2 . . . 12.45	34x4 . . . 16.95
31x4 . . . 13.45	

**Gordon Bates Co. Dept. 532 Minneapolis, Minn.**

**Satisfaction Guaranteed!**

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## Two Polly Primms for only 92¢

When you can buy pretty percale "Polly Prim" slip-over aprons at this unheard of cut price, you'll probably want more than two. They're in pretty patterns, with two pockets, and rich rick rack trimmings. Handy every day in the year. Only 92¢, plus postage, on arrival, for two different patterns. Order by No. 816. If not pleased, return them and get your money back at once.



## U.S. Army Khaki Wool Blankets



**\$2.98**

The most sensational bargain yet in army goods. Guaranteed perfect condition Khaki color O. D. all wool U. S. army blankets, all full size 66x84. Send in your orders at once. Be sure you get several at this big bargain price. Order by No. 3200.

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## Men's Stunning Oxfords

Stunning? You'll say so. And if you could see them in city show windows right now, you'd probably see a \$7.50 price tag on them. Selected broad side leather, rich brown shade. Extra fine leather soles. Broad rubber heels. New French Square Toe. Neatly perforated and stitched. Superb workmanship. Direct from Gordon Bates for only \$3.49 plus postage on arrival. Sizes 6 to 11. Order by No. 1131.

**\$3.49**



No. 1131

## Newest for Men!

Men! If you're particular—if you want the season's latest and snappiest style, get a pair of these quick. Rich brown color broad side leather. Selected leather sole, Goodyear stitched. Low broad rubber heels. New square French toe, handsome, perforated vamp and uppers. Only \$3.69 plus postage on arrival. Sizes 6 to 11. Order by No. 2109.

**\$3.69**



No. 2109

## Tremendous Bargain!

Topmost Quality Muleskin Outing Shoes. Tough muleskin uppers, can't be beat for wear. Indestructible chrome soles. Sensible roomy last, great for comfort. Simply a sensational bargain at our cut prices. Only \$1.88 for men's sizes 6 to 12. Order by No. 102. Order No. 314 for Boys, sizes 1 to 5 1/2, price \$1.69. And sizes 9 to 13 1/2 for small boys, order No. 315, price \$1.49. Send no money. Just pay on arrival, plus postage.

**\$1.88**



**Don't Send Any Money Now**