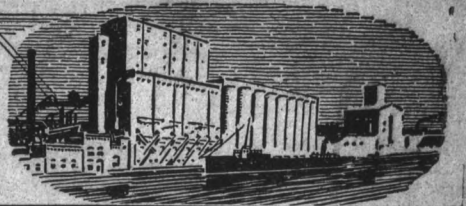


# *The Michigan* BUSINESS FARMER



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*Cultivating the Corn*



### OAKLAND COUNTY FARMERS TAKE DAY OFF

WHEN investment, upkeep and family overtime are rated, the average farmer of this county has been forced to acknowledge a pretty small return for his time investment, and he is rapidly coming to think that the cause and the remedy both rest with himself.

Right in the midst of potato planting when haying and other farm work are close at hand Oakland county families are taking time for a day's drive into the sections east and north of their homes to see the country in the most beautiful month in the year.

Incidentally, they wish to know their own state better, but more than this they desire to see how others, under different conditions, are working out their life's problems and so get a better perspective of their own job. Thus, they are placed in a better position to see the vital forces at work in their own business and also those forces that make for a better solution of the rural problem as a whole.

Last year a tour was made of Oakland county. About one hundred twenty-five men and women took

time to see their own county, its beautiful vistas, attractive lakes, and some of their county's most outstanding farms.

Upwards of two hundred folks were scheduled to take the trip this year but the great help shortage at seed time cut the forces down to a quarter of the members who desired to participate.

Things that especially interested the party were a beautiful drive to Port Huron, a visit to the St. Clair County Farm, a glimpse of the Port Huron Thresher Works and the Diamond Crystal Salt Works at St. Clair. A picnic dinner at Lakeside Park, Port Huron, gave every member of the party a vivid idea of what opportunities are offered by a fine landscape, a beautiful lake front and the human element strictly in tune for the occasion.

Too much had been planned for the day and a visit to the Michigan Business Farmer, the Aviation Field and the Detroit Creamery Company's Farm at Mt. Clemens all had to be hastily considered after six o'clock. At that time a considerable part of the tourists had been forced to return home to attend to the regular evening round of details.

A tour of this description gets farmers into a thoughtful mood, and in such a mind the idea of more planning, a better system, and the need for more constructive work in organization become strangely apparent.—C. B. Cook, County Agricultural Agent, Oakland County.

### SOIL SURVEY TO BE PUSHED FORWARD

THE soil survey of the state which was started a few years ago will be pushed forward this summer by the United States Department of Agriculture, the state department of Agriculture and the Michigan Agricultural College.

Van Buren, Kalamazoo, Manistee, Ogemaw and Mackinac counties are included in this year's survey plans. The soil types and general topography of the land will be mapped and later the maps will be published and placed at the disposal of the people of the state.

Experiments in different parts of the state have brought out the fact that certain soils need more fertilizers than some others. Also different fertilizers are needed on different soils. A map having the areas of these different soils mapped out on them would be of inestimable value to the farmer and the prospective settler in guiding his selection of the right kind of land for certain crops and the correct fertilizers

and methods of handling the soils for the best results.—C. E. Johnson, M. A. C. Correspondent.

### MICHIGAN TO HAVE CO-OP. MARKETING REPORT SERVICE

COMMISSIONER of Agriculture John A. Doelle announces that plans have been about completed, in co-operation with the U. S. Bureau of Markets, for a co-operative Marketing Reporting Service in Michigan for the shipping season.

The arrangements were completed by W. P. Hartman, director, Bureau of Foods and Standards, who has just returned from Washington. The tentative plans provide for the main office in connection with the Department, at Lansing. The first reports will cover the cherry crop, the daily markets wired to the cherry producing centers. Later, it is planned to establish a sub-station at Benton Harbor, or other center, to serve the fruit shippers, apples, peaches and grapes, all along the west shore from Berrien county to the Grand Traverse region.

Later in the season, a sub-office will probably be opened in Grand Rapids to handle potato and apple shipments, and, perhaps, the celery crop.

Based upon latest available reports, the present outlook for the fruit crop is fifty per cent greater than last year, with a prospective value to the growers exceeding \$25,000,000.

In recognition of this volume of traffic, the need of handling the fruit crop promptly and efficiently coupled with the demands of the potato growers, led the Department of Agriculture to take the initiative in soliciting the co-operation of the Federal Bureau at Washington.

### BETTER METHODS WITH CORN LAST YEAR

AT least 94,896 farmers were directly influenced to use better methods in growing corn last year because of the demonstration and other work of county agents employed co-operatively by the United States Department of Agriculture, the state agricultural colleges and the counties. A summary of yields produced on demonstration farms as compared with the average production of corn in the localities of the demonstrations shows that at least one and one-half times as much corn was produced to the acre on the demonstration plats. In some instances the yield was as much as 4 times the average.

Seed corn selection has brought a marked improvement in the quality of seed used in many communities. Reports show that as a result of demonstrations about 1,600,000 acres were planted with tested and selected seed in 1921.

In carrying on demonstrations, improved cultivation methods were given attention. The dry season of last year made the results of such cultivation stand out more conspicuously than they might have done otherwise and attracted attention particularly in the south. It was there that the greatest contrast in yields was noted.

In Brown county, Texas, where the dry season is particularly hard on corn, a former county agent introduced a local system of cultivation for corn which has proved very successful in that county and which might well be tried in other similar localities. Under this system corn is planted in widely-spaced rows, 6 1-2 to 7 feet apart, and given thorough cultivation until the ears are mature. A deep mulch is maintained by using a section harrow between the rows, after corn planted in narrowly-spaced rows is too large to plow with a cultivator.

Tests show that the same number of stalks on an acre in narrowly or widely-spaced rows may yield about the same in seasonable years, but that in seasons with a light rainfall, as in 1921, the widely-spaced rows given late cultivation make a decidedly better showing. For the last 3 years the corn crop where given proper cultivation has been successful, which shows that with proper cultural methods a good corn crop may be grown almost every year.



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## Progressives in Charge at Holstein Convention

Breeders of "Black and Whites" Make Several Important Changes in Constitution of Their

### National Organization

By J. H. FRANDSEN



H. W. NORTON, JR.,  
Lansing  
Mr. Norton was elected  
on the board of directors

HOLSTEIN conventions have not always been noted for accomplishing constructive work. Too often much of their time has been occupied with politics and in settling personal differences to the exclusion of essential things. In this respect the Thirty-Seventh Annual Convention of the Holstein-Friesian Association of America held in Kansas City June 5 to 10, set a new precedent. It was "A convention that accomplished things." Ending a long drawn-out fight by modernizing its constitution; demonstrating the efficiency of the delegate system; staging a dairy show and putting on a dairy program which surpassed anything previously attempted by a Holstein convention; providing adequately for Holstein extension work; providing a better basis for the judging of Holstein animals; aiding thru its co-operative sale in the distribution of about 200 good animals in the big Southwest where Holsteins are not yet well known—and putting this across out in the so-called undeveloped Holstein territory—constitutes a program not attained by any former Holstein convention.

For about ten years many of our best Holstein breeders have been quietly at work trying to effect certain changes in the constitution which would permit the most efficient administration, but it was not until this year at Kansas City that they succeeded. It was over this particular matter that the principal interest of this convention centered. It came to a head in connection with the Hackney amendment, which in effect changed the constitution so that the secretary, the treasurer and the superintendent of advanced registry shall be elected by the Board of Directors, instead of by the delegates.

In speaking of this amendment, former President D. D. Aitken argued that the Board of

Directors should be in a position to control the activities of the secretary and treasurer, and that these officers should be responsible to the board for their acts, as far as the association is concerned. "The Board of Directors," said Mr. Aitken, "must be an authority over the employees of the association and if they are spreading virus, the board must be in a position to tell them to cease. Put the board in a position where it can control and govern employees. All that the officials have to do is to make good to be re-elected."

The vote was overwhelmingly in favor of the amendment. This presumably ends a fight which has been carried on for almost ten years.

There was much interest in the amendments affecting transfer fees, and the matter was finally settled by the adoption of a compromise amendment which provides that if transfers are made within three months after date of sale, the fee to members shall be \$1.50; non-members, \$3. If the transfer is made after three months from date of sale, the fee shall be \$3 to members, and each transfer shall be used for extension work in places and in ways approved for by the Board of Directors. The adoption of this amendment should provide the additional money needed to promote the interests of the Holstein breed.

#### Purebred Sire Exhibit

Possibly no exhibit attracted more attention from visitors than the one featuring the value of the purebred sire. Many a dairyman, who so far has not been quite convinced that he needed a purebred bull at the head of his herd was found intently studying the illustrated material and copying in his own notebook information showing that in some herds there are scrub cows with an average annual milk production of only 3874.5 pounds of milk and an average butterfat production of 192 pounds. Where a sire 50 per cent purebred heads the herd, the next generation of cows is found to have an average of 6955 pounds of milk and 266 pounds of butterfat, or an in-

crease of 79 per cent in milk yield and 38 per cent increase of butterfat yield. When a sire 75 per cent purebred is used, the result is an average milk production of 12,817 pounds, or an increase of 231 per cent, and 486.45 pounds of butterfat, an increase of 153 per cent.

These experiments were all with one herd. There were many other illustrations as striking as the one mentioned. This exhibit, showing the importance of the purebred bull, grading up the common dairy herd and improving grade herds, appealed tremendously to dairymen in the Midwest country who are not so very old as dairy matters go. The young man in charge of this work was kept busy answering inquiries relative to the kind of purebred sires to select, what they would cost and where they could be procured. Much of the information in this booth came from the experimental work of the Iowa Experiment Station. Mr. Fred Koenig, in charge of the Holstein Extension Service, spent much time with the exhibit.

The United States Dairy Division, assisted by the Holstein Association, arranged to have its fine exhibit, previously used at the National Dairy Show, at this convention. This exhibit consisted of 26 booths, including the entire government exhibit of last year's National Dairy Show and two booths from the recent milk campaign in New Orleans. In general interest and in educational value it was one of the very best displays ever sent out by the U. S. Department of Agriculture.

The National Dairy Council under the supervision of M. O. Maughan, exhibited many things of interest not only to the milk producer, but to the consumer of dairy products. "Full of health and pep," "Milk three times a day," "My, but he's a husky-boy! Milk three times a day did it," were a few of the striking signs featuring their booth.

#### Better Basis for Judging

The National Committee on Judging and Classifications met during the convention, devoting a full day to a conference with interested breeders relative to matters of (Continued on page 19)

## Ottawa County Poultry Breeders Stage Tour and Round-Up

OTTAWA county is the largest poultry producing county in the state. Last year five million chicks were hatched in that county and it is estimated that the output for the present season will aggregate eight million, or nearly three times the production of 1920. The breeders in this county have fine flocks of purebreds and it was in the interests of better poultry that an all-day poultry tour was put on in that county on June 8.

The tour started from Coopersville promptly at 7 a. m. and the schedule was maintained right through. There were 60 autos at the first stop, Clyde Hollis' White Wyandotte farm, Jamestown, where Mr. C. M. Ferguson, poultry specialist, M. A. C., explained the prevailing type of White Wyandotte from standard and utility standpoint.

At the second stop, Walter Van Dam, who operates a combined fruit, dairy, poultry and general farm and a fine apiary, 75 cars or 280 people were present. Mr. E. C. Foreman, head of the poultry department M. A. C., gave a lecture on culling chicks and selecting breeding stock. Particular attention was called to the brooder equipment. At Margaret Strick's poultry farm the 20x80 Foreman type of house was examined. This house it is claimed is the best poultry house in the state. Miss Strick traps nests her hens. Starting Feb. 10th, one White Leghorn laid 103 eggs in 110 days, her longest record was 51 eggs in 51 successive days.

At Marinus Brandts a double demonstration was held. Mr. Ferguson giving a caponizing demonstration and Mr. Smith from Lakewood Farm demonstrating the wet and dry method of picking chickens. Mr. Foreman, the culling wiz-

ard, gave his ever popular culling demonstration at Thos. Beyer's pullet farm. Geo. Caball, a barred rock breeder, spoke to more than 400 people at his own place. His subject was "Mating Rocks for color and utility purposes." At M. Wyngarden's, Zeeland, Dr. L. E. Heasley, who has charge of breeding work on the Ferris farm, pointed out the need of poultrymen producing infertile eggs.

At Zeeland the Zeeland Poultry Association provided benches and coffee and an enjoyable noon hour was spent here. 115 cars with 450 people participated. Mr. Milham, county agricultural agent who arranged the tour in co-operation with the four poultry associations in the county, spoke on the importance of the poultry industry in Ottawa county and the relation of the chick hatcheries to the poultry industries. The Wolverine Hatchery and Grandview Hatchery were visited, these two being the largest in the county and in the state. Facts brought out were as follows: The combined capacity of the commercial hatcheries of Ottawa county is in excess of a million and a half eggs. This means that more than 500,000 eggs are set weekly by the hatcheries. Members of the Ottawa County Chick Hatchery Association have already shipped five and a quarter million chicks.

H. M. Eliot, head of the Farm Management Department, M. A. C., spoke on management of poultry farms from the standpoint of marketing products at C. DeJonge's place. At the Holland Hatchery, Mr. Foreman addressed the tourists on the future of the poultry business. He stated we were just getting started in the poultry business and that eventually poultry meat and eggs

will be a dominant factor in the price of other meat products. D. L. Hagerman, agricultural and industrial agent of the Penn. R. R. also addressed his many friends.

The round-up was held at Simon Harkem's place near Macatawa Park. H. J. Stafseth, who made a special study of poultry diseases, gave a very instructive and educational lecture on poultry diseases. He demonstrated the taking of a blood sample for diagnosis of diseases.

Mr. Bennet, county agricultural agent from Barry county brought six loads of poultry enthusiasts with him. K. K. Vining, from Kent county, Claire Taylor from Newago county, D. C. Long from Muskegon county, I. T. Pickford from Oceana county, Miss Clark, home demonstration agent from Kalamazoo county, and Miss Woodworth, home demonstration agent from Allegan county, completed the list of "notables" from outside Ottawa county.

The tour was a complete success and another will be held next year. Plans are under way for a state poultrymen's tour and a state chick hatcheries tour to Ottawa county this fall. Ottawa county is making rapid strides in commercial production of quality poultry chicks and eggs and at the present time a number of poultrymen are starting the production of certified chicks of known breeding. The college plans to sell pedigreed cockerels at \$3 each which will stimulate quality birds in Michigan. The soil and climate of Ottawa county is well adapted to production of fruit and chickens and Ottawa is aiming at the goal of the biggest and best poultry county in the United States. It is rapidly reaching that goal.



# Danger Signals on Co-operative Highway

*Private Gain is Only one and Not the Most Important Advantage of Co-operative Effort*

THE private system of marketing produce from the farm has grown up under the spur of private profit. It was quite natural that this should be the way in which marketing should develop for the reason that it has only been recently that agriculture has been commercialized. Until recent years the produce which went into the channels of trade was the surplus gathered up from the many sections of the country. This development of the market system was a result of necessity and the services which have been performed are essential. The well informed does not question the essential services of the middleman or doubt that he is a real producer. However, it must be admitted that this system has been developed under conditions that made the impelling force one of private gain other than one of service. It is quite doubtful whether those things which tend toward private profit and the welfare of the individual are always for the best interests of society at large. Profit, which under our present system goes to a separate class of middlemen, is the main motive of our market system and those things which tend toward a greater profit are the things which are desired by those who are in the business of performing market services. Practices which grow up under present conditions of marketing are not looked at through the eyes of him who desires to secure the best interests of producer, middleman and consumer; but rather through the eyes of him who desires to increase his own profit. The institution of markets as now developed has back of it the incentive of private profit rather than the incentive of community or social betterment.

There is a realization among market middlemen that there exists a certain class interest and every effort to encroach upon their domain is naturally opposed. Certain standards of living are desired and required. Every effort is being made to maintain a reasonable margin of profit in order that these living standards can be maintained. The recognition of this class consciousness among different classes of private market men is evidenced by the existence of trade associations. The primary function of such associations is to improve the conditions within the

J. T. HORNER

Department of Farm Economics, M. A. C.

## WHY DO MEN CO-OPERATE?

J. T. Horner's accompanying article discusses co-operation among farmers from a somewhat different viewpoint. Private gain is popularly believed to be the sole advantage of co-operative effort, but Dr. Horner says not. Indeed, he claims it is one of the least. He doubts if the saving through co-operative marketing can be made sufficiently large to warrant the effort and the risk. But, he points out, there are many other and more important advantages to co-operation. These are discussed in this article together with a few danger signals on the road to co-operative success. Read his article. If you don't agree with all he says let us hear from you.—Editor.

trade and, what is natural, to protect the members as a class from the undermining of their station in the economic society of the day. The great pressure which is brought to bear upon certain classes of these middlemen is such that they must necessarily seek the most effective and economic methods of doing business in order to survive. This is not bad. It is a good tendency. Anything which increases efficiency in the production of the things man wants is desirable unless it results in some manner in privilege or some other injustice. The point here is that the market class recognizes a class interest and is organized to protect that interest. The present make-up of our commercial and industrial system is such that this type of market machinery operators are firmly entrenched. The problems of efficiency were not so paramount to them until the "menace" of co-operation and other types of market distributive agencies began to appear. The fight which is made against co-operation is along the most logical line and that is lack of efficiency.

Attacks are being made against other types of distributive agencies. The mail order house, the chain store, direct marketing and types of integrated marketing are vigorously opposed by the "regular" distributors. Action along such lines on the part of regular middlemen is recognition on their part of the value of building up a class consciousness through organization. The importance of a class consciousness is also evidenced in all walks of life by the existence of different types of social, professional, religious, fraternal and business associations.

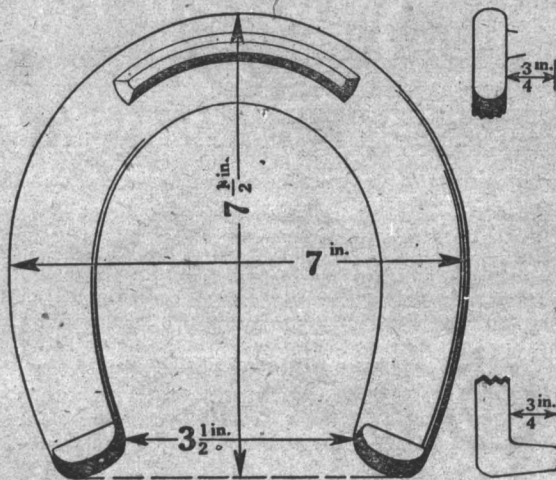
Too often, in the past, co-operative marketing has been looked upon entirely from the economic standpoint. The advantages of co-operation have been viewed from the standpoint of how well such a type of marketing could compete with that of private enterprise. From the standpoint of society in general thought must be given to the problem of efficient production of the things men desire. Marketing is merely a part of the process of production. Efficient marketing is in a manner which meets with the requirements of the consumer. However, because of the difference in the nature of private and co-operatively owned enterprises there are factors other than those of the pure business type which must be considered. There are also items of economic efficiency which are not apparent at first sight. It might be that we do not have an adequate measure for efficiency. Is the amount of profit to be used as a sole measure of efficiency? Is the money cost of performing a certain service to be the sole measure of the efficiency of the performance? Is it not possible that there are other considerations which are of vital importance and yet not capable of being measured by any measuring rod known to man?

Group life strengthened through media of social or economic action is a great factor in welding a people together into a homogeneous mass. Individualism is submerged by the domination of the more important problems which are being dealt with as a group. In agriculture individualism has survived longer than in any other line of endeavor. The farmer has not learned to work with his neighbor. (Continued on page 16)

## Rules Under Which Michigan Horseshoe Pitchers Will Compete

AS a popular sport horseshoe pitching has engaged the attention of the American people in general, but particularly those in the rural districts, since the early days of the Civil War when each company or regiment of soldiers had their champion horseshoe pitcher the same as each company or regiment of the present-day army have their champion athlete. In those days there were no set or standard rules by which they pitched and it was not until the sixth of May, 1914, when Kansas organized the Grand League of American Horseshoe Pitchers, that laws were enacted and rules established to govern the game. The following year a tournament was held at Kansas City and the first national champion declared. However, it was not until February, 1919, that the game attracted much more attention but from then on interest increased and organizations sprang into existence until at the present time there are some 30,000 organized horseshoe pitchers in the United States. At the national tournament to be held at the Iowa State Fair this fall over \$2,200 premium money will be given away as prizes besides a trophy from each state represented.

When the Grand League of American Horseshoe Pitchers was founded and rules adopted the pitching distance was made 38 1-2 feet from stake to stake, measuring from where the stake entered the ground. Since that time the rule has been changed and the standard regulation



This illustration will enable you to determine whether your horseshoes are standard size for entering your county or the state tournaments. The shoes must not exceed the dimensions shown, but may be smaller.

pitching distance is now 40 feet. For women in contests or tournaments the distance is 30 feet from stake to stake.

Another rule that has been changed considerably is the number of points to a regulation game. Up to within one year ago the standard

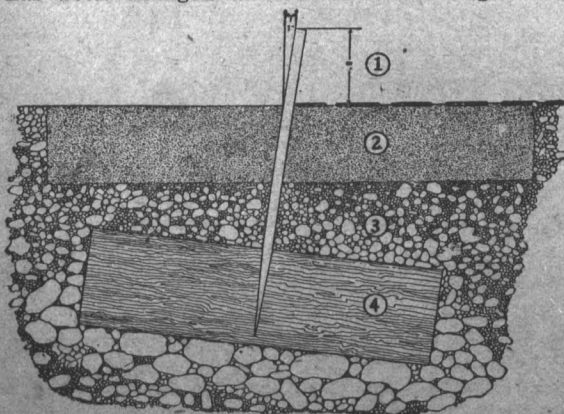
regulation game consisted of 21 points but this has been changed to 50 points, and the contestant first scoring this number after all shoes have been pitched, shall be declared winner. In all official matches or exhibition games between two contestants eleven games of 50 points shall be a series; the one winning six games shall be declared the winner.

The grounds shall be level as possible. The pitcher's box shall be filled with Potter's Clay or any substitute of a like nature; the clay must be kept moist and worked to a putty-like condition and to a depth of not less than 6 inches and at least 18 inches around the stake.

The pitcher's box shall extend three (3) feet on either side to the rear and front of the stake. Said box shall be constructed of material 2x4 inches and shall not extend more than 1 inch above the level of the ground. Where several or more courts are constructed, a 2x4 inch shall be laid the full length of such courts 3 feet in front of the stakes. In delivering the shoe into the opposite pitcher's box, a contestant may stand anywhere inside the pitcher's box.

The stakes shall be of iron, one (1) inch in diameter, perpendicular, inclined one (1) inch toward the opposite stake and extending eight (8) inches above the ground in the pitcher's box. On single courts, the stakes shall be set in the center of the pitcher's box. Where several or more courts are constructed, the stakes shall be not less than eight (8) feet apart, in a straight, direct line where possible.

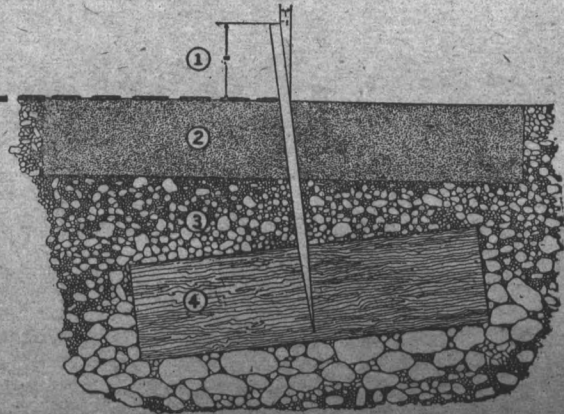
No horseshoe shall (Continued on page 21)



40 Feet

### HOW TO SET THE STAKES

1. Stake should be 1 inch round, 32 inches long; 8 inches above the ground, leaning 1 inch forward toward the opposite stake; 24 inches below ground.
2. The area for a distance of not less than 36 inches diameter around the stake and 8 inches deep, must consist of loose, wet sand or tamped, wet clay, always kept level and as soft as putty or dough.
3. Subsoil—Can be of anything.
4. Lower end of stake should extend 9 inches into a block or log 10x10 inches by 8 feet long.





# A New Outlet for Live Stock in Michigan

*Detroit Packing Company Provides Home Market for Stock at Greater Profit to Producers*

**N**O FARMER should think of visiting Detroit without making an inspection of the great plant of the Detroit Packing Company which stands at the intersection of Lafayette boulevard and Springwells avenue. This imposing business structure is the answer to the argument that Michigan live stock cannot be slaughtered and packed in Michigan for Michigan consumers. For within the walls of this modern and sanitary plant thousands of head of cattle, hogs and sheep from the farms of Michigan are being slaughtered and packed every month and sold to Michigan consumers.

For years men have been asking themselves what the sense was of shipping Michigan live stock hundreds of miles across country into another state, in cattle cars, and bringing it right back again to the point of origin in refrigerator cars. Millions of dollars have been paid in freight by Michigan farmers and meat consumers merely because no one in Michigan had the courage and foresight to establish a plant within her borders which would turn live stock into meat and save these enormous transportation charges.

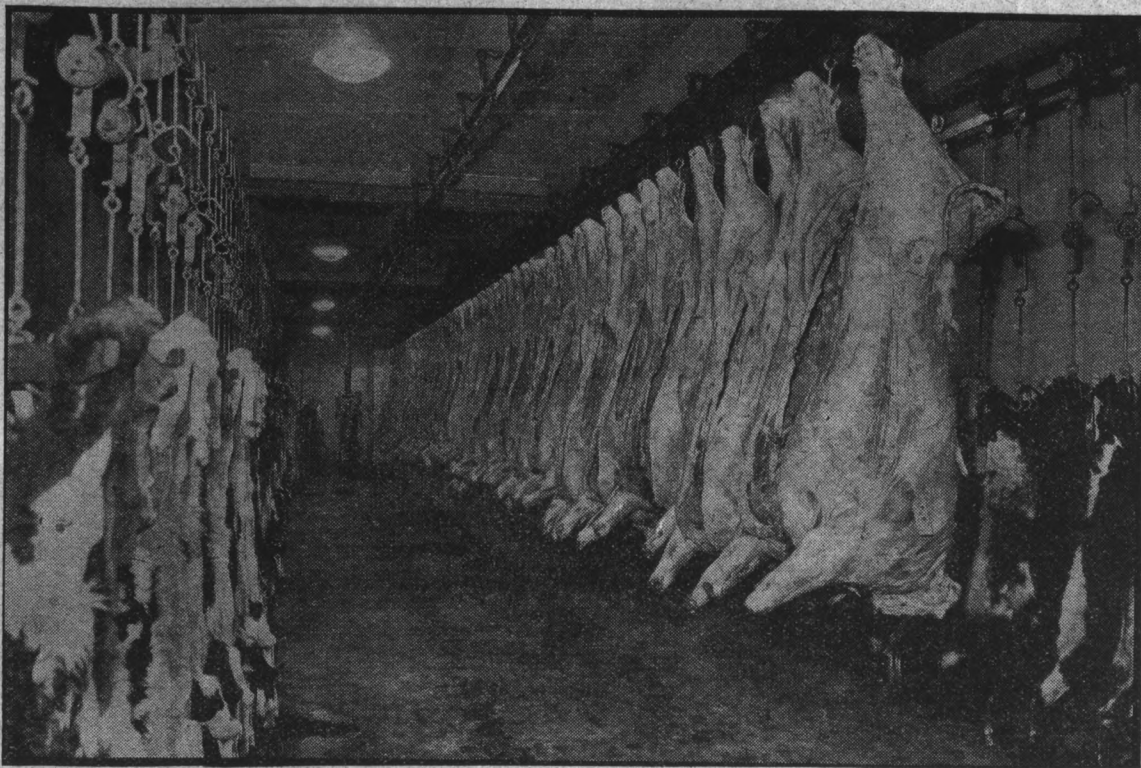
This economic absurdity continued, however, with everybody condemning it but nobody acting to remedy it, until a couple of years ago when a group of men with experience in the live stock and packing business concluded that the time was ripe to end a farce, and to build within the fourth largest city of the United States a modern packing institution.

One of these men was Edward F. Dold, son of the well-known Buffalo packer by that name. Another was Frank L. Garrison, who was brought up in the packing business. Still another was Joseph Gardulski, with long and successful experience in financial matters. And a fourth was L. Whitney Watkins, known the length and breadth of Michigan as a successful farmer, live stock grower and business man. With these men in the lead the Detroit Packing Company was launched, and following the usual vicissitudes which accompany new business enterprises, began slaughtering and packing operations the first of January in the current year. The story of some of the obstacles it has bumped up against, of how it has overcome these obstacles and what it has accomplished make interesting reading.

Not only is it interesting to farmers because the institution is owned by farmers and managed by men of their choosing, but because, of far greater importance still, the institution promises to become the greatest single factor in the UPBUILDING of the Michigan live stock industry.

## A Business of Magnitude

During the four months of January, February, March and April the Detroit Packing Company slaughtered 1,659 head of cattle for which it paid



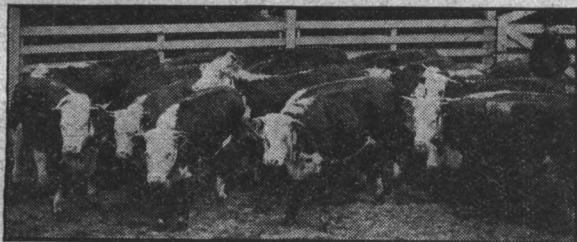
Section of Cooling Room, Detroit Packing Company

farmers \$86,558.05; 1,543 head of calves, value, \$25,691.91; 2,102 sheep and lambs, value, \$19,901.05; 17,087 hogs, value, \$352,837.44, representing a total value of nearly three-quarter million dollars.

Nor was this the extent by any means, of the amount of business done by this concern during that period. Each month thousands of dollars worth of dressed carcasses and uncured meats are purchased and cut up and cured for the Michigan trade. The Packing Company finds the demand for hams very greatly in excess of the demands for other portions of the hog and consequently prefers to make a margin of profit on buying and curing fresh hams and other cuts than to slaughter enough hogs for the purpose and loading up with surplus minor products. The demand for cured meats is in excess of present local supply from daily cutting of hog carcasses and to equalize outside purchases of cut meats which are cured under "Detroit Star" formulas are purchased.

## Some Savings to Farmers

From the time the Detroit Packing Company announced that it would buy direct from farmers, certain commission men operating in the Detroit stockyards have sought to place divers objections in the path of the company. On one or two occasions buyers for the Packing Company were unable to secure any animals at the



Bunch of Mich. Choice Beef Just Arrived for Slaughter

yards except at a premium over the market. On one occasion the company had to wire to Toledo for several carloads of hogs to meet its orders although there were plenty of hogs for sale at the Detroit yards on that day. However, the company is not out to injure or destroy the live stock commission firms but desires to work with them, as long as they show any disposition to co-operate. But the company officials positively declare that they will not abandon their policy of dealing direct with farmers despite the opposition of the commission dealers.

In January 56 per cent of the company's live stock purchases were made in the Detroit stockyards and 44 per cent direct from farmers. In February 70 per cent were from the yards and 30 per cent from the farmers. But in March only 8 per cent were from the yards and 92 per cent were from the farmers, while in April yard purchases amounted to only 5 per cent and the balance of the nearly 4,000 head of live stock were received direct from the farmers.

All farmers who sold direct to the company were saved yardage commissions, etc., which aggregated from \$20 to \$30 a car. The company always pays full yard prices on stuff received direct from farmers with no offset except freight.

## Big Field for Packing Business

Large as is the volume of business now being done by the Detroit Packing Company it is only a drop in the bucket to what it can do and will do as conditions permit the expansion of the business. Nearly all of the products now being manufactured in the plant find a ready sale in Detroit in competition with the older established packing concerns, but we are told there is a market in that city alone for several times the amount of products which the Detroit packers are now turning out.

As time goes on the company will require an ever increasing amount of raw material for its plants. The officers of the company are anxious to form a friendly and mutually beneficial contact with the live stock producers and believe that Detroit can be made an important live stock center which in time will rank with many of the other well-known packing centers of the country. The concern is rapidly building a reputation for itself as packers of fine meats, its Star brand bacon and cottage hams being in particular favor and demand, owing to the delicate and appetizing flavor imparted by special curing processes.

With the continued conservative management and confidence of the farmer-stock-holders we know of no reason why the Detroit Packing Company should not become the outlet in time for the major portion of Michigan live stock, and by so doing, lend an impetus to this industry which will make it one of the greatest in the state.

## World Wheat Stocks for July Promise to Be Lower than for Years

**T**HE present moment the situation indicates, says the Foodstuffs Division of the Department of Commerce, that world wheat stocks will be lower than for several years by July 1, 1922, as both Argentina and Australia have considerably less than last year, the United States carry-over will be light and only Canada has considerable stocks on hand. The upward trend of European consumption indicates a larger demand than last year, whereas prospects are for a smaller crop. Until next February, the international trade will be largely dependent for supplies on the surplus of North America and a limited quantity from India. With Russia entirely out of the export trade, North America wheat is in a relatively strong position.

The world wheat situation has been going through very much the same adjustment during the past five years as other agricultural products,

especially wool and cotton. All three commodities depended very largely in pre-war years on Europe to absorb the world surplus. During the war European consumption and production fell to around three-quarters normal and resulted in considerable accumulation of surpluses at the end of hostilities. It was generally expected in trade circles that the surplus would be quickly absorbed by Europe, but the reduced buying power and the lower standard of living forced by war conditions were not fully considered. As a result, the enormous surplus of wool brought a perpendicular price drop in the spring of 1920, followed soon by cotton, and in July, 1920, by wheat. The recovery of wool has been very gradual, owing to continued production, but is again very near normal.

The wheat situation was considered during the war to be of first importance. There would, no

doubt, have been a serious world shortage during the war had it not been for three successive large crops from 1913 to 1915, creating a large reserve which helped to carry over the large drop in European production in the two following years. World production and consumption have been below average for the past five years.

It is probable that during the war period the world outside of Europe consumed nearly normal quantities of wheat, but the apparent consumption of central and western Europe fell from about 2,000,000,000 bushels in 1913 to 1,200,000,000 bushels in 1917. This was due to a decrease in both production and imports. Since 1917 there has been a steady recovery in production and in imports, the apparent consumption reaching about 1,850,000,000 bushels in 1921, with apparently a strong tendency to reach pre-war normal.



## Make \$13 More Per Cow

Free Book for Dairy Farmers Tells How to Cut Out Waste; Gives Valuable Building Hints

Do you know that the manure produced by one cow in twelve months contains fertilizing elements valued at \$39? And do you know that one-third, or \$13 of this amount is lost in the course of a year through improper handling? By providing a simple easy-to-build pit outside the barn, this loss can be prevented.



Write for this Free Book, "Concrete on the Dairy Farm" and see the many money-saving suggestions it gives on the use of concrete in making permanent improvements. Properly housed dairy cattle return greatest profit on the investment. This free book is recognized as a simple guide to 100% efficiency and economy in building on the dairy farm. Fully illustrated with diagrams and pictures. Shows how to build barns, milk-houses, silos, icehouses, cooling tanks, paved barnyards, manure pits, water supply systems, etc.

## PORTLAND CEMENT ASSOCIATION

Dime Bank Building  
DETROIT, MICH.

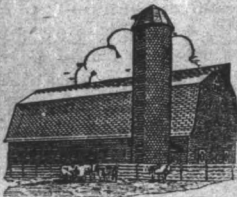
A National Organization to Improve and Extend the Uses of Concrete  
Offices in 23 Other Cities



## FOR SILOS, HOUSES, BARN AND ALL PERMANENT BUILDINGS

Those patented corner braces (exclusive HOOSIER feature) make this tile the strongest, most efficient block on the market. Excels all others in load-bearing capacity. HOOSIER TILE are standard five-wall, clincher-joint, fire-clay glazed blocks. Prices reduced to pre-war level. Put your farm on a PERMANENT basis with HOOSIER TILE dwellings, poultry houses, hog barns, silos, etc. They solve the upkeep problem. Write for literature and prices. Estimates furnished free. Tell us type of building you need. Get our special agent's proposition.

HOOSIER SILO COMPANY  
Dept. MB 56 Albany, Ind.



HOOSIER SILO AND BARN  
Proof against fire, frost, moisture and vermin. Save their cost annually in better housing and feeding conditions. Buy NOW a p d save money.

(Drawn from actual photograph)

## Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 508 E. Olive St., B-365, 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 cut 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.

## \$24.95 Upward American CREAM SEPARATOR

On trial. Easy running, easily cleaned. Skims warm or cold milk. Different from picture which shows larger capacity machines. Get our plan of easy MONTHLY PAYMENTS and handsome free catalog. Whether dairy is large or small, write today. AMERICAN SEPARATOR CO. Box 7067 Bainbridge, N. Y.



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. Adv.

WANT TO SELL LIVE STOCK?  
AN AD IN THE M. B. F. WILL DO IT



# Farmers Service Bureau



A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information. Name not used if requested.

## SON MISSING

I would like to find my son who was in the detention hospital in Grand Rapids, Mich., two years ago last December, and have not heard from him since. His name is Adelbert Hurd, height about 5 foot 7 inches, light complexion, blue eyes, dark hair and a little near sighted. Had a wife and little boy. He was sent to Grand Rapids from the hospital in Caro.—Mrs. C. J. X., Onaway, Mich.

## FARMING ON SHARES

When a man is farming on the one-third basis on a dairy farm does he have to furnish all of the help or part of it? Is he entitled to a third of the corn and grain (the corn goes in the silo and it takes all the grain to feed the cows)? Would like to have some information in regard to this question and also on the wages to be paid for farm help. They say wages are \$30 for a single man and \$40 for a married man. Is that for the summer months or the year around? What is a married man entitled to besides house and fuel? You will oblige me by answering these questions.—R. S., Rochester, Mich.

The renter furnishes the labor, team and tools and the owner half of the live stock other than horses. The landlord furnishes the land and buildings and one-half of live stock and in case the tenant cannot pay for one half the live stock the landlord takes a note. Possibly in your case the landlord is furnishing everything and giving the tenant one third. The tenant paying the labor. This is undoubtedly not an unfair contract.

Last year (1921) the average wage for hired men in the United States was \$43.32 a month. without board and with board it was \$30.14 a month. Michigan wages ran \$50.50 and \$34.30 last year. These are average year around wages. Of course wages vary up and down from this point according to the ability and trustworthiness of the man. Married men usually get house, garden spot, and some milk and fuel if there is fuel on the farm.—Howard M. Elliot, Professor of Farm Management, M. A. C.

## NO STATE OFFICIALS IMPEACHED

Our class would like to know whether or not any of our state officers have been impeached, and if so what for, and whom?—C. L. G., Holton, Mich.

The state records do not disclose that any official of this state has ever been impeached. Impeachment proceedings were brought against a state official by the name of Edwards a great many years ago, but the senate vote was almost unanimously against impeachment.

The Commissioner of State Land Office, the Secretary of State and the State Treasurer were at one time removed from office after trial before the governor. In these cases impeachment proceedings were discussed, but the legislature was not in session, and the removal was brought about in another way.—Charles J. Deland, Secretary of State.

## MEASURING CORN IN CRIB

Would you please tell me how to measure corn in crib? Also grain?—B. V., South Branch, Mich.

The following rules from H. L. Steiner's book on "Farm Accounts" regarding measuring corn in crib are accepted as reliable:

On Cob—Two heaping bushels of corn on the cob will make one struck bushel of shelled corn. Some claim that one and one-half bushels of ear will make one bushel of shelled corn. Much will depend upon the kind of corn, shape of the ear, size of the cob, etc.

In crib—To measure corn in a crib, multiply the length of the crib in inches by the width in inches, and that by the height of the corn in the crib in inches, and divide the product by 2,748, and the quotient will be the number of heaped bushels of ears. If the crib flares at the sides, measure the width at the top and also at the bottom, add the two

sums together, and divide by 2, which will give the mean width.

Corn Shrinkage—Corn will shrink from the time it is husked in the autumn, in well-protected cribs, from 20 to 30 per cent by spring. That is, 100 bushels will shrink to 70 or 80 according to how dry it was when cribbed.

To Measure Grain in Bins—Multiply the length of the bin in inches by the width in inches, and that by the height in inches and divide by 2,150 for struck bushels, and by 2,748 for heaped bushels. The quotient will be the number of bushels contained in the bin.

To find the amount of grain in a bin take four-fifths of the number of cubic feet.—J. F. Cox, Professor of Farm Crops, M. A. C.

## CONCRETE PRODUCTS AND SUPPLY COMPANY

Will you please inform me through your paper if the stock of the Concrete Products Co., of River Rouge, Mich., was approved by Michigan Securities Commission or not?—A Subscriber, Oakland, Mich.

The Concrete Products & Supply Company of 42 Victoria St., River Rouge, Mich., was approved by this commission on July 10th, 1920, and permission given for the sale of \$30,190.00 of its unissued common stock.

This company was incorporated under the laws of the State of Michigan on May 15, 1915, with an authorized capital of \$50,000, \$19,810 of which was issued and outstanding at the time application was filed with this commission.—Michigan Securities Commission.

## CROP ON LIGHT LAND

Please tell me what can be grown on land that blows for pasture?—W. A. B., Morenci, Mich.

Sheeps fescue and Marram grass are varieties well adapted to light soils that tend to blow. Orchard grass and rye grass are sometimes used and the seed is somewhat cheaper.

In securing a catch on that type of soil it is quite important that a top dressing of strawy manure be used, also a fertilizer containing phosphorous and potash will prove beneficial.—C. R. McGee, Associate in Farm Crops, M. A. C.

## VOTE REQUIRED FOR INCORPORATION OF VILLAGE

We have taken your paper ever since the first issue and write for a little information on the incorporation of a small village or country town. The population of which is less than 500 inhabitants. Can a village of this size be incorporated without the vote of the people?—A. M., Middleton, Mich.

A vote of the people is required in all cases where certain territory is proposed to be incorporated as a village.—Charles J. Deland, Secretary of State.

## COLLECTION BOX

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

- 1.—The claim is made by a paid-up subscriber to The Business Farmer.
- 2.—The claim is not more than 6 mos. old.
- 3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box Mt. Clemens, Mich.

Report Ending June 5, 1922  
Total number claims filed ..... 892  
Amount involved ..... \$18,315.46  
Number of claims settled ..... 540  
Amount secured ..... \$10,032.64

A typographical error appeared in the Collection Box last issue. The "amount secured" was given as \$1,032.64. It should have read \$10,032.64.

## RIGHT TO LOGS AND TOPS

I recently bought an eighty-acre farm forty acres of which was lumbered off a year ago this winter. The no mention was made at the time of the sale, the former owner, declares that he still owns the logs and tops that are still in the woods. If that is true how long may he continue to enter my woods, and may he cut any standing timber in order to remove the same?

The former owner had sold the standing timber, and all the good logs have been removed by the company who purchased it. Are the remaining logs and tops still his personal property, and may he open any fence on my farm to remove the same?—L. S., Mandelona, Mich.

The right to the abandoned logs and tops is probably dependent upon the original contract of the owner of the land with the person who bought the timber. If a specific time was provided in the contract in which to get off what he bought then the rest would revert to the land and such person who bought the timber would thereafter have no right to enter the land for the purpose of removal.

If the contract of purchase of the timber had expired before the sale to the present owner it would be largely controlled by the intent of the seller at the time of the sale of the land. After the sale of the land he would have a reasonable time to remove the logs and tops and if he does not remove them within a reasonable time he would be presumed to have abandoned them to the purchaser. If he has gone beyond what the average man would say was a reasonable time to remove them I would forbid his entering on the land.

If in an honest construction of the time he has had to remove it would seem reasonable to say that he has not had a fair time to remove them then I think he would have a right to remove the logs and tops. He would not have a right to cut any timber whatever in removing them and would be liable for damage on all he cuts or injures. He is bound to get it out without injury to the balance. He would have no right to enter the land except at such a place as was provided for entering the woods, if any, and if none provided, he must enter at such place as will do the owner no damage or he would be liable.—Legal Editor.

## TAXES ON GRANGE AND GLEANER HALLS

Will you kindly inform us as to whether Grange and Gleaner halls are subject to taxation under the state law?—D. P. R., Kalkaska, Mich.

Grange and Gleaner societies must pay taxes on their halls the same as on other kinds of real property.—Editor.

## CLOSING HIGHWAY

Can a contractor, a board of road commissioners or in fact any official connected with township county or any public board close a public road for a period of four or more weeks without providing a detour or a temporary road for the farmers whose only out or inlet is the road under construction?—A. B., Saginaw, Mich.

Act 165 of the Acts of 1917 Sec. 2 provides that no roads shall be closed until a suitable detour around same or that portion which is closed is provided and placed in a reasonably safe and passable condition for traffic. Notices shall also be posted at either end of the closed highway or portion of the same.—State Highway Department, Lansing.

## ASSESSMENTS AND EXEMPTIONS

If a taxpayer has personal property to be taxed besides his real estate and has notes standing against him, can he have the amount of said notes he owes deducted from his personal tax?

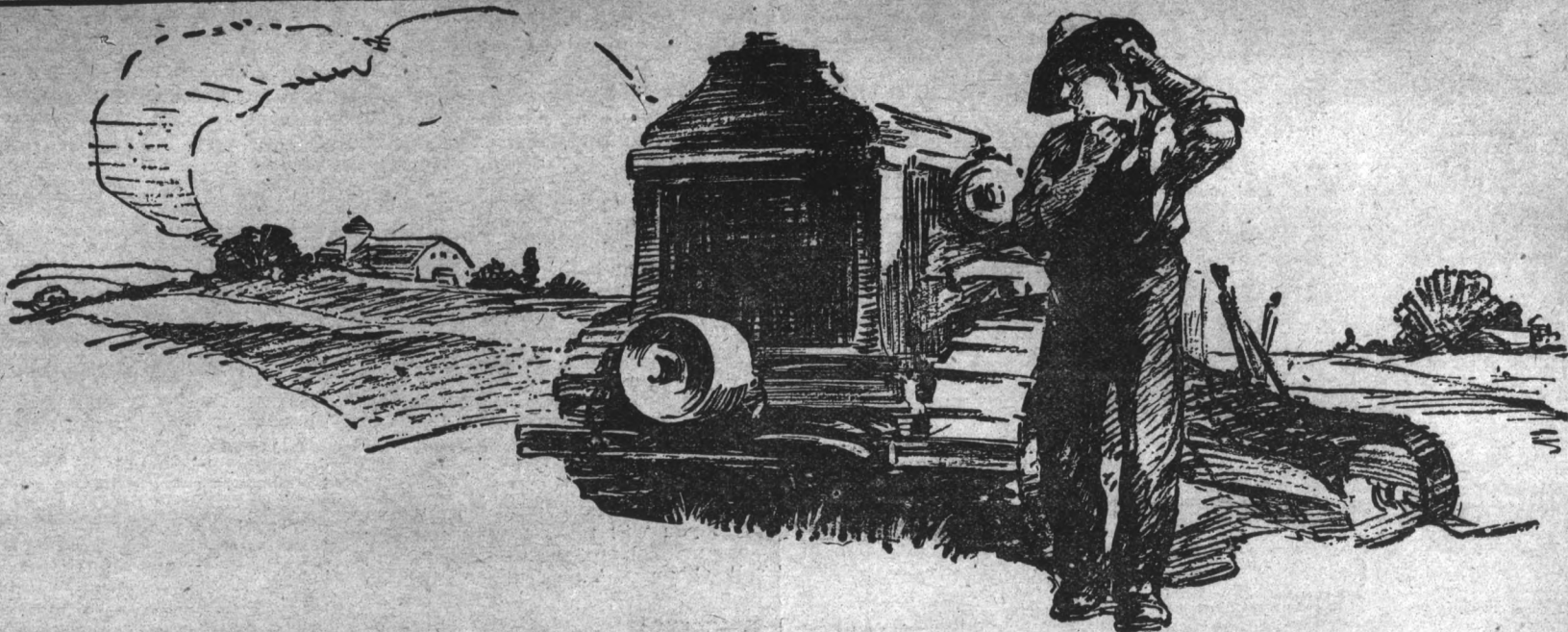
If the state assessor places a valuation on your real estate at a higher valuation than other adjoining property how can you proceed to get your valuation lowered? Our supervisor says that since the first of last August he or the township board of review has no power to change the valuation of real estate.

Is there any set time when personal property should be assessed? At what time does the date for assessing personal expire?—J. S., Gladwin, Mich.

Under the provisions of our general tax law, debts can be offset only against credits. If a taxpayer has accounts due him, they are subject to assessment unless he owes other

(Continued on page 11)





# Is Your Tractor Behaving to Suit You?

## Chart of Recommendations

Trade Name	Motor Oil	Trade Name	Motor Oil
Alcoa	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.	Nogul	H.
Armington	H.	Mohawk	H.
Aultman-Taylor, 22-45	E. H.	Monarch-Industrial	H.
Aultman-Taylor, 30-40	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	E. 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.	Flow Man	H.
Bates Steel Mule—All Models	H.	Porter	H.
Best	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.
Blitwell	H.	Rex	H.
Boring	H.	Rumely Oil Pull, 12-20	E. H.
Burnell	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 Boss" 20-35	E. H.
Case, 20-40	E. H.	Russell "Giant" 30-60	E. H.
Cletrac, 9-16 and 12-20	H.	Russell "Little Boss" 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	E. H.
Dill Harvesting	M. H.	Shelby Model D	E. H.
Eagle, 12-22 and 16-30	E. H.	Square Turn	E. H.
E-B, 8-16 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.
Forson	H.	Traylor	H.
Flour City Junior, 20-35	E. H.	Triumph	E. H.
Flour City, 30-50 and 40-70	E. H.	Trudnar	H.
Fox	H.	Twin City, 12-20 and 20-35	H.
Four Wheel Drive Fitch	E. H.	Twin City, 40-65	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.	Wheat	E. H.
Holt Caterpillar (5 Ton)	H.	Whitney	E. H.
Holt Caterpillar (10 Ton)	E. H.	Wichita	H.
Holt Caterpillar (15 Ton)	E. H.	Wilson	H.
Huber Light & Super Four	H.	Wisconsin, 16-30 and 22-40	E. H.
Illinois Super Drive, 18-30 and 22-40	E. H.	Yuba Ball Tread—All Models	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.		
Larson, 12-25 and 15-30	H.		
Leader, 18-36	H.		
Leader, 12-18 and 16-32	E. H.		
Leader, 18-35	E. H.		
Leonard Four Wheel Drive	H.		
Liberty	E. 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.

WHEN your horse gets an orn'ry streak you know just how to handle him because you've had years of experience with horses. But how about your tractor? You see, a tractor's a human sort of thing. It has cranky spells whenever it feels it isn't being treated just right. And a lot of this mis-treatment comes from wrong lubrication.

## Use Polarine

THE PERFECT MOTOR OIL

## Made in Four Grades

### Seals Pistons Against Loss of Power

Did you ever stop to think of the great number of parts to be lubricated; parts which can and will go wrong with improper lubrication?

You don't have to use guess-work in finding out which lubricants will keep your tractor in good humor. The chart to the left tells you what grade of Polarine to use to obtain the full power the tractor was designed to deliver, to reduce your repair bills to a minimum, to give long life to your tractor, and to effect the greatest saving in fuel.

For years the Standard Oil Company (Indiana) has maintained a comprehensive laboratory with a department especially equipped to make lubricating oils and greases. The chemists of this Company, working with the lubricating engineers, have perfected a grade of Polarine which gives correct lubrication for every make and type of tractor. These men know just why it is best for you to use Polarine, The Perfect Motor Oil.

## Standard Oil Company

(Indiana)

910 S. Michigan Avenue

CHICAGO



## Orange Label Tea

### Special 10¢ Tins

Try a package of this really good tea!



The choicest teas and the most skilful blending are the reasons why Ridgways Tea so satisfies the palate—and makes you ask for more.

Also sold in 1 lb., ½ lb. and ¼ lb. TINS

"The First Thing You Think Of"

# Ridgways Tea



GOLD MEDAL San Francisco 1915



GRAND PRIZE San Diego 1916

## Standard Tires

Standard Four Cords, 10,000 miles **STANDARD GUARANTEE** Fabric 7,500 Miles

Buy direct from us, note well the saving. Prices absolutely the very lowest. You cannot buy this first grade of tires less anywhere. These Standard tires are all firsts, new fresh stock. We do not handle seconds.

Sizes	Heavy Non-Skids	Heavy Tubes	Sizes	Heavy Non-Skids	Heavy Tubes
28x3	\$ 7.75	\$1.35	34x4	\$13.95	\$22.45
30x3	6.75	1.30	32x4 ½	17.95	25.95
30x3 ½	7.45	1.35	38x4 ½	18.45	26.45
32x3 ½	9.75	1.40	34x4 ½	18.95	26.95
31x4	10.95	1.75	35x4 ½	19.45	27.95
32x4	13.45	1.80	36x4 ½	19.95	28.95
33x4	13.75	1.85	35x5	22.45	33.95

We ship C. O. D. on approval—Send no money. LEADER TIRE CO., Dept K, 1506 Hennepin Ave., Minneapolis, Minn.

## One Man Can Move 300 to 500 Bushels of Grain An Hour With the LIBERTY GRAIN BLOWER

Elevate, clean and grade your grain in one operation. A powerful fan does all the work. Only one moving part. No buckets, chains or gears to get out of order. No inside scooping necessary. One man can move it. Assembled or taken down in five minutes. Costs only half as much as old style elevators. Pays for itself in a few days.

**FREE!** Send name today for FREE Booklet describing the Liberty Grain Blower and special 1922 price offer. Midwest Steel Products Co., 429 American Bank Bldg., Kansas City, Mo.

## Another BIG DROP in PRICES

Big drop in fence prices—freight prepaid. Write for new 30-day cut price catalog, showing big price cuts on 150 styles of famous Brown quality Double Galvanized fence, ready roofing and paints. Also bargains in gates, steel posts, etc.

**THE BROWN FENCE & WIRE CO.**  
Dept. A-1276, Cleveland, Ohio

**FREE TUBE with each tire**

**New Cords Slashed To \$9.95**

**GUARANTEED 10,000-Miles**

## BIG FACTORY SALE

### Brand New—Strictly Firsts

These strong High Grade Cords made from fresh stock at 50 per cent saving. Absolutely Brand New—first, in original wrapper with manufacturer's name and serial number on every tire. **Guaranteed 10,000 Miles** and adjusted at the list price on a mileage basis. (These prices include Tube Free.)

Sizes	Price	Sizes	Price	Sizes	Price
30x3	\$ 9.95	33x4	\$17.50	35x4 ½	\$25.75
30x3 ½	11.75	34x4	18.95	36x4 ½	26.15
32x3 ½	14.40	32x4 ½	23.50	33x5	26.75
31x4	15.65	33x4 ½	24.10	35x5	28.00
32x4	16.90	34x4 ½	25.00		

**Send No Money**—just send your name and address, together with size and number of tires wanted. All Unshipped C.O.D. subject to examination. **Send Today.** Special 5% discount for cash with order. Shipments same day order received.

**Webster Tire Corporation**  
323 E. 33rd St., Dept. 379 Chicago, Ill.

## What the Neighbors Say

### REAL ESTATE GRAFTERS

I RECEIVED a few copies of the Business Farmer and enjoyed every one of them. Some time ago I read an article on "the kind of advertising we don't accept." It was in regard to real estate grafters who want to get \$5 or \$10 from farmers for listing their farms, etc.

No doubt many northern Michigan farmers have been bit with these ads. and I wish those men could be put out of business. But I will say this is nothing compared to what has been going on here in Benzie county for the past 10 years at least. Some real estate men here will not take a certain per cent as they do in the southern part of the state for selling a farm, which is from 2 to 5 per cent. Nothing unless they sell it. Here they ask you to state the very lowest price you will take. If you are real hard up and anxious to sell you will sell cheap. The real estate man finds some innocent man with money in Indiana, Chicago or somewhere who knows nothing about the good and bad land, the land which frosts out of season and the land which does not. There is good land for sale here. It does not frost and is fine for fruit and many other crops. But the stranger does not know.

There were few good farms sold as the real estate man could get the poor land for almost nothing, which he sold for a big price.

One case I know of the real estate men put \$1,000 on the owner's price as their commission. Another case \$300 was the farmers price for a small piece of land. The buyer paid \$900. The real estate men took \$600 as their commission. The land was misrepresented and the buyer has long since abandoned the place after making many improvements. Many similar incidents have occurred in this vicinity. Can we put a stop to this?—A Reader, Benzie County.

There are grafters, we suppose, in the real estate business as in all other kinds of business, but so long as they do not evade the law it is pretty hard to expose and punish them. Agents who misrepresent property in order to make a sale are laying themselves open to a civil action. Any person who buys a farm or any other piece of property without a personal inspection of the property has nobody but himself to blame if he gets stung. But that is no excuse for permitting the grafters to stay in business. The Bureau of Agricultural Development at Lansing is laying for the dishonest land company and real estate agent and expects some day to put them both out of business.—Editor.

### MODERN DRESS

I AM an interested reader of your paper and from time to time have felt inclined to voice my humble opinion of some of the subjects under discussion. Rhoda's article settled it. I, too, am a woman, and I cannot let her view be adopted by our young men and young girls (not to mention the older ones) without protest.

She chooses to style herself "Rhoda." would not Salome suit her better? She says it matters little how women dress. Now the fact of the matter is, it does matter a great deal, if we wish to retain our self-respect and merit respect from others. We can all dress neatly, comfortably and at the same time modestly if we will.

I agree with the man from Ing-ham county, would like to shake hands with him. Rhoda recommends Bible reading for him, so he will be less interested in what is going on about him, in that she makes another mistake for the more we study the scripture the more hideous and glaring present day evils become, if she will do like wise she will never again say that God made the "flapper."

Have we not "wrapped the mantle of charity" until some are willing to appear before the public eye, attired in very little more? It is high time the decent folks began to "cry aloud and spare not," are we willing to have our growing sons and daughters caught in this maelstrom of wickedness and swept to destruction? If we are, let us remain silent and it will be done.

Rhoda refers to our ancestors fighting for liberty of conscience, it seems to me she is using liberty without conscience. Surely anyone with a "conscience void of offence toward God and man," the only kind we are justified in owning, would not have expressed such ideas. And you, Mr. Editor, call her pen clever and her wit matchless. Then it is the cleverness of Satan and doubtless he can match her wit.

This is not written for argument, but to help stem the tide of immorality that is sweeping thru our land. Will not more wives and mothers express themselves on this subject? Yours for a higher standard of morals.—A. W., Williamsburg, Mich.

The more we discuss this subject of dress the more bewildered "mere man" becomes. What is an "immoral" dress? Is a bathing suit immoral? Does the garb of a circus rider suggest immorality? Does the picture of a sleeping woman with bare arms exposed arouse wicked thoughts in the minds of the beholders? Define the term, "immoral" as applied to woman's dress and we may then discuss the subject with some degree of intelligence. My regard for woman-kind in general leads me to denounce the allegation that all women who wear short skirts, low-necked gowns and other comfortable forms of dress are leading man to his moral destruction.—Editor.

### WATER OUT, ROADS WILL PAY, SAYS FORD; PROVES IT

FOR an amateur, which propagandists say he is, Henry Ford doesn't do half bad as a railroad operator for the public, his employees and for himself.

What he has done for the public and workers is generally known. For the farmer he has given improved service at reduced rates. For the latter he has given improved labor conditions at increased wages. For himself he is having a lot of fun with the old railroad outfit and is making it pay handsomely.

The financial statement for the first years operation shows that Ford has made a profit of 12 per cent on the Detroit, Toledo & Ironton bonds. On the preferred stock he has had a return of 80 per cent on his investment. On the common stock, which he purchased just a year ago his return is 200 per cent. That seems to be the answer to the criticism to which the railroad operator-manufacturer is now being subjected.

"I am not a miracle worker," says Ford. "I simply paid for the railroad. I own what it was worth and no more." When the water is squeezed out of the other railroads they also will make big returns without ruining the public or starving their workers.—Copied from Labor by S. H. Slagle, Harietta, Mich.

We suppose our readers have noted that the Interstate Commerce Commission has finally given Henry Ford permission to reduce freight rates on his railroad, many months after he applied. All sorts of excuses are offered by other rail heads for Ford's success with the D. T. & I., but none of them seem to fit the case. Labor has probably suggested the reason. With the water out the roads can pay reasonable dividends.—Editor.

### A DIFFERENT FARM PAPER

ENCLOSED find \$1 to apply on my subscription to the Business Farmer. You are to be commended for your just and fearless stand on all questions in which the farmer is concerned.

It is one thing to print the experiences and various methods of raising and increasing crop production by the farmers in general but it is quite another thing to dispose of the same advantageously to the producer. Right here is where the Business Farmer differs, in that it is constantly fighting for the betterment of marketing conditions.

I am greatly interested in Mr. Ferris' radio articles and hope to be able to own eventually a receiving set of my own.

I would like to add that the serial, "Nomads of the North" was well worth the price of the M. B. F. alone.—V. K., Plainwell, Mich.

Thank you for your words of appreciation. We know that marketing conditions are very much better than they were a few short years ago, but what part the Business Farmer and other progressive farm papers have played in bringing about the improvement we can only conjecture. We like to feel, of course, that

MICHIGAN BUSINESS FARMER

"The Farm Paper of Service"

TELL YOUR FRIENDS ABOUT IT



we have had a part in the reform. Glad you liked "Nomads of the North." With the coming of fall we shall have another corking good story to thrill and interest our readers.—Editor.

#### ONTARIANS PROTEST CONSOLIDATION

I DO not know whether you would object to publishing an Ontario resolution or not, yet I feel like encouraging L. Z. S., of Shiawassee. The truth is I copied his article and the London Advertiser published it and I also sent it to the Farmer's Sun.

I have been delegated to attend a convention of the Ontario Trustees' and Ratepayers' Ass'n at Toronto and am anxious to secure all the information I can on consolidated schools in Michigan. I am enclosing copy of resolution which was passed in Caradoc township, Middlesex county:

"Resolved, that we are opposed to the pressure that is being brought to bear by the Ontario Trustees' and Ratepayers' Ass'n for the general consolidation of rural schools as we consider the above organization is not representative of the rural viewpoint. Furthermore, we are opposed to the generous grants that are given to encourage consolidation, also to the centralization of control and the abolition of the present democratic system of three trustees to a section, as we believe there can be no one more interested in the welfare of the children than their parents."—H. J. H., Longwood, Ontario.

We are always glad to hear from our Canadian readers on any subject, and to learn their views on matters in which we are mutually interested. Keep us advised, will you, of developments in the consolidated school question in your section?—Editor.

#### TAXES AND CONSOLIDATION

A CONTAGIOUS disease without a remedy is sure a bad state of affairs. I have been a reader of your paper for a little over a year and have been somewhat interested in the different remedies offered for the existing burden of taxation. Many of us have had painful experiences with quack doctors. No one ever had a disease, however dangerous, but nearly everyone had a remedy. So it is today with the tax problem.

All over the state of Michigan, in every town, on every four corners where there is a gathering people are airing their views but getting nowhere. A hard row of stumps sure. I have lived in both Ohio and Michigan and paid taxes in both states and have had a chance to find out something about both systems of government and have compared the valuations. I find the taxes at present are about one-third lower in Ohio than in Michigan. One would naturally favor their government. They have as many if not more costly roads than in Michigan.

I noticed a short time ago our board of supervisors were much opposed to the commission form of government for counties. No wonder. They would sure miss a great many good times and a few turkey feasts. The supervisors a few years ago did their work in about one-fourth the time that it takes them now. A great many people in the south part of the state don't see any need of this useless throng of dog-trotters traveling over different townships every spring mixing up valuations.

Another needless expense is the way taxes are collected. In this part of the state we believe the collection of taxes for all purposes should be made one-half Jan. 1st and one-half July 1st, payable at county seat.

There is certainly a cause for this excessive high tax. Remove the cause and we will have the desired effect. I can hear someone say this old fogle doesn't believe in improvements at all. I don't expect to pay the same taxes today as I did 15 or 16 years ago. Last year I paid ten times the amount on the same property that I did 15 years ago.

I am very much in sympathy with Mr. E. F. G., of Avoca, Mich., concerning consolidated schools, the biggest fool proposition yet, and still our legislature says that school teachers must go through the State Normal school or be set aside as teachers. Another case of class legislation. We farmers believe in equal rights to all and special privileges to none. Statesmen, lawyers, farmers and mechanics as well as school teachers are born. We believe we had as good school teachers 35 years ago as we have now.

The present mortgage law is another piece of class legislation. But, dear readers, don't get the impression money will ever pay its portion of taxation. It never has and never will.

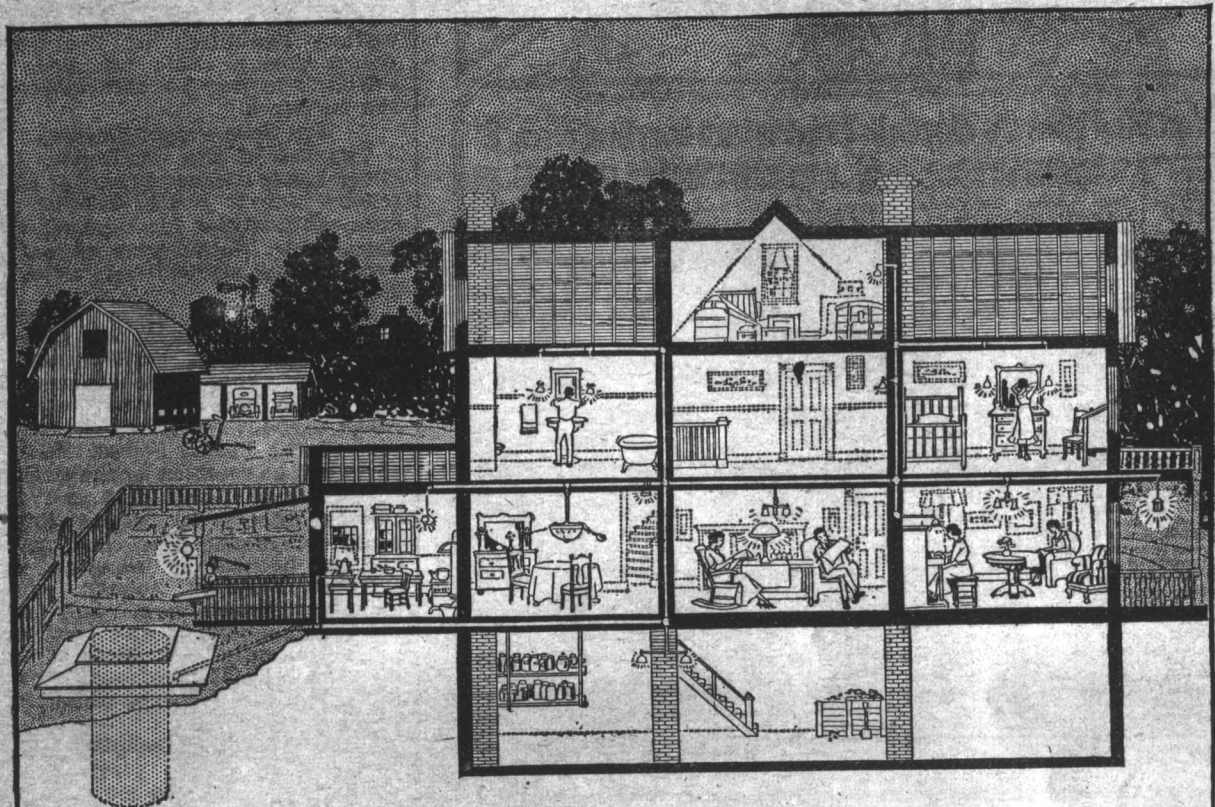
We farmers believe the state can be put on a paying basis by disposing of all unnecessary officers. While everything has been up in the air and farmers' valuations at present are above cash value and his profits cut in half, salaries of state officers have stayed right up. Take, for instance, our circuit judges. Cut their salaries from \$5,000 to \$2,500, and others in proportion.

No one seems inclined to sacrifice anything but rather to study up some scheme to sustain the present high salaries and even create more offices. When an individual township, county or state starts down hill it seems hard to apply the brakes

until they strike the bottom. At the rate we are going we will soon be in the grave. Let the bold financiers of the state fiddle away. It is hoped that they will save one string for the funeral march.—"Uncle Joe Cannon," Hillsdale County, Mich.

Don't you think you are unduly pessimistic, "Uncle Joe"? And don't you think your comparison of things of today with thirty years ago is a little unfair? You know as well as I that conditions of living are altogether different than when you were a boy. Men must be better equipped today than then to grapple with the problems of life no matter what vocation they may follow. You are enjoying comforts and pleasures which your parents did not know. Would you swap the conveniences of the twentieth century for the hard conditions of life which prevailed back a hundred years ago. No, you wouldn't do it. You'd rather pay the price of modern comforts, yes, even of modern extravagance than to return to the "good old days" when dad farmed with a team of oxen and mother made home-spun. Just as you wouldn't want to put up

with the things which were "good enough" for your folks, neither will the children of today be satisfied with the comparatively scant conveniences of the day when their parents were children. You have made some good suggestions, but you spoil it all by suggestions that are not so good. Suppose we reduce the salaries of circuit court judges who have spent thousands of dollars on their education and many lean years in the practice of law in order to equip themselves for their present job. They would all quit because most anybody with an education now-a-days with the exception of the farmer can get a job at more than \$2,500 a year. We believe as firmly as you in tax retrenchment, but we wouldn't paralyze the administration of government by efficiency than could possibly be gained in dollars and cents. None of the things you have mentioned is the primary cause of high taxes and taxes cannot be greatly lowered by following out your every recommendation. The total tax has not increased out of proportion to the increase in wealth nor the natural increase in the cost of government. The real secret of high taxes on real and personal property is the lack of any tax or at least a wholly inadequate tax on intangible property and profits.—Editor.



## How Simple to Install the Marvelous Colt "Gas Well"!

HERE is a cross-section of a farm house showing how the pipes carrying that wonderful carbide gas are run to every room from the COLT Lighting and Cooking plant.

Even though no provision was made for piping when the house was built it is a simple matter to pipe it now for Carbide Gas.

A good mechanic can set the COLT generator, pipe the average house and attach the handsome polished brass fixtures in about three or four days.

—without cluttering, upsetting and disturbing the whole house.

He works quietly from room to room.

Pipes are usually run between the partitions and under the floor—always concealed except in some cases where possibly in a room or two building construction prevents the running of pipe between a partition.

For illuminating the barn and outbuildings a shallow trench is dug from generator to barn, pipe laid and covered. After that, you can have the most brilliant, softest, whitest and most-spreading

light ever discovered in your home. The clearest light to read by—the very easiest on the eyesight of the whole family.

And instantaneous flame for cooking at the touch of a finger. Even, sustained heat for a gas iron. With a water heater, piping hot water for washing, shaving and bathing.

And no more lamp-cleaning, filling, trimming or carrying—no insufferably hot coal or wood range in the kitchen during the summer months.

And you'll have a cooking and lighting system that is unequalled for simplicity, economy and little attention. The gas is made automatically by the generator. No expensive parts needing continual replacement—a lifelong investment.

Interesting? You should hear what 341,000 farmers say about Carbide lighting. Space won't permit us to tell you the wonderfully fascinating story of carbide lighting and the COLT—so just drop us a postcard and get the full story.

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MONEY  
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# WIN \$1000.00



MAKE SURE OF WINNING. SEND FOR A LARGER, CLEARER PICTURE, FREE

## Can You Find 15 or 20 Words in This Picture Starting With 'B'?

**COSTS NOTHING TO TRY**

such as barrel, boy, bone, bicycle? If you can find the others, or nearly all the others, you can win the big \$1,000.00 prize. Come on, folks! Join in the puzzle game. You will find it loads of fun. Get mother and father and brother and sister around the table tonight and see who can find the most. Yes, and grandmother can find some, too.

**NOT A SUBSCRIPTION CONTEST**

### Observe These Easy Rules

1. Anyone living outside of Minneapolis and St. Paul, except employees of The Rural American and their relatives or former first prize winners, may enter the contest.
2. All answers must be mailed by midnight, July 29th. All subscriptions must be mailed by August 15th, 1922.
3. Write list on one side of the paper. Number your words consecutively. Write full name and address in upper right hand corner. If you wish to write anything, use a separate sheet of paper.
4. Words of same spelling can be used only once, even though they designate different objects. Each object must be named only once.
5. Words shown to be obsolete, archaic or hyphenated in a New Standard Dictionary, or words formed of two or more words, each of which is in itself an object, cannot be used, nor can the singular be counted when the plural is used or vice versa.
6. The answer having the nearest correct list of names of visible objects shown in the picture that begin with the letter "B" will win first prize, etc.
7. More than one member of a family may compete, but only one prize will be given in any one household or group where two or more have been working together.
8. Three Minneapolis business and professional men, having no connection with The Rural American, will act as final judges and they alone will decide the winners. Participants agree to accept the decision of these judges as final and conclusive.
9. All answers will get the same consideration, whether any subscriptions have been sent in or not.
10. Lists of the prize winners and correct words will be published in The Rural American shortly after the close of the contest.
11. In case of a tie, the full amount of the prize tied for will be awarded to each of the tying contestants.

### No Hidden Words

You don't have to turn the picture up-side-down—all the objects are in plain sight. It will be easy to find the words.

Make a game of it in your family or in your group of friends and see who can find the most. It won't be necessary to send in a single subscription to earn one of the thirty prizes, but there will be extra large rewards for those who help boost The Rural American.

The answers will be judged and the winners chosen by J. A. Talman, Librarian, Minnesota State Historical Society; Dr. A. G. Plankers, M.D., Faculty University of Minnesota; and Mr. W. W. Bradley, Professor of English, West High School. These gentlemen were chosen to act as judges because of their well known reputation for fairness and integrity in their community.

	With no Subscriptions	With 5 Subscriptions
1st Prize	\$20.00	\$1000.00
2nd Prize	10.00	500.00
3rd Prize	5.00	300.00
4th Prize	5.00	200.00
5th Prize	5.00	100.00
6th Prize	3.00	75.00
7th Prize	3.00	50.00
8th Prize	3.00	40.00
9th Prize	2.00	25.00
10th to 30th	1.00	10.00

### How to Win the Big Prize

Here is the plan on which we are running this big booster campaign. If your answer wins first prize you will be given \$20.00 in cash, but if you have sent in five 1-year subscriptions to The Rural American, you will receive \$1,000.00 in cash instead. It is our aim to introduce The Rural American—an independent weekly newspaper—into every home in the country, and we are willing to pay these big rewards to those who help us advertise. Take advantage of this big chance. Send in your answer AND QUALIFY IT!

Address All Communications to K. M. GRANT, Dept. 16, The Rural American, Minneapolis, Minn.

**NEW CORD TIRES**  
\$10.65 TUBE FREE  
30 x 3 1/2

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## GUARANTEED 8,000 MILES

Our Guarantee and challenge assures every customer full protection. You can't afford to overlook these wonderful quality tires at such low prices. Brand new—high grade—cords, guaranteed 8,000 miles and adjusted at list price on that Guarantee.

THESE PRICES INCLUDE NEW PURE GUM TUBE FREE

30 x 3	\$ 8.85	32 x 4	\$17.10	34 x 4 1/2	\$23.45
30 x 3 1/2	10.65	34 x 4	18.60	35 x 4 1/2	25.20
32 x 3 1/2	12.38	32 x 4 1/2	21.45	36 x 5	26.20
31 x 4	14.11	34 x 4 1/2	22.60	38 x 5	26.90
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**RUSH ORDERS! DON'T DELAY** No money in advance. Just write today to be sure of getting the sizes and number of tires you want. All tires shipped C.O.D. Pay after you have examined.  
**WILSON TIRE CO., Dept. 926 325 E. 33d St., CHICAGO**

**Only \$2 DOWN ONE YEAR TO PAY**

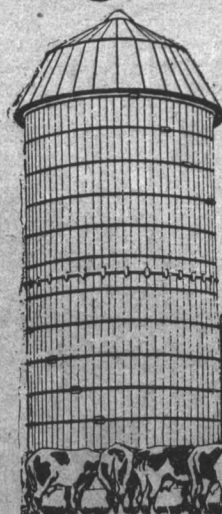
**\$44 Buys the New Butterfly Jr. No. 2**  
Light running, easy cleaning, close skimming, durable.  
**NEW BUTTERFLY Separators** are guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 5 shown here; sold on 30 DAYS' FREE TRIAL and on a plan whereby they earn their own cost and more by what they save. Postal brings Free Catalog Folder. Buy from the manufacturer and save money.  
**ALBAUGH-DOVER CO., 2260 Marshall St., Chicago**

### RADIO SUPPLIES

Aerial wire, magnet wire, insulators, receiving sets.

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**MICHIGAN BUSINESS FARMER**  
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Tell your friends about it

# RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

## NATION WIDE AGRICULTURE RADIO SERVICE

GOVERNMENT weather, crop, and market reports are being broadcast daily from the Arlington and Great Lakes wireless stations of the Navy Department.

This makes possible the receipt of agricultural reports by radio thru out virtually the entire United States and is the most important step yet made in broadcasting agricultural information, according to W. A. Wheeler, in charge of the radio work for the department. The new service started June 15.

Continuous wave radio telegraph is being used to broadcast the reports but it is expected that there will be considerable re-building by radio telephone so that any one in the eastern two-thirds of the United States saving radio telephone receiving sets may be able to receive the messages.

### Use Government Stations

The use of the Arlington and Great Lakes stations is part of an extensive plan to utilize existing government facilities for establishing a dependable, Nation-wide system for broadcasting agricultural news by radio.

It is said that under favorable static conditions both the Arlington and Great Lakes stations can be heard over the entire country, but that under average conditions the range is about two-thirds the eastern part of the United States. The reports will be received by the state departments of agriculture and agricultural colleges for broadcasting by radio telephone; local and private stations licensed to broadcast agricultural reports; county agents, shipping associations, and other farm organizations; and local amateurs who make a business of copying for local individuals and agencies the agricultural reports broadcast by radio telegraph.

### Schedule Is Completed

Extension of the service to all the high-powered stations mentioned is restricted at the present time only because the leased telegraph wire system of the Department of Agriculture over which the reports are dispatched for broadcasting does not reach some of those points. However, in the late summer or autumn when atmospheric conditions are more favorable for radio work a move may be made to extend the service by relaying messages to the various stations.

The tentative schedule of reports being broadcast from the Arlington and Great Lakes stations follows: After two weeks trial a fixed schedule will be established.

From the Great Lakes station a report of live stock receipts at five markets will be dispatched at 8 a. m. At 9 a. m. the weather reports which the Arlington and Great Lakes stations have been sending out for some time will be released. A brief report of the hog markets will be flashed at 9:15 a. m. A report of fruits and vegetables shipments and

f. o. b. prices will go out at 10 a. m. followed by a New York and Chicago dairy report at 10:40 a. m. From 11 a. m. to 1:05 p. m. complete live-stock reports of the Chicago, Kansas City, St. Louis, St. Paul, and Omaha markets will be sent out. A report of the grain markets will go out at 1:45 p. m.; a report of the fruit and vegetable markets at 2:30 p. m.; hay and feed market reports at 3:45 p. m.; a special weather report at 4 p. m.; dairy and poultry reports at 5 p. m.; a summary of all markets at 6 p. m.; and a weather report at 9:50 p. m. Arrangements are also being made to dispatch crop information.

### PORTABLE RADIO

THE Chevrolet Motor Co. has proved that the radio equipment operates satisfactorily in an automobile without the use of a "ground wire."

The possibilities that this portable radio receiving station offers include an almost limitless field of use and with such tremendous strides as these made in its development, it is bound to become one of the indispensable utilities of modern civilization.

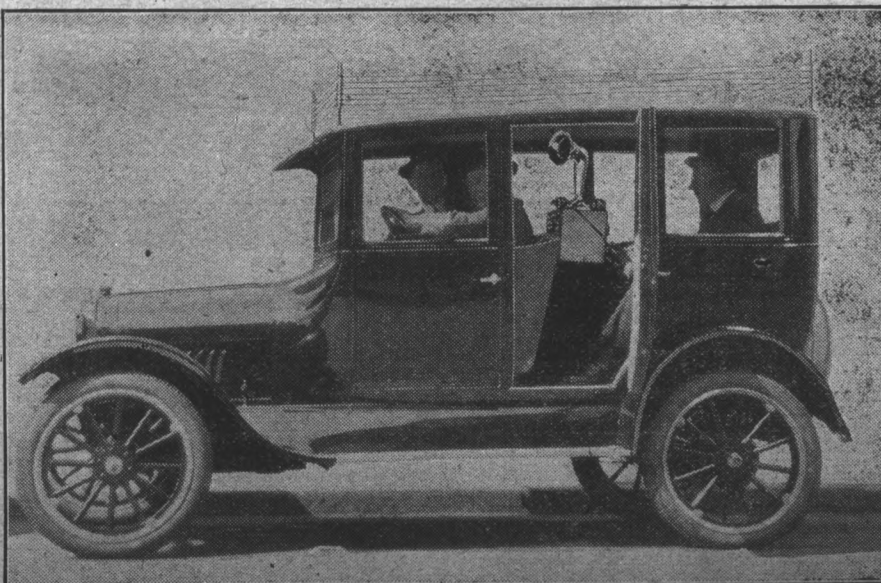
With a car equipped in this fashion it is possible for a family to drive anywhere within 100 miles of a broad-casting station and picnic while the radio in their car amuses or instructs them with music, sermons, or wireless telegraphy. Education and entertainment can be transported to wherever people congregate. With a few cars equipped as this one is, a minister could talk to a dozen congregations at once. If the United States' Department of Agriculture had similar radio equipment in the hands of its county agents, department experts could talk to thousands of farmers at once and thus bring the tremendous added benefits to our agriculture that would be made possible through a greater broad-casting of its work.

The installation of this equipment in the Chevrolet car is so simple that it is possible to adapt it to many uses, and therefore we may expect to see many cars similarly equipped in the future. It is also only a matter of a few moments to remove the radio equipment from the car when it is not desired for use there. It can then be used in the home or the office, or any other place desired.

Just as anywhere on the high seas ships can keep constantly in touch with ports and other ships thru the use of the radio, now the automobile—the land ship—can immensely facilitate distribution of information to the great benefit of mankind.

One ingenious amateur, by utilizing the power of the generator on his car, not only receives messages, but also transmits them.

Such equipment makes possible the use of motor cars as scouts or reporters of crop, weather or news messages from any part of the country.



Chevrolet Sedan equipped with radio outfit which receives messages clearly while the car is in motion. Note the antenna strung around the top of the car.

WHEN WRITING TO ITS ADVERTISERS  
PLEASE MENTION THE MICHIGAN BUSINESS FARMER



**ASSESSMENTS AND EXEMPTIONS**

(Continued from page 6)

persons or companies in which case he is assessable only for the amount his credits exceed his debts. No deduction can be made from real estate or tangible personal property because of indebtedness thereon.

If any person feels that an assessment made by the tax commission is at more than the true cash value of his property, we will be very glad indeed to have him write us, giving his reasons for believing the property is overassessed and we will take the matter up promptly with the assessing officer of the district in which it is located. We are very anxious to correct any errors which have at any time been made in our work. It will be equally satisfactory if the person will take the matter up with the supervisor of his township and request him to write us, recommending what change if any, should be made in the assessment.

Personal property is assessable at its actual value as of the second Monday in April. This does not mean that the assessment must be made on the second Monday in April but that property which existed at that date should be assessed to the person owning it or having it in his possession at that time, except that Section 17 of the Tax Law provides that, "no change of location or sale of personal property after the first day of May in any one year shall affect the assessment for that year." This section is intended to enable a supervisor to cancel an assessment already made where the person removes property from his district to another district before May first. If property is removed after May first, no change can be made in the assessment on that account. — B. W. Burtless, Secretary Board of State Tax Commissioners.

**SCHOOL SECRETARY OVER-DRAWS SALARY**

Has a secretary of a school board a right to overdraw his wages? If not what can be done with him?—T. N., Oscoda County.

The law provides that the treasurer of a school district is the legal custodian of school moneys. He has authority to pay out money only for amounts properly audited by the school board on orders drawn and signed by the secretary and countersigned by the president or moderator. He and his bondsmen are personally liable for the payment of illegal orders, those for purposes not authorized by law or those exceeding the amounts authorized by law.

The salary of school officers is provided for by statute. The provision is different for districts organized under different acts. The secretary has no right to draw an amount in excess of the amount legally fixed. He is restrained by law from drawing an order for purposes not authorized by law or for an amount exceeding the amount authorized by law. He can be required to refund any such amount.—G. N. Otwell, Department Public Instruction.

**DRAIN CONTROVERSY**

A, B, C and D had a county ditch voted through their farms. The ditch was sold in March, 1918, each owner, except A, taking the job on his own land. A and B had their ditches dug during the summer of 1918 and D dug his during the summer of 1919, but C refused to dig his part of the ditch, and the drain commissioner, though notified of the danger being done on D's farm, did not force him. Finally, when D threatened with a lawsuit, C's ditch was sold to another party, and dug during the summer of 1921.

But it was not dug according to specifications, in fact it was dug so shallow that it did not drain the water out of D's ditch, and this spring, when the sides caved in some, the outlet is obstructed so that D's ditch actually overflowed at a low spot, and there is still some water seeping onto the farm and small pools of water standing at the present date. The ditch is so full that the land along the edge of it is soft and unfit for crop production. C's water is running into D's.

What can D do to get his farm drained? Can he resort to courts and force the county to provide an outlet for his water? Can he sue for damages? What proof of damage would it be necessary to furnish in court?—Subscriber, Genesee County, Mich.

Under the statement of facts as set forth D should take this matter up with the county drain commissioner, calling his attention to the fact that a portion of the drain is not constructed in accordance with

the specifications and ask that the same either be constructed in accordance with the specifications of the contract or that portion of the drain be cancelled and the work be relet in accordance with the provisions of the statute.

It is the duty of the county drain commissioner to inspect this drain and see that same is constructed in accordance with the specifications as outlined by him in the contract and he has no legal right to pay for the cost of the same until the drain has been inspected by a competent inspector and found to comply with the specifications.

The writer is of the opinion that D would not have an action for damages but could only compel the drain commissioner to perform the duties of his office or proper charges which might bring about his removal therefrom.—State Highway Department, Lansing.

**TEACHER AND CONTRACT**

A school teacher hires out for nine months and obtains a contract. At Christmas time she has an entertainment and loses some school time in preparing for it. No complaint was made until after Christmas when the school board claims she has violated her contract by not hear-

ing the regular classes, and refuse to pay for the week before Christmas, time she has already put in. They bring another contract and tell her she must either sign it or not teach any longer. She does this and now holds both contracts. Can she force them to pay for that week? Did she violate her first contract? Has the board any right to put anything in a teacher's contract in regard to a teacher's conduct out of school hours and would a contract containing such restrictions be valid?—A. F., Edenville, Mich.

I would say in reply that as this teacher signed a second contract she must now be governed by this second contract. While she has both contracts in her possession the second contract signed would be the one that would govern. If the entertainment for which she prepared was a general nature and a reasonable amount of time was used in preparing for this entertainment she did not forfeit her rights as a teacher under her contract.

The school board cannot regulate a teacher's conduct outside of school hours whether this is attempted through the contract or otherwise. If a teacher does anything outside of school hours that would bring her school work into contempt she could be held accountable whether this was definitely stated in the contract or not, but to determine whether or

not her conduct was injuring her school work would be a judicial question.—G. N. Otwell, Dept. of Public Instruction.

**ORCHARD GRASS**

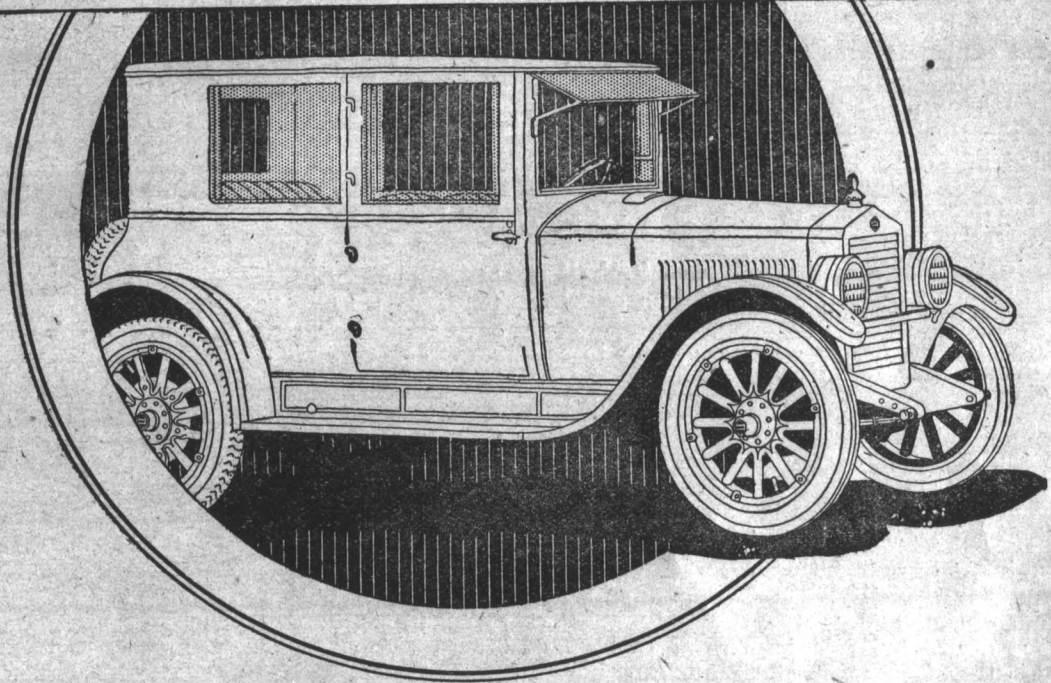
Will orchard grass grow satisfactory on sandy soil which is in fair shape but sour? Would it make pasture?—H. B., Vermontville, Mich.

Orchard grass does best on rich loam, but will do well on sandy soil if this is fertile. It does poorly on the poorer sandy soil. If well established it will endure considerable drought. It makes excellent pasture, and is earlier than timothy.—E. A. Bessey, Professor of Botany, M. A. C.

**GROUND CORNCOB NOT GOOD FEED**

Are corncobs good feed for horses? Am feeding ground cobcorn and the results are not very satisfying.—Subscriber, Wilber, Mich.

The practice of grinding corn and cob together for feed is followed by many. There is no feed value to speak of obtained from the ground cob. It does help lighten the ration and helps to make filler but it requires as much if not more energy to digest the ground cob than is contained in it.—Editor.

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Its owners like it—the best test of all

**A Few of the Many Who Praise It**

"This little Coach is a revelation. Handles easier, runs smoother than any car I ever owned. I don't think I will ever want to drive a big car again."

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Drive the Essex. It is altogether different from any car you have ever driven. It will delight—and tempt you. Any dealer will be glad to arrange such a ride.

Touring Car, \$1095

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**ESSEX MOTORS—DETROIT, MICHIGAN**



# The Michigan BUSINESS FARMER

An Independent Farmer's Weekly Owned and Edited in Michigan

SATURDAY JUNE 24, 1922

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Mt. Clemens, Michigan

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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.

Entered as second-class matter, at post-office, Mt. Clemens, Mich.

"The Farm Paper of Service"

## Another Word About "Missed" Issues

Friends of the Business Farmer:

From the letters which come to my desk I learn that there are still a number of our good friends and readers who have not read my repeated explanation of "missed" issues.

Although conditions over which we have no control have made it absolutely necessary to issue the Business Farmer, every other week, instead of every week since March 25th—every issue thus missed by our subscribers has been credited to their paid up subscription!

So in the end no subscriber will "miss" a single issue to which his subscription entitled him.

Naturally, we are as anxious as you to see The Business Farmer, back on a regular every-Saturday basis, and hope to accomplish this before September first.

In the meantime, we ask you to be patient and we are trying to make up in the enlarged issues every other week, what you miss by not getting your copy every week.

You know, of course, that this weekly is owned and edited entirely in Michigan and by Michigan men, and we depend only on the support of the business farmers of this state and are therefore, responsible only to them.

Standing thus independent of foreign ownership or political control we believe The Business Farmer, can be maintained as the leader of courageous thought and action in the service of the farming business in this great state of Michigan!

## Horse-Bits or Horse-Sense

ONE evening two weeks ago the writer sat in the gallery of the United States Senate in the city of Washington. It was a very hot evening and everybody from Vice-President Coolidge lolling in the chair, to the sleepy page boys on the steps looked worn-out and ready to give up the ghost.

In the senate chamber were five senators, one was on his feet talking, one near him might have been listening or sleeping, his gaze was riveted on the ceiling, the other three were reading, writing, or fumbling over papers piled high on their desks.

It was a typical senate scene during the warm days in Washington!

Finally the senator speaking, broke off to ask permission to "reprint in the Record, a large volume of important figures, without reading," the chair woke with a start, uncoiled his legs and mumbled something about "there being no objection, so ordered!" the page boy galvanized into action, ran for the papers and another senator, with a flowing mustache and a voice to match, arose languidly from his seat. Then for an hour and some fifteen minutes

an exciting debate was held between the senator from North Carolina, and the senator from Wyoming, over the paramount subject "horse-bits," as differentiated from "carpenter-bits" the kind of horses that wore them, the kind of buyers who bought them and the kind of sellers who sold them.

It was proposed to include them in a revised amendment which added a 60 per cent ad valorem duty, to this the democratic senator from North Carolina objected. He offered a motion to cut this tariff to 30 per cent, or to take it off all together and not tax the bit-buying public, at the profit of the bit-manufacturer, to this the republican tariff leader strenuously objected, naturally.

From an authority we learn that the first month of tariff debate just closed brought out a total of 1,492,000 words, occupying 746 pages in the Record and only 35 of the 438 pages in the tariff bill have so far been considered. From the discussion we heard on horse-bits, we assumed that the May record will be broken in June.

When our collar had melted down completely and we were alone in the spectators gallery, we arose from our seats and went out into the clear Washington evening. The stars were shining just as they do back in Michigan, folks seemed to be going about the things of ordinary life, just as though they had no thought about what the heated senators under the big dome up there were going to do with the tariff on "horse-bits"!

And then for some reason we kept thinking about one of the big catalogs the Chicago houses send out in which they list most of things used by humans in their homes, on their backs or in their stomachs and we wondered how important a position "horse-bits" occupied anyway in the catalog of human necessities! For if, thought we, it takes an hour and a quarter to discuss the single item of "horse-bits," how long will it take to pass this tariff legislation?

In the meanwhile, President Harding may beg for his ship subsidy, the American Legion for its bonus bill, but the congress must argue over "horse-bits"!

If they sold pink-lemonade, peanuts and tickets for "the wild-west and feed the animals show immediately after the big performance" in the gallery of the senate it would be a circus to go there even on a hot night!

## Nero Fiddled, While Rome Burned!

IT is summer time in most of the United States, the birds are singing and we are glad to get in the shade and drink a big dipper of ice water from the bubbling spring—in other words it is warm here and therefore we are not burning coal for heat.

From past history, of which we seem to have a convincing amount of evidence, it will within six months from this date be cold in most of the United States. The snow will be piled high, lakes and streams frozen over and the window in the bed-room where we arise will be frosted over—in other words it will be cold here and we will have to have heat or we will freeze.

These two facts as we have stated them seem to us undeniable. Most folks whom we know would accept them without challenge, although we admit we do know some who are always ready to take the negative on any subject.

But admitting, for the sake of argument, that the United States, which includes you and me, will be in great need of coal within six months, it would seem that the government, which is supposed to be our paid agent for the protection of our interests would be looking far enough ahead to see the inevitable result if the coal strike and the resulting non-production of coal are allowed to continue.

Congressional investigations and depart-

## NOTICE TO SUBSCRIBERS

Since March 25, 1922, we have been forced to issue every other Saturday and each issue thus "missed" has been credited to the expiration date of every subscription, so that in the end, no subscriber will miss a single issue of The Business Farmer, for which he has paid.

ment of justice detectives who will undoubtedly be put on the job next winter to discover why the price of coal is so high could collect without effort all of the evidence they will need then, right now.

## Will It Be a Good Year?

FARMERS are looking forward to one of the best years in their history. The hay crop has been bounteous in all sections of Michigan. Wheat and rye have attained an excellent growth and oats are not far behind. Corn will be well up over the orthodox "knee-high" stage by the Fourth of July, and potatoes, beans and sugar beets planted under ideal conditions have made a wonderful start.

If good crops mean good times the promise is rich for an unprecedented era of prosperity for Michigan farmers. But unfortunately, the reverse is often the case. The American farmers have not yet learned how to prevent an over-production of crops, nor to store, dry or market the surplus at a profit. Until they learn how to do these things and have the necessary credit and marketing facilities good crops may continue to mean losses for the farmers and hard times for the country.

However, there need be no fear of an over-production this year of such non-perishable crops as wheat, rye, corn, oats and beans. The rest of the world is still on a near to starvation basis and with the world acreage of grain crops the smallest it has been in years, every bushel of grain that can be raised from American acres will find a market. But the world food situation offers little hope for the surpluses of fruits and vegetables.

No matter what the harvest may promise it should not as some farm papers have intimated lull the farmer into a state of forgetfulness of what has happened in recent years nor blind him to his future economic welfare. Organized agriculture must not sleep for a moment nor neglect the means at its command to right the wrongs that have been perpetrated upon it. The farmers have made some progress economically in recent years but they have a long road yet to travel. To permit themselves to be talked into a state of passivity and to fold their hands now when the fight has just begun would prove a blunder for which they would some day pay dearly.

Agriculture has a definite mission to perform. The plan of action has been outlined. The purpose is to insure for those engaged in farming a permanent prosperity which cannot be wiped out by one or two bad years. Good crops may fill the farmer with optimism but they will not alone insure prosperity. It is what the farmer has left after he has sold his crops and paid his bills which counts.

## For Cleaner Milk

THE Chicago Milk Producers' Ass'n has begun a campaign among its members for cleaner milk. The Association believes the time has come to stop trying to kill bacteria in milk and begin keeping bacteria out of milk.

Disease is the natural offspring of filth. Filthy premises where milk is produced will surely contaminate the milk and fill it with bacteria fatal to both bovine and human health. Most of the diseases which animals suffer have had their origin in filthy surroundings. The price which dairymen have paid for the carelessness of some of their members would, if calculated, make a staggering total. The ease with which milk is contaminated and disease germs spread among dairy cattle have discouraged many farmers from taking the precautions they should, but thousands of dairymen have demonstrated that milk can be kept pure by simple and inexpensive measures.

Just as simple health rules promulgated by departments of health reduced disease and death among humans; so can a few common sense measures employed about the barnyard lessen the ravages of disease among animals. The campaign inaugurated by the Illinois farmers to this end is most commendable and the results will profit the entire country. It is to be hoped that the dairy organizations of Michigan will shortly undertake similarly intensive measures to eradicate dirt and disease among the dairy herds of this state.



## Uncle Rube Spinach Says

### HOW 'BOUT CONGRESS?

AIN'T Congress the wonderful thing? We think 'bout Hollywood an' its actors an' actresses. We 'member the scandals, murders an' everthing that's happened out there in the last year or two. We say its an awful place an' maybe it is, least-ways there's been a lot of goin' on out there an' nobody seems to know what its all about. An' then there's Congress! I'm jest wonderin' if there ain't swell doin's there? What has our Congress been doin' in the last year or two? Bonus bills, Tariff bills—most every kind of thing has come up in Congress—Fights—or purty nigh fights has took place. Men that have been elected to make our laws and who are drawin' good money for their labor, are jest squabblin' an' fightin' to see who can talk longest an' loud-est.

They go back to the war an' even before the war, they cry fraud, profiteering, graft an' most every thing imaginable, they appoint investigatin' committies that never git any where. They argue 'bout the soldiers bonus, while the aforesaid soldiers are destitute an' in need of help. They draw their money an' jest lay on their oars an' for why? Well dear friends, here's why! Purty soon now another 'lection'll take place. If every thing was cleared up, if our Congressmen had done their duty, there should be no question left unsolved. But—an' here's the big idea. They must have some thing to bring before the voters next fall or at the primaries an' so you see they jest bring in a lot of unfinished business! They send out a lot of cheap garden seeds 'bout this time of year—your seeds will have "compliments of your Congressman."

Tommy-rot! Your Congressman never seen any of the seeds you get. Its a bunch of seeds that's sent in from diff'rent seed houses an' the secretaries send 'em out with "compliments."

Let's get some good red blooded men down there. Men who'll do the work an' not think that a few packages of garden seeds 'll compensate for the \$7,500 they get, mebbe they get more'n that, but that's their salary any way. You know some of 'em spend a fortune, \$175,000 even to get a seat in Congress. What's it all for? Do you know that if we'd jest git after them tellers, tell 'em what we want an' what we demand, give 'em to understand they are our servants an' not our masters, tell 'em to get busy an' make some laws, You know Congress is—or is supposed to be, our law makin' body. Congress is great, ain't she? Now if I could be allowed to use swear words I could put 'em in right here. I don't use 'em so I can't express myself, but I guess you'll know 'bout what I think of Congress an' say folks, farmers! What're you doin' about it! Are you doin' your duty? Are you goin' to 'lection? Are you votin' for the men you want? What're you doin' any way? Now lets get in the harness an' tend to business. Its up to us an' lets be there on all fours. Cordially,—UNCLE RUBE.

## FRUIT and ORCHARD

EDITED BY FRANK T. WELLS

### AN APPLE TREE PEST

SOMETIMES white, woolly spots are found on the trunks or limbs of apple trees, usually in crevices of the bark. By examining with a small microscope it will be seen that they are colonies of small aphids or plant lice having bunches of wool on their backs. The insect is the woolly apple aphid, a pest that at times does considerable injury to the trees.

The insect is most troublesome on newly planted trees. Colonies are to be found on the twigs and leaves, where the sap is sucked out, causing swellings in the bark. The roots are also infested, where it is hard to find the creatures and still more difficult to kill them.

Woolly aphids live on the apple till the latter part of summer or early autumn when they develop a

winged form and seek another host plant, but return later to lay eggs for the winter, which hatch the following spring. Those on the roots remain there through the winter and may be distributed about the branch in the spring by ants, who have an interest in them and some other kinds of aphids.

The habits of the insect make it difficult to control. They do not belong to the biting or chewing class, so arsenate of lead or any of these poisons are useless. A contact spray alone is effective. Kerosene emulsion, or better still a nicotine application will kill them. Black-leaf 40 at the rate of one pint to 100 gallons of water is used as a spray in orchards and nurseries. The addition of four pounds of fish oil soap, dissolved in hot water makes it more effective. Common laundry soap may be used if the other is not at hand. The best time to apply it is in the spring as soon as the insects appear, but any time while they are on the trees will do.

The aphids on the roots are a more difficult problem. Probably the most effective treatment at present is to remove the earth about the trunk of the tree to a depth of four or five inches, and for a radius of from one to three feet, according to the size of the tree, then spread tobacco dust, stems or refuse from a cigar factory, if it can be obtained. For the large area six or seven pounds of dust or stems is advised. Cover this with as much soil as was removed. As the rain soaks through the tobacco and comes in contact with the roots the aphids will cease to cause trouble.

Woolly aphids do most damage in the nursery, where blocks of trees are sometimes ruined. The greater injury is to the roots, which become brittle and lifeless. Little swellings characterise the work of the insects. Such trees are discarded by reputable nurserymen.

But while nurserymen who care for their reputation destroy trees infested with woolly aphids, it is impossible to get them all, besides there may be eggs on the bark and these are not easily seen. So the insect should be looked for during the first and second years after planting.

### ORCHARD INSURANCE

I have an apple orchard and wish to know if there is any company that insures such property.—M. D., Barry County, Mich.

The Michigan Mutual Hail Insurance Company, Lansing, Mich., may be what you want. It writes insurance for farm, garden and orchard.

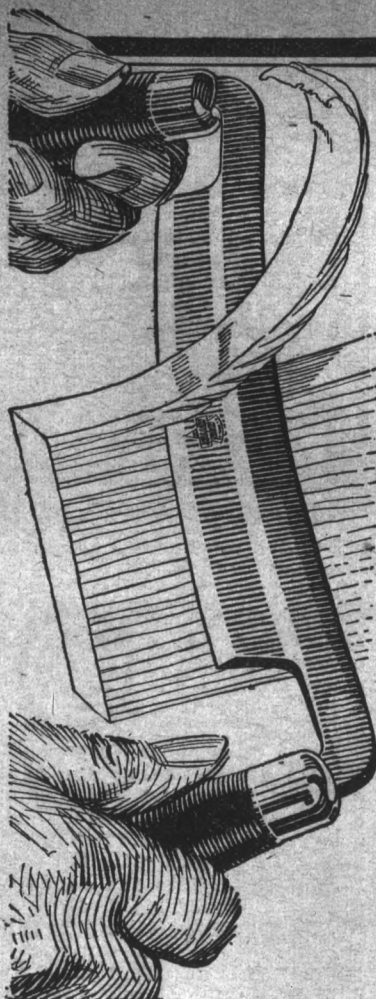
### NOTES AND COMMENTS

Last spring demonstrated the value of bees in the orchard. When the peaches were in bloom, the weather a part of the time was favorable for the bees to work. As a result the flowers were well pollenized and the trees were full of promise. But when the apples were blossoming the weather was cold and damp. Few bees were abroad. A large proportion of the blossoms were not fertilized, or so weakly that they were of no account. Many of the apples that did form have since fallen. This was the result through a considerable portion of Michigan. One or two apples to a cluster, where half a dozen or more were promised. But a loss this year may be a gain next.

One of the hopeful signs of the future is the interest now taken in the huckleberry. Owners of swampy land, difficult or expensive to reclaim, are asking themselves why they cannot put it to good use by planting the high bush or swamp huckleberry. The bushes grow rapidly and soon bear abundantly. There is a ready sale for the berries at a good price and the outlook is good for the future. Thousands of acres now little better than worthless might be made profitable in this way.

The first brood, so called, of the San Jose scale is moving by the last of June. When these yellow mites are in evidence, so small that they are not readily detected without a microscope, the diluted lime-sulphur spray is effective. It can be used on apples and pears, at the rate of a gallon of the commercial solution to 33 gallons of water. For cherries and European or Domestic plums make it a little weaker, about 1 to 35. Peaches and Japanese plums should not be sprayed with lime sulphur while the foliage is on, as even a weak solution will cause the leaves to drop.

Young plum trees of the domestic or American varieties should not be allowed to overbear. They will often set three times as much fruit as they should, the result being a dead tree, unless severe trimming is done. The Japanese varieties are not liable to be killed by heavy bearing, but the fruit will be small and inferior. This is unmercifully for the good of the trees. If the trees were sprayed properly there should be no curculio to do the work.



## The Emblem of Value!

Keen Kutter on any Tool signifies not only those merits expert workmen demand, but the practical strength and usefulness needed by men on the farm.

That is why a Keen Kutter Drawing Knife, with its one-piece blade of finest steel, gives long years of hard service and stands endless re-sharpening.

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Trade Mark Reg. U. S. Pat. Off.

Simmons Hardware Co.

Our prices on all Keen Kutter tools have been reduced. Ask your Hardware Store about today's values.

# KEEN KUTTER



## Look at your wheat before harvest

Has it long, full heads of sound grain? Is the straw stiff enough to stand? Will it yield as much as you hoped? Is the clover or grass stand in it good? If not, think over the matter of using a fertilizer that will help you.

For six years wheat fertilizers have contained little or no Potash. Potash prices are now much lower. Enough German Potash has now come forward, so that those who wish can buy wheat fertilizers with

## 4 TO 6% POTASH

Go at once to your dealer and tell him what you want and insist that he get it for you when the fertilizer salesman makes his first call.

## Potash Pays

SOIL AND CROP SERVICE POTASH SYNDICATE, H. A. HUSTON, Manager  
42 Broadway New York

## THE AUTO-OILED AERMOTOR

### A Real Self-Oiling Windmill

Oil an Aermotor once a year and it is always oiled. Every moving part is completely and fully oiled. A constant stream of oil flows on every bearing. The shafts run in oil. The double gears run in oil in a tightly enclosed gear case. Friction and wear are practically eliminated.

Any windmill which does not have the gears running in oil is only half oiled. A modern windmill, like a modern automobile, must have its gears enclosed and run in oil. Dry gears, exposed to dust, wear rapidly. Dry bearings and dry gears cause friction and loss of power. The Aermotor pumps in the lightest breeze because it is correctly designed and well oiled. To get everlasting windmill satisfaction, buy the Aermotor.

Write today for Circular. **AERMOTOR CO.** Chicago, Des Moines, Kansas City, Minneapolis, Oakland



## AGENTS WANTED

To solicit subscriptions for the Business Farmer. Liberal commission or salary and expenses. Write Agency Mgr., The Business Farmer, Mt. Clemens, Mich.



## BANISH THE BUGS

MY good friend Mr. C. H. Hill who represents Hooker Brothers, nurserymen, Rochester, N. Y., has given me the very best spray for killing insects that I have ever used. You can make it yourself and as I want to pass every good thing along here it is:

Dissolve 1-2 small bar of Ivory soap in 1 quart soft hot water, when cold add 1-2 pint kerosene oil, whip for 10 minutes as you beat eggs. When creamy add 3 quarts of soft water, add the strength of 4 ounces of smoking tobacco steeped in 2 quarts of water, making six quarts of the mixture then add 60 drops of carbolic acid.

Mix thoroughly 24 hours before using. Keep in a cool place in a corked jug. Shake well before using and apply with a sprayer in a mist-form. This spray gets better the longer it stands and will keep trees, plants, shrubs and vines free from all insects.

## WHO ARE OUR GREATEST DOZEN?

WHO are the greatest twelve women in the United States? That is the question the National League of Women Voters needs help in answering. What twelve living women in North America best deserve to serve as examples and inspirations to the women of Chile and the rest of South America?

Senorita Graciana Mandujano, official delegate from Chile to the Pan American Conference of Women, has asked the League, at whose invitation the conference was held, to select for her a dozen women about whom she will write articles for publication in the newspapers of Chile which she serves as correspondent. They must be living women, she stipulates. Chile has her heroines of history, her women patriots, her women of devotion, and our Anne Hutchinsons and Hannah Dustins have nothing to teach that Chile does not know. What Chilean women need is the lesson of life of the modern woman, the woman who has successfully dealt with conditions of today, can teach, for the women of Chile, with all their keen intelligence, their sound educations and their famous wit, are still in need of exactly the kind of incentive the life-stories of soundly useful women of the United States can give them.

Who are the twelve greatest women in the United States? Who are the twelve women our Chilean sisters may best adopt as guiding lights? The League of Women Voters asks everybody's help in answering the question.

Note—Mail your answers to me if you wish and I will send them on or send them direct to the League of Women Voters, Washington, D. C.

WARM WEATHER FOODS  
(Requested)

## Baked Codfish

Mix well 2 cups of flaked fish, freshened, 1 cup of mashed potato, 1 egg, 2 1-2 cups milk, 1-2 cup of butter. Mix all together and put in bazer. Beat 1 egg, add 1-2 cup of milk and 2 crackers rolled fine, spread over top and sprinkle over with 1-4 cup of grated cheese. Bake about 30 minutes in moderate oven.

## Salmon Loaf

Free the salmon from skin and bones and break in pieces using a silver fork. Cook 1-4 cup of bread crumbs in 1-2 cup of milk, until smooth like a paste add scant 3-4 teaspoonful of salt and 1 beaten egg, add salmon and pour in a well buttered baking dish, set baker in a pan of hot water and place in oven to bake about 30 minutes. This loaf may be served hot or cold.

## Tunny Fish Turbot

Make one pint of white sauce, add the juice of 1 lemon. Use 1 can of white tunny, place a layer of fish in baker then a layer of sauce then add rolled cracker crumbs. Fill the dish in this manner with crumbs on top and bake 30 minutes.

Salad recipes and jellied chicken will be given next week, also recipes for using mackerel, lobster, flounder and halibut.

The Farm Home  
A Department for the Women

Edited by MRS. GRACE NELLIS JENNEY

Dear Friends of "Our Page"—Just a little personal word to you today. I want to thank those of you who have responded so graciously to my requests for poems and for the good suggestions and ready responses which have come in, in answer to our queries in the correspondents column.

I cannot thank each one personally so we will just broadcast our appreciation, and speak not only for myself but for all those who have received help or light on some problem. We will be visiting you every week again before so very long and in the meantime we will not forget that we are members of one big family and all interested in each other confide your perplexities we will try to help and when you have found something of value pass it along.—Editor.

## CORRESPONDENTS COLUMN

Subscriber—For one afflicted with salt-rheum the following suggestions will be found beneficial:

Three tablespoons of sulphur, 2 tablespoons of cream-of-tartar, 1 tablespoon nitrate of potash or salt-peter. Mix and put 1 teaspoonful in a little milk or syrup and take at night.

Put 3 tablespoons Epson salts and 1 teaspoon of carbolic acid in 1 quart of water and boil 5 minutes, bathe hands in it. Witch hazel is also good. At night rub lanoline or sweet oil, 1 ounce, with ten drops of carbolic acid, into the hands drawing on a pair of loose cotton gloves to keep bedding clean. The hands should not be kept in water any more than is necessary, strong soaps and washing powders are very harmful. Loose gloves should be worn when dusting as dust irritates.

To keep the hands in condition always rub perfectly dry after they are wet. Imperfect drying cause much trouble.

Mrs. M. E.—Absolute cleanliness is the surest way of keeping lice and mites away. If the hen-house and roosts are kept clean the chickens will rid themselves of body lice in a good sand bath. It is the small lice in roosts and in nests that weaken fowls so that they are unable to rid themselves of the body lice.

When a bald-head has reached the shiny stage there is nothing for it but resignation, nature's own covering will never return. Close-fitting hats and fur caps tend in the direction of baldness.

Who can send me the words of the song called "Lilly Dale?"

E. H.—An inexpensive material and desirable for dining room curtains, is just plain white lawn made with a deep hem and hung straight at each side of your windows, especially good for a room inclined to be dark.

CERTO, A NEW PREPARATION  
What is Certo?

Certo is a pure fruit product and contains, in a highly concentrated form, that necessary element, Pectin, without which you cannot make jelly.

Some fruit juices have pectin in a greater or less degree.

Other fruits, such as cherry and strawberry, contain no pectin at all.

Partly ripened fruits contain more pectin than fully ripened fruits; that is why most cook book directions say "choose incompletely ripened currants and grapes for jelly."

A dry or wet summer will affect the pectin content of fruits.

## What Does Certo Do?

With Certo you can make jelly and jams from all fruits, even jelly from the pectin-less cherry, strawberry and pineapple.

With Certo you use the fully ripened fruits and berries with their superior flavor.

With Certo the jelly always "jells."

With Certo the boiling period in jelly-

## AIDS TO GOOD DRESSING

For Service, Simplicity and Style

Address Mrs. Jenney, pattern Dept., Michigan Business Farmer, Mt. Clemens. Do not overlook our patterns if too busy to sew at present, choose your style and send for the patterns. You will then have them all ready when you are at liberty to sew. You may lose the paper.



## A Becoming Gown for the "Stout" Woman

3948-3727. Figured and plain foulard are here combined. This style would also be attractive in the new printed voiles, or in tissue gingham combined with organdy.

The waist pattern 3948, is cut in 6 sizes: 36, 38, 40, 42, 44 and 46 inches bust measure. The skirt 3727 is in 6 sizes: 24, 26, 28, 30, 32 and 34 inches waist measure. To make the dress as illustrated will require 4 1-8 yards figured material and 3 7-8 yards of plain material, for a 38 inch size. The width of the skirt at the

foot is about 2 1-4 yards. TWO separate patterns mailed to any address on receipt of 12c for each pattern in silver or stamps.



## A Dainty Up-to-date Morning Negligee

3974. Here is a charming breakfast coat for my lady of leisure, which will serve also as a negligee. It is pretty in the new printed voiles, tissue gingham, as well as in dotted Swiss and crepe. As illustrated printed foulard and lace are combined. Cotton, crepe with a finish of hemstitching is equally attractive.

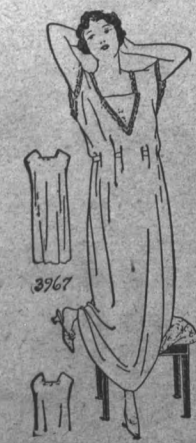
The pattern is cut in 4 sizes: small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 3 7-8 yards of 40 inch material. Price 12c.



## A Smart Suit for Sports, Beach or Country

3846-3787-3946. 3 stylish models are here shown, that may be developed separately, or combined to make this attractive "suit." The sleeveless blouse 3787 may be of paisley cretonne, or Jersey, and the guimpe, 3846 and skirt 3946, of sports satin, crepe or flannel.

The blouse and guimpe are cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. The skirt, in 6 sizes: 26, 27, 29, 31, 33 and 35 inches waist measure. The skirt requires 3 5-8 yards of 44 inch material. Its width at the foot is about 3 3-8 yards. The guimpe requires 3 1-2 yards of 27 inch material and the blouse 2 1-4 yards of 36 inch material for a medium size. Each 12c.



## A Pleasing "Lingerie" Model

3967. For this charming style crepe de chine, radium silk, batiste or crepe could be used. Embroidery lace, or simple hemstitching is effective for trimming. The gown may be finished without the dainty bib portion shown in the large view, and its fullness may be confined at the waistline with ribbon drawn through slashes.

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 1-2 yards of 32 inch material. Price 12c.

making is one half minute; in jams generally one minute.

The short boiling period results in one-half more jam or jelly from the same amount of fruit than by the old method.

The short boiling period also preserves the color and flavor of the fresh, ripe fruit.

## ON THE WARM LUNCH

As I see so many good things in our page of the M. B. F. I feel like a good many others that the space is so small, but it is surely meeting the needs of the farm women. In answer to A Friend in May 13 issue the warm school lunch is a God-send to many children in our rural schools, so many have such poor appetites and so little to tempt them to eat that a warm lunch seems to fill the bill. I have tried this out, and find that soups with plenty of milk are more relished by children than anything else. The children always brought the materials and we prepared them at school, however, if the mothers would do this at home simply to be reheated at school it would save the teacher a great deal of trouble, especially where there are no large girls to help.

The consolidated school is being discussed so freely I believe it would be a glorious opportunity for farm children if it wasn't for the hardships in transportation at least for the small ones.

Is there any middle aged lady among our readers who is free to leave home for eight or nine months beginning with the school year? If so I would like to hear from you, you may get my name and address from Mrs. Jenney. Please tell age, experience and if you care for children.

Hoping I may hear from a number and wishing Mrs. Jenney all success in this department, I am, truly yours.—Mrs. W. J.

## WANTS LOAN OF BOOK

I am a reader of the M. B. F. and have seen so many requests that I have ventured to write one myself. If any of the readers of the M. B. F. have the book called "The Story of an Error," written by Charlotte M. Braeme, and would loan it to Mrs. Frank Howard, and she will return it in the best of condition or send something in return. Thanking you in advance.—Mrs. Frank Howard, Millbrook, Mich.

## WILL PAY FOR CARPET BAGS

I am wondering if some of the women who have kept house longer than I haven't some rags, suitable for rag carpet, more than they need. I have three little tots but their clothes don't make many rags, only being 3 1-2 years, 25 months and 10 months of age. If some have rags to spare I do wish they would kindly pack a few pounds in a box and parcel post them to me. I am able and very willing to pay for them any reasonable price and also parcel post charges if they will just send a card along with name and address.

I do want some so badly and I am willing to return the favor in any way I can. I will write again soon with some good recipes. Am cleaning house now, have had sickness here all the month of May and I am behind with it.

I will close, thanking you in advance. Sincerely, I am.—Mrs. Arthur H. Shoultes, Bentley, Mich., R. 1.

## BE CONFIDENTIAL

I have read with interest Mrs. C. E. B.'s letter, also Mrs. C. E. M.'s. I am very glad to know of other mothers interested in the way of teaching children about their own bodies as they ask the questions. Surely no one else can talk to a growing child as a mother can. There are so many things on the farm to compare a child's life with and a child will become as interested in its own makeup and more so than in any other kind of a story. I am the mother of two growing boys and one growing girl. I answer all my children's questions truthfully. I try to be an interesting listener to all their little stories and troubles their minds are filled with when they come home from school, and I hope to always be their confidant as they grow up.

I think there are too many mothers who are not interested in their children's notions (as they call them) and as the children grow older they will sooner or to anyone else than mother for things they want to know. Also a father can explain to his son the things he ought to know better than any other grown-up boy or man. It is grand for father and sons to be chums. I have been a silent reader of the M. B. F. for a long time and like it very much.—Mrs. H. Walt.

P. S.—Will you kindly send me the stocking foot pattern?

## WHEN A BOY I USED TO DWELL

When a boy I used to dwell in a house I loved so well, Far away among the clover and the bees, Where the morning glory vine 'round the cabin porch did twine. And the robin red-breast sang among the leaves. There I spent life's golden hours roving wild among the flowers. In my boyhood's happy home down on the farm.

## Chorus

Many years have passed since I saw the old home last, But memory still steals o'er me like a charm. In that old familiar place every kind and loving face, In my boyhood's happy home down on the farm.

But today as I draw near the old home I love so dear, A stranger comes to meet me at the door. Around the place there's many a change and the faces all seem strange. Not a loved one to meet me as of yore. My mother dear is laid neath the elm tree's quiet shade, And the golden summer sun shines bright and warm. In that old familiar place I can see a stranger's face. In my father's old arm-chair down on the farm.



## The Children's Hour



**C**AN you write a story? Have you ever tried? I am going to give away ten prizes to the writers of the ten best stories about the above picture that I receive within the next 2 weeks. There are five prizes for the girls and five for the boys and they are well worth working hard for.

All you have to do to compete for one of the prizes is to study the above picture and then write a story around the people shown. Do not describe just what is going on in the picture but write a complete story centering your plot about these three people and what they are doing.

Now for the prizes. To the girls I am giving a needle case containing nearly fifty needles of different sizes. It is very beautiful and if you girls do much sewing, or belong to a Garment Making Club it would be very handy for you to carry about from place to place. And we are not giving away just one to one girl for the best story but will give five to five girls for the five best stories. Each of the five boy winners will receive a leatherette pencil case containing four assorted pencils, a penholder and a pen point. This case is a beauty and can be carried in the pocket so that you will always have a pencil with you. The top of this case fastens down with a snap and there is a small pocket or purse on the side of the case that has a top that fastens the same way. You can carry money or many other things in this pocket. The case will be just the thing when you return to school this fall. The names and addresses of the winners will be published in the Children's Hour along with the stories.—UNCLE NED.

### OUR BOYS AND GIRLS

Dear Uncle Ned—It has been so long since I have written to you that I thought I would write. I wrote on the eighth grade examination this year but did not pass. I have a sister older than myself, she wrote and passed. All the flowers are in bloom now and northern Michigan is very beautiful. We planted one thousand and seven hundred and sixty-six hills of melons this year and they are all up. People come here from Kalkaska and other places after melons. My father is sixty-three years old and is still farming. He has only three children at home, two girls and one boy. Last Sunday we were over to Leon Lake, east of our home, to a baptizing. There is going to be a lot of fruiting this year. We have a small grape vine that will yield about two bushels of grapes. I will close. From your niece.—Theresa Lamb, Lake City, Mich.

Dear Uncle Ned—I am 10 years old, am in the fourth grade. How are you and my cousins? I am fine and hope you are the same. I have 25 little chickens and two bantams. I would like to hear from some of my cousins. Good-bye Uncle Ned—Irene Jarvis, Rodney, Mich., R. 1.

Dear Uncle Ned—May I join your merry circle? I am nine years old. I have four brothers and two sisters. My mother died the 20th of January, 1920. I was



**USELESS**  
Bird—Now what on earth does any one want to dust their feathers off for?

six years old then. My birthday is the 2nd of February. I passed on test into the fourth grade. We have 5 cows, 4 horses, 5 little pigs. I have a new adopted mother and father. Our school was out the 25th of May. We had a picnic dinner so all the neighbors could come and eat. I love my new father and mother I like to go to church and Sunday school. I have two and a half miles to go. I wish the boys and girls would write to me.—Lola C. Davis, Port Hope, Mich.

Dear Uncle Ned—May I join your merry circle? I am a girl eight years old and will be in the fifth grade when school starts again. Our school let out the nineteenth of May. My mother's birthday is the nineteenth of May, my birthday is the sixteenth of March. We received the M. B. F. today. I will send a riddle: What turns but never moves? Milk turning sour. We live on a forty-eight acre farm. Good-bye.—Norma Torrant, Napoleon, Mich., R. 1.

Dear Uncle Ned—I see lots of boys and girls are writing letters for the Children's Hour page, so I thought I would write one too. I am ten years old. My birthday is Oct. tenth. I wonder if any of the girls and boys that have written to the children's page have their birthday on the same day as mine? I live on a farm about five miles from town. We have three horses, five cows, and three calves, a cat and a dog, named Jip. I am a little shaggy fellow but we have lots of fun with him. I have two sisters and three brothers. It is my sister Ethel's birthday today. She is 14 years old. My other sister is 15 years old, her name is Helma, and my brothers' names are Rudolph, Carl and Oscar. Our school was out last Friday. We had a picnic. I like to read the letters in the M. B. F. I will close now, hope some of the boys and girls will write to me. Your friend.—Gladys Carlson, Omena, Mich., Box 49.

Dear Uncle Ned—I am a farmer girl 14 years of age. I have written to you before and also have received some letters from some M. B. F. friends. I also hope to get more. I wish some of the boys and girls would write to me for I love to get letters and also love to get acquainted with other M. B. F. friends. I have to iron today so I think I shall close. Wishing Uncle Ned and all the cousins good luck and the best of health, I remain a true niece and cousin.—Clara Weber, Freeland, Mich., R. 3, Box 52.

Dear Uncle Ned—I am a farmer's daughter. My papa has 210 acres of land. I am 13 years old, just past the seventh grade in school. We have 8 pigs, 6 calves, 5 cows and 3 yearlings. I help milk night and morning. My two sisters and one brother and myself are cultivating ten acres of corn twice in a row with one horse. Papa gives us one dollar a day. We have a garden. Also have 2 cats, 1 dog, 100 chickens and 50 hens. We will have to pick cherries and raspberries pretty soon. I think Miss Frances Inman is 16 years old. My papa takes the M. B. F. and likes it very much. Couldn't get along without it. I will close hoping I guessed Miss Frances' age right. I am your niece.—Clara Kempton, Grant, Mich., R. 1.

Dear Uncle Ned—I am another one that wishes to join your merry circle. I am a farmer boy 9 years of age. I live on a 40 acre farm. We have two horses and four cows and three young cattle. We sold two steers last fall and gave away one. I had a pair of pigeons in a box and yesterday I let them go. One flew away about a half an hour after I let them out and one flew away in the night. There was a mother and father bird with two more eggs a little way from the other nest which was the other pair's nest. Good bye Uncle Ned and friends.—Wm. C. Wismer, Bad Axe, Mich., R. 6.

Dear Uncle Ned—I am a farmer's girl. My age is between 14 and 18 years. Who guesses my age will receive a long letter from me. I will describe myself. I am 5 feet 3 inches tall, light complexion, some freckles, reddish brown hair. My birthday is on Ground-hog day. Ha! Ha! Have I a twin? I took the eighth grade examination in town and got my diploma last Thursday. I am going to high school next year. Frances Inman I think your age is 16 years. Don't forget that long letter.

I like to read the Children's Hour. I am going to ask the cousins to do me a favor. Do any of you boys or girls know Caroline Stark? She lives in Resort township. If you do will you please send me her address for I would like to hear from her? I hope some of the older boys and girls will write to me, will answer all letters. With love to all.—Elizabeth Steiner, Conway, Mich.

### SUCCESS IN CLUB WORK

By Donald H. Shepard, Charlotte  
Winner of 2 county championships, 1 state championship, a trip to State Fair, trip to 1920 International and trip to Atlanta as a member of Michigans team in 1920.

**A**S the title suggests a rather wide field and difference of opinion. I will only attempt an outline of how an Iowa boy who is strong in his belief in the good the work can do and support that he gives, regards the work and something about his success as a club member.

This particular boy started club work in 1917, by feeding a baby beef. Although he worked hard and

thought he would win he was not placed in any of the contests, in which he entered. The next year he did better and the third year he was a winner in both calf and pig club classes, winning ribbon after ribbon and almost forgetting what it was like to be defeated. In 1922 we find that this club member is at the head of the National Organization of Club Boys and Girls. His name is Joseph R. Caputo, of Iowa. He regards patience and perseverance to be the habit which we must have in order to succeed with our projects. He says that while we all like to win a blue ribbon and be successful by winning honors in our particular work that if you lose and have honestly tried, don't feel "blue" with the idea that you can never win and decide to quit and not to give up no matter how hard you try. The world doesn't love a quitter, but just keep making the best better, until

you win whether you get the ribbon or not.

He considers the three following factors to be of great help in order to win:

First, you must decide upon a project which you will like, as one will do better with something you enjoy doing than if you went at your work with a drawn lip.

Second, if an animal project, get the best animal possible to start with and decide to give them the best of care.

Third, have an objective. Have some sort of an idea of what you are striving for and what you wish to become. A fourth is also suggested by spelling "work" with all capital letters.

Working for these furnishes good training and is not without value, also it has taught this club member his vocation in life and as a result of the work he has decided to attend his state college of Agriculture after which he intends going back to the farm.

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**How to Make Jam and Jelly With Positive Success**  
New Process Requires Only 1 Minute's Boiling and Never Fails  
By Ann Proctor

The greatest cooking authorities in this country—Good Housekeeping Institute, Boston Cooking School, Modern Priscilla Proving Plant, government experts, domestic science teachers, etc.—and housewives everywhere are hailing with delight the New Certo Process of making all kinds of jam and jelly. Anyone, even a child, can now make jam or jelly of excellent quality, with any kind of fruit in a few minutes. Only one minute's boiling is required, and the result is one-half more product from same amount of fruit.

Certo (Surejell) is a pure fruit product, contains no gelatine or preservative. It is concentrated pectin, supplied by Mother Nature in some fruits, now bottled for household use. With it, jam and jelly making is a fascinating pastime—no guesswork or worry. Cooking authorities call it "the short-boiling process" because you boil only one minute. This short boiling saves the natural color and flavor of the fruit, permits the use of fully ripened fruit, and makes one-half more product from the same amount of fruit because no juice is boiled away.

With Certo you can make jam or jelly from any fruit. Peach, pear, or rhubarb jam, blackberry, elderberry or cherry jelly, orange marmalade, etc., are easily and quickly made and keep perfectly. Certo "jells" any fruit juice. It simply supplies the necessary pectin to "jell" all the fruit juice.

Certo is what you have been looking for. Be the first to use it in your neighborhood so you can tell your friends about it, and show them the excellent results you had. You can get Certo from most grocers or druggists, or we will send it to you by parcel post prepaid, with Book of nearly 100 Recipes for 35 cents. Be sure to include your grocer's name and address. Then we will see that he carries Certo for the convenience of yourself and friends. Try one bottle of Certo—investigate the new, the highly endorsed Certo process of making jam and jelly—and save hours of time and worry and frequent failures of the old method. Pectin Sales Co., Inc., 602 East Ave., Rochester, N. Y.

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**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.

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

**KENTUCKY TOBACCO—"SPECIAL BAR-** gains." Send no money, pay for tobacco and postage when received. 10 lbs. 3 year old smoking, \$1.00. FARMERS' GRANGE, Hawesville, Ky. (P)

**NATURAL LEAF TOBACCO—CHEWING,** 5 lbs. \$1.50; 10 lbs. \$2.50. Smoking, 5 lbs. \$1.25; 10 lbs. \$2. Send no money. Pay when received. TOBACCO GROWERS' UNION, Paducah, Ky.

**TOBACCO—HOMESPUN SMOKING, 10 lbs.,** \$2.50; 20 lbs. \$4.00. Fine chewing, 10 lbs., \$3.00. FARMERS CLUB, Mayfield, Ky.

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#### BREEDERS' ATTENTION

**If you are planning on a sale this year,** write us **CLAIM THE DATE!** now and this service is free to the live stock industry in Michigan to avoid conflicting sale dates.

**LET "THE BUSINESS FARMER"** CLAIM YOUR DATE!

#### DANGER SIGNALS ON CO-OPERATIVE HIGHWAY

(Continued from page 4)

For the upbuilding of the country as a whole it is essential that the rural community be taught the fundamental principles of organized action.

There is necessity for building up in the agricultural communities a certain type of culture which is rural in character yet not inferior to that of the urban communities. Rural communities must be solidified into groups which will aid in the improvement of their power for economic as well as social action. Correct ideas concerning the essential characteristics of our economic and social institutions must be held by the mass of the people if advancement of our civilization is to continue. These can be secured by proper group study and instruction.

It is fallacious to think that co-operation which tends to unify the rural community and develop a class consciousness is to the detriment of other classes of society. It is the unorganized community whose thought is permitted to follow wrong channels which is the menace. By group action properly directed the great mass of rural people can be brought up to a high plane of intelligence and their action directed along rational and constructive lines. The attitude taken by the mass of the farmers toward the economic questions of the present time has been more rational and sound than formerly. This is, no doubt, due to a certain extent, to organized thought headed by the extension divisions of our colleges of agriculture and the larger farmers' organizations.

Saving the profits which usually go to the private market agencies is looked upon by most farmers as the paramount gain from co-operative effort. If this profit could only be retained by the producers of farm produce it is presumed that the market problem would be solved. It is very questionable whether this saving of profit is ever going to be of sufficient importance to result in a very great benefit. Co-operative organizations would probably not survive very long if their survival depended upon the benefits of saving of profit. However, in connection with other benefits this is one which must be taken into consideration and given its due importance.

From the economic viewpoint the real essential benefit which is possible from co-operation is the improvement of the product. The manufacturer studies his market and makes goods which the consumer wants. Consumer demands are studied so that the producer may know what kind of things will appeal. The successful manufacturer learns the demand and then goes about to meet it. Being an individual concern which operates under the direct supervision of one head the product can be made just as desired. In agriculture a different condition prevails. Production is scattered and is under the direction of many different individuals. Many farmers are producing the same product each in his own individual way. These things go into the market in a rather haphazard way. They are products of many different varieties and kinds. Quality varies. These products are bought by an individual middleman who desires to make a profit. Whether this profit comes from selling a good or poor quality product matters not. The farmer grows produce which he especially likes to grow or a product which does especially well on his land. There is no correlation between the market demand and production. Since the farmer is working isolated he is not in a position to secure market information. He does not know what the demands are as to quality, variety and quantity of produce. The farmer, unlike the manufacturer who knows the market demands, is working in the dark. The individual market agency may be more efficient in the matter of handling the produce as it is brought to the warehouse; many know more about finance; may be better able to establish connections with the central markets; and may be instilled with a more forceful motive

in the operation of the business; but this private agency is lacking in that it has no effective control over the production of the individual farmer.

The market ills of a community or of a certain product may be analyzed and in most instances the weakness will be found to lie in the fact that the right kind of products of proper quality are not being grown in the proper quantity to meet the demand of the consumers, and that a price is not received which makes production profitable. The reason for the inadequate price is due to the fact, no doubt, that the consumers wants are not being properly met. In other words, there is something wrong with the kind of produce, its quality, the method of preparation for market, or the quantity offered on the market at particular times. The consumers demands are not being met in a manner that will result in a proper price. This is a problem which can be met in but one way and that is through community action. The co-operative organization can make the market analysis and then go direct to the farmers giving them the facts concerning the market demands and specify just what kind of variety of produce they shall grow and in what manner they shall prepare it for market. This is a service which is basic to market improvement. A product well grown and prepared for market is more than half sold. Whenever the farmer gives the market demand side of his business sufficient attention then goods will flow to market in a more orderly manner and there will not be the wastes through deterioration of goods and glutted markets as we now have.

It is evident that marketing will be efficient when the right kind of goods are brought to the right market at the right time and in the right quantity to satisfy the demands of the consumers. The right kind of farm produce will never be brought to the market at the right time and in the right quantities so long as it is left to individual action. The basic thing is that the right kind of produce be grown. In order to do this effectively there must be co-operative action and organization of production in the various communities instead of the individual type of production which now prevails. Private enterprise does not have sufficient control over production to get the right kind of produce on the market. This improvement of the product must come through co-operative effort and is going to be the greatest benefit which results from co-operative marketing. This is a service which is going to result in an increase in the farmers income; but just how much of this increased income will be due to co-operative effort can never be measured. It is going to be one of those indeterminate benefits of co-operation which can never be totaled and set on the credit side of the ledger to offset the disadvantages, which can be measured in dollars and cents, in the form of costs which are higher than those of private enterprise.

The co-operative organization is not always a success. Failure results for many reasons. Too often, such an organization is started at a time when enthusiasm was at its height. Too much was expected. The idea prevailed that the savings of the profits of the "parasitic" middlemen would result in a great return to the co-operators. Unscrupulous and uninformed organizers have capitalized prejudice and preconceived ideas. The true economic situation has not, in many instances, been studied at all. Many co-operative enterprises have been the result of some ones desire to organize something.

All the weaknesses of co-operative organizations will not be dealt with here. The most outstanding ones seem to be lack of proper understanding as to the needs of the community and lack of proper direction. No co-operative organization can bring to a community benefits of every type and description. The successful enterprise must have successful direction. Proper direction takes time, effort and ability. No organization will run itself. Co-operative (Continued on page 19)



# VETERINARY DEPARTMENT

DR. W. AUSTIN EWALT, EDITOR

## ARTICULAR RHEUMATISM

Could you advise in regard to a fattening hog gone lame in one front leg, no swelling, but seems to breathe short and quick and if urged to any exercise will open its mouth and get its breath? Hog is not very fat and eats very sparingly.—O. C. T., Baroda, Mich.

Articular rheumatism is the cause of the lameness and pressure over the affected joint, or joints will cause pain. Inflammation will also be present. Provide good dry quarters where the animal will not experience wide variations of temperature within a short time. Do not keep animal on cement and provide plenty dry straw; give thirty grains of Phenyl Salicylate morning and night.

## WARTS ON TEATS

Would you please inform me how to get rid of warts on a cow's teats?—F. H. Gaylord, Mich.

These germs are carried in the blood stream and in order to get rid of them permanently the blood must be treated. Give two tablespoonsful of Fowler's solution of Arsenic morning and night, also apply the same to the warts once a day. This can best be done by the use of a small cotton swab.

## AZOTURIA

I have an eight-year-old gelding that had three attacks of azoturia. He never went down before he had the last attack. I plowed with him for a week then for two days I drove him four miles a day and then had him in pasture for two days. I was feeding four quarts of oats, and two ears of corn. Is this too much feed or is there anything else I could do for him?—A Subscriber, Pigeon, Mich.

To prevent azoturia cut the feed one half while idle. Feed plenty salt and give lots of good water.

## RING WORM

I have a few calves which have sore eyelids, the hair around the eyes coming and showing on the bare spots some kind of a scab. Would you kindly advise what I shall do for this disease?—O. P., South Branch, Mich.

This is an affection of the skin. It is commonly known as "ring worm." The form of ring worm disease which is most common in cattle is slightly different from that in other animals. The disease commonly is infectious, usually affecting a number of animals in a herd. The disease is slightly more prevalent in young cattle than in old ones, and occurs under all conditions of housing as well as at pasture. The scabs should be removed and the underlying base is then painted twice daily with pure iodine tincture. Where the scabs cannot be easily removed they should be soaked several times daily with olive oil; after a few days soaking the scabs can be removed without trouble and the exposed active area is then submitted to the iodine treatment twice daily until cured. When the formations occur on the upper eyelid, where the iodine applications cannot be made, powdered iodoform is pressed into the active area after the scabs have been removed. In all cases it is well to apply the iodine over an area considerably larger than the seat of the trouble.

## BUNCH ON FORELEG

I have a horse that has a large bunch on his foreleg caused from its being bumped on the neck yoke. The bunch is tight on the knee and it does not look very good.—G. E. M., Gaylord, Mich.

This enlargement should be opened under strict aseptic conditions to prevent infection, after which it should be packed with gauze soaked in Tr. iodine and covered with cotton and bandaged.

## HORSE INJURES NECK

I have a horse that got his hind shoe fast in his halter in the night and strained his neck and back. Has never layed down since it happened. His neck is curved and bent around to the side. I blistered it and since I have been rubbing it and lifting his head three times a day. He can put his head in the manger now but he staggers when he walks. Could you tell me what to give him for his kidneys and what to put on his neck?—Subscriber, Osceola County, Mich.

Why treat his kidneys for an injured neck? This horse has either dislocated or broken one of the vertebral column and the staggering observed in the gait is caused by some pressure on the spinal cord. This animal should be allowed the free-

dom of a loose box and nature will do all that can be done with exception perhaps of a little support in the way of splints and bandage. You should have applied hot applications in place of the blister, this was the worst thing you could do.

## PARALYSIS

Please tell me what is wrong with my sheep. They do not walk, seem to have no use of their legs. Have good appetite, seem to be in good order. I feed them corn stalks, carrots and rye. They have a dry place to sleep.—Mrs. J. S. Gaylord, Mich.

This may result from a number of causes, such as an acute infectious disease, poisons, or sists in the brain. In lambs it is associated with eclampsia of the ewe, caused by poor food, exposure or the infection that causes abortion. Unless caused by sists in the brain, (in which case nothing can be done) iodine given in an ounce of water about four times daily will do as much good as anything.

## THRUSH

What is good for thrush in horses feet?—Subscriber, Onaway, Mich.

Thrush results from an irritation set up in connection with some of the sensitive structures of the foot, and more especially a diseased condition of the fatty frog, and is characterized by a discharge of the purulent character from the cleft of the frog. Thrush may be caused by standing in filthy stables, or running in filthy barn-yards, hence it occurs more frequently in the hind than in the front feet. Remove the cause. If the animal has been running in a filthy stable or barn-yard, he should be placed in quarters free from filth and dampness; remove the shoes, pare down the frog and sole generally; thoroughly cleanse the parts with Kresol dip and water, after which apply a poultice of linseed and bran, for a period of twenty-four hours, at the end of which time, the poultice may be removed and the following mixture worked well down in the cracks morning and night: Calomel one dram, cupri sulphate one dram and sulphate of iron one ounce. Mix well together and no better treatment can be used.

## TUBERCULOSIS

Would you please tell me through your paper what is the trouble with my hogs? They seem to have a hacking cough. I lost one last year that would weigh 150 pounds. Was nearly fat when taken. Got poor and died. One of my brood sows got it but got over it. Had seven pigs and three died at about three months old. Our local veterinarian said it was caused from a hair worm in the throat. I am feeding corn and ground feed. Have given charcoal and ashes without result.—Reader, Genesee County, Mich.

Tuberculosis has been recognized from the remotest time in the history of man as a prevalent disease and is becoming very prevalent among swine. This is due to the fact that the dairying industry is becoming more extensive and the by-products of milk are used for swine feed. A relatively large percentage of dairy cattle is tuberculous, and the infection gains entrance to the milk on filth that is contaminated with infected discharges, such as saliva and feces. The organism may also be eliminated direct from the mammary gland into the milk. Swine from some sections of the United States have been found by experience to be so extensively tuberculous that some packers will buy them only subject to postmortem inspection. The most frequent channel of entrance of the organism in swine is the digestive tube, the infection being introduced in food or water. Tuberculosis is seldom noticed in the early stages but is essentially a chronic disease. The digestive derangements develop slowly and usually only in young pigs. They become unthrifty and thin as the disease progresses. Tuberculosis affecting the lungs is evidenced by a dry, short, suppressed cough and by some difficulty in breathing. The cough becomes more aggravated, and the animals become weak and thin and have a rough coat. Curative treatment is of no value in tuberculosis in swine. The only rational method is to sell the affected swine subject

# BREEDERS' DIRECTORY

(SPECIAL ADVERTISING RATES under this heading to honest breeders of live stock and poultry will be sent on request. Better still write out what you have to offer, let us put it in type, show you a proof and tell you what it will cost for 13, 26 or 52 times. You can change size of ad. or copy as often as you wish. Copy or changes must be received one week before date of issue. Breeders' Auction Sales advertised here at special low rates: ask for them. Write today!) BREEDERS' DIRECTORY, THE MICHIGAN BUSINESS FARMER, Mt. Clemens, Michigan.

## CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens.

## LIVE STOCK AUCTIONEERS

Andy Adams, Litchfield, Mich.  
Ed. Bowers, South Whitley, Ind.  
R. L. Benjamin, Waukegan, Wisconsin  
Porter Colestock, Eaton Rapids, Mich.  
Harry A. Eckhardt, Dallas City, Ill.  
O. S. Forney, Mt. Pleasant, Mich.  
John Hoffman, Hudson, Mich.  
John P. Hutton, Lansing, Mich.  
I. R. Love, Waukegan, Wisconsin  
L. W. Lovewell, So. Lyons, Mich.  
J. H. Mack, Ft. Atkinson, Wisconsin  
J. L. Perry, Columbus, Ohio  
J. I. Post, Hillsdale, Mich.  
O. A. Ramussen, Greenville, Mich.  
J. M. Ruppert, Perry, Mich.  
Guy C. Rutherford, Decatur, Mich.  
Harry Robinson, Plymouth, Mich.  
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We make a specialty of selling pure bred big type Poland Chinas, Spotted Poland Chinas and Duroc Jerseys. We are experienced. We sell 'em and we get the money. We are expert hog judges. We are booking dates right now for 1922 sales. We would like to sell for you. We have one price for both of us and it's right. Select your date; don't put it off; write today. Address either of us.

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FOR SALE—20 YOUNG HEALTHY, HEAVY milking, registered Holsteins cows. Also 14 registered Holstein heifers.  
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Sired by a Pontiac Aagie Korndyke-Hengerfeld DeKol bull from a nearly 19 lb. show cow. First prize junior calf, Jackson Fair, 1920. Light in color and good individual. Seven months old. Price \$125 to make room. Hurry!  
Herd under Federal Supervision.

## BOARDMAN FARMS

JACKSON, MICH.  
Holstein Breeders Since 1906

## SOLD AGAIN

Bull calf last advertised sold but have 2 more that are mostly white. They are nice straight fellows, sired by a son of King One. One is from a 17 lb. 2 yr. old dam and the other is from a 20 lb. Jr. 8 yr. old dam, she is by a son of Friend Hengerfeld De Kol Butter Boy, one of the great bulls.  
JAMES HOPSON JR., Owosso, Mich., R. 2.

FOR SALE—TWO BULL CALVES, A HOLSTEIN and Durham about 3 months old. Both have heavy milking dams. Not registered. \$50 each if taken at once.  
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FOR QUICK SALE WE ARE OFFERING your choice of nearly 50 purebred Holsteins. Nearly all cows and heifers. Bred well, yearly records, free from t. b. Priced right. Breeder's price. Write us your wants.  
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Sired by Segis Korndyke De Nijlander, a 32 lb. son of a twice Michigan ribbon winner, her dam, 29 1-2 lbs. Dams are daughters of King Segis Pontiac, a 37 lb. son of King Segis. Records up to 30 lb. Priced at \$100 up. Federally tested. Write for list.  
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Everything guaranteed, write me your wants or come and see them.

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## HOLSTEIN FRIESIAN PURE-BRED BULL

tested herd. Prices are right.  
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SOME GOOD YOUNG REGISTERED HOLSTEIN COWS. Fair size, good color, bred to good bulls and due from July to December. Mostly from A. R. O. stock, prices reasonable and every one guaranteed to be exactly as represented.

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Straight, well grown, nicely marked, more white than black, guaranteed to please. Dam has 7 day A. R. O. record of 19 lbs butter and 473 lbs. milk as Jr. 3 year old, now being run on semi-official test. Sire's dam has 7 day A. R. O. record of 29 lbs. butter and 715 lbs. milk. Grandson of 30 lb. cow. Also yearling heifers not skin to this bull from good milking dams. Herd Federal accredited. Priced to sell. Write for particulars.

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HOLSTEIN CALVES, 7 weeks old, 31-32nds pure. Tub. Tested, \$25.00 each, crated for shipment anywhere. Satisfaction guaranteed.  
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SHORTHORN CATTLE AND OXFORD DOWN sheep. Both sex for sale.  
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Shropshire, Southdown and Cheviot rams write to L. C. KELLY & SON, Plymouth, Mich.

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FEDERAL ACCREDITED HERD

One red Scotch bull ready for service. Two bull calves ten months old. Poland-China weanling pigs ready to ship.

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GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages both sexes. W. S. HUBER, Sec'y, Gladwin, Mich.

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Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmecott Viscount 25th, 648,563. Prices reasonable.  
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Special offer on two white yearling Bulls from IMP. Cows and sired by IMP. Newton Champion. Also several other real Bull Bargains. Don't overlook these bargains.

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Bull calves 1 to 12 mo. old from sons and daughters of General Clay, Glenside Dairy King, Glenside Bill Boy, Glenside Roan Clay, and Doris Clay. These are good calves priced to sell.

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TWO YOUNG RED POLLED BULLS FOR sale. Sired by Cosy Ellis Laddie. He took the prize at six State Fairs.  
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ALL AGES.  
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Not merely milk or beef cattle. But milk and beef cattle. I have two bulls for sale eight and ten months old. Big massive fellows from heavy milking strain. Will sell if taken soon. Write, phone or come and see.  
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### GUERNSEYS

OF MAY ROSE AND GLENWOOD BREEDING. No abortion, clean federal inspected. Their sire dam made 19,460.20 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.  
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service and bull calves carrying 1/2 of blood of my heifer Norman's Missaukee Red Rose, World Champion G. G. Sired by her sire Dams finishing splendid A. R. Records.  
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FOR SALE—REGISTERED GUERNSEY Cows, 6 years old, will freshen in June. A. HATT & SON, Napoleon, Mich.

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

spring pigs at above prices. Top fall gilts bred for summer farrow, priced right.  
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**Big Type P. C. Boar Pigs**, they can't be beat in Michigan. Sired by Big Bob Mastoden and Peter A. Pan & son 1076 Peter Pan. C. E. GARNANT, Eaton Rapids, Mich.

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**DUROC JERSEY WEANLING BOAR PIG** weighing 40 pounds, from large litter. \$12 to \$15.  
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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.

**BOAR PIGS BY FANNIE'S JOE ORION AND** Pathfinder Orion. Priced to sell. Satisfaction guaranteed. Write, **H. E. LIVERMORE & SON**, Romeo, Mich.

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

**WILL 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.

## 85 FINE SPRING BOARS

all sired by Schalros Top Col. a grandson of the famous Walt's Top Col. We want the room, send \$15.00 and get first selecting of these fine boars.  
**SCHAFER BROS.**, Oxford, Mich., R. 4.

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

## HAMPSHIRE

**A CHANCE TO GET SOME REAL HAMPSHIRE** Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th, Gen. Pershing 2nd., and other great boars. Write for list and prices. **DETROIT CREAMERY HOG FARM**, Route 7, Mt. Clemens, Mich.

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

## O. I. C.

**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.  
**A. J. GORDEN**, Dorr, Mich., R. 3.

**REGISTERED O. I. C. SPRING BOARS** Sired by R. O. Big Prince. Write for prices. **DETROIT CREAMERY HOG FARM**, Route 7, Mt. Clemens, Mich.

**O. I. C. & CHESTER WHITE SWINE** Choice boars of Feb., March and April farrow. Advance Type and Busters Giant Bloodlines. Priced to sell. **Clare V. Dorman**, Snover, Mich.

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

**CHESTER WHITES FOR SALE AT REASONABLE** prices. Apr. pigs registered in buyers name. Will ship C. O. D. if preferred. **RALPH COSENS**, Levering, Michigan.

## BERKSHIRES

**WE HAVE A FINE LOT OF BERKSHIRE** spring boars for sale, sired by Longfellow's Double, Bob and Duke of Manchester. **DETROIT CREAMERY HOG FARM**, Route 7, Mt. Clemens, Mich.

## 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.

**CLARKE U. HAIRE**, West Branch, Mich.

## PET STOCK

## SHETLAND PONIES

We have a few good Shetland Ponies for sale; prices ranging from \$75.00 to \$100. Write  
**JOHN FARMER**, R 2, Stockbridge, Mich.

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

**FOR SALE—THOROUGHbred COLLIE** pups females. Natural heelers. **E. J. MAURER**, Marshall, Mich., R. 5.

## EVERY BREEDER

Can use M. B. F.'s Breeders' Directory to good advantage. Run your ad. and watch the returns come in

**What Have You to Offer?**

to post-mortum inspection findings. In this way some value will be obtained by the original owner, there will be no loss to the packer, and no danger to the consumer. The most frequent source of tuberculosis in swine is from tuberculous cattle. Swine becomes infected from infected cow's milk, feces, nasal discharges and the carcasses of tuberculous cattle that are given them for feed. A limited number of swine become infected from garbage that contains the human organism. This has been especially observed in swine fed upon garbage from tuberculosis sanitariums or hotels. It is possible that infection may be transmitted in the exhaled air from infected to healthy swine. Tuberculosis is a preventable disease and the losses from it could be avoided, or at least materially diminished, by proper control of tuberculosis in cattle. The judicious use of skimmed milk, including pasteurizing milk from suspected cows will materially diminish tuberculosis in milk-fed swine.

## DOCKING EWES

Have some ewes with long tails. Ewes are four or five years old. Would there be any danger in docking them? What time should it be done?—**W. S. Merrill**, Mich.

Ewes may be docked at any age and in any season of the year with little danger of serious results if reasonable precautions are taken. It would be advisable, however, that this be done soon and by all means before fly-time. Before docking these ewes a strong string should be tied tightly around the tail about 3-4 of an inch above where it is to

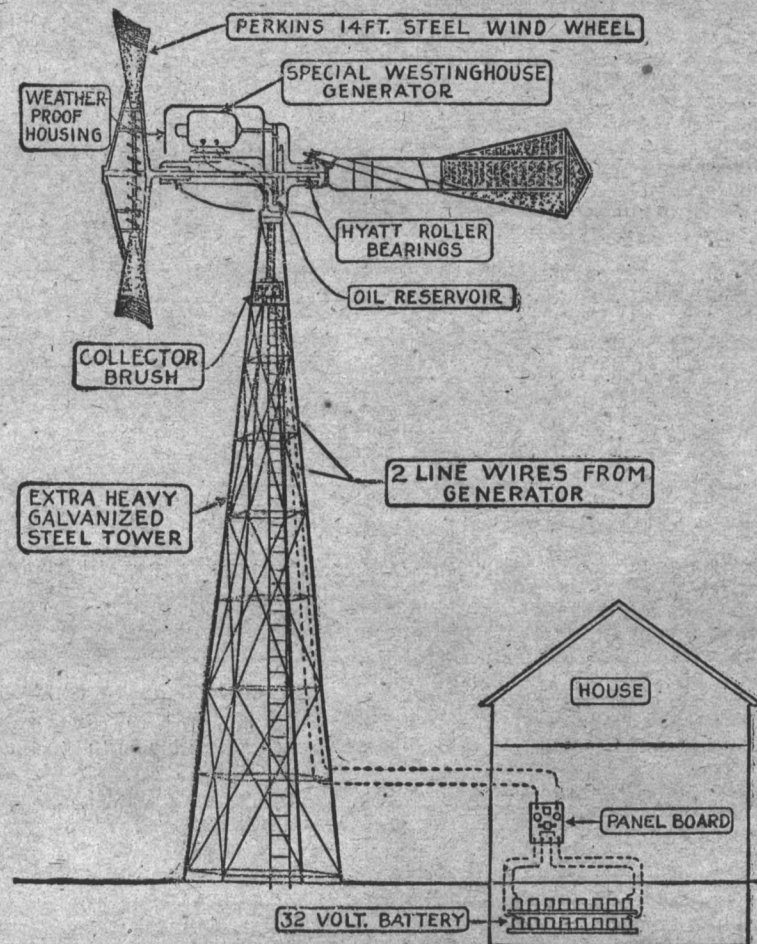
be removed. This should prevent any serious bleeding. A docking iron may be used to good advantage but if one is not available a chisel and mallet answers the purpose very well. The string should be removed from 12 to 18 hours after the operation is performed but if bleeding starts again another string should be tied around the dock tightly and left for a few hours.—**W. E. Edwards**, Ass't Prof. of Animal Husbandry, M. A. C.

## BLOODY MILK FROM ONE QUARTER

I have a two-year-old heifer, freshened March 10th, about two weeks ago began giving bloody milk from one quarter. It started suddenly, being much worse the first night than it has been since. Sometimes it is quite noticeable, sometimes apparently normal. We thought at first she might have bruised the quarter, or hurt it some way, but it does not seem to be tender, and there is a little lump forming just above the teat. The heifer had a caked bag when she came in, and that quarter which was the worst didn't give near as much milk as the other three for a month or so. Now it gives almost the same as the other quarters. Can you tell me what causes this, and if it can be cured? Is the milk from this quarter fit to feed calves?—**H. C. D., Williamston**, Mich.

There is very little that can be done for a heifer giving bloody milk from one quarter. This is caused by a rupture of one of the small blood vessels and there is no method of treatment. This occurs frequently shortly after calving when the udder of the cow is caked and consequently more liable to injury. Usually this will stop after a time without treatment. Milk from such a quarter is satisfactory feed for calves.—**J. E. Burnett**, Associate Professor of Dairy Husbandry, M. A. C.

## Free Electricity For Every Farm Home



**FOR** the first time in history electricity is being generated by a wind-driven plant. Years ago scientists started experimenting with electric generating units driven by wind. All sorts of devices were tried.

However, these early experiments all took the same trend, the power of the wind being transmitted to a generator, which was placed directly under the tower. This again was connected to the wind wheel through a long vertical shaft and bevel gears. Other plants, too, were made on which a belt was placed on the rim of the wind wheel and around a generator pulley. With these a 14-foot wheel and a four inch pulley served to make the necessary reduction in speed. The long belt did not stand up under adverse weather conditions so this too, was a failure.

Recently an Indiana corporation developed a windmill generating out-

fit with a specially-designed electric generator which will give an almost constant voltage through a range of 750 R.P.M. to 2,500 R.P.M. In other words whatever be the speed of the wind, the generator will work efficiently and give the same rate of voltage.

The "Aeroletric" as it is known is a 1 Kw plant and the battery has an intermittent capacity of 280 ampere hours or an eight hour rate of 240 ampere hours.

This plant has capacity enough to light the house, barn and other buildings, pump water, operate the vacuum sweeper, electric iron, electric cream separator, electric washing machine and other electrical time-saving household helps.

All this being true it surely will be a boon to the farmer and readers who are interested can secure further information by addressing the editor.



### BIG PRODUCERS EAT MORE BUT BRING BETTER RETURNS

COWS that produce milk and butterfat in large quantities have keen appetites and roomy paunches, but they bring in higher incomes over feed cost than the scanty producers, regardless of breed, age, weight, date of freshening, and geographical location. This is one of the important points brought out in Department Bulletin 1069, Relation of Production to Income from Dairy Cows, by J. C. McDowell, just published by the United States Department of Agriculture.

The facts in the bulletin are based on a study of data supplied by 96 cow-testing associations in various parts of the country. Because of better feeding, better breeding, and better care, cows owned by association members are much better than the general run of cows. The estimated production per head of all the dairy cows in the United States is approximately 4,000 pounds of milk and 160 pounds of butterfat a year. The association cows are about 50 per cent better, producing an average of 6,077 pounds of milk and 248 pounds of butterfat.

According to figures based on 18,014 yearly individual cow records, as butterfat production increased from 100 to 400 pounds there was a regular increase of about \$16 in income over feed cost per cow for every 50 pounds of increase in average production of butterfat. As the yield of butterfat increased from 109 pounds to 296 pounds, the returns above the dollar expended for feed increased from 35 cents to \$1.52.

The cows having an average milk production of 3,250 pounds showed an average income of \$32.25 over the cost of feed, while those producing 13,250 pounds showed an average income of \$218.19 over feed cost. The cows in the latter group produced about 4 times as much as those in the other group, and their average income over cost of feed was nearly 7 times as great. The increase in income above feed cost grew regularly with the increase in production.

A study of these records that it pays best to put feed into big producers, even though they are big eaters, says the department.

A copy of the bulletin may be obtained upon application to the Department of Agriculture, Washington, D. C.

### DANGER SIGNALS ON CO-OPERATIVE HIGHWAY

(Continued from page 16)

tors upon entering into an organization must realize that the benefits which come from it must be paid for in some manner or other. Co-operation is not a cure-all for the evils of a community nor does it do the miraculous thing of furnishing results without work.

The fundamental principles of business management must be followed by the co-operative association as strictly as by any other organization. No business unit, regardless of its type of ownership, can be successful unless it is properly directed by someone who knows how. This deficiency of management, however, is not a deficiency of the type of business ownership but rather one of internal management. There is nothing characteristic about the co-operative type of ownership which should render the management any more inefficient than that of other types. Other things being equal, the management of the co-operative concern has an equal opportunity with the corporation for efficiency. The fact that in the past inefficient management has prevailed in connection with co-operatives need not signify that it will continue to do so.

The present tendency is toward the organization of more co-operative associations. Those who are in a position to advise with farmers should be particular to point out the dangers of the movement as well as the advantages. Impossible things should not be promised. A careful examination of the needs of the community and the possibility of the success of the venture should be made before the organization is

attempted. Wherever private enterprise is performing the services of marketing in an efficient manner and is not exploiting the community there should be great hesitancy in organization. If defects in production or the productive processes are the paramount reasons for poor marketing it is quite probable that co-operative action is the only means whereby improvement can be secured. If this improvement can come through co-operation along other lines than marketing it may not be essential to take over the market services.

### PROGRESSIVES IN CHARGE AT HOLSTEIN CONVENTION

(Continued from page 3)

changes in classification and how to best fix in the minds of breeders the essential features of ideal Holstein type. Among the recommendations unanimously adopted by this committee were:

That classifications of calves under 6 months of age be eliminated. That no prizes be awarded except where merited. That notice of all A. R. O. records be filed with the fair secretary. That cows in the 305-day class be eligible for competition with cows having completed a full year's record. That fair secretaries use greater care in checking all records and ages of animals entered in the various classes. That all discredits on the Holstein score card be eliminated until more satisfactory score cards can be developed and approved.

At the co-operative sale held in connection with the convention, 175 head of Holsteins coming from practically every state in the Union were sold. The best price paid was for a 40-pound cow which sold for \$3,200. The average for all animals sold was \$470.

#### Officers Elected

Officers elected for the coming year are: For president, Frank O. Lowden, former governor of Illinois and prominent Holstein breeder at Oregon, Illinois; for vice-president, John M. Kelly of Wisconsin; members of the board of directors: W. S. Moscrip, Minnesota; W. G. Davidson and John A. Bell, Jr., of Pennsylvania; H. W. Norton, Jr., of Michigan; E. B. Armstrong, of New York; G. E. Fox, of Illinois; T. E. Elder, of Massachusetts.

After adjournment of the convention, the new board met, transacting considerable routine business and elected, according to the new constitution provision, the following officers: For secretary, F. L. Houghton, of Vermont; for treasurer, Wing R. Smith, of New York; for superintendent of advanced registry, Malcolm H. Gardner.

The convention had before it invitations from Grand Rapids, Michigan; Cleveland, Ohio; Richmond, Virginia and Los Angeles, Calif., but decided to hold its 1923 meeting in Cleveland, Ohio.

### 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 you, 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.

### BREAKS DOG OF EATING EGGS

Tell A. V. S. my wife breaks a dog of eating eggs, by feeding one every meal, fried or boiled, with his feed. The dog will soon begin to leave the egg to eat last, finally not at all.—E. I. W., Mt. Pleasant, Mich.

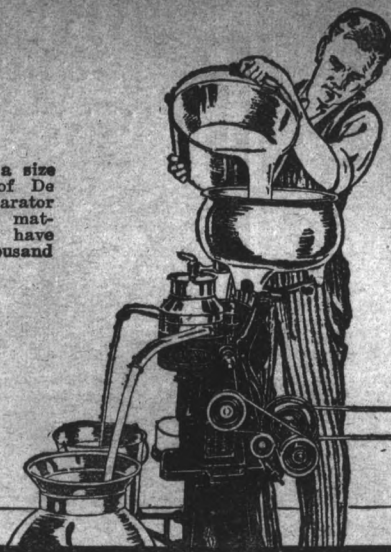
### LICE ON HOGS

Heat one cup of grease, add two cups of kerosene, shake and apply to back and sides of hogs with an old horse-brush. Repeat in month or so if needed.—C. Y., Allegan County, Mich.

### POTATO BLIGHT

"Late-Blight Tubor Rot of the Potato," is the name of a new U. S. Department of Agriculture circular, which is of interest to Michigan farmers. The circular describes the cause, nature, and treatment of the disease. Copies of the circular may be had at 5c each upon application to the Government Printing office, Washington, D. C. Specify Department Circular No. 220.

There is a size and style of De Laval Separator for you, no matter if you have one or a thousand cows.



De Laval Separators are furnished with hand, electric, steam turbine or belt drives, for any kind of power.

## Don't Let This Happen to You

"Last week we replaced a machine made by ..... which had been used only five years. Our customer, Mr. Crawford Cook, living near Foyil, Oklahoma, shipped one can of cream from ..... and then one from the De Laval, and changed about in this manner for four weeks, the result being that the De Laval got him exactly two pounds more butter-fat per day, and he is milking 12 cows. This amount at 35c per pound makes 70c per day, or \$255.50 per year, more than twice as much as the new De Laval was worth. Mr. Cook said we could use his name and this information, and if they didn't believe it, he would make an affidavit to that effect."

This was taken from a letter from one of our agents, but there is nothing unusual about

it. We are constantly receiving letters of a similar character from people who say they waited too long before buying a De Laval.

On hundreds of thousands of farms today there is an enormous amount of butter-fat being wasted by inferior or worn-out separators and by hand skimming. Perhaps such waste is going on right on your farm. Stop it at once by getting a new De Laval. It is not only the world's best cream saver, but lasts longer and is easier to clean and turn than any other.

Call up your De Laval Agent today and ask him to bring out a new De Laval so that you can try it, or write us for full information. Sold on such easy terms that it will pay for itself while you are using it.

### The De Laval Separator Co.

NEW YORK CHICAGO SAN FRANCISCO  
165 Broadway 29 E. Madison St. 61 Beale St.



Sooner or later you will use a

**De Laval**  
Cream Separator and Milker



## POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 25 cents per line, per issue. Write out what you have to offer and send it in, we will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

### POULTRY

#### PULLETS

If you want fine Pullets for fall and winter eggs we can furnish Leghorns, Anconas, Rocks, Reds, Buff Orpingtons. Eight weeks and three months old; also other breeds.

Yearling Hens and Cockerels. Write us for description and price list. We will send you stock from our Pure Bred Practically Poultry—stock that will make money for you on your farm.

STATE FARMS ASSOCIATION  
202 Chase Building, Kalamazoo, Michigan

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

#### PLYMOUTH ROCK

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

BUFF ROCKS—Bronze Turkeys—For 20 years, by J. C. Clipp & Sons, Bx. M, Safford, Ind.

#### LEGHORNS

S. C. BUFF LEGHORN BABY CHICKS. We have just the one breed.  
J. W. WEBSTER, Bath, Mich.

#### 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.

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 LEGHORN FARM, Belding, Michigan

S. C. BUFF LEGHORN COCKERELS. Full egg basket strain. March hatched, full blooded, \$1.00 each. MRS. FRED LAMBRIGHT, Manchester, Michigan, Route No. 5.

### WYANDOTTE

HEIMBACH'S WHITE WYANDOTTES. Exhibition and utility—Rhode Island Reds. Chicks all sold for the season. Hatching eggs half price. O. W. HEIMBACH, Big Rapids, Michigan.

### RHODE ISLAND REDS

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.

ROSE COMB RHODE ISLAND REDS. Hatching Eggs reduced to \$1 per setting. MRS. ALBERT HARWOOD, R. 4, Charlevoix, Mich. (P)

RHODE ISLAND REDS, TOMPKINS STRAIN. Hatching eggs and baby chicks. Eggs per hundred, May, June, July \$8. Chicks twice the price of eggs. Both combs. WM. H. FROHM, New Baltimore, Mich., R. 1.

### ANCONAS

### 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 winners at Columbus, O., Louisville, Ky., Cleveland, O., Pittsburg, Pa., Hagerstown and Cumberland, Md. Cks. Hens, Cks. 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.

### HATCHING EGGS

WHITE ROCK EGGS FOR HATCHING. Blue Ribbon winners. Write for prices and information. Mrs. Roy Oakes, Hartford, Mich.



**EGGS \$1 SETTING**, Parcel Post Paid, Thor-  
oughbreds, 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.

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

#### BABY CHICKS



#### CHICKS WITH PEP BIG JUNE AND JULY PRICE REDUCTION

Try some of our full blood-  
ed DON'T STOP LAYING  
KIND of chicks for June  
and July. They will pay  
you big. Rocks, Reds, An-  
conas, Minorcas, W. Wyandottes, 13c; Leghorns,  
10c; Orpingtons, 8c. Wyandottes, 15c; broilers,  
10c. Safe delivery. Prepaid. Free Catalog.

**HOLGATE CHICK HATCHERY**  
Box B, Holgate, Ohio

## CHICKS

Thoroughbred varieties of Tom Barron English  
White Leghorns, S. C. R. I. Reds, Parks Bar-  
red 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  
June and July chicks now at my new low prices.  
White Leghorns \$10 per 100; Barred Rocks, and  
S. C. R. I. Reds, \$12 per 100. Special prices  
on large lots. At these prices we advise placing  
your order as soon as possible. Interesting cat-  
alog free. Importer.

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

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

**BABY CHICKS. ALL STANDARD VARI-  
eties at reduced prices for June delivery. Satis-  
faction guaranteed. 100 per cent live delivery.**  
Send for prices. **HOMER HATCHERY, Homer,**  
Mich.

#### 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 win-  
ners, none better.  
**LAPHAM FARMS, Pinckney, Mich.**

**BABY CHICK, 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 \$16.00  
prepaid. 100 per cent live delivery guaranteed.  
Our 12th year producing chick that please. July  
price 2c per chick less. **GREEN LAWN POULTRY  
FARM, R. 3, Fenton, Mich.**

#### BABY CHICK PRICES SMASHED

**ENGLISH AND AMERICAN LEGHORNS**  
now \$9.50 delivered. Anconas \$10.00. 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 L MICHIGAN**

## 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 chix from the best  
breeds. Our growth from one small in-  
cubator 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 to-  
day 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.**



You ought to have some of  
our certified "efficiency  
chicks" to make you money  
this fall and winter. We are  
making special June prices on  
our stock. White and Brown  
Leghorns, \$12 per 100; Bar-  
red Rocks and S. C. Reds,  
\$14 per 100; White Wyan-  
dottes \$15 per 100. Sent par-  
cel post prepaid with guaran-  
teed delivery. Order from  
this ad.

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

## EXTRA GOOD CHICKS

Plan now on more eggs next winter. Order chicks  
from pure bred record layers. Curo Barron White  
Leghorns, Brown Leghorns, and Anconas. Post-  
paid anywhere. Catalog free. Ask for May and  
June prices.

**QUEEN HATCHERY**  
ZEELAND, MICHIGAN

**NABOB JUST-RITE**  
Baby Chicks

Get our low July  
prices. July chicks  
for January layers.

Postage PAID. 95 per  
cent arrival guaranteed.  
MONTH'S FEED FREE  
with each order. A hatch  
every week all year. 40  
Breeds Chicks. 4 Breeds  
Ducklings. Select and Exhibition Grades. Cat-  
alogue Free.  
**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**

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

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

## CHICKS! CHICKS!



It will pay you to look over  
these low prices for June and  
July delivery. Better chicks at  
real bargain prices. Pure S.  
C. W. Leghorns, \$5.25 for  
50; \$10 for 100; \$47.50 for  
500. Pure Barron Eng. Leg-  
horns, \$5.75 for 50; \$11 for  
100; \$52.50 for 500. Pure  
S. C. Anconas, \$5.75 for 50  
Hatch every Tuesday in June  
and July. Order direct from ad. Prompt ship-  
ment by insured Parcel Post prepaid to your  
door. Full count strong lively chicks on arrival.  
For quick service and an entirely satisfactory  
deal send us your order. Fourteen years reliable  
dealings. Fine instructive catalog free.

**HOLLAND HATCHERY**

**R. 7, Holland, Mich.**

#### BABY CHICKS

**FULL LIVE COUNT GUARANTEED**

From hens of heavy laying strain. S.  
C. White and Brown Leghorns and  
Anconas, \$5 for 50; \$10 for 100;  
\$47.50 for 500. R. I. Reds and  
Barred Rocks, \$6.50 for 50; \$13 for  
100; \$82.50 for 500. Prepaid Par-  
cel Post right to your door. Order  
now from this ad.

**VINSTROM POULTRY FARM & HATCHERY,**  
Zeeland, Mich.

#### Old Reliable' OHIO HATCHERY

S. C. White Leghorns, S. C.  
Brown Leghorns, and S. C. Buff  
Leghorns \$3.50 per 25; \$6.50 per  
50; \$12.00 per 100; \$110 per  
1000. Barred Rocks, Mottled An-  
conas, and S. C. Black Minorcas,  
\$4.00 per 25; \$7.50 per 50;  
\$14.00 per 100; \$130 per 1000.  
White Rocks, White Wyandottes,  
and Buff Orpingtons, \$4.50 per 25; \$8.50 per  
50; \$16.00 per 100. R. C. R. I. Reds,  
\$5.25 per 25; \$10 per 50; \$18 per 100; Light  
Brahmas, \$7.00 per 25; \$13 per 50; \$24 per  
100. Broilers, odds and ends, \$3.00 per 25;  
\$5 per 50; \$10 per 100; **THE OHL HATCHERY**  
Box 502, New Washington, Ohio.

## BABY CHICKS

**FROM SELECT, HEAVY LAYING  
HENS IN S. C. WHITE AND  
BROWN LEGHORNS, BLACK  
MINORCAS, ANCONAS, BARRED  
ROCKS AND RHODE IS. REDS.**  
JUNE PRICES: S. C. White and Brown  
Leghorns and Anconas, 50 chicks, \$5;  
100, \$10; 500, \$47.50. Rocks, Reds  
and Minorcas, 50, \$6.50; 100, \$13.00;  
500, \$82.50. Postpaid to your door and  
full live count GUARANTEED. Order  
from this ad and save time. REFER-  
ENCE Zeeland State Bank. Instructive  
Circular Free.  
**COLONIAL POULTRY FARM**  
Zeeland, Michigan

## Egg Bred Chicks



Selected thoroughbreds. Prize winners at National  
Egg Laying Contest, Mo. 1922. June and July  
chicks make November layers. Now is the time  
to buy. S. C. Anconas: \$13, 100; \$7, 50. S.  
C. White Leghorns: \$12, 100; \$6.50, 50. Er-  
tra Star mating. Sheppard Anconas: \$16, 100;  
\$8, 50. Barron Eng. White Leghorns, \$14, 100;  
\$7, 50. Thousands ready for shipment every  
Tuesday. Parcel Post Prepaid. Guaranteed alive  
and healthy at your door. Catalog free.  
**FRANK A. VAN BREE**  
Box B, Zeeland, Mich

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



**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.**



## POULTRY

### SUMMER AND FALL CARE OF PULLETS

IT'S really surprising the amount  
of literature that is spread broad-  
cast all over the land about  
winter feeding and housing to get  
eggs, but never anything said about  
summer and fall care of the pullets.  
It's very necessary to have good  
houses and feed intelligently, but it's  
vastly more important in winter egg  
production to give the pullets proper  
attention during the summer and  
fall months. This is especially true  
of the fall months. I will venture  
the assertion that ninety percent of  
the egg supply in winter is reduced  
by miss-management of the pullets  
in the fall. They are allowed to  
crowd up in the brood coops or in  
the buildings, contract colds and  
soon develop roup and sore-head.  
When pullets have been suffering  
with roup and sore head it's next to  
an impossibility to feed them so as to  
get eggs during the winter months.  
Good houses and feed are very es-  
sential but it's more important to  
keep the fowls healthy and "coming  
along" during the fall months in  
order to have them laying by the  
time they reach the 5 1-2 months of  
age and in some varieties they  
should be laying at from four to  
five months of age. A correspond-  
ent says he taught his pullets to  
take to the roost poles by the time  
they were two months of age, never  
allowed them to crowd up in the  
brooder house at any time and al-  
ways fed them cautiously and kept  
plenty of bran and other growing  
foods before them continually. This  
convinces us more and more that  
the fall care and management of the  
pullets serves more to prompt the  
pullets to early winter laying than  
all the fancy houses you could  
build. Fancy houses are expensive,  
but the loss of several hundred pul-  
lets and the absence of eggs when  
eggs are high is much more expen-  
sive. You do not have to give the  
pullets but a very little more extra  
care and feed and the returns are  
three hundred per cent more profit.  
Whatever else, you neglect, never  
neglect the health of the growing  
fowls if you expect to make good  
with them during the winter months.  
If pullets are well grow, carefully  
selected by the "Hogen" system of  
picking out the layers, you can easily  
build up a profitable laying strain  
of fowls. You can not get any  
where, however, if you allow your  
fowls to crowd up in any old place,  
at night during the fall months to  
become over heated and stunted  
with colds and roup. All the ex-  
pert selections will avail nothing  
with sick rousy pullets. Proper  
early attention you give them in the  
fall that counts for eggs during the  
winter months when eggs are high.  
You read all kinds of "dope" on  
feeding, but it will do you no good  
with sick rousy pullets. Proper  
feeding is necessary, but amateur  
breeders should be taught the es-  
sentials of keeping the fowls in  
prime condition throughout the fall  
months and have them reach the  
winter months in a healthy rugged  
condition and then your good hous-  
ing and practical feeding will bring  
you a rich harvest in eggs. Turkeys,  
chickens and eggs are the salvation  
of the farmers and poultrymen these  
days. I know personally a farmer in  
my county, would have been com-  
pelled to let the mortgage take his  
farm had it not been for a good crop  
of turkeys and 300 fine hens shell-  
ing out the eggs, when eggs were  
at a premium. This neighbor ac-  
knowledgeed this fact to the writer  
last winter, so I know he told  
me the truth. He had judgment  
enough to keep his pullets in fine  
shape during the fall months, and  
brought them into laying early in  
October and the same was true of  
his turkeys, consequently he sold  
his turkeys before Christmas at a  
figure that more than paid his in-  
terest, taxes and a nice little sum on  
the face of the mortgage, and it was  
all due to his good management dur-  
ing the fall months in bringing his  
fowls through without any molesting  
with any form of disease. Hence, I



say, give more attention to the pullets during the summer and fall months and the harvest is yours.—J. C. Clipp.

#### CROWING HEN

What ailed a crowing hen we once had? We never saw her on the nest, and decided to kill her. After the feathers were off she weighed 5 pounds but after she was opened up a big lump, about the size of 4 or 5 eggs, and quite hard, and the color of beef liver, dropped out, broke off from where the egg bag should have been. The hen was always healthy and hungry.—A. M. W., Hart, Mich.

The crowing hen which you describe would come under two classifications: she has either developed permanent atrophy of the ovaries in which case masculine qualities would develop including a number of masculine characteristics such as the high upstanding comb, masculine voice, or the hen is the type described as Incomplete Hermaphroditism. This latter type did not have the male or female organs developed.

I am of the opinion, however, that a diseased condition of the ovaries has developed and the yolks were not delivered into the oviduct due to some obstruction. These yolks would accumulate in the body cavity until a condition such as described is present.

In my culling work throughout the state I have frequently found hens of this description, and of course placed them among the culls because they would never regain a healthy and productive condition. Nothing can be done to correct this trouble and there is no danger of infection to other individuals, because this is an inherent condition peculiar to this one individual.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

#### RULES UNDER WHICH HORSESHOE SHOE PITCHERS COMPETE

(Continued from page 4)  
exceed the following regulations; seven and one-half (7 1-2) inches in length, seven (7) inches in width, two and one-half (2 1-2) pounds in weight. No toe or heel calk shall measure over three-quarters (3-4) of an inch in length. Opening between the calks shall not exceed three and one-half (3 1-2) inches, inside measurements. No horseshoe constructed in a freak design will be considered regulation.

No contestant shall walk across to the opposite stake and examine the position of his opponent's shoes, before making his first or final pitch. All contestants shall pitch both shoes from the pitching box, into the opposite pitching box, or forfeit the value of one (1) point to his opponent. All contestants shall, when having first pitch, after delivering both shoes, stand back of a line even with the stake and out of the pitcher's box. Any contestant failing to comply with this rule shall forfeit the value of such shoes pitched. Any contestant delivering his shoes landing outside of the opposite pitcher's box shall forfeit the value of the pitch. Wrapping the fingers with tape, or the wearing of gloves shall be permitted in any or all games. If at any time a shoe is broken, such as striking another shoe, the frame of the pitcher's box the stake or other causes, such shoe shall be removed and the contestant entitled to another pitch.

Any shoe to be scored as a ringer shall encircle the stake far enough to permit a straight edge to touch both heel calks and clear the stake.

A foul line shall be established three (3) feet in front of the stake, and any pitcher stepping over the foul line in delivering his shoe, shall lose the value of his pitch, and no score shall be credited to him.

A shoe that does not remain within six (6) inches of the stake, in all national tournaments and match contests, shall not be entitled to score. (This does not apply to informal pitching or games where players decide otherwise). If a shoe strikes the frame of the pitcher's box or other object, such shoe shall be considered a foul shoe and shall not score.

The most points a contestant can score in a single game shall be fifty (50) points. A pitcher shall be credited with all ringers pitched. If

a shoe when thrown moves another shoe, both shoes are counted in their new positions.

All equals shall be counted as ties. If both contestants have one shoe each an equal distance from the stake, or against the stake or ringers, they shall be counted tie and the next closest shoe shall score. In case of all four shoes being tie or equal distance from the stake, or four ringers, no score shall be recorded and the contestant who pitched last shall be awarded the lead.

All measurements shall be made by the use of calipers and a straight edge.

No contestants during the progress of a game, contest or tournament, shall coach, molest or in any way interfere with a pitcher in any manner, except that in four-handed games, partners shall have the right to coach each other.

At the beginning of a game the contestants shall agree who shall have the first pitch, either in single, three or four-handed games, by the toss of a coin, the winner to have his choice of first pitch or follow. At the beginning of the second game, the loser of the preceding game shall have first pitch.

In case of any dispute, or where the rules do not specifically cover a disputed point, the referee or committee in charge shall have full power and final jurisdiction.

Any shoe that does not remain within six (6) inches of the stake shall not be scored or counted.

The closest shoe to the stake (within six (6) inches) shall score one (1) point. If both shoes are closer than the opponent's, they shall score two (2) points.

A ringer shall score three (3) points.

A ringer and a closer shoe shall score four (4) points.

A double ringer shall score six (6) points and is the highest score a contestant can make.

In case of each contestant having a ringer, the next closest shoe shall score and all such ringers shall be credited as ringers pitched, but not counted as a score.

If each contestant has a double ringer, both double ringers are canceled and no points scored.

If a contestant shall have two ringers and his opponent one the pitcher having two ringers shall score three (3) points.

In case of a tie of all four shoes, such as four ringers or all four shoes an equal distance from the stake, no score shall be recorded and the contestant who pitched last will be awarded the lead.

Where ringers are pitched and canceled, they shall be credited to the contestant who pitched such ringers and no score shall be credited as points scored.

All equals shall be counted as ties and no points scored.

Any shoe leaning against the stake shall have no advantage over a shoe lying on the ground and against the stake; all such shoes are ties. If a contestant has a shoe leaning against the stake, it shall count only as a closest shoe.

Booklets containing the rules given here and others, official layout of horseshoe counts and layout for ideal backstop may be secured from the Horseshoe Editor of the Business Farmer. Fill in the coupon published in the last two issues of the Business Farmer and we will enroll your name in the State Horseshoe Pitching Tournament and send you a copy of the national rules free of cost.

More county agents have advised that their counties will be in the tournament and the total number of names enrolled at this office for the state tournament is increasing rapidly. Sent in the coupon yet?

#### SWAMPED WITH ORDERS

Please change our ad. as we are swamped with orders and sold out on our output of Brown Leghorns and E. I. Reds. We are more than pleased with the orders received through your paper.—Star Hatchery, Holland, Mich.

## Down Go the Prices!

of Superior

## Baby Chicks --- 8 Week Pullets

Tom Barron English White Leghorns, Brown Leghorns, Anconas

The World's Greatest Layers

#### Read This—

Mrs. Geo. Sawyer, of Dansville, Mich. says: "I received my chicks the 24th and they came in fine condition. All alive and doing fine. I can say for your hatchery that they are the nicest chicks I have ever bought. I thank you for your great pains in selecting the chicks and for the extra ones."



#### Read This—

Mr. W. P. Miller of Morris, Minn., says: "Our baby chicks arrived all alive. I have never seen such nice chicks before. They are all healthy. I would like 200 more June 1st, and another 200 June 15th."

Now is your chance to buy superior baby chicks and pullets at these bargain prices. Order direct from this ad and save time. We will write you at once when you can get your chicks or pullets.

#### BABY CHICK PRICES

JUNE—JULY—AUGUST

	Per 50	Per 100	Per 500	Per 1000
American S. C. White Leghorns	\$5.00	\$10.00	\$50.00	\$100.00
S. C. Brown Leghorns	5.00	10.00	50.00	100.00
S. C. Mottled Anconas	6.00	12.00	57.50	110.00
Tom Barron English White Leghorns	6.00	12.00	57.50	110.00
Extra Selected Stock	8.00	16.00	75.00	140.00
Tom Barron Ex. Spec. Pen Star Mating Ped.	8.00	16.00	75.00	140.00
Broiler or mixed c. f. k.	4.50	8.50	40.00	80.00

Remember these are not ordinary chicks, but selected stock. The best that money can buy. Shipped prepaid to your door. We guarantee live arrival and complete satisfaction.

EIGHT-WEEKS-OLD PULLETS AT BARGAIN PRICES

Write for free bargain list today.

Superior Poultry Farms and Hatchery

Box 2052

Zeeland, Mich.

## Baby Chicks

TEN WEEK OLD PULLETS

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	\$5.25	\$10.00	\$47.50	\$95.00
ENGLISH WHITE LEGHORNS	5.25	10.00	47.50	95.00
S. C. BROWN LEGHORNS	5.25	10.00	47.50	95.00
S. C. MOTTLED ANCONAS	5.25	10.00	47.50	95.00
BROILERS (Odds and Ends)	4.00	7.00	35.00	70.00

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. Wytenbach, 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

Wynyard Hatchery, Box B, Zeeland, Mich.



## BABY CHICKS

BARRON STRAIN

S. C. WHITE LEGHORNS. ALSO HEAVY LAYING ANCONAS

REDUCED PRICES FOR JUNE

S. C. English White Leghorns and Anconas, 50 for \$5.75; 100 for \$11; 500 for \$52.50; 1000 for \$105.

LIVE DELIVERY GUARANTEED BY INSURED AND PREPAID PARCEL POST

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

STAR HATCHERY

HOLLAND, MICH.

BOX 500

MICHIGAN BUSINESS FARMER

"The Farm Paper of Service"

TELL YOUR FRIENDS ABOUT IT





# MARKET FLASHES



## BUSINESS AND TRADE REVIEW

WHILE prospective labor difficulties are tending to create an atmosphere of uncertainty in some business circles, the general tendency of leaders in the commercial and industrial field in the west is to look for further improvement. The majority view is that labor difficulties will be cleared up satisfactorily and that with good crops the improvement in general business conditions will go on steadily. It is admitted that in the event of a general rail strike there would be a serious setback to the conditions, but it is hoped that such an eventuality will be averted.

Outside of this one feature the general prospects are good. Building operations are increasing in extent, and the erection of many small homes and moderate-sized flat buildings in nearly every city, town and village is causing a demand for materials exceeding anything known in several years, and the general employment of labor is creating in turn a more extensive demand.

The employment situation is good, and is improving. The farms are taking a lot of extra laborers, and while the idleness at the coal mines is discouraging in other lines there is little lack of employment. Money conditions are no tighter. There is plenty of money for all legitimate enterprises, and there also appears to be a plenitude for investment purposes. There is a broad demand for bonds, and the stock market appears to be absorbing liberal amounts of money as the demand on the dips, according to western houses, is good, and loans are expanding.

In the general merchandise and dry goods lines there is a fairly active demand, with mail order business said to be showing further improvement. Barring some restriction placed on the steel trade by the coal strike, last week's reports of western activities in this line were favorable.

## WHEAT

June 20—The wheat market continues its way downward, not however, without occasional advances; in fact, during the past two weeks the market has been higher one day and lower the next with total of advances amounting to less than declines leaving prices at a lower level at the end of the fortnight. Reports of crop damage came from the wheat sections which helped the bull side of the market but on the other hand poor export demand and large supplies had a bearish effect on the trading. Another bearish factor was that Argentine wheat was quoted at 3c under American. Exporters have bought in a spasmodic way and domestic milling demand is very quiet. Receipts at Chicago last week aggregated 238,000 bushels and shipments amounted to 1,650,000 bushels. The close of last week left wheat firm but on Monday, June 19th, improved crop weather in the wheat belt caused the market to open at lower levels and it did not return to Saturday's close at any time.

## Prices

Detroit—No. 2 red, \$1.18; No. 2 white and No. 2 mixed, \$1.16.

Chicago—No. 2 hard, \$1.13.

New York—No. 2 red, \$1.26; No. 2 hard, \$1.27; No. 2 mixed durum, \$1.29 1-2.

Prices one year ago—Detroit, No. 2 red, \$1.30; No. 2 white and No. 2 mixed, \$1.25.

## CORN

June 20—There has been a firm tone to the corn market during the past couple of weeks and only one or two days did the market show any inclination to follow the trend of wheat. Export demand continues of good volume and dealers are optimistic over this branch of the trading, expecting it to continue for

## MARKET SUMMARY

Wheat steady after recent declines. Corn and oats easy. Old potatoes firm and scarce. Beans steady. Butter and eggs in demand. Strawberries lower and cherries easy. Poultry firm. Cattle slow. Hogs and sheep active to higher. Provisions advanced with hogs.

(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.)

some time. Receipts have been liberal but they are not expected to remain this way as country offerings show a decline. Chicago received 2,805,000 bushels last week. Shipping demand was light at this market, only 1,015,000 bushels being shipped. The opening of the current week found prices slightly lower owing to report of increased visible supply. Government reports show the growing crop in fine shape when considered in a general way.

## Prices

Detroit—No. 2 yellow, 65c; No. 3 yellow, 63 1-2c; No. 4 yellow, 62c. Chicago—No. 2 yellow, 61 1-2c. New York—No. 2 yellow, 78 1-2c. Prices one year ago—Detroit, No. 2 yellow, 62c; No. 3 yellow, 61c; No. 4 yellow, 55c.

## OATS

June 20—The greater part of the time during the past two weeks oats have followed the trend of wheat but during the latter days of last week the market developed some strength owing to renewed buying both domestic and export. On Monday of the present week prices declined and the market was easy. The tone of the market has been easy, with the exception of two or three days, since our last issue but declines in prices only amount to 2 cents where the market has been the easiest. We must repeat that we can see nothing in the near future of the market that would warrant much lower prices. But should they go lower there are several reasons why they should return.

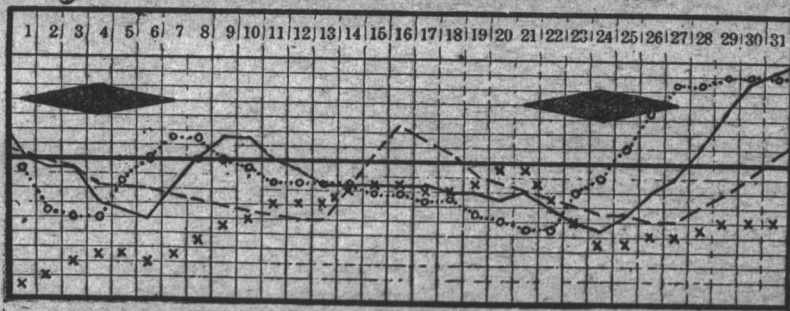
## Prices

Detroit—No. 2 white, 40c; No. 3 white, 38c; No. 4 white, 34 1-2c.

## THE WEATHER FOR NEXT WEEK

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

### FOSTER'S WEATHER CHART FOR JULY 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 36 between meridian 90 and Rockies crest; broken line for south of 36, between meridian 90 and Rockies crest, also Louisiana and Mississippi; X line, east of meridian 90, north of 36; O line, north of 36 and west of Rockies crest.

WASHINGTON, D. C., June 22—Two principal severe storm periods are expected for July for the weeks centering on 3 and 26. To locate these storms as they cross the continent in about five days read the division forecast for your section. Rainfall for the states and provinces east of Rockies crests will be near the average of past ten years. But for your immediate vicinity the general long slopes will modify the amount of moisture which will come from the vicinity of a line drawn from northern point of South America to the Rock of Gibraltar. On all long southeastern slopes more than average rain may be expected and on all northeastern slopes less moisture than the ten year average. The severe storms of the week centering on July 3 will be most severe of the month and very severe storms are expected near July 1. Heavy rains are expected on southern slopes from both storms. Best crop-weather of the month is expected during the eleven days centering on 13. That good weather will come during harvest time near latitude 40. Not much rain during July west of Rockies crests and less than usual rain in Arizona and New Mexico. Rain shortage expected in all the West India islands and northern South America.

NORTHEAST DIVISION—Low temperatures near July 1, followed by a long, slow upward trend. Severe storms and most rain near 5. Most rain on southern and western slopes. Crop-weather average good with a few exceptions.

WORLD CROP-WEATHER—Rain shortage will continue in Australia, injurious to their winter wheat. That country will get four months rain shortage followed by a long destructive drought. Its condition will be much worse than that of Europe. Drought in Europe did not start till some of their crops were far advanced, but all late maturing crops in southern Europe will be very short.

turning to the new potatoes. If new potatoes continue to decline in price old stock cannot be expected to hold present levels long.

## Prices

Detroit—\$2.50 per cwt. sacked. Chicago—\$1.75 @ 2 per cwt. Price one year ago—Detroit, \$1.02 per cwt. sacked.

## HAY

June 20—Receipts of hay and country loadings are showing a decline. The Detroit market has advanced some in prices during the past two weeks while Chicago prices have worked to lower levels.

## Prices

Detroit—Standard timothy, \$21.50 @ 22; No. 2 timothy, \$16 @ 17; light mixed, \$21 @ 22; No. 1 clover, \$16 @ 17.

Chicago—No. 2 timothy, \$19 @ 21; light mixed, \$20 @ 22; No. 1 clover, \$16 @ 18.

New York—No. 2 timothy, \$27 @ 29.

Prices one year ago—Detroit, standard timothy, \$18 @ 19; No. 2 timothy, \$16 @ 18; light mixed, \$18 @ 19; No. 1 clover, \$13 @ 14.

## DETROIT PRODUCE MARKET

June 20—Butter and eggs are active and in demand. Receipts are large but what consumers can not use now are going into storage.

The market is being overloaded with strawberries and as a result prices are declining. Trading is active. Homegrown cherries are beginning to appear on the market at prices about equal to those of southern varieties.

Live poultry is quiet and steady. Dressed calves are easy with a good supply on hand.

## Prices

Butter—Best creamery, in tubs, 33 1-2c per lb.

Eggs—Fresh current receipts, 23 @ 23 1-2c; fresh candied and graded, 24c per doz.

Apples—Good winter varieties, \$2.75 @ 3.75 per bushel, western, \$3 @ 4 per box.

Cherries—California, \$3.25 @ 3.50 per flat; Michigan, \$3.25 @ 3.75 per 24-quart case.

Strawberries—Michigan, \$3.75 @ 4.50 per 24-quart case for good fruit.

Asparagus—Michigan, \$2.75 @ 3 per case.

Cabbage—New, \$1.50 @ 2.50 per crate.

Onions—\$2.25 @ 2.40 per crate.

Live Poultry—Broilers, 2-lb. and up, 42c; small broilers, 30 @ 32c; large broilers, 30 @ 32c; large fat hens, 24c; medium hens, 24c; small hens, 22c; old roosters, 15c; geese, 13c; ducks, 20 @ 22c; turkeys, 30c per lb.

Dressed Meats—Small hogs, 12 @ 13c; heavy hogs, 10 @ 11c; choice calves, 14 @ 15c; medium calves, 12 @ 13c; large calves, 10 @ 11c per lb.

New Vegetables—Beets, 50 @ 60c per doz.; carrots, \$2.75 @ 3 per hamper; turnips, \$2.25 @ 2.50 per bu.; rhubarb, 30 @ 40c per doz.; green and wax beans, \$2 @ 2.25 per hamper; green onions, 30 @ 40c per doz; green peas, \$3.75 @ 4.25 per hamper; radishes, \$1 @ 1.25 per bu.

Celery—Jumbo, 65 @ 75c; extra Jumbo, 90 @ \$1; Michigan, 30 @ 40c per doz.

## CHICAGO LIVE STOCK MARKET

Steers, aside from the few best grades, sold lower practically every day last week. The decline Monday, June 12, affected almost all grades, but the better kinds escaped with light losses then. Tuesday there was a reaction that benefited lower grades little. Wednesday the spread widened, with lower grades declining and better kinds advancing. Thursday and Friday saw further declines on the grades selling under \$9.00 and a generally steady market on those selling above



that price. Yearlings lacking choice quality, and some that were good to choice, but of light weight or handicapped by a heifer end, sold lower last week. The supply of lighter yearlings was far too heavy for the present demand. The week showed a few better grades of strong weight, good quality, long finished steers slightly higher, but the other grades varying from 25c to 50c lower, with some light, short fed, or grassy steers and light, unfinished yearlings around \$1.00 lower. The spread widened materially for the week.

Daily top hogs last week ranged from \$10.65 to \$10.80, while average costs ranged from \$10.30 to \$10.40. Lack of eastern demand failed to cause the expected sharp breaks, with packers active buyers of light and medium weight butchers. The latter class during several sessions last week reached the same level as choice light. However, a preference for light hogs after mid-week upheld the latter class late.

Heavy packers and common mixed hogs each day last week were extremely slow selling, with a large holdover after each session, consisting mostly of these grades. Packers bought up practically all offerings except weighty packing classes at a slight decline.

Receipts of hogs at Chicago last week at approximately 171,200 stand largest since middle of February and comparing with corresponding periods, stand third largest in over eleven years. This week's supply shows an increase of 9,800 over previous week, a decrease of 700 as compared with a year ago and stands 21,300 larger than the eleven-year average.

Last week's average weight of hogs stands unusually heavy for this time of the year, with the estimate at 244 lbs., being heaviest in over 11 years, comparing with the corresponding periods. Corresponding average weights during the past 11 years range from 227 lbs. in 1916 to 242 lbs. in 1913, with the 11-year average at 235 lbs. Last week's average weight shows a gain of 4 lbs. over the week previous, 6 lbs. average a year ago and 8 lbs. over two years ago.

Strengthened considerably on each session last week by competition that formed among country buyers, all light and medium weight young sheep desirable for breeding purposes showed only little change as compared with previous week, while other classes declined. Heavy, undesirable weights and several transactions of aged ewes and wethers in good killing flesh bought for local slaughter at the close showed uneven declines of 25c to \$1.00 as compared with the week previous.

#### LIVE STOCK QUOTATIONS

The following prices were paid at Detroit on Tuesday, June 20:

Cattle		
Best heavy steers, dry	\$ 8 50 @	9 25
Best hdy wt butch steers, dry	8 00 @	9 25
Mixed steers & heifers, dry	7 50 @	8 00
Handy light butchers, dry	7 00 @	7 25
Light butchers	5 00 @	6 00
Best cows	5 00 @	6 00
Butcher cows	4 00 @	4 75
Cutters	3 25 @	3 75
Canners	2 50 @	3 00
Choice bulls, light dry-fed	5 50 @	6 00
Bologna bulls	4 00 @	5 50
Stock bulls	3 50 @	4 00
Feeders	6 00 @	7 00
Stockers	5 00 @	6 00
Milkers and springers	40 00 @	70 00
Calves		
Best grades	\$10 00 @	10 50
Others	5 00 @	8 50
Sheep		
Best lambs	\$12 50	
Fair lambs	9 00 @	10 00
Light to common lambs	7 00 @	9 00
Yearlings	6 00 @	10 00
Fair to good sheep	5 00 @	6 00
Culls and common	1 00 @	2 00
Heavy	3 00	
Hogs		
Mixed hogs and pigs	\$11 00	
Extreme heavy	9 50 @	10 50
Roughs	8 75	
Stags	6 25 @	5 75
Boars	3 00	

#### PRODUCE MARKETS IN EARLY SUMMER

Shipments of most leading fruits and vegetables are heavier than at this time last year. Peaches and cantaloupes have moved in lighter volume. Early potatoes started the season fairly high but have declined. Old stock firm. Cantaloupes are double the price a year ago probably because of light supplies. Watermelon values are well maintained. Peaches are in good demand and prices are good for good stock.

The old potato season is about done although shipments from late shipping sections moved at the rate of 1,475 cars

for the first two weeks in June. Maine shipping over 600 cars a week. Movement of the 1921 crop from the 18 leading late shipping states for the season to June 10, 1922, amounted to 176,696 cars compared with 132,026 cars shipped from the 1920 crop to the same date last year. The total movement from these states since Jan. 1 was 80,157 cars compared with 54,976 after Jan. 1, 1921. The gradual decline in Eastern and Northern Round Whites which began in February was halted the last week in May when prices were at \$1.25@1.50 the lowest point of the season. An advancing market then brought prices to a range of \$1.50@2.15 the closing price of the season the second week in June.

Early potatoes have moved in fairly steady volume. Shipments to June 10 were 15,205 cars compared with 12,284 last season to same date. The movement from Florida of 5,107 cars was more than double the total shipments from that state for the entire 1921 season. South Carolina too with 4,071 cars exceeded last year's movement by 1,500 cars. Shipments from Virginia were late in starting and only 415 cars have moved compared with 1,741 to June 10, 1921. Irish Cobbiers from South Carolina brought \$5.50@6 per bbl. in leading consuming markets the third week in May and advanced to \$6.50@7.50 early in June, losing part of this gain they closed at \$5.50@7 June 12 when North Carolina and Virginia cobbiers held about the same range.

The estimated production of potatoes in the intermediate groups of states, which includes Arkansas, Kansas, Kentucky, Maryland, Missouri, New Jersey and Oklahoma, based on condition June 1, is 20,672 cars compared with 18,965 cars a year ago.

#### WEEKLY MARKETGRAM

U. S. Bureau of Markets and Crop Estimates

WASHINGTON, D. C., for the week ending June 16, 1922.

**LIVE STOCK AND MEATS**—Chicago hog prices declined 5 to 10 cents net for the week. Medium and good beef steers generally 5 to 15 cents higher with butcher cows and heifers 25 to 50 cents lower. Feeder steers were 15 to 40 cents lower; Light and medium weight veal calves, \$1.75@2.25 lower. Lambs ranged from \$1.75@2. lower while fat ewes were generally fifty cents lower. Hogs closed firm on the 16th on good grades and mostly 5 to 10 cents higher than Thursdays average. Hogs 25 to 50 cents lower. Beef steers and better grades of butcher cows and heifers were steady. Veal calves 25 cents lower. Better grades of sheep and lambs about steady, others weak to lower. June 16 Chicago prices: Hogs top \$10.80; bulk of sales \$10.05@10.15. Medium and good beef steers, \$8@9.20; Butcher cows and heifers, \$4@8.50; Feeder steers, \$5.75@8.75. Light and medium weight veal calves, \$7.75@9.25; Fat lambs, \$11.50@12.75; Yearlings, \$8.25@11.25; Fat ewes, \$2.50@6.50; Stocker and feeder shipments from 12 important markets during the week ending June 9 were: Cattle and calves, 30,927; hogs 11,998; sheep, 22,991. Pork loins and mutton lost \$1@4 for the week; lamb, \$2; veal, \$2@; beef weak to \$1 lower. In eastern wholesale fresh meat markets on the 16th steer beef ranged from 50 cents higher to 50 cents lower than Thursdays average with the demand generally poor. Veal was steady to \$1 lower while lamb ranged from \$1@1 lower. Mutton and fresh pork loins were weak to \$1 lower per 100 pounds. June 16 prices good grade meats: Beef, \$13@15.50; veal, \$13@15; lamb, \$20@25; mutton \$13@14.

**FEED**—Wheat feed market continues weak. Considerable pressure to sell principally bran. Some manufacturers quoting Gluten in eastern markets lower which has slightly stimulated buying. High protein feed slow. Quoted June 16 Spring bran Chicago blank; Philadelphia \$21.75; Standard middlings, Philadelphia \$23; winter wheat bran St. Louis, \$17; linseed meal New York, \$53.

**DAIRY PRODUCTS**—Butter markets steady to firm. Demand active. Bulk of buying is from consumptive demand although considerable buying for storage has occurred over a million pounds daily having moved into storage in the four markets the past week. Closing prices 92 score: New York, 36; Philadelphia, 36 1-2; Boston, 37; Chicago, 35 3-4 cents. Cheese markets steady with trading quite active on all except small styles. Sales included numerous lots for storage although the into-storage movement is relatively slow. Prices at Wisconsin Primary markets June 15: Twins, 18 1-4c; Daisies, 18 1-4c; Double Daisies, 18c; Young Americas, 18 1-2c; Longhorns, 18c; Square Prints, 19c.

#### GOVERNMENT BULLETINS OF INTEREST IN JULY

Farmers Bulletin 766, The Common Cabbage Worm; 825, Pit Silos; 872, The Bollworm or Corn Earworm; 903, Evaporation and Drying of Fruits; 914, Control of the Melon Aphid; 984, Farm and Home Drying of Fruits and Vegetables; 1007, The Control of the Onion Thrips; 1068, Judging Beef Cattle; 1086, How Insects Affect the Rice Crop; 1112, Culling for Egg and Market; 1120, Control of Apple Powdery Mildew; 1217, The Green Bug or Spring Grain Aphid; 1225, The Potato Leafhopper and Its Control; 1246, The Peach Borer; How to Prevent or Lessen Its Ravage.

Department Circular 36, Use of Poultry Club Products; 93, The Installation of Dust Collecting Fans on Thrashing Machines for Prevention of Explosions and Fires and Grain Cleaning.

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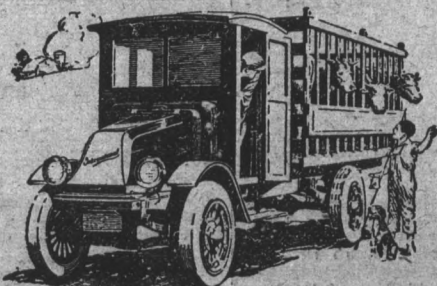
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